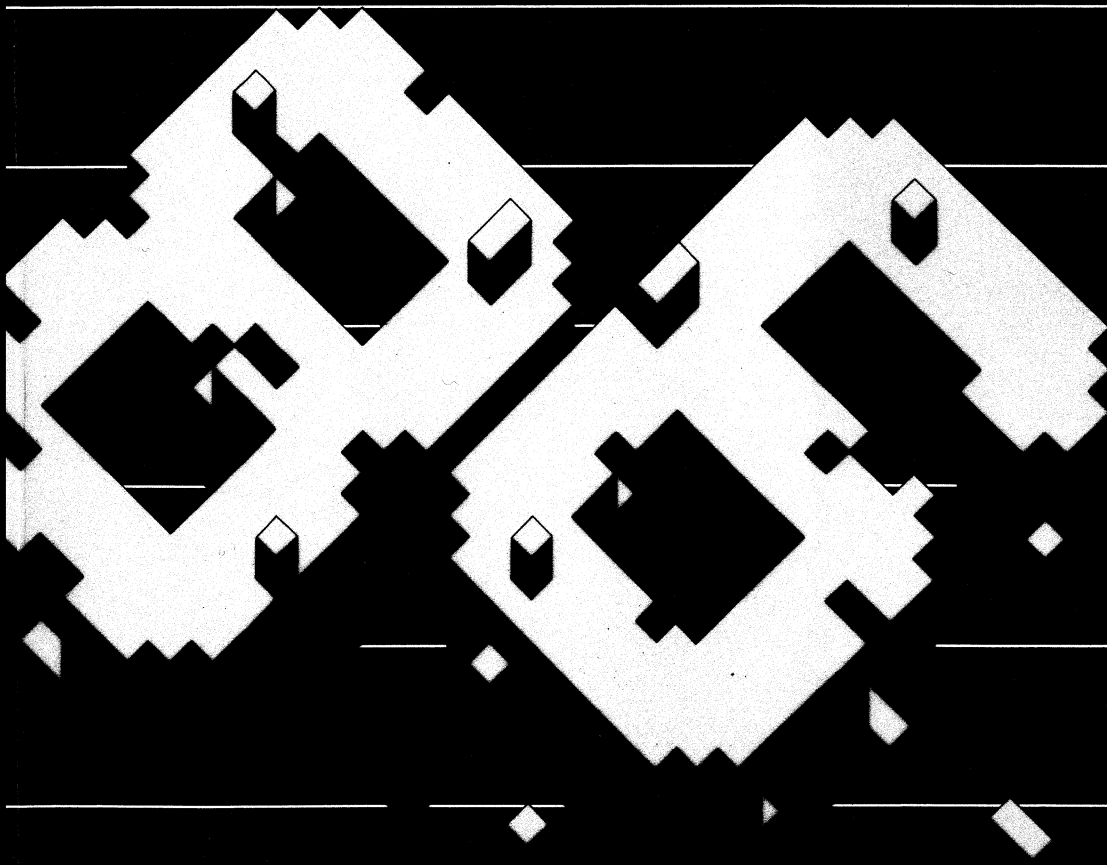
INTEGRATED CIRCUITS CATALOGUE 1986



PHILIPS - ELECTRONIC COMPONENTS AND MATERIALS (ELCOMA) DIVISION

INTEGRATED CIRCUITS PREFERRED TYPE RANGE CATALOGUE 1986

The preferred type range
Although Philips' Electronic Components and Materials (ELCOMA) Division manufactures over 100 000 different products, only about a third of them regularly appears on the majority of customer orders. This part of our total range is named the preferred type range.

A catalogue containing a guide to type numbers, catalogue numbers, selection and brief technical data for the preferred type range is published under the title 'Preferred type range catalogue 1986'.

Integrated circuits
To provide a compact, handy reference work, the Integrated circuits section of the 'Preferred type range catalogue 1986' is presented here as a separate publication. (The Semiconductors section of this catalogue is also published separately under the title 'Semiconductors catalogue 1986'.)

The Philips Data Handbook System
For complete specifications of the components listed in this catalogue, please refer to the relevant volumes of the Philips Data Handbook System, which are indicated in the heading of each data page of this catalogue.

The Philips Data Handbook System comprises over seventy volumes, divided into four series distinguished by colour as follows:

IC Series	Integrated circuits	purple
S series	Discrete semiconductors	red
T series	Electron tubes	blue
C series	Passive components and materials	green

The contents of these series are listed in the section entitled Data Handbook System at the end of this catalogue.

If you cannot find the information you need in this catalogue or the appropriate data handbook, please consult your nearest Philips - Elcoma sales organization or industrial distributor (for addresses, see the back cover of this catalogue).

Please note that all dimensions given in tables and drawings are in mm, unless stated otherwise.

Integrated circuits IC

In the alphanumeric index (which appears in the second part of this section) reference is made to IC data sheets or Data Handbooks in which they appear.

These Handbooks are part of The Philips Data Handbook System which is a comprehensive source of information on electronic components, subassemblies and materials.

For this catalogue section the following Integrated Circuit Handbooks (purple series) are of interest.

book	title
	EXISTING SERIES
IC4	Digital integrated circuits - CMOS HE4000B family (superseded by IC04N/86)
IC6	Professional analogue integrated circuits (superseded by IC11N/86)
IC7	Signetics bipolar memories (superseded by IC10N/86)
	NEW SERIES
IC01N	Radio, audio and associated systems - Bipolar, MOS (published 1985)
IC02N	Video and associated systems - Bipolar, MOS (published 1985)
IC03N	Telephony equipment - Bipolar, MOS (published 1985)
IC04N	HE4000B logic family - CMOS
IC05N	HE4000B logic family uncased integrated circuits - CMOS (published 1984)
IC06N	High-speed CMOS;PC74HC/HCT/HCU - logic family (published 1985)
IC07N	PC74HC/HCU/HCT uncased integrated circuits - HCMOS
IC08N	10K and 100K logic family - ECL (published 1984)
IC09N	Logic series - TTL (published 1984)
IC10N	Memories - MOS, TTL, ECL
IC11N	Linear LSI (published 1985)
IC12N	Semi-custom gate arrays & cell libraries - ISL, ECL, CMOS
IC13N	Semi-custom - Integrated Fuse Logic (published 1985)
IC14N	Microprocessors, microcontrollers & peripherals - Bipolar, MOS (published 1985)
IC15N	Logic series - FAST TTL (published 1984)

Contents

STANDARD FUNCTIONS

DEDICATED FUNCTIONS

IC

Contents (cont.)

CMOS HE4000B FAMILY SPECIFICATIONS

The LOCMOS HE4000B range is a fully buffered digital integrated circuit family which meetsthe Jedec-B specification. The members of this family are plug-in replacements for the well-known CMOS 4000 and 14500 ranges.

The HE family has the same advantages as conventional CMOS circuits, plus the additional LOCMOS advantages.

Advantages of the CMOS

- low power dissipation - typically 10 nW per gate (static)
- wide operating supply voltage range
- wide operating temperature ranges:
  − 40 to + 85 °C for standard temparature range (HEF)
  − 55 to + 125 °C for extended temparature range (HEC)
- high d.c. fan-out
- inputs and outputs are protected against electrostatic voltages

IC

In addition to these, the **LOCMOS HE4000B** range has:

- buffered outputs on **all** circuits
- higher speed
- higher packing density - essential for MSI/LSI
- excellent noise immunity

Recommended supply voltage range 3 to 15 V.

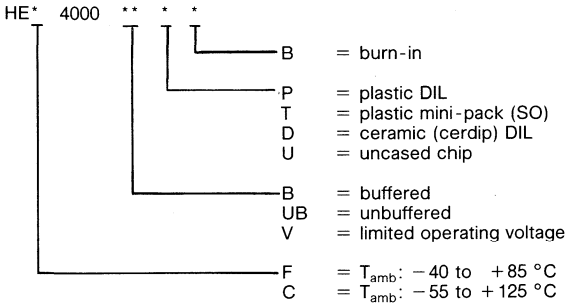
LOCMOS means Local Oxidation Complementary MOS

Inputs and outputs are protected against electrostatic effects in a wide variety of device-handling situations. However, to be totally safe, it is desirable to take handling precautions into account.

Type number designation

Type numbers have suffix which signifies the type of package and burn-in option.

HE*4000**** complete type number which can be split up as follows:



CMOS HE4000B FAMILY SPECIFICATIONS (cont.)

The HE family is designed with standardized output drive characteristics which, combined with relative intensitivity to output capacitance loading, simplify system design.

Family ratings

Limiting values in accordance with the Absolute Maximum System (IEC 134)

Supply voltage range	V_{DD} −0,5 to +18 V
Voltage on any input	V_I −0,5 to (V_{DD} + 0,5) V
D.C. current into any input or output	±I max. 10 mA

D.C. family characteristics at V_{SS} = 0

		T_{amb} = −40 °C		T_{amb} = +25 °C		T_{amb} = +85 °C		V_{DD}	
parameter	symbol	min.	max.	min.	max.	min.	max.	V	conditions
Quiescent device current for gates	I_{DD} (µA)	-	1,0	-	1,0	-	7,5	5	all valid input combinations; $V_I = V_{SS}$ or V_{DD}
		-	2,0	-	2,0	-	15,0	10	
		-	4,0	-	4,0	-	30,0	15	
Quiescent device current for buffers and flip-flops	I_{DD} (µA)	-	4,0	-	4,0	-	30	5	all valid input combinations; $V_I = V_{SS}$ or V_{DD}
		-	8,0	-	8,0	-	60	10	
		-	16,0	-	16,0	-	120	15	
Quiescent device current for MSI	I_{DD} (µA)	-	20	-	20	-	150	5	all valid input combinations; $V_I = V_{SS}$ or V_{DD}
		-	40	-	40	-	300	10	
		-	80	-	80	-	600	15	
Quiescent device current for LSI	I_{DD} (µA)	-	50	-	50	-	375	5	all valid input combinations; $V_I = V_{SS}$ or V_{DD}
		-	100	-	100	-	750	10	
		-	200	-	200	-	1500	15	
Output voltage LOW $\|I_O\| < 1$ µA	V_{OL} (V)	-	0,05	-	0,05	-	0,05	5	$V_I = V_{SS}$ or V_{DD}
		-	0,05	-	0,05	-	0,05	10	$V_I = V_{SS}$ or V_{DD}
		-	0,05	-	0,05	-	0,05	15	$V_I = V_{SS}$ or V_{DD}
Output voltage HIGH $\|I_O\| < 1$ µA	V_{OH} (V)	4,95	-	4,95	-	4,95	-	5	$V_I = V_{SS}$ or V_{DD}
		9,95	-	9,95	-	9,95	-	10	$V_I = V_{SS}$ or V_{DD}
		14,95	-	14,95	-	14,95	-	15	$V_I = V_{SS}$ or V_{DD}
Input voltage LOW $\|I_O\| < 1$ µA (buffered stages only)	V_{IL} (V)	-	1,5	-	1,5	-	1,5	5	V_O = 0,5 or 4,5 V
		-	3,0	-	3,0	-	3,0	10	V_O = 1,0 or 9,0 V
		-	4,0	-	4,0	-	4,0	15	V_O = 1,5 or 13,5 V
Input voltage HIGH $\|I_O\| < 1$ µA (buffered stages only)	V_{IH} (V)	3,5	-	3,5	-	3,5	-	5	V_O = 0,5 or 4,5 V
		7,0	-	7,0	-	7,0	-	10	V_O = 1,0 or 9,0 V
		11,0	-	11,0	-	11,0	-	15	V_O = 1,5 or 13,5 V

Family ratings (cont.)

Power dissipation per package for plastic and ceramic (cerdip) DIL

for T_{amb} = −40 to +60 °C	P_{tot} max. 400 mW
for T_{amb} = +60 to +85 °C	derate linearly with 8 mW/K to 200 mW

Power dissipation per package for plastic SO mini-pack

for T_{amb} = −40 to +70 °C	P_{tot} max. 200 mW
for T_{amb} = +70 to +85 °C	derate linearly with 5 mW/K to 125 mW

Power dissipation per output	P max. 100 mW
Operating ambient temperature range	T_{amb} −40 to +85 °C
Storage temperature range	T_{stg} −65 to +150 °C

IC

D.C. family characteristics at V_{SS} = 0 (cont.)

		T_{amb} = −40 °C		T_{amb} = +25 °C		T_{amb} = +85 °C		V_{DD}	
parameter	symbol	min.	max.	min.	max.	min.	max.	V	conditions
Input voltage LOW $\|I_O\| < 1$ µA (unbuffered stages only)	V_{IL} (V)	- - -	1,0 2,0 2,5	- - -	1,0 2,0 2,5	- - -	1,0 2,0 2,5	5 10 15	V_O = 0,5 or 4,5 V V_O = 1,0 or 9,0 V V_O = 1,5 or 13,5 V
Input voltage HIGH $\|I_O\| < 1$ µA (unbuffered stages only)	V_{IH} (V)	4,0 8,0 12,5	- - -	4,0 8,0 12,5	- - -	4,0 8,0 12,5	- - -	5 10 15	V_O = 0,5 or 4,5 V V_O = 1,0 or 9,0 V V_O = 1,5 or 13,5 V
Output (sink) current LOW	I_{OL} (mA)	0,52 1,3 3,6	- - -	0,44 1,1 3,0	- - -	0,36 0,9 2,4	- - -	5 10 15	V_O=0,4; V_I=0/5 V V_O=0,5; V_I=0/10 V V_O=1,5; V_I=0/15 V
Output (source) current HIGH	$-I_{OH}$ (mA)	0,52 1,3 3,6	- - -	0,44 1,1 3,0	- - -	0,36 0,9 2,4	- - -	5 10 15	V_O=4,6; V_I=0/5 V V_O=9,5; V_I=0/10 V V_O=13,5; V_I=0/15 V
Output (source) current (HIGH)	$-I_{OH}$ (mA)	1,7	-	1,1	-	1,1	-	5	V_O=2,5; V_I=0/5 V
Input leakage current	$\pm I_{IN}$(µA)	-	0,3	-	0,3	-	1,0	15	V_I = 0 or 15 V
3-state output leakage current HIGH	I_{OZH} (µA)	-	1,6	-	1,6	-	12,0	15	output returned to V_{DD}
3-state output leakage current LOW	I_{OZL} (µA)	-	1,6	-	1,6	-	12,0	15	output returned to V_{SS}
Input capacitance per unit load	C_I (pF)	-	-	-	7,5	-	-	-	digital inputs

CMOS HE4000B FAMILY SURVEY

Type numbers have a suffix which signifies the type of package and burn-in option:
P = plastic DIL; D = ceramic (cerdip) DIL; T = plastic SO mini-pack;
U = uncased chip 2nd B = burn-in

NAND gates

HEF4011B*	quadruple 2-input NAND gate
HEF4011UB	quadruple 2-input NAND gate; unbuffered
HEF4012B*	dual 4-input NAND gate
HEF4023B*	triple 3-input NAND gate
HEF4068B*	8-input NAND gate

AND gates

HEF4073B*	triple 3-input AND gate
HEF4081B*	quadruple 2-input AND gate
HEF4082B	dual 4-input AND gate

NOR gates

HEF4000B	dual 3-input NOR gate and inverter
HEF4001B*	quadruple 2-input NOR gate
HEF4001UB	quadruple 2-input NOR gate; unbuffered
HEF4002B*	dual 4-input NOR gate
HEF4025B*	triple 3-input NOR gate
HEF4078B	8-input NOR gate

OR gates

HEF4071B*	quadruple 2-input OR gate
HEF4072B	dual 4-input OR gate
HEF4075B	triple 3-input OR gate

Inverters and buffers

HEF4007UB*	dual complementary pair and inverter
HEF4041B	quadruple true/complement buffer
HEF4049B*	hex inverting buffers
HEF4050B*	hex non-inverting buffers
HEF4069UB*	hex inverter
HEF4502B	strobed hex inverter/buffer
HEF40097B*	3-state hex non-inverting buffer
HEF40098B*	3-state hex inverting buffer

Complex gates

HEF4030B*	quadruple EXCLUSIVE-OR gate
HEF4070B*	quadruple EXCLUSIVE-OR gate
HEF4077B	quadruple EXCLUSIVE-NOR gate
HEF4085B	dual 2-wide 2-input AND-OR-invert gate
HEF4086B	4-wide 2-input AND-OR-invert gate

* HEC type with burn-in option available in cerdip package

Flip-flops

HEF4013B*	dual D-type flip-flop
HEF4027B*	dual JK flip-flop
HEF4076B	quadruple D-type register with 3-state outputs
HEF40174B*	hex D-type flip-flop
HEF40175B*	quadruple D-type flip-flop

Counters

HEF4017B*	5-stage Johnson counter
HEF4018B	presettable divide-by-n counter
HEF4020B*	14-stage binary counter
HEF4022B	4-stage divide-by-8 Johnson counter
HEF4024B*	7-stage binary counter
HEF4029B	synchronous up/down counter, binary/decade counter
HEF4040B*	12-stage binary counter
HEF4059B	programmable divide-by-n counter
HEF4060B	14-stage ripple-carry binary counter/divider and oscillator
HEF4510B*	BCD up/down counter
HEF4516B	binary up/down counter
HEF4518B	dual BCD counter
HEF4520B*	dual binary counter
HEF4521B	24-stage frequency divider
HEF4522B	programmable 4-bit BCD down counter
HEF4526B	programmable 4-bit binary down counter
HEF4534B	real time 5-decade counter
HEF4737B;V	quadruple static decade counters
HEF4751V*	universal divider
HEF40160B	4-bit synchronous decade counter; asynchronous reset
HEF40161B	4-bit synchronous binary counter; asynchronous reset
HEF40162B	4-bit synchronous decade counter; synchronous reset
HEF40163B	4-bit synchronous binary counter; synchronous reset
HEF40192B	4-bit up/down decade counter
HEF40193B	4-bit up/down binary counter

Registers

HEF4006B	18-stage static shift register
HEF4014B*	8-bit static shift register
HEF4015B*	dual 4-bit static shift register
HEF4021B	8-bit static shift register
HEF4031B	64-stage static shift register
HEF4035B*	4-bit universal shift register
HEF4076B	quadruple D-type register with 3-state outputs
HEF4094B*	8-stage shift-and-store bus register
HEF4517B	dual 64-bit static shift register
HEF4557B*	1-to-64 bit variable length shift register
HEF4731B;V	quadruple 64-bit static shift register
HEF40194B*	4-bit bidirectional universal shift register
HEF40195B*	4-bit universal shift register

IC

* HEC type with burn-in option available in cerdip package

Decoders and demultiplexers

HEF4028B	1-of-10 decoder
HEF4511B*	BCD to 7-segment latch/decoder/driver
HEF4514B	1-of-16 decoder/demultiplexer with input latches
HEF4515B	1-of-16 decoder/demultiplexer with input latches
HEF4543B	BCD to 7-segment latch/decoder/driver
HEF4555B	dual 1-of-4 decoder/demultiplexer
HEF4556B*	dual 1-of-4 decoder/demultiplexer

Digital multiplexers

HEF4019B*	quadruple 2-input multiplexer
HEF4512B*	8-input multiplexer with 3-state output
HEF4519B*	quadruple 2-input multiplexer
HEF4539B*	dual 4-input multiplexer

Analogue switches and multiplexers/demultiplexers

HEF4016B*	quadruple bilateral switches
HEF4051B*	8-channel analogue multiplexer/demultiplexer
HEF4052B	dual 4-channel analogue multiplexer/demultiplexer
HEF4053B	triple 2-channel analogue multiplexer/demultiplexer
HEF4066B*	quadruple bilateral switches
HEF4067B	16-channel analogue multiplexer/demultiplexer

Latches

HEF4042B*	quadruple D-latch
HEF4043B	quadruple R/S latch with 3-state outputs
HEF4044B	quadruple R/S latch with 3-state outputs
HEF4508B	dual 4-bit latch
HEF4724B	8-bit addressable latch

Multivibrators and timers

HEF4047B*	monostable/astable multivibrator
HEF4528B*	dual monostable multivibrator
HEF4538B	dual precision monostable multivibrator
HEF4541B*	programmable timer
HEF4753B	universal timer module

Arithmetic circuits

HEF4008B	4-bit binary full adder
HEF4531B	13-input parity checker/generator
HEF4532B	8-input priority encoder
HEF4585B*	4-bit magnitude comparator

* HEC type with burn-in option available in cerdip package

Schmitt triggers

HEF4093B*	quadruple 2-input NAND Schmitt trigger
HEF40106B	hex inverting Schmitt trigger

Memories

HEF4505B*	64-bit static read/write RAM
HEF4720B;V	256-bit, 1-bit per word RAM

Octal circuits

HEF40240B	octal buffers with 3-state outputs
HEF40244B	octal buffers with 3-state outputs
HEF40245B	octal bus transceiver with 3-state outputs
HEF40373B	octal transparent latch with 3-state outputs
HEF40374B	octal D-type flip-flop with 3-state outputs

Special functions

HEF4046B	phase-locked loop
HEF4104B	quadruple low-to-high voltage translator with 3-state outputs
HEF4527B	BCD rate multiplier
HEF4738V	IEC/IEEE bus interface
HEF4750V*	frequency synthesizer
HEF4752V	a.c. motor control circuit
HEF4754V	18-element bar graph LCD driver
HEF4755V	transceiver for serial data communication

IC

* HEC type with burn-in option available in cerdip package

HCMOS PC74 FAMILY SPECIFICATIONS

General

These family specifications cover the common electrical ratings and characteristics of the entire HCMOS PC74 family, unless otherwise specified in the individual device data sheet.

Introduction

The PC74 high-speed Si-gate CMOS logic family combine the low power advantages of the HE4000B family with the high speed and drive capability of the low power Schottky TTL (LSTTL). The family will have the same pin-out as the 74 series and provide the same circuit functions. In these families are included several HE4000B family circuits which do not have TTL counter parts and some special circuits.
The basic family of buffered devices, designated as PC74HCXXXXX, will operate at CMOS input logic levels for high noise immunity, negligible typical quiescent supply current and the input current is operated from a power supply of 2 to 6 V.
A subset of the family, designated as PC74HCT....., with the same features and functions as the "HC-types", will operate at standard TTL power supply voltage (5 V ± 10%) and logic levels (0,8 to 2,0 V) for use as pin-to-pin compatible CMOS replacements to reduce power consumption without loss of speed.
These types are also suitable for converted switching from TTL to CMOS.
Another subset, the PC74HCU....., are single-stage unbuffered CMOS compatible devices for application in RC or crystal controlled oscillators and other types of feed-back circuits which operate in the linear mode.

Handling MOS devices

Inputs and outputs are protected against electrostatic effects in a wide variety of device-handling situations. However, to be totally safe, it is desirable to take handling precautions into account.

Features

- Functions and pinning identical to the LSTTL and HE4000B family CMOS circuits
- Standard CMOS input switching levels for high-noise immunity (PC74HC)
- TTL input switching levels for PC74HCT devices
- Fan-out equal to 10 LSTTL loads (4 mA) for devices with standard outputs and 15 LSTTL loads (6 mA) for devices with bus driver outputs
- Balanced output characteristics for optimum speed and performance
- Typical quiescent power supply current: 10 nA (gates), 20 nA (flip-flops), 40 nA (MSI)
- Operating frequency (50 MHz) compatible with LSTTL
- Wide operating supply voltage:
  2 to 6 V for PC74HC/HCU devices
  5 V ± 10% for PC74HCT devices
- Wide operating temperature range:
  standard: −40 to +85 °C
  extended: −40 to +125 °C
- Available package:
  plastic DIL and mini-pack (SO)
- Built-in protection against latch-up
- Highly immune to electrostatic discharge
- Alternate source is RCA

Type number designation

Basic family:

PC74*** ***** * complete type number; standard and extended temperature ranges

PC74*** ***** *

- * (package code):
  - P = plastic DIL;
  - T = plastic mini-pack (SO)
- ***** device number (up to 5 digits)
- *** :
  - HC = CMOS input switching levels; supply voltage range 2 to 6 V; fully buffered
  - HCT = TTL input switching levels; supply voltage range 5 V ± 10%; fully buffered
  - HCU = CMOS input switching levels; supply voltage range 2 to 6 V; unbuffered (single-stage devices)

IC

Family ratings

Limiting values in accordance with the Absolute Maximum System (IEC 134)

Voltages are referenced to GND (ground = 0 V)

parameter	conditions	symbol	min.	typ.	max.	unit
D.C. supply voltage		V_{CC}	−0,5	-	+7	V
D.C. input diode current	for $V_I < -0,5$ V or $V_I > V_{CC}+0,5$ V	$\pm I_{IK}$	-	-	20	mA
D.C. output diode current	for $V_O < -0,5$ V or $V_O > V_{CC}+0,5$ V	$\pm I_{OK}$	-	-	20	mA
D.C. output source or sink current	for $-0,5$ V $< V_O <$ $V_{CC}+0,5$ V					
	standard outputs	$\pm I_O$	-	-	25	mA
	bus driver outputs	$\pm I_O$	-	-	35	mA
D.C. V_{CC} or GND current	standard outputs	$\pm I_{CC}$; $\pm I_{GND}$	-	-	50	mA
	bus driver outputs	$\pm I_{CC}$; $\pm I_{GND}$	-	-	70	mA
Storage temperature range		T_{stg}	−65	-	+150	°C
Power dissipation per package	for temperature range; −40 to +85 °C PC74HC/HCT/HCU					
	plastic DIL	P_{tot}	-	-	500	mW
	above +60 °C	P_{tot}*	-	-	-	mW
	plastic mini-pack (SO)	P_{tot}	-	-	400	mW
	above +60 °C	P_{tot}**	-	-	-	mW
Power dissipation per package	for temperature range; −40 to +125 °C; PC74HC/HCT/HCU					
	plastic DIL	P_{tot}	-	-	500	mW
	above +70 °C	P_{tot}*	-	-	-	mW
	plastic minipack (SO)	P_{tot}	-	-	400	mW
	above +70 °c	P_{tot}**	-	-	-	mW

* Derate linearly with 8 mW/K.
** Derate linearly with 6 mW/K.

Recommended operating conditions

Voltages are referenced to GND (ground = 0 V)

parameter	symbol	min.	typ.	max.	unit	conditions
D.C. supply voltage range						
PC74HC/HCU	V_{CC}	2,0	5,0	6,0	V	
PC74HCT	V_{CC}	4,5	5,0	5,5	V	
D.C. input voltage range	V_I	0	-	V_{CC}	V	
D.C. output voltage range	V_O	0	-	V_{CC}	V	
Operating ambient temperature range						
PC74HC/HCT/NCU	T_{amb}	−40	-	+85	°C	standard
PC74HC/HCT/HCU	T_{amb}	−40	-	+125	°C	extended
Input rise and fall times		-	-	1000	ns	V_{CC} = 2,0 V
except for Schmitt trigger inputs	t_r; t_f	-	6,0	500	ns	V_{CC} = 4,5 V
		-	-	400	ns	V_{CC} = 6,0 V

IC

D.C. family characteristics, PC74HC

Voltages are referenced to GND (ground = 0 V)

			T_{amb} (°C)									
			+25			−40 to +85		−40 to +125			conditions	
parameter	V_{CC} V	symbol	min.	typ.	max.	min.	max.	min.	max.	unit	V_I	other
HIGH level input voltage	2,0	V_{IH}	1,5	1,3	-	1,5	-	1,5	-	V		
	4,5		3,15	2,4	-	3,15	-	3,15	-	V		
	6,0		4,2	3,1	-	4,2	-	4,2	-	V		
LOW level input voltage	2,0	V_{IL}	-	0,7	0,5	-	0,5	-	0,5	V		
	4,5		-	1,8	1,35	-	1,35	-	1,35	V		
	6,0		-	2,3	1,80	-	1,80	-	1,80	V		
HIGH level output voltage all outputs	2,0	V_{OH}	1,9	2,0	-	1,9	-	1,9	-	V	V_{IH} or V_{IL}	$-I_O$ = 20 μA
	4,5		4,4	4,5	-	4,4	-	4,4	-	V		$-I_O$ = 20 μA
	6,0		5,9	6,0	-	5,9	-	5,9	-	V		$-I_O$ = 20 μA
HIGH level output voltage standard	4,5	V_{OH}	3,98	-	-	3,84	-	3,7	-	V	V_{IH} or V_{IL}	$-I_O$ = 4,0 mA
	6,0		5,48	-	-	5,34	-	5,2	-	V		$-I_O$ = 5,2 mA
HIGH level output voltage bus driver	4,5	V_{OH}	3,98	-	-	3,84	-	3,7	-	V	V_{IH} or V_{IL}	$-I_O$ = 6,0 mA
	6,0		5,48	-	-	5,34	-	5,2	-	V		$-I_O$ = 7,8 mA
LOW level output voltage all outputs	2,0	V_{OL}	-	0	0,1	-	0,1	-	0,1	V	V_{IH} or V_{IL}	I_O = 20 μA
	4,5		-	0	0,1	-	0,1	-	0,1	V		I_O = 20 μA
	6,0		-	0	0,1	-	0,1	-	0,1	V		I_O = 20 μA
LOW level output voltage standard	4,5	V_{OL}	-	-	0,26	-	0,33	-	0,4	V	V_{IH} or V_{IL}	I_O = 4,0 mA
	6,0		-	-	0,26	-	0,33	-	0,4	V		I_O = 5,2 mA
LOW level output voltage bus driver	4,5	V_{OL}	-	-	0,26	-	0,33	-	0,4	V	V_{IH} or V_{IL}	I_O = 6,0 mA
	6,0		-	-	0,26	-	0,33	-	0,4	V		I_O = 7,8 mA
Input leakage current	6,0	$\pm I_I$	-	-	0,1	-	1,0	-	1,0	μA	V_{CC} or GND	
3-state OFF-state current	6,0	$\pm I_{OZ}$	-	-	0,5	-	5,0	-	10,0	μA	V_{IH} or V_{IL}	V_O = V_{CC} or GND
Quiescent supply current												
SSI	6,0	I_{CC}	-	-	2,0	-	20,0	-	40,0	μA	V_{CC} or GND	I_O = 0
flip-flops	6,0	I_{CC}	-	-	4,0	-	40,0	-	80,0	μA		I_O = 0
MSI	6,0	I_{CC}	-	-	8,0	-	80,0	-	160,0	μA		I_O = 0

D.C. family characteristics, PC74HCU

Voltages are referenced to GND (ground = 0 V)

			T_{amb} (°C)									
			+25			−40 to +85		−40 to +125			conditions	
parameter	V_{CC} V	symbol	min.	typ.	max.	min.	max.	min.	max.	unit	V_I	other
HIGH level input voltage	2,0	V_{IH}	1,7	-	-	1,7	-	1,7	-	V		
	4,5		3,6	-	-	3,6	-	3,6	-	V		
	6,0		4,8	-	-	4,8	-	4,8	-	V		
LOW level input voltage	2,0	V_{IL}	-	-	0,3	-	0,3	-	0,3	V		
	4,5		-	-	0,9	-	0,9	-	0,9	V		
	6,0		-	-	1,2	-	1,2	-	1,2	V		
HIGH level output voltage	2,0	V_{OH}	1,8	-	-	1,8	-	1,8	-	V	V_{IH} or V_{IL}	$-I_O = 20\ \mu A$
	4,5		4,0	-	-	4,0	-	4,0	-	V		$-I_O = 20\ \mu A$
	6,0		5,5	-	-	5,5	-	5,5	-	V		$-I_O = 20\ \mu A$
HIGH level output voltage	4,5	V_{OH}	3,98	-	-	3,84	-	3,7	-	V	V_{CC} or GND	$-I_O = 4,0$ mA
	6,0		5,48	-	-	5,34	-	5,2	-	V		$-I_O = 5,2$ mA
LOW level output voltage	2,0	V_{OL}	-	-	0,2	-	0,2	-	0,2	V	V_{IH} or V_{IL}	$I_O = 20\ \mu A$
	4,5		-	-	0,5	-	0,5	-	0,5	V		$I_O = 20\ \mu A$
	6,0		-	-	0,5	-	0,5	-	0,5	V		$I_O = 20\ \mu A$
LOW level output voltage	4,5	V_{OL}	-	-	0,26	-	0,33	-	0,4	V	V_{CC} or GND	$I_O = 4,0$ mA
	6,0		-	-	0,26	-	0,33	-	0,4	V		$I_O = 5,2$ mA
Input leakage current	6,0	$\pm I_I$	-	-	0,1	-	1,0	-	1,0	µA	V_{CC} or GND	
Quiescent supply current **SSI**	6,0	I_{CC}	-	-	2,0	-	20,0	-	40,0	µA	V_{CC} or GND	$I_O = 0$

D.C. family characteristics, PC74HCT

Voltages are referenced to GND (ground = 0 V)

parameter	V_{CC} V	sym-bol	T_{amb} (°C) +25 min.	+25 typ.	+25 max.	−40 to +85 min.	−40 to +85 max.	−40 to +125 min.	−40 to +125 max.	unit	conditions V_I	conditions other
HIGH level input voltage	4,5-5,5	V_{IH}	2,0	-	-	2,0	-	2,0	-	V		
LOW level input voltage	4,5-5,5	V_{IL}	-	-	0,8	-	0,8	-	0,8	V		
HIGH level output voltage all outputs	4,5	V_{OH}	4,4	4,5	-	4,4	-	4,4	-	V	V_{IH} or V_{IL}	$-I_O$ = 20 µA
HIGH level output voltage standard	4,5	V_{OH}	3,98	-	-	3,84	-	3,7	-	V	V_{IH} or V_{IL}	$-I_O$ = 4,0 mA
HIGH level output voltage bus driver	4,5	V_{OH}	3,98	-	-	3,84	-	3,7	-	V	V_{IH} or V_{IL}	$-I_O$ = 6,0 mA
LOW level output voltage all outputs	4,5	V_{OL}	-	0	0,1	-	0,1	-	0,1	V	V_{IH} or V_{IL}	I_O = 20 µA
LOW level output voltage standard	4,5	V_{OL}	-	-	0,26	-	0,33	-	0,4	V	V_{IH} or V_{IL}	I_O = 4,0 mA
LOW level output voltage bus driver	4,5	V_{OL}	-	-	0,26	-	0,33	-	0,4	V	V_{IH} or V_{IL}	I_O = 6,0 mA
Input leakage current	5,5	$\pm I_I$	-	-	0,1	-	1,0	-	1,0	µA	V_{CC} or GND	
3-state OFF-state current	5,5	$\pm I_{OZ}$	-	-	0,5	-	5,0	-	10,0	µA	V_{IH} or V_{IL}	V_O = V_{CC} or GND per input pin; other inputs at V_{CC} or GND; I_O = 0
Quiescent supply current												
SSI	5,5	I_{CC}	-	-	2,0	-	20,0	-	40,0	µA	V_{CC} or GND	I_O = 0
flip-flops	5,5	I_{CC}	-	-	4,0	-	40,0	-	80,0	µA		I_O = 0
MSI	5,5	I_{CC}	-	-	8,0	-	80,0	-	160,0	µA		I_O = 0
A.Q.S.C. (see note)	4,5-5,5	I_{CC}	-	100	360	-	450	-	490	µA	V_{CC} -2,1 V	other inputs at V_{CC} or GND I_O = 0

Note: Additional quiescent supply current (A.Q.S.C.) per input pin for unit load coefficient is 1.*

* The additional quiescent supply current per input is determined by the ΔI_{CC} unit load, which has to be multiplied by the unit load coefficient as given in the individual data sheets. For dual supply systems the theoretical worst-case (V_I = 2,4; V_{CC} = 5,5 V) specification is: ΔI_{CC} = 0,65 mA (typical) and 1,8 mA (maximum) across temperature.

A.C. family characteristics

GND = 0 V; C_L = 50 pF; $t_r = t_f$ = 6 ns

PC74HC

	V_{CC}		T_{amb} (°C)							
			+25			−40 to +85		−40 to +125		
parameter	V	symbol	min.	typ.	max.	min.	max.	min.	max.	unit
Output transition time standard outputs	2,0	t_{THL}/ t_{TLH}	-	-	75	-	95	-	110	ns
	4,5		-	-	15	-	19	-	22	ns
	6,0		-	-	13	-	16	-	19	ns
Output transition time bus driver outputs	2,0	t_{THL} t_{TLH}	-	-	60	-	75	-	90	ns
	4,5		-	-	12	-	15	-	18	ns
	6,0		-	-	10	-	13	-	15	ns

PC74HCU

	V_{CC}		T_{amb} (°C)							
			+25			−40 to +85		−40 to +125		
parameter	V	symbol	min.	typ.	max.	min.	max.	min.	max.	unit
Output transition time	2,0	t_{THL} t_{TLH}	-	-	75	-	95	-	110	ns
	4,5		-	-	15	-	19	-	22	ns
	6,0		-	-	13	-	16	-	19	ns

PC74HCT

	V_{CC}		T_{amb} (°C)							
			+25			−40 to +85		−40 to +125		
parameter	V	symbol	min.	typ.	max.	min.	max.	min.	max.	unit
Output transition time standard outputs	4,5	t_{THL}/ t_{TLH}	-	-	15	-	19	-	22	ns
Output transition time bus driver outputs	4,5	t_{THL}/ t_{TLH}	-	-	12	-	15	-	18	ns

HCMOS PC74 FAMILY SURVEY

Type numbers have a suffix which signifies the type of package:
P = plastic DIL; T = plastic SO mini-pack

NAND/NOR gates

74HC/HCT00	quad 2-input NAND gate
74HC/HCT02	quad 2-input NOR gate
74HC/HCT03	quad 2-input NAND gate; open drain
74HC/HCT10	triple 3-input NAND gate
74HC/HCT20	dual 4-input NAND gate
74HC/HCT27	triple 3-input NOR gate
74HC/HCT30	8-input NAND gate
74HC7266	quad 2-input EXCLUSIVE-NOR gate
74HC/HCT4002	dual 4-input NOR gate

AND/OR/EXCLUSIVE-OR gates

74HC/HCT08	quad 2-input AND gate
74HC/HCT11	triple 3-input AND gate
74HC/HCT21	dual 4-input AND gate
74HC/HCT32	quad 2-input OR gate
74HC58	dual AND-OR gate
74HC/HCT86	quad 2-input EXCLUSIVE-OR gate
74HC/HCT4075	triple 3-input OR gate

Inverters/buffers/line drivers/level shifters

74HC/HCT04	hex inverter
74HCU04	hex inverter (unbuffered)
74HC/HCT125*	quad buffer/line driver; 3-state
74HC/HCT126*	quad buffer/line driver; 3-state
74HC/HCT240*	octal buffer/line driver; 3-state; inverting
74HC/HCT241*	octal buffer/line driver; 3-state
74HC/HCT244*	octal buffer/line driver; 3-state
74HC/HCT365*	hex buffer/line driver with common enable; 3-state
74HC/HCT366*	hex buffer/line driver with common enable; 3-state; inverting
74HC/HCT367*	hex buffer/line driver; 3-state
74HC/HCT368*	hex buffer/line driver; 3-state; inverting
74HC/HCT540*	octal buffer/line driver; 3-state; inverting
74HC/HCT541*	octal buffer/line driver; 3-state
74HC4049	hex inverting HIGH-to-LOW level shifter
74HC4050	hex HIGH-to-LOW level shifter

* Types with a bus driver output stage.

Flip-flops/latches/registers

74HC/HCT73	dual JK flip-flop with reset; negative-edge trigger
74HC/HCT74	dual D-type flip-flop with set and reset; positive edge-trigger
74HC/HCT75	quad bistable transparent latch
74HC/HCT107	dual JK flip-flop with reset; negative-edge trigger
74HC/HCT109	dual JK flip-flop with set and reset; positive edge-trigger
74HC/HCT112	dual JK flip-flop with set and reset; negative edge-trigger
74HC/HCT173*	quad D-type flip-flop; positive-edge trigger; 3-state
74HC/HCT174	hex D-type flip-flop with reset; positive-edge trigger
74HC/HCT175	quad D-type flip-flop with reset; positive edge-trigger
74HC/HCT259	8-bit addressable latch
74HC/HCT273	octal D-type flip-flop with reset; positive edge-trigger
74HC/HCT373*	octalD-type transparent latch; 3-state
74HC/HCT374*	octal D-type flip-flop; positive-edge trigger; 3-state
74HC/HCT377	octal D-type flip-flop with data enable; positive-edge trigger
74HC/HCT533*	octal D-type transparent latch; 3-state; inverting
74HC/HCT534*	octal D-type flip-flop; positive-edge trigger; 3-state; inverting
74HC/HCT563*	octal D-type transparent latch; 3-state; inverting
74HC/HCT564*	octal D-type flip-flop; positive-edge trigger; 3-state; inverting
74HC/HCT573*	octal D-type transparent latch; 3-state
74HC/HCT574*	octal D-type flip-flop; positive-edge trigger; 3-state

Shift registers

74HC/HCT164	8-bit serial-in/parallel-out shift register
74HC/HCT165	8-bit parallel-in/serial-out shift register
74HC/HCT166	8-bit parallel-in/serial-out shift register
74HC/HCT194	4-bit bidirectional universal shift register
74HC/HCT195	4-bit parallel access shift register
74HC/HCT299*	8-bit universal shift register; 3-state
74HC/HCT7597	8-bit shift register with input latches
74HC/HCT670*	4 x 4 register file; 3-state
74HC/HCT4015	dual 4-bit serial-in/parallel-out shift register
74HC/HCT4094	8-stage shift-and-store bus register
74HC/HCT7030	9-bit x 64 word FIFO register; 3-state
74HC/HCT40104*	4-bit bidirectional universal shift register; 3-state
74HC/HCT40105	4-bit x 16 word FIFO register

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* Types with a bus driver output stage.

Arithmetic circuits

74HC/HCT85	4-bit magnitude comparator
74HC/HCT181	4-bit arithmetic logic unit
74HC/HCT182	look-ahead carry generator
74HC/HCT280	9-bit odd/even parity generator/checker
74HC/HCT283	4-bit full adder with fast carry
74HC/HCT583	4-bit full adder with fait carry
74HC/HCT688	8-bit magnitude comparator

Counters

74HC/HCT93	4-bit binary ripple counter
74HC/HCT160	presettable synchronous BCD decade counter; asynchronous reset
74HC/HCT161	presettable synchronous 4-bit binary counter; asynchronous reset
74HC/HCT162	presettable synchronous BCD decade counter; synchronous reset
74HC/HCT163	presettable synchronous 4-bit binary counter; synchronous reset
74HC/HCT190	presettable synchronous BCD decade up/down counter
74HC/HCT191	presettable synchronous 4-bit binary up/down counter
74HC/HCT192	presettable synchronous BCD decade up/down counter
74HC/HCT193	presettable synchronous 4-bit binary up/down counter
74HC/HCT390	dual decade ripple counter
74HC/HCT393	dual 4-bit binary ripple counter
74HC/HCT4017	Johnson decade counter with 10 decoded outputs
74HC/HCT4020	14-stage binary ripple counter
74HC/HCT4024	7-stage binary ripple counter
74HC/HCT4040	12-stage binary ripple counter
74HC/HCT4059	programmable divide-by-n counter
74HC/HCT4060	14-stage binary ripple counter with oscillator
74HC/HCT4510	BCD up/down counter
74HC/HCT4516	binary up/down counter
74HC/HCT4518	dual synchronous BCD counter
74HC/HCT4520	dual synchronous 4-bit binary counter
74HC/HCT40102	8-stage synchronous BCD down counter
74HC/HCT40103	8-bit synchronous binary down counter

Multiplexers

74HC/HCT151	8-input multiplexer
74HC/HCT153	dual 4-input multiplexer
74HC/HCT157	quad 2-input multiplexer
74HC/HCT158	quad 2-input multiplexer; inverting
74HC/HCT251	8-input multiplexer; 3-state
74HC/HCT253*	dual 4-input multiplexer; 3-state
74HC/HCT257*	quad 2-input multiplexer; 3-state
74HC/HCT258	quad 2-input multiplexer; 3-state
74HC/HCT354*	8-input multiplexer/register with transparent data latch; 3-state
74HC/HCT356*	8-input multiplexer/register; 3-state

* Types with a bus driver output stage.

Decoders/demultiplexers

74HC/HCT42	BCD to decimal decoder (1-of-10)
74HC/HCT137	3-to-8 line decoder/demultiplexer with address latches
74HC/HCT138	3-to-8 line decoder/demultiplexer; inverting
74HC/HCT139	dual 2-to-4 line decoder/demultiplexer
74HC/HCT147	10-to-4 line priority encoder
74HC/HCT154	4-to-16 line decoder/demultiplexer
74HC/HCT237	3-to-8 line decoder/demultiplexer with address latches
74HC/HCT238	3-to-8 line decoder/demultiplexer
74HC/HCT4511	BCD to 7-segment latch/decoder/driver
74HC/HCT4514	4-to-16 line decoder/demultiplexer with input latches
74HC/HCT4515	4-to-16 line decoder/demultiplexer with input latches
74HC/HCT4543	BCD-to-7 segment latch/decoder/driver for LCDs

Switches/multiplexers/demultiplexers

74HC/HCT4016	quad bilateral switches
74HC/HCT4051	8-channel analog multiplexer/demultiplexer
74HC/HCT4052	dual 4-channel analog multiplexer/demultiplexer
74HC/HCT4053	triple 2-channel analog multiplexer/demultiplexer
74HC/HCT4066	quad bilateral switches
74HC/HCT4067	16-channel analog multiplexer/demultiplexer
74HC/HCT4316	quad bilateral switches
74HC/HCT4351	8-channel analog multiplexer/demultiplexer with latch
74HC/HCT4352	dual 4-channel analog multiplexer/demultiplexer with latch
74HC/HCT4353	triple 2-channel analog multiplexer/demultiplexer with latch

Bus transceivers

74HC/HCT242*	quad bus transceiver; 3-state; inverting
74HC/HCT243*	quad bus transceiver; 3-state
74HC/HCT245*	octal bus transceiver; 3-state
74HC/HCT640*	octal bus transceiver; 3-state; inverting
74HC/HCT643*	octal bus transceiver; 3-state; true/inverting
74HC/HCT646*	octal bus transceiver/register; 3-state
74HC/HCT648*	octal bus transceiver/register; 3-state; inverting

Schmitt triggers

74HC/HCT14	hex inverting Schmitt trigger
74HC/HCT132	quad 2-input NAND Schmitt trigger

One-shot multivibrators

74HC/HCT123	dual retriggerable monostable multivibrator with reset
74HC/HCT221	dual non-retriggerable monostable multivibrator with reset
74HC/HCT423	dual retriggerable monostable multivibrator with reset
74HC/HCT4538	dual retriggerable precision monostable multivibrator

Miscellaneous

74HC/HCT297	digital phase-locked-loop filter
74HC/HCT4046A	phase-locked loop with VCO
74HC/HCT7046	PLL with lock detector

* Types with a bus driver output stage.

TTL FAMILY CHARACTERISTICS COMPARISON

	SSI gates propagation delay	flip-flops toggle rate	MSI ALU 4-bit add time
STANDARD TTL (STD) 7400 Series SSI and MSI 8200 Series MSI 9300 and 9600 Series MSI Standard "gold doped" TTL is the industry's longest selling digital logic family still in high volume production. New system designs generally favor the Low Power Schottky TTL equivalent functions.	10 ns at 10 mW	25 MHz	27 ns
LOW POWER SCHOTTKY TTL (LS) 74LS00 Series SSI and MSI Low power Schottky provides the same speed as standard TTL at 1/5 the power. The power savings and LSI potential are encouraging the use of 74LS in most new system designs.	10 ns at 2 mW	30 MHz	21 ns
SCHOTTKY TTL (S) 74S00 Series SSI, MSI and 82S00 Series MSI Schottky TTL uses a diode clamp design to insure the highest speed possible at TTL logic levels.	3 ns at 30 mW	90 MHz	11 ns
FAST TTL (F) 74F00 Series SSI and MSI New FAST Series offer higher speed than Schottky TTL.	3 ns at 4 mW	-	-

TTL 74 SERIES		STD	LS	S	F
Gates					
7400	quad 2-input NAND gate	●	●	●	●
7401	quad 2-input NAND gate (open collector)		●		
7402	quad 2-input NOR gate	●	●	●	●
7403	quad 2-input NAND gate (open collector)	●		●	
7408	quad 2-input AND gate	●	●	●	●
7409	quad 2-input AND gate (open collector)		●		
7410	triple 3-input NAND gate	●	●	●	●
7411	triple 3-input AND gate	●	●	●	●
7420	dual 4-input NAND gate	●	●	●	●
7421	dual 4-input AND gate	●	●		
7425	dual 4-input NOR gate with strobe	●			
7426	quad 2-input NAND gate (open collector)	●	●		
7427	triple 3-input NOR gate	●	●		●
7430	8-input NAND gate	●	●		●
7432	quad 2-input OR gate	●	●	●	●
7450	expandable dual 2-wide 2-input AND-OR-invert gate	●			
7451	dual 2-wide 2-input AND-OR-invert gate	●	●	●	●
7454	4-wide 2 and 3-input AND-OR-invert gate		●		
7464	4-2-3-2-input AND-OR-invert gate			●	●
7486	quad 2-input EXCLUSIVE-OR gate	●	●	●	●
74133	13-input NAND gate			●	
74134	12-input NAND gate (3-state)			●	
74135	quad EXCLUSIVE-OR/NOR gate			●	
74136	quad EXCLUSIVE-OR gate (open collector)		●		
74260	dual 5-input NOR gate		●	●	●
74266	quad 2-input EXCLUSIVE-NOR gate (open collector)		●		
Buffers, inverters					
7404	hex inverter	●	●	●	●
7405	hex inverter (open collector)	●	●	●	
7406	hex inverter buffer/driver (open collector)	●			
7407	hex buffer/driver (open collector)	●			
7416	hex inverter buffer/driver (open collector)	●			
7417	hex buffer/driver (open collector)	●			
7428	quad 2-input NOR buffer	●			
7433	quad 2-input NOR buffer (open collector)	●	●		
7437	quad 2-input NAND buffer	●	●	●	●
7438	quad 2-input NAND buffer (open collector)	●	●	●	●
7439	quad 2-input NAND buffer (open collector)	●			
7440	dual 4-input NAND buffer	●	●	●	●
74827	10-bit buffer, non-inverting				○
74828	10-bit buffer, inverting				○
741240	octal buffer (3-state); light load				●
741241	octal buffer (3-state); light load				●
741244	octal buffer (3-state)				●
741245	octal bus transceiver (3-state); light load				○

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—o— = planned.

TTL 74 SERIES		STD	LS	S	F
Bus drivers, transceivers					
74125	quad buffer (3-state)	●	●		●
74126	quad buffer (3-state)	●	●		●
74128	quad 2-input NOR buffer	●			
74240	octal inverter buffer (3-state)		●	●	●
74241	octal buffer (3-state)		●	●	●
74242	quad bus inverting transceiver (3-state)		●	●	●
74243	quad transceiver (3-state)		●	●	●
74244	octal buffer (3-state)		●	●	●
74245	octal bus transceiver (3-state)		●		●
74365A	hex buffer/driver (3-state)	●	●		●
74366A	hex inverter buffer (3-state)	●	●		●
74367A	hex buffer/driver (3-state)	●	●		●
74368A	hex inverter buffer (3-state)	●	●		●
74540	octal buffer/line driver (3-state)		●		●
74541	octal non-inverting buffer/line driver (3-state)		●		●
74545	octal bus transceiver (3-state)				●
74550	octal registered transceiver (AMD2950)				o
74551	octal registered transceiver (AMD2951)				o
74552	octal registered transceiver with status flags				o
74588	GPIB compatible octal transceiver				●
74620	octal bus transceiver (3-state)		●		●
74621	octal bus transceiver (O.C.)		●		●
74622	octal bus transceiver (O.C.)		●		●
74623	octal bus transceiver (3-state)		●		●
74640	inverting octal bus transceiver (3-state)		●		●
74640-1	inverting octal bus transceiver (3-state)		●		
74641	octal bus transceiver (open collector)		●		●
74641-1	octal bus transceiver (open collector)		●		
74642	inverting octal bus transceiver (open collector)		●		●
74642-1	inverting octal bus transceiver (open collector)		●		
74645	octal bus transceiver (3-state)		●		
74645-1	octal bus transceiver (3-state)		●		
74646	octal bus transceiver and register (3-state)				o
74647	octal bus transceiver and register (O.C.)				o
74648	octal bus transceiver and register (3-state)				o
74649	octal bus transceiver and register (O.C.)				o
74861	10-bit transceiver, non-inverting				o
74862	10-bit transceiver, inverting				o
74863	9-bit transceiver, non-inverting (3-state)				o
74864	9-bit transceiver, inverting (3-state)				o
741242	quad transceiver; inverting (3-state) light load				●
741243	quad transceiver (3-state); light load				●
743037	quad 2-input NAND, 30 Ohm transmission line driver				●
743038	quad 2-input NAND, 30 Ohm transmission line driver, (O.C.)				●
743040	dual 4-input NAND, 30 Ohm transmission line driver				●
7430240	octal inverting 30 Ohm transmission line driver				o
7430241	octal 30 Ohm transmission line driver				o
7430244	octal 30 Ohm transmission line driver				o

—o— = planned.

TTL 74 SERIES		STD	LS	S	F
Flip-flops					
7413	dual 4-input NAND Schmitt trigger	●	●		●
7414	hex inverter Schmitt trigger	●	●		●
7473	dual JK master-slave flip-flop	●	●		
7474	dual D-type edge-triggered flip-flop	●		●	●
7474A	dual D-type edge-triggered flip-flop		●		
7476	dual JK master-slave flip-flop	●	●		
74107	dual JK master-slave flip-flop	●	●		
74109	dual JK positive-edge triggered flip-flop	●	●		●
74112	dual JK negative-edge triggered flip-flop		●	●	○
74113	dual JK positive-edge triggered flip-flop		●	●	○
74114	dual JK negative-edge triggered flip-flop				○
74121	monostable multivibrator	●			
74123	dual retriggerable monostable multivibrator	●			
74132	quad 2-input NAND Schmitt trigger	●	●		●
74173	quad D-type flip-flop (3-state)	●	●		
74174	hex D-type flip-flop with reset	●	●	●	●
74175	quad D-type edge-triggered flip-flop with reset	●	●	●	●
74221	dual monostable multivibrator	●			
74273	octal D-type flip-flop with reset		●	●	●
74364	octal D-type flip-flop (3-state)		●		
74374	octal D-type flip-flop (3-state)		●	●	●
74377	octal D-type flip-flop with clock enable		●		●
74378	hex D-type flip-flop with clock enable		●		●
74379	quad D flip-flop with enable				●
74564	octal D flip-flop (3-state) broadside pinout				○
74574	octal D flip-flop (3-state) broadside pinout				○
Shift registers					
7494	4-bit shift register	●			
7495	4-bit shift register	●			
7495B	4-bit left-right shift register		●		
7496	5-bit shift register	●	●		
74164	8-bit serial-in/parallel-out shift register	●	●		○
74165	8-bit parallel-in/serial-out shift register	●			○
74166	8-bit parallel-in/serial-out shift register	●			
74170	4x4 register file (open collector)	●	●		
74172	16-bit multiple port register file (3-state)			●	
74194	4-bit bidirectional universal shift register	●		●	●
74194A	4-bit bidirectional universal shift register		●		
74195	4-bit parallel access shift register	●		●	●
74195A	4-bit parallel access shift register		●		
74198	8-bit bidirectional universal shift register				○
74199	8-bit parallel-access shift register	●			○
74225	FIFO			●	○
74295B	4-bit shift register (3-state)		●		
74299	octal shift/storage register (3-state)				○
74322	octal shift/storage register (3-state)				○
74323	octal shift/storage register (3-state)				○
74395A	4-bit cascadable shift register (3-state)		●		●
74398	quad 2-port register true				●
74399	quad 2-port register true				●

IC

—o— = planned.

TTL 74 SERIES		STD	LS	S	F
Shift registers (cont.)					
74595	8-bit shift register with output latch	—	—	—	○
74597	8-bit shift register with input latch	—	—	—	○
74598	8-bit shift register with input latch	—	—	—	○
74670	4x4 register file (3-state)	—	●	—	—
74673	16-bit serial-in, serial/parallel-out shift register (3-state)	—	—	—	○
74674	16-bit serial/parallel-in,serial out shift register (3-state)	—	—	—	○
74675	16-bit serial-in, serial/parallel-out shift register (3-state)	—	—	—	○
74676	16-bit serial/parallel-in,serial out shift register (3-state)	—	—	—	○
Other registers					
74821	10-bit register, non-inverting	—	—	—	○
74822	10-bit register, inverting	—	—	—	○
74823	9-bit register, non-inverting	—	—	—	○
74824	9-bit register, inverting	—	—	—	○
74825	9-bit register, non-inverting	—	—	—	○
74826	9-bit register, inverting	—	—	—	○
Counters					
7490	4-bit decade ripple counter	●	●	—	—
7492	divide-by-twelve counter	●	●	—	—
7493	4-bit binary ripple counter	●	●	—	—
74160	synchronous BCD decade counter	●	—	—	—
74160A	synchronous BCD decade counter	—	●	—	○
74161	synchronous 4-bit binary counter	●	—	—	—
74161A	synchronous 4-bit binary counter	—	●	—	○
74162A	synchronous BCD decade counter	—	●	—	○
74163	synchronous 4-bit binary counter	●	—	—	—
74163A	synchronous 4-bit binary counter	—	●	—	●
74168A	synchronous BCD decade up/down counter	—	●	●	○
74169A	synchronous 4-bit binary up/down counter	—	●	●	○
74190	presettable BCD/decade up/down counter	●	—	—	○
74191	presettable 4-bit binary up/down counter	●	●	—	○
74192	presettable BCD/decade up/down counter	●	●	—	○
74193	presettable 4-bit binary up/down counter	●	●	—	○
74197	presettable 4-bit binary ripple counter	—	●	—	—
74269	8-bit binary counter	—	—	—	●
74290	4-bit decade ripple counter	—	●	—	—
74293	4-bit binary ripple counter	—	●	—	—
74390	dual decade ripple counter	—	●	—	—
74393	dual 4-bit binary ripple counter	—	●	—	—
74490	dual BCD decade ripple counter	—	●	—	—
74568A	BCD decade up/down synchronous counter (3-state)	—	●	—	○
74569A	4-bit binary up/down synchronous counter (3-state)	—	●	—	○
74579	8-bit up/down counter, common I/O (3-state)	—	—	—	●
74779	8-bit up/down counter, common I/O (3-state)	—	—	—	○

—○— = planned.

TTL 74 SERIES TTL 74 SERIES		STD STD	LS LS	S S	F F
Latches					
7475	quad bistable latch	●	●		
74116	dual 4-bit transparent latch with reset	●			
74256	dual 4-bit addressable latch		●		●
74259	8-bit addressable latch		●		●
74279	quadruple S-R latch	●			
74363	octal transparent latch (3-state)		●		
74373	octal transparent latch (3-state)		●	●	●
74375	quad transparent bistable latch		●		
74412	octal multimode buffered latch				○
74432	octal multimode buffered latch				○
74533	inverting octal D-type latch (3-state)				●
74534	octal D-type flip-flop (3-state)			●	●
74543	octal transparent bidirectional latch				●
74544	octal transparent bidirectional latch				○
74563	octal D latch (3-state) broadside pinout				○
74573	octal D latch (3-state) broadside pinout				○
74604	dual 8-bit latch (3-state)				●
74605	dual 8-bit latch (O.C.)				●
74841	10-bit latch, non-inverting				○
74842	10-bit latch, inverting				○
74843	9-bit latch, non-inverting				○
74844	9-bit latch, inverting				○
74845	8-bit latch, non-inverting				○
74846	8-bit latch, inverting				○
Decoders/drivers					
7445	BCD-to-decimal decoder/driver (open collector)	●			
74140	dual 4-input NAND line driver (50 Ohm)			●	
74145	BCD-to-decimal decoder/driver (open collector	●			
74445	BCD-to-decimal decoder/driver (open collector)		●		

IC

○ = planned.

TTL 74 SERIES		STD	LS	S	F
Decoders/(de)multiplexers					
7442	BCD-to-decimal decoder (1-of-10)	●	●		
74138	3-line to 8-line decoder/demultiplexer		●	●	●
74139	dual 2-line to 4-line decoder/demultiplexer		●	●	●
74147	10-line to 4-line priority encoder	●			
74148	8-line to 3-line priority encoder	●			○
74150	16-line to 1-line multiplexer	●			
74151	8-line to 1-line multiplexer	●	●	●	●
74153	dual 4-line to 1-line multiplexer	●	●	●	●
74154	4-line to 16-line decoder/demultiplexer	●	●		
74155	dual 2-line to 4-line decoder/demultiplexer	●	●		
74156	dual 2-line to 4-line decoder/demultiplexer (open collector)	●	●		
74157	quad 2-input data selector/multiplexer; non-inverting	●	●	●	●
74158	quad 2-input data selector/multiplexer; inverting	●	●	●	●
74251	8-line to 1-line multiplexer (3-state)			●	○
74251A	8-line to 1-line multiplexer (3-state)		●		
74253	dual 4-line to 1-line multiplexer (3-state)		●	●	●
74257	quad 2-line to 1-line data selector/multiplexer (3-state)			●	●
74257A	quad 2-line to 1-line data selector/multiplexer (3-state)		●		
74258	quad 2-line to 1-line data selector/multiplexer (3-state)			●	●
74258A	quad 2-line to 1-line data selector/multiplexer (3-state)		●		
74298	quad 2-port register	●	●		●
74352	dual 4-input multiplexer		●		●
74353	dual 4-input multiplexer (3-state)		●		●
74384	8-bit serial/parallel two's complement multiplier				○
74537	1-of-10 decoder (3-state)				○
74538	1-of-8 decoder (3-state)				○
74539	dual 1-of-4 decoder (3-state)				○
74547	octal decoder/multiplexer				○
74548	octal decoder/multiplexer				○
74557	8x8 multiplier with latch (3-state)				○
74558	8x8 multiplier (3-state)				○

○ = planned.

TTL 74 SERIES		STD	LS	S	F
Arithmetic circuits					
7483	4-bit binary full adder (ripple carry)	●			
7483A	4-bit binary full adder (fast carry)		●		
7485	4-bit magnitude comparator	●	●	●	●
74180	8-bit odd/even parity generator/checker	●			
74181	4-bit arithmetic logic unit	●	●	●	●
74182	look-ahead carry generator			●	○
74280	9-bit odd/even parity generator/checker			●	
74280A	9-bit odd/even parity generator/checker				●
74283	4-bit full adder with fast carry		●		○
74350	4-bit shifter (3-state)			●	●
74381	4-bit arithmetic logic unit				○
74382	4-bit arithmetic logic unit				○
74385	quad serial adder/substractor				○
74455	octal buffer with parity generator checker				●
74456	octal buffer with parity generator checker				●
74521	8-bit identify comparator				●
74524	8-bit register comparator (O.C.)				○
74655A	octal inverting buffer with parity generator checker				●
74656A	octal buffer with parity generator checker (3-state)				●
74657	octal bus transceiver with parity generator checker				●
74881	arithmetic logic unit/function generator				○
74882	32-bit look-ahead carry generator				○
Memories					
74189	64-bit bipolar scratchpad memory (16x4)			●	○
74301	256-bit TTL RAM (256x1)		●	●	
Special functions					
74630	memory error detector/corrector (3-state)				○
74631	memory error detector/corrector (O.C.)				○
74764	dual port RAM controller		●		○
74765	dual port RAM controller without latch		○		○
74784	8-bit serial multiplier and adder substractor				○
741801	bit stream manager EN/DEC		●		
741802	bit stream manager SER/DES		●		

IC

—○— = planned.

TTL 8200, 9300 AND 9600 SERIES

Arithmetic circuits

82S82	4-bit arithmetic unit
82S83	4-bit BCD adder

Counters

9310	4-bit decade counter
9316	4-bit binary counter

Decoders/display drivers

82S50	binary-to-octal decoder
82S52	BCD-to-decimal decoder

Flip-flops

9602	dual monostable multivibrator

Multiplexers

8234	2-input, 4-bit digital multiplexer
8266	2-input, 4-bit digital multiplexer
9309	dual 4-input multiplexer
9322	data selector/multiplexer

Parity functions

82S41	quad EXCLUSIVE-OR gate
8242	quad EXCLUSIVE-NOR gate
8262	8-bit parity generator and checker
82S62	8-bit parity generator and checker
9324	5-bit comparator

Registers/latches

8262	8-bit parity generator/checker
82S62	8-bit parity generator/checker
8271	4-bit shift register
8273	10-bit serial-in/parallel-out shift register
8274	10-bit parallel-in/serial-out shift register
8881	quad 2-input NAND O/C
8890	HEX invertor
8891	HEX invertor
9334	8-bit addressable latch
9386	quad exclusive - NOR

TTL 8T00 SERIES

Timing circuits

8T20	bidirectional one shot

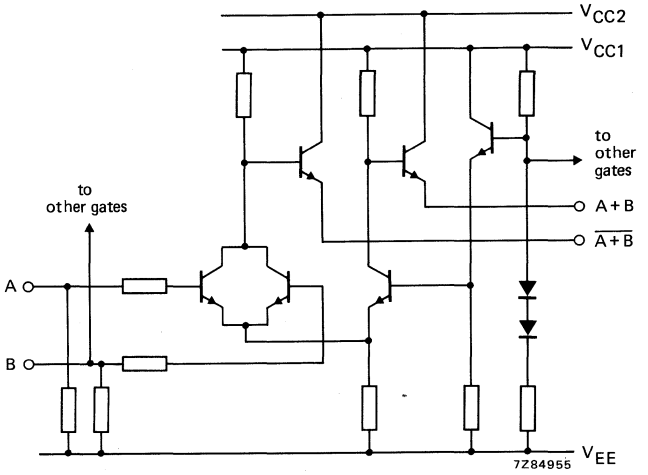
Line drivers/receivers/transceivers

8T09	quad 3-state bus driver
8T10	quad 3-state D-type bus latch
8T13	dual low impedance line driver
8T15	dual communications line driver
8T16	dual communications line receiver
8T23	dual IBM 360/370 line driver
8T24	triple IBM 360/370 line receiver
8T26A	quad inverting bus transceiver (3-state)
8T28	quad non-inverting bus transceiver (3-state)
8T34	quad bus transceiver (3-state)
8T37	hex bus receiver/Schmitt trigger
8T38	quad bus transceiver (open collector)
8T95/97	high-speed hex buffer (3-state)
8T96/98	high-speed hex inverter (3-state)
8T125	octal transceiver (inverting)
8T126	quad bus driver/receiver (inverting)
8T127	quad bus driver/receiver (inverting)
8T128	quad bus driver/receiver (non-inverting)
8T129	quad bus driver/receiver (non-inverting)
8T245	octal transceiver
8T380	quad bus receiver with hysteresis/Schmitt trigger
8T3404	high-speed 6-bit latch
8TS805	octal transparent latch (3-state)
8TS806	octal D-type flip-flop (3-state)
8TS807	octal transparent latch (3-state)
8TS808	octal D-type flip-flop (3-state)
8TS809	octal transparent latch; inverting; 3-state

ECL 10 000 FAMILY SPECIFICATIONS

The 10K family of ECL silicon monolithic integrated circuits is designed for high speed central processors and digital communication systems.
With 2,0 ns typical propagation delay and only 25 mW power dissipation per gate, this family offers an excellent speed-power product and so is recommended for high speed large system design.

Basic gate circuit



Family ratings

Limiting values in accordance with the Absolute Maximum System (IEC134)

Supply voltage (d.c.)	V_{EE}	max. −8,0	V
Input voltage range	V_I	0 to V_{EE}	
Output current	I_O	max. 50	mA
Storage temperature range	T_{stg}	−55 to +150	°C

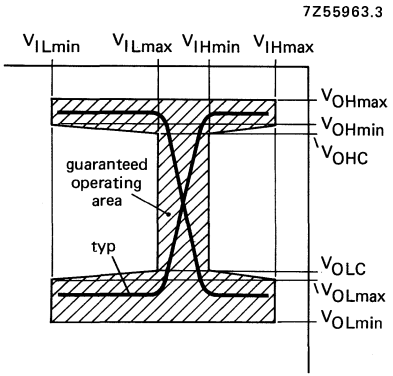
D.C. family characteristics

V_{CC} = ground; V_{EE} = −5,2 V; R_L = 50 Ohm to −2 V

Each 10K circuit has been designed to meet the d.c. specifications shown in the test table below, after thermal equilibrium has been established.
The circuit is in a test socket or mounted on a printed-circuit board and transverse air flow > 2,5 m/s is maintained.
Test values are given in the table and defined in the figure.

Test table

T_{amb}	−30	+25	+85 °C	unit
V_{IHA}	−890	−810	−700	mV
V_{IHB}	−1205	−1105	−1035	mV
V_{ILA}	−1500	−1475	−1440	mV
V_{ILB}	−1890	−1850	−1825	mV



parameter	symbol	T_{amb} −30 °C	T_{amb} +25 °C	T_{amb} +75 °C	unit
Output voltage HIGH	V_{OHA} V_{OHB}	−890 −1060	−810 −960	−700 −890	mV mV
Output voltage LOW	V_{OLA} V_{OLB}	−1675 −1890	−1650 −1850	−1615 −1825	mV mV
Output threshold voltage HIGH	V_{OHC}	−1080	−980	−910	mV
Output threshold voltage LOW	V_{OLC}	−1655	−1630	−1595	mV

ECL 10 000 FAMILY SURVEY

Type numbers have a suffix which signifies the type of package:
N = plastic DIL; F = ceramic (cerdip) DIL

Gates

10100	quadruple 3-input NOR gate (1 input common)
10101	quadruple 2-input OR/NOR gate (1 input common)
10102	quadruple 2-input, 3 NOR and 1 OR/NOR gate
10103	quadruple 2-input, 3 OR and 1 OR/NOR gate
10104	quadruple 2-input, 3 AND and 1 AND/NAND gate
10105	triple 2-3-2 input OR/NOR gate
10106	triple 4-3-3 input NOR gate
10107	triple 2-input EXCLUSIVE-OR/EXCLUSIVE-NOR gate
10108	dual 3-input AND/NAND gate
10109	dual 4-5 input OR/NOR gate
10110	dual 3-input/3-output OR gate (line driver)
10111	dual 3-input/3-output NOR gate (line driver)
10113	quadruple EXCLUSIVE-OR gate (with enable)
10117	dual 2-wide 2-3-input OR-AND/OR-AND-INVERT gate
10118	dual 2-wide 3-input OR-AND gate
10119	4-wide 4-3-3-3-input OR-AND gate
10121	4-wide OR-AND/OR-AND-INVERT gate
10210	high speed dual 3-input/3-output OR gate
10211	high speed dual 3-input/3-output NOR gate
10216	triple differential amplifier

Interfaces

10114	triple line receiver (output OR/NOR)
10115	quadruple line receiver (output OR)
10116	triple line receiver (output OR/NOR)
10123	triple bus driver (4-3-3-input; output NOR)
10124	quadruple TTL to ECL translator
10125	quadruple ECL to TTL translator
10129	quadruple TTL/IBM bus receiver/latch
10188	hex buffer (non-inverting) with enable
10189	hex inverter with enable
10192	quadruple current-mode bus driver

Flip-flops

10130	dual D-type latch
10131	dual D-type master-slave flip-flop
10133	quadruple latch with D-type inputs and enable outputs
10135	dual JK master-slave flip-flop
10175	quint D-latch with common reset and two wired-OR common clock inputs
10176	hex D-type master-slave flip-flop
10231	high speed dual D-type master-slave flip-flop

Counters and registers

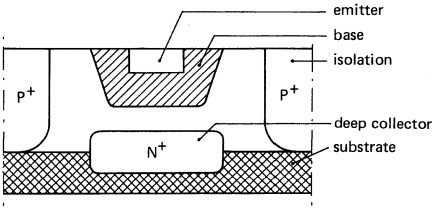
10136	universal hexadecimal counter
10137	universal decade counter
10141	4-bit universal shift register

Complex functions

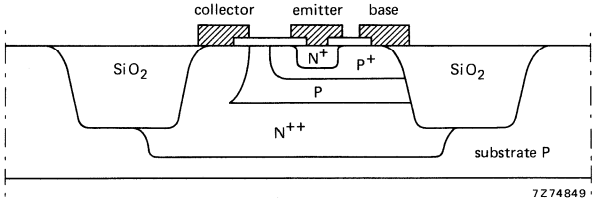
10132	dual 2-input multiplexer with clocked D-type latches and common reset
10134	dual 2-input multiplexer with clocked D-type latches
10149	1024-bit, 4-bits per word PROM (bip. memory)
10155	16-bit, 2-bits per word CAM (bip. memory)
10158	quadruple 2-to-1 multiplexer (non-inverting)
10159	quadruple 2-to-1 multiplexer (inverting)
10160	12-bit parity checker/generator
10161	3-bit decoder with two enable inputs (1 of 8 lines LOW)
10162	3-bit decoder with two enable inputs (1 of 8 lines HIGH)
10164	8-input multiplexer with enable input
10165	8-input priority encoder
10171	dual 2-bit decoder (1 of 4 lines LOW)
10172	dual 2-bit decoder (1 of 4 lines HIGH)
10173	quadruple 2-input multiplexer with latched outputs
10174	dual 4-to-1 multiplexer (with enable)
10179	look-ahead carry block
10180	dual 2-bit adder/subtractor
10181	4-bit arithmetic logic unit
10191	hex ECL-MST translator

ECL 100 000 FAMILY SPECIFICATIONS

To satisfy the needs of new generations of computer and telecommunication systems in standard and LSI circuit design, a new technological process has been developed using oxide lateral isolation. The process is called SUBILO and permits the manufacture of integrated circuits with ultra-high speeds and high integration density.
Instead of conventional planar junction isolation technology, SUBILO uses a process that results in a considerable reduction in transistor area and an increase integration density. By using an increase in silicon oxide instead of isolation diffusion 'p', and removing the part between the emitter and isolation oxide, SUBILO technology results in a further reduction of transistor area. At the same time, the collector-base capacitance decreases, which is an important improvement in the dynamic performance of the transistor.



Junction-isolated PLANAR technique used for ECL 10 000.



The SUBILO process uses silicon oxide between devices instead of the p^+ regions used in the planar process.

Planar process in comparison with SUBILO technology

	planar	SUBILO	unit
Transistor area	3000	500	μm^2
Transition frequency	1,5	4,5	GHz
Application	ECL 10 000	ECL 100 000	

Family ratings

Limiting values in accordance with the Absolute Maximum System (IEC 134)

Supply voltage (d.c.):	V_{EE} max. -7 V
Input voltage range:	$V_I = 0$ to V_{EE} if $V_{EE} > -6$ V; 0 to -6 V $> V_{EE} > -7$ V
Output current:	I_O max. 55 mA
Storage temperature range:	T_{stg} -55 to $+150$ °C

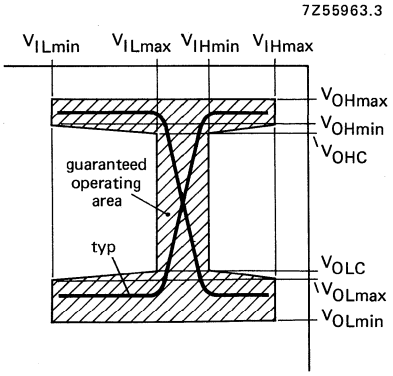
D.C. family characteristics

V_{CC} ground; $V_{EE} = -4{,}5$ V; $T_{amb} = 0$ to $+85$ °C; $R_L = 50$ Ohm to -2 V.

Each 100K circuit has been designed to meet the d.c. specifications shown in the test table, after thermal equilibrium has been established. The circuit is in a test socket or mounted on a printed-circuit and transverse air flow > 2,5 m/s is maintained.
Test values are given in the table and defined in the figure.

Test table

parameter	symbol	value	unit
Input voltage HIGH	V_{IHA} V_{IHB}	−880 −1165	mV mV
Input voltage LOW	V_{ILA} V_{ILB}	−1475 −1810	mV mV
Output voltage HIGH	V_{OHA} V_{OHB}	−880 −1025	mV mV
Output voltage LOW	V_{OLA} V_{OLB}	−1620 −1810	mV mV
Output threshold voltage HIGH LOW	 V_{OHC} V_{OLC}	 −1035 −1610	 mV mV



ECL 100 000 FAMILY SURVEY

Gates

100101	triple 5-input OR/NOR gate
100102	quintuple 2-input OR/NOR gate with common enable
100107	quintuple EXCLUSIVE OR/NOR gate with compare
100112	quadruple double fan-out OR/NOR gate
100113	quadruple fan-out OR/NOR gate
100117	triple 1-2-2 input OR/AND-OR/NAND gate
100118	2-4-4-4-5 input OR/AND-OR/NAND gate

Drivers

100123	hex bus driver

Interfaces

100114	quintuple differential line receiver
100122	9-bit buffer gate
100126	9-bit buffer gate
100175	5-bit 100K to 10K interface with latch
100255	5-bit ECL/TTL interface

Flip-flops

100131	triple D master-slave flip-flop
100131A	high-speed triple D master-slave flip-flop
100150	hex D latch flip-flop
100151	hex D master-slave flip-flop

Matrix

100158	8-bit shift matrix

Multiplexers

100155	quadruple 2-way multiplexer latch
100163	dual 8-bit multiplexer
100164	16-input multiplexer
100171	triple bit 4-way multiplexer

Counters and registers

100136	multipurpose counting register
100141	8-bit universal shift register
100145	16x4 register file

Complex functions

100160	dual 9-bit parity generator/8-bit comparator
100165	universal priority encoder
100166	9-bit comparator
100170	universal demultiplexer/decoder
100179	high speed carry look ahead generator
100180	fast 6-bit adder
100181	4-bit ALU binary/decimal

BIPOLAR TTL RAM

device	organization	output circuit[1]	output logic[2]	access time (ns)	temperature range[3]	package	no. of pins	I_{CCmax} (mA)
3101A	16x4	OC	B	35	C	F,N	16	105
74S189	16x4	TS	B	35	C	F,N	16	110
82S16	256x1	TS	T	50	C	F,N	16	115
82S16				70	M	F		120
74S301	256x1	OC	B	50	C	F,N	16	115
82LS16	256x1	TS	T	40	C	F,N	16	70
74LS301	256x1	OC	B	40	C	F,N	16	70
82S09	64x9	OC	T	45	C	F,N	28	190
82S09A				35	C	F,N	28	190
82S19	64x9	OC	B	35	C	F,N	28	190
82S212	256x9	TS	B	45	C	F,N	24	185
82S212				70	M	F		200
82S212A				35	C	F,N		185
8X350	256x8	TS	B	N/A	C	F,N	22	185
8X350				N/A	M	F		200

IC

Notes

1) Output circuit : OC = Open collector
TS = 3-state

2) Output logic : T = Transparent - input data appears on output during Write
B = Blanked - output is blanked during Write

3) Temperature range : C = Commercial (0 °C to +75 °C)
M = Military (−55 °C to +125 °C)

BIPOLAR TTL PROM

device	organization	output circuit[1]	access time (ns)	temperature range[2]	package	no. of pins	I_{CCmax} (mA)
82S23	32x8	OC	50	C	F,N	16	77
82S23A			25	C	F,N		100
			65	M	F		85
82S123	32x8	TS	50	C	F,N	16	77
82S123A			25	C	F,N		
			65	M	F		85
82S126	256x4	OC	50	C	F,N	16	120
82S126A			30	C	F,N		120
			70	M	F		125
82S129	256x4	TS	50	C	F,N	16	120
82S129A			27	C	F,N		120
			70	M	F		125
82S130	512x4	OC	50	C	F,N	16	140
82S130A	512x4	OC	33	C	F,N		140
			70	M	F		140
82S131	512x4	TS	50	C	F,N	16	140
82S131A	512x4	TS	30	C	F,N		140
			70	M	F		140
82LS135	256x8	TS	100	C	F,N	20	100
82S135	256x8	TS	45	C	F,N	20	155
82S115	512x8	TS	60	C	F,N	24	175
			90	M	F		185
			90	M	F		185
82S137	1024x4	TS	60	C	F,N	18	140
			70	M	F		150
82HS137	1024x4	TS	45	C	F,N	18	140
			70	M	F		150
82S137A	1024x4	TS	45	C	F,N	18	140
82S137B	1024x4	TS	35	C	F,N	18	140
82S147	512x8	TS	60	C	F,N	20	155
82S147A	512x8	TS	45	C	F,N	20	155
82LS181	1024x8	TS	150	C	F,N	24	80
82S181	1024x8	TS	70	C	F,N	24	175
			90	M	F,G		185
82S181A	1024x8	TS	50	C	F,N	24	175
			80	M	F,G		185
82S181B	1024x8	TS	45	C	F,N	24	175
82S183	1024x8	TS	60	C	F,N	24	175
82S185	2048x4	TS	100	C	I,N	18	120
			115	M	I		130
82S185A	2048x4	TS	50	C	F,N	18	155
			80	M	F,G		160
82S185B	2048x4	TS	45	C	F,N	18	155
82HS187	1024x8	TS	45	-	N	24	185
82HS189	1024x8	TS	45	-	N	24	185
82S191	2048x8	TS	80	C	F,N	24	175
			100	M	F,G		185
82S191A	2048x8	TS	55	C	F,N	24	175
			80		F,G		185

1) Output circuit : OC = Open collector; TS = 3-state
2) Temperature range : C = Commercial (0 °C to +75 °C)
M = Military (−55 °C to +125 °C)

BIPOLAR TTL PROM (cont.)

device	organization	output circuit[1]	access time (ns)	temperature range[2]	package	no. of pins	I_{CCmax} (mA)
82S191B			45	C	F,N		175
82S195	4096x4	TS	30	C	F,N	20	155
			50	M	F		165
82HS195	4096x4	TS	30	C	F,N		155
82HS195A	4096x4	TS	35	-	N	20	145
82HS195B	4096x4	TS	25	-	N	20	145
82S321	4096x8	TS	70	-	N	24	175
82HS321	4096x8	TS	35	C	F,N	24	175
82HS321A	4096x8	TS	35	-	N	24	175
82HS321B	4096x8	TS	30	-	N	24	175
82HS641	8192x8	TS	45	C	F,N	24	175
82HS641A	8192x8	TS	45	-	N	24	175
82HS641B	8192x8	TS	35	-	N	24	175

IC

1) Output circuit : OC = Open collector; TS = 3-state
2) Temperature range : C = Commercial (0 °C to +75 °C)
M = Military (−55 °C to +125 °C)

BIPOLAR ECL RAM

10422; B; C	256x4-bit RAM
10470; A	4096x1-bit RAM
10474 A	1024x4-bit RAM
100422; B; C	256x4-bit RAM
100470; A	4096x1-bit RAM
100474 A	1024x4-bit RAM

Access time: A = 15 ns; B = 10 ns; C = 7 ns

BIPOLAR ECL PROM

10139	256-bit, 8-bits per word PROM
10149/100149	1024-bit, 4-bits per word PROM

BIPOLAR ECL CAM

10155	16-bit, 2-bits per word CAM
100142	4x4 CAM

NMOS ROM

2332	32 768-bit static ROM (4096x8) (2732 pin compatible)
2364	65 536-bit static ROM (8192x8)
2616	16 384-bit static ROM (2048x8)
2632	32 768-bit static ROM (4096x8) (2532 pin compatible)
2664	65 536-bit static ROM (8192x8)
23128	131 072-bit static ROM (16 384x8)
23256A	262 144-bit static ROM (32 768x8)
23512A	524 288-bit static ROM (65536x8)

CMOS EPROM

27C64	65 536-bit CMOS EPROM (8192x8)
27C256	262 144-bit CMOS EPROM (32Kx8)

CMOS EEPROM

PCB8582	256x8-bit electrically eraseable PROM with I^2C bus interface

All parts offer 200 ns, 250 ns and 300 ns access time.

CMOS RAM

PCD5101	256x4-bit static RAM
PCD5114	1024x4-bit static RAM
PCF8570	256x8-bit static RAM with I^2C bus interface
SBB6116L-10	2048x8-bit static RAM; max. access time 100 ns
SBB6116L-12	2048x8-bit static RAM; max. access time 120 ns
SBB6164	8kx8-bit static RAM; access time 150 ns

PERIPHERAL INTERFACES

MC1488	quad line driver
MC1489/1489A	quad line receiver
NE587	LED decoder driver
NE589	LED decoder driver
NE590	addressable peripheral drivers
NE591	addressable peripheral drivers
NE/SA594	vacuum fluorescent display driver
NE5080	FSK modem transmitter
NE5081	FSK modem receiver
NE5090	addressable relay driver
NE5520	LVDT signal conditioner
NE5521	LVDT signal conditioner

COMPARATORS

LM111/211/311*	voltage comparator
LM119/219/319*	dual voltage comparator
LM139/239/339*	quad voltage comparator
LM193/293/393	dual voltage comparator
LM2901	quad voltage comparator
LM2903	low power dual voltage comparator
MC3302	quad voltage comparator
NE/SE521/522*	high speed dual differential comparator
NE/SE527*	high speed voltage comparator
NE/SE529*	high speed voltage comparator

D/A AND A/D CONVERTERS

AM6012	12-bit high speed multiplyine D/A converter
DAC-08 series	8-bit D/A converter
MC3410/3510	10-bit high speed multiplying D/A converter
NE/SE5410	10-bit high speed multiplying D/A converter
MC1408-7	8-bit D/A converter, 1 LSB accuracy
MC1408-8	8-bit D/A converter, 1/2 LSB accuracy
MC1508-8*	8-bit D/A converter, 1/2 LSB accuracy
NE/SE5018*	8-bit D/A converter subsystem, 1/2 LSB accuracy, V_{out}
NE/SE5019*	8-bit D/A converter subsystem, 1/4 LSB accuracy, V_{out}
NE/SE5118	8-bit D/A converter subsystem, 1/2 LSB accuracy, I_{out}
NE/SE5119	8-bit D/A converter subsystem, 1/4 LSB accuracy, I_{out}
NE5020	10-bit D/A converter subsystem, 1 LSB accuracy, I_{out}
ADC0801/2/3/4/5-1	8-bit CMOS A/D converter
NE5034	8-bit general purpose A/D converter
NE5036	8-bit A/D converter (serial output)
NE5037	6-bit A/D converter (parallel outputs)
PNA7509	7-bit, 22 MHz, ± 1/2 LSB 3-state ADC (NMOS)
PNA7510	7-bit, 22 MHz, ± 1/2 LSB 3-state + ref. voltage ADC (NMOS)
PNA7518	8-bit, 30 MHz, ± 1/2 LBS D/A converter (NMOS)
TDA1432P;T	8-bit D/A converter (CMOS)
TDA1534A	monolithic 14-bit A/D converter
TDA1540D;P	14-bit D/A converter with 85 dB S/N ratio, 1/2 LSB accuracy
TDA5702	8-bit D/A converter (bipolar)
TDA5703	8-bit A/D converter (bipolar)
TDB1710	CDAC

* Available with military processing

OPERATIONAL AMPLIFIERS

LM124/224/324*	general purpose single supply quad op amp
LM158/258/358*	dual low power op amp
MC1458/1558*	general purpose dual op amp
MC3303/3403/3503	quad low power op amp
NE/SE530	high slew rate op amp
NE/SE531	high slew rate op amp
NE/SE532*	dual low power op amp
NE/SE538	single high slew rate op amp
NE/SE4558	dual general purpose op amp
NE/SE5512	dual high performance op amp
NE/SE5514	quad high performance op amp
NE5517	dual transconductance amp
NE5517A	dual transconductance amp
NE/SE5532	internally compensated dual low noise op amp
NE/SE5532A	internally compensated dual low noise op amp
NE/5533	dual low noise op amp
NE/5533A	dual low noise op amp
NE/SE5534	single low noise op amp
NE/SE5534A	single low noise op amp
NE/SE5535	dual high slew rate op amp
NE5230	low voltage op amp
TCA520B; D	low-power/low-voltage op amp
NE5205	high frequency amplifier
μA741/741C*	general purpose op amp
μA747/747C*	dual op amp

VIDEO AMPLIFIERS

NE/SE5539	ultra high frequency op amp
NE/SE592	video amplifier
NE5592	video amplifier
μA733/733C	differential video amplifier

SAMPLE AND HOLD CIRCUITS

NE/SE5537	low leakage sample and hold amplifier
LF398	sample and hold circuit

TIMERS

NE/SE555*	timer
NE/SE556*	dual timer
NE/SE556-1	dual timer
NE/SE558	quad timer

MOTOR CONTROL AND SENSOR CIRCUITS

NE5044	programmable 7 channel RC encoder
NE5045	seven channel RC decoder
NE544	servo amplifier

* Available with military processing

PHASE LOCKED LOOPS

HEF4046B	phase-locked loop
NE/SE564*	phase locked loop; 5 V supply; up to 50 MHz; TTL compatible in/out
NE/SE565	phase locked loop; ± 6 to ± 12 V supply; TTL/DTL compatible output
NE/SE566	function generator
NE/SE567*	tone/frequency decoder PLL

TRANSISTOR ARRAYS

CA3081	seven-transistor common emitter

COMPANDORS

NE570	compandor
NE/SA571	compandor
NE/SA572	programmable compandor

SMPS CONTROLLERS

NE/SE5560	SMPS controller
NE/SE5561	SMPS controller
NE/SE5562	SMPS controller
NE/SE5563	SMPS controller
NE5568	SMPS controller
SG3524	SMPS controller
SG/1526A/2526A/3526A	SMPS controller
μA723/CC/SA723C	precision voltage regulator

COMMUNICATION CIRCUITS

LM1870	stereo denodulator with blend
NE542	dual low noise of amp
NE/SA602	double balanced mixer & oscillator
NE612	double balanced mixer & oscillator
NE/SA604	low power narrow band FM. IF.
NE614	low power narrow band FM. IF.
μA758	FM stereo multiplex decoder phase locked loop
CA3089	FM. IF. system
MC1496/1596	balanced modulator/demodulator
ULN2003/4	high-voltage/high current Darlington transistor array

IC

* Available with military processing

LCD DRIVERS; CMOS

PCF1303T	Bargrath LCD driver (18 segments); with analogue input
PCF2100	LCD duplex driver; 40 segments
PCF2110	LCD duplex driver; 60 segments and 2 LEDs
PCF2111	LCD duplex driver; 64 segments
PCF2112	LCD driver; 32 segments
PCF8576	universal LCD driver for low multiplex rates (1:1 to 1:4); I^2C bus interface
PCF8577	LCD direct driver (32 segments) or duplex driver (64 segments) with I^2C bus interface

DISPLAY DRIVERS; BIPOLAR

NE587/589	LED decoder/driver
NE/SE594	vacuum fluorescent display driver

CLOCK TIMERS; CMOS

PCF8573P	clock/calendar with serial I/O; I^2C bus interface

A/D AND D/A CONVERTERS; NMOS

PNA7509	7-bit, 22 MHz, ± 1/2 LSB 3-state output A/D converter
PNA7510	7-bit, 22 MHz, ± 1/2 LSB 3-state + ref. voltage A/D converter
PNA7518	8-bit, 30 MHz, ± 1/2 LBS D/A converter

MISCELLANEOUS; BIPOLAR ECL

23-101	16 lines to 8 lines high level connection matrix; 10K compatible
231-101	16 lines to 8 lines high level connection matrix; 100K compatible
241-141	high-speed FIFO RAM controller
SAB1164	sensitive 1 GHz divider-by-64
SAB1165	sensitive 1 GHz divider-by-64
SAB1256	sensitive 1 GHz divider-by-256
SAB3064	display driver
SAB6456	sensitive 1,3 GHz switchable divider-by-64/256
SAB6456T	sensitive 1,3 GHz switchable divider-by-64/256

AD/DA converter CMOS

PCF8591	8-bit AD/DA converter with I^2C bus interface

REMOTE I/O EXPANDER

PCF8574	remote I/O expander/LED driver

MEMORIES

PCD5101	256x4-bit static CMOS RAM
PCD5114	1024x4-bit static CMOS RAM
PCF8570	256x8-bit static Ram with I^2C bus interface
PCF8571	128x8-bit static Ram with I^2C bus interface

AM CHANNELS

TDA1072	AM receiver circuit for hi-fi and carradio
TDA1072A	AM receiver circuit for hi-fi and carradio
TEA5550	AM car radio receiver circuit
TEA5570	AM/FM radio receiver circuit

FM CHANNELS

TCA420A	FM/IF combination
TDA1574	integrated FM tuner for radio receivers
TDA1576	FM/IF amplifier and detector
TDA1596	FM/IF amplifier and detector
TDA7000	FM radio circuit (in plastic DIL-18)
TDA7010T	FM radio circuit (in SO-16 plastic mini-pack)
TDA7020;T	low voltage FM stereo radio circuit (in SO-16 plastic mini-pack)
TDA7021;T	low voltage FM stereo radio circuit (for MTOS)
TEA5560	FM/IF system
TEA5570	AM/FM radio receiver circuit
TEA6000	FM/IF system and microcomputer-based tuning interface

AM/FM COMBINED CHANNELS

TEA5570	AM/FM radio receiver circuit

STEREO DECODERS

TDA1005A;AT	frequency multiplex PLL stereo decoder
TDA1578A	time multiplex PLL stereo decoder for hi-fi and carradio
TDA1598	time multiplex PLL stereo decoder for hi-fi and carradio
TDA7040T	low voltage stereo decoder (SO-8)
TEA5580	PLL stereo decoder

INTERFERENCE SUPPRESSORS

TDA1001B	interference and noise suppression circuit for FM receivers
TDA1001BT	interference and noise suppression circuit for FM receivers

TUNING CIRCUITS

HEF4750V	frequency synthesizer
HEF4751V	universal divider
SAA1057	radio tuning PLL frequency synthesizer
SAA1300	tuner switching circuit
TDD1742T	low power synthesizer
TDA7030T	low voltage micro-tuning and operating system (MTOS)

ARI SYSTEM

TDA1579	traffic warning decoder circuit (ARI-system)
TDA1589	traffic control messages and warning tone circuit

BUS CONTROLLED AUDIO CIRCUITS

TDA8420	stereofone/volume control circuit with head phone channel, spatial and pseudo-stereo sound
TEA6300	carradio preamplifier with source selector, sound and fader control

D.C. CONTROLLED AUDIO CIRCUITS

TCA730A	d.c. volume and balance stereo control circuit
TCA740A	d.c. treble and bass stereo control circuit
TDA1029	signal-sources switch (4 x two channels)
TDA1074A	dual tandem electronic potentiometer circuit
TDA1524A	stereo-tone/volume control circuit
TDA3810	spatial, stereo and pseudo-stereo sound circuit

AUDIO POWER AMPLIFIERS

TDA1010A	6 W audio power amplifier in car and 10 W audio power amplifier in mains-fed applications
TDA1011	2 to 6 W audio power amplifier
TDA1013A	4 W audio power amplifier with d.c. volume control
TDA1015	1 to 4 W audio power amplifier
TDA1015T	0,5 W audio power amplifier
TDA1020	12 W car radio power amplifier
TDA1510	24 W BTL or 2x12 W stereo car radio power amplifier
TDA1512	12 to 20 W hi-fi audio power amplifier
TDA1512Q	12 to 20 W hi-fi audio power amplifier
TDA1514	40 W hi-fi power amplifier for compact disc
TDA1515	24 W BTL or 2x12 W stereo car radio power amplifier
TDA1520;A;B	20 W hi-fi audio power amplifier
TDA1521	2x12 W audio power amplifier
TDA2611A	5 W audio power amplifier
TDA7050T	low voltage mono/stereo power amplifier; stereo: 75 mW; BTL: 150 mW

RECORDER (CASSETTE) AMPLIFIERS/CONTROL CIRCUITS

TDA1002A	recording and playback amplifier
TDA1012	recording/playback and 2 W audio power amplifier
TDA1016	recording/playback and 2 W audio power amplifier
TDA1508	auto-reverse car radio cassette deck steering circuit
TDA1522	stereo cassette head preamplifier and equalizer
TDA1600	oscillator switch and playback recorder amplifiers

MOTOR SPEED CONTROL CIRCUITS

HEF4752V	a.c.motor control circuit
TDA1059B	motor speed regulator with thermal shut-down
TDA1059C	motor speed regulator
TDA1506	motor regulator and function controller for car cassette systems
TDA1533	PLL motor speed control circuit for hi-fi applications
TDA1559	motor speed regulator

DISPLAY DRIVERS

SAA1060	LED display/interface circuit
SAA1062A	LCD display/interface circuit
SAA1062AT	LCD display/interface circuit
SAA1063	fluorescent display/interface circuit
PCF8574	remote I/O expander/LED driver
PCF8576	universal LCD driver for low multiplex rates (1:1 to 1:4); I^2bus interface
PCF8577	LCD direct driver (32 segments) or duplex driver (64 segments) with I^2 bus interface
PCF2100	LCD duplex driver; 40 segments
PCF2110	LCD duplex driver; 60 segments and 2 LEDs
PCF2111	LCD duplex driver; 64 segments
PCF2112	LCD driver; 32 segments

PERSONAL RADIO/AUDIO

TDA7000	FM radio circuit (in plastic DIL-18)
TDA7010T	FM radio circuit (in SO-16 plastic mini-pack)
TDA7020;T	low voltage FM stereo radio circuit
TDA7021;T	low voltage FM stereo radio circuit (MTOS)
TDA7030T	low voltage micro-tuning and operating system (MTOS)
TDA7040T	low voltage stereo decoder (SO-8)
TEA0670T	low voltage dolby B and C type noise reduction circuit

COMPACT DISC DIGITAL AUDIO SYSTEM CIRCUITS

SAA7210	CDZ decoder
SAA7220	CDZ digital filter
TDA1540D;P	14-bit DAC with 85 dB S/N ratio
TDA1541	stereo 16-bits DAC
TDA1542	low pass filter IC
TDA5708;T	photo diode signal processor
TDA5709;T	radial error signal processor

SPEECH SYNTHESIZERS

MEA8000	voice synthesizer
PCF8200	voice synthesizer
OM8000	standard Euro-card demo for MEA8000
OM8001	speech demonstration box
OM8002	dutch diphone board
OM8010	stand-alone speech editing system
OM8200	Euro-card demo for PCF8200
OM8201	speech demo box for PCF8200
OM8209	update package for OM8010
OM8210	speech editing system for PCF8200

MISCELLANEOUS

CA3089	FM/IF system
LM1870	stereo demodulator with blend
MC1496/1596	balanced modulator/demodulator
NE5044	programmable 7-channel RC encoder
NE5045	7-channel RC decoder
OM200/S2	integrated amplifier for use in hearing aids
TAA263	low-level amplifier
TAA320	integrated MOST amplifier
TAA320A	integrated MOST level sensor
TDA1540D;P	14-bit DAC with 85 dB S/N ratio

DOLBY CIRCUITS

NE645/646 *	Dolby noise reduction circuit
NE648/649 *	low voltage Dolby noise reduction circuit
NE650 *	Dolby B/C type noise reduction circuit
TEA0651*	Dolby C processor
TEA0652*	Dolby C processor
TEA0653T*	stereo Dolby B processor
TEA0654*	Dolby C switch
TEA0665;T*	Dolby B and C type noise reduction circuit
TEA0666;T	Dolby B and C type noise reduction circuit
TEA0670T	low voltage Dolby B and C type noise reduction circuit

* Dolby is a registered trademark of Dolby Laboratories Licensing Corporation, San Fransisco, California (U.S.A.)

VISION I.F. CIRCUITS

Economical circuits

TDA2540	i.f. amplifier and demodulator; n-p-n tuners
TDA2540Q	i.f. amplifier and demodulator; n-p-n tuners
TDA2541	i.f. amplifier and demodulator; p-n-p tuners
TDA2541Q	i.f. amplifier and demodulator; p-n-p tuners
TDA2542	i.f. amplifier and demodulator; for E and L standards; p-n-p tuners
TDA2542Q	i.f. amplifier and demodulator; for E and L standards; p-n-p tuners
TDA2544	i.f. amplifier and demodulator; MOS tuners
TDA2544Q	i.f. amplifier and demodulator; MOS tuners
TDA2548	i.f. amplifier and demodulator; p-n-p tuners
TDA2548Q	i.f. amplifier and demodulator; p-n-p tuners
TDA2549	i.f. amplifier and demodulator for multistandard TV receivers

High-performance circuits

TDA2549	i.f. amplifier and demodulator for multistandard TV receivers
TDA3540	i.f. amplifier and demodulator; n-p-n tuners
TDA3540Q	i.f. amplifier and demodulator; n-p-n tuners
TDA3541	i.f. amplifier and demodulator; p-n-p tuners
TDA3541Q	i.f. amplifier and demodulator; p-n-p tuners

IC

COLOUR DECODING CIRCUITS

TBA540	reference combination
TCA640	chrominance amplifier for SECAM or PAL/SECAM decoders
TCA650	chrominance demodulator for SECAM or PAL/SECAM decoders
TCA660B	contrast, saturation and brightness control circuit for colour difference and luminance signals
TDA3501	video control combination
TDA3505	video control combination with automatic cut-off control
TDA3510	PAL decoder
TDA3560	PAL decoder
TDA3561A	PAL decoder
TDA3562A	PAL/NTSC decoder
TDA3563	NTSC decoder
TDA3564	NTSC decoder without R.G.B. inputs
TDA3565	PAL decoder
TDA3590	SECAM processor circuit
TDA3590A	SECAM processor circuit (improved TDA3590)
TDA3591	SECAM processor circuit
TDA3591A	SECAM processor circuit
TDA4510	PAL decoder
TDA4532	SECAM decoder
TDA4555	multi-standard decoder (colour difference output; negative going)
TDA4556	multi-standard decoder (colour difference output; positive going)
TDA4565	colour transient improvement circuit
TDA4570	NTSC decoder
TDA8442	bus interface for colour decoders
TDA9080	RGB processor (video control)

VERTICAL DEFLECTION CIRCUITS

TDA2653A	PIL-S4; 30AX; monitor; with +60 V and protection
TDA2654	monochrome, 110°; tiny-vision colour, 90°
TDA2655B	colour and monochrome, 90°; with +60 V and protection
TDA3650B	vertical deflection circuit
TDA3651	vertical deflection circuit
TDA3651A	vertical deflection circuit
TDA3651AQ	vertical deflection circuit
TDA3652	vertical deflection circuit
TDA3652Q	vertical deflection circuit
TDA3653	vertical deflection circuit with +60 V and protection
TDA3653A	vertical deflection circuit with +60 V and protection
TDA3654	vertical deflection circuit with +60 V and protection

SYNC PROCESSORS; HORIZONTAL; VERTICAL

TBA920S	horizontal combination
TDA2577A	synchronization circuit with vertical oscillator and driver stages
TDA2578A	synchronization circuit with vertical oscillator and driver stages
TDA2579	synchronization circuit (628 lines)
TDA2593	horizontal combination
TDA2594	horizontal combination with transmitter identification
TDA2595	horizontal combination with transmitter identification and protection circuits
TDA3571B	sync combination with transmitter identification and vertical 625 divider system
TDA3576B	sync combination with transmitter identification and vertical 625 divider system
TDA3586	horizontal and vertical sync. combination

DIGITAL VIDEO PROCESSING

SAA9001	317 K CCD memory
SAA9010	picture enhancement processor
SAA9020	field memory controller
SAA9030	background memory controller
SAA9035	video time multiplexer VMX
SAA9040	computer-controlled teletext extension
SAA9045	video time demultiplexer VDX

SOUND CIRCUITS

TBA120U	sound i.f. amplifier/demodulator for TV
TDA1013A	4 W audio power amplifier
TDA1029	signal sources switch (4 x two channels)
TDA1512	12 to 20 W hi-fi audio power amplifier
TDA1512Q	12 to 20 W hi-fi audio power amplifier
TDA1520A; AQ	20 W hi-fi audio power amplifier
TDA1520Q	20 W hi-fi audio power amplifier
TDA1524A	stereo-tone/volume control circuit
TDA2543	AM sound i.f. circuit for French standard
TDA2545A	quasi-split-sound circuit
TDA2546A	quasi-split-sound circuit with 5,5 MHz demodulation
TDA2555	dual FM demodulator with 8 stage limiter
TDA2557	dual FM demodulator with 5 stage limiter
TDA2611A	5 W audio power amplifier
TDA2791	TV sound combination; volume, treble, bass
TDA2795	TV stereo/dual sound identification decoder
TDA3800G; GS	stereo/dual TV sound processing circuit
TDA3806	multiplex PLL stereo decoder
TDA3810	spatial, stereo and pseudeo-stereo sound circuit
TEA6300	carradio preamplifier with source selector, sound- and fader control

VIDEO RECORDER CIRCUITS

SAA5235	DATALINE slicer
SAD1009	UDAC universal digital to analog converter
TDA2501	PAL/NTSC encoder
TDA2504P;T	FM modem for 8 mm video
TDA2730	FM limiter/demodulator
TDA2740	amplifier and drop-out identification circuit
TDA3720	SECAM chrominance signal processor for V2000 system
TDA3724	SECAM identification circuit
TDA3730	frequency demodulator and drop-out compensator
TDA3740	video processor/frequency modulator
TDA3755	PAL/NTSC synchronization processor for VHS system
TDA3760	PAL chrominance signal processor for VHS system
TDA3765	NTSC chrominance signal processor for VHS system
TDA3766	PAL/NTSC chrominance signal processor for VHS system
TDA3771	video processor
TDA3780	frequency modulator
TDA3791	band selector and window detector
TDA5702	8-bit D/A converter (bipolar)
TDA5703	8-bit A/D converter (bipolar)

VIDEO CAMERA CIRCUITS

SAA1043	universal sync generator
SAA1044	subcarrier coupling circuit
TDA4301	vertical driver
TDA4302	pixel oscillator
TDA4303	white processor
TDA4304	d.c. controller
TDA4305	horizontal driver
TDA4306	master gain circuit

VIDEO AMPLIFIERS

NE/SE592	differential video amp.
μA733/733C	differential video amp.

MISCELLANEOUS

TDA1082	east-west correction driver circuit
TDA2506;T	SECAM encoder
TDA2507;T	SECAM coder control
TDA2581	control circuit for SMPS
TDA2581Q	control circuit for SMPS
TDA2582	control circuit for PPS
TDA2582Q	control circuit for PPS
TDA4500	small signal combination IC for monochrome TV
TDA4501	monolithic integrated small signal combination for television receivers
TDA4503	small signal combination IC for monochrome TV
TDA4505	monostandard small signal combination IC for television receivers
TDA5030;A;AT	mixer/oscillator for VHF tuner
TDA8440	PT COMMUTATOR switch
TDA8442	I^2C bus interface
TDA8443	YUB RGB switch
TDA9045	start analoge control
TEA1011	preamplifier and amplifier (for systems minitel and games)
TEA2000	NTSC/PAL colour encoder and video summer (64 different colours)

REMOTE CONTROL SYSTEMS

For general purpose applications

SAA1082P	remote transmitter
SAF1032P	receiver/decoder for infrared operation
SAF1039P	remote transmitter for infrared operation

For sophisticated radio and video systems

SAA3004	remote control transmitter for infrared operation
SAA3006	low voltage infrared remote control transmitter (RC-5)
SAA3007	low voltage infrared remote control transmitter (455 KHz)
SAA3008	low voltage infrared remote control transmitter (38 KHz)
SAA3027	infrared remote control transmitter (RC-5)
SAA3028	infrared remote control transcoder (RC-5); I²C bus compatible

VIDEO TUNING SYSTEM (VTS)

Control systems

See page IC60 for microcontrollers used in this function

Tuning systems

SAB1164	sensitive 1 GHz divider-by-64
SAB1165	sensitive 1 GHz divider-by-64
SAB1256	sensitive 1 GHz divider-by-256
SAB3035	computer interface for tuning and control (CITAC); 8 DACs; I²C bus compatible
SAB3036	computer interface for tuning and control (CITAC); without DACs; I²C bus compatible
SAB3037	computer interface for tuning and control (CITAC); 4 DACs; I²C bus compatible
SAB6456	1,3 GH divider switchable by 64/256
SAB6456T	1,3 GH divider switchable by 64/256

Display systems

SAA1060	LED display/interface circuit

Additional optional circuits

PCF8573P	clock/calendar with serial I/O; I²C bus interface

TEXT DECODER SYSTEMS

Teletext decoder ICs

SAA5020	teletext timing chain circuit (625 lines)
SAA5025D	teletext timing chain circuit for USA 525 line system (USTIC); 40 characters per row, 24 rows (8 TV-lines per row)
SAA5030	teletext video processor
SAA5040;B	teletext acquisition and control circuit
SAA5041;42	teletext acquisition and control circuit
SAA5045	gearing address logic array (GALA); 525 line system
SAA5050	teletext character generator (English)
SAA5051	teletext character generator (German)
SAA5052	teletext character generator (Swedish)
SAA5053	teletext character generator (Italian)
SAA5054	teletext character generator (Belgian)
SAA5055	teletext character generator (US ASCII)
SAA5056	teletext character generator (Hebrew)
SAA5057	teletext character generator (Cyrillic)
SAA5230	teletext video processor II
SAA5240A	computer controlled teletext circuit (CCT); 625-line system (English, German, Swedish)
SAA5240B	computer controlled teletext circuit (CCT); 625-line system (Italian, German, French)

Videotex

See page IC60 for microcontrollers used in this function

SAA5020	timing chain circuit (625 lines)
SAA5025D	teletext timing chain circuit for USA 525 line system (USTIC); 40 characters per row, 24 rows (8 TV-lines per row)
SAA5050	character generator (English)
SAA5051	character generator (German)
SAA5052	character generator (Swedish)
SAA5053	character generator (Italian)
SAA5054	character generator (Belgian)
SAA5055	character generator (US ASCII)
SAA5056	character generator (Hebrew)
SAA5057	character generator (Cyrillic)
SAA5070	microcontroller/microprocessor peripheral IC for viewdata (LUCY)
SAA5240A	computer controlled teletext circuit (CCT); 625-line system (English, German, Swedish)
SAA5240B	computer controlled teletext circuit (CCT); 625-line system (Italian, German, French)
SAA5350	Eurom, CRT controller (CEPT standard)

Field memory converters

SAA9001	CCD memory (320 K bits)
SAA9010	picture inhancement controller (PEP)
SAA9020	field memory controller (FMC)
SAA9030	background memory controller (BMC)
SAA9040	computer-controlled teletext extension (CCTE)

Digital TV

SAA9050	Digital Multi Standard Decoder (DMSD) NMOS for all standards, with I²C capability
SAA9055	Digital Secam Color Decoder (DSD) CMOS with I²C capability
SAA9057	Clock Generator Circuit (CGC) CMOS
SAA9058	Sample Rate Converter (SRC) NMOS
SAA90xx	A/D converter for digital TV NMOS like PNA7510

RADIO TUNING SYSTEM (RTS)

Tuning, display and control ICs

See page IC 60 for microcontrollers used in this function

PCF2100	LCD duplex driver; 40 segments
PCF2110	LCD duplex driver; 60 segments and 2 LEDs
PCF2111	LCD duplex driver; 64 segments
PCF2112	LCD driver; 32 segments
PCF8576	universal LCD driver for low multiplex rates (1:1 to 1:4); I²C bus interface
PCF8577	LCD direct driver (32 segments) or duplex driver (64 segments) with I²C bus interface
SAA1056P	PLL frequency synthesizer
SAA1057	radio tuning PLL frequency synthesizer (SYMO II)
SAA1060	LED display/interface circuit
SAA1062A;AT	LCD display/interface circuit
SAA1097	analogue head switch
SAA1300	tuner switching unit
TDA730T	low voltage micro-tuning and operating system (for MTOS)
PCF8574	remote I/O expander/LED driver

FREQUENCY MEASUREMENT AND DISPLAY SYSTEM

SERIAL MEMORIES

PCF8570	256x8-bit static CMOS RAM with I²C bus interface
PCF8571	128x8-bit static CMOS RAM with I²C bus interface

AD/DA CONVERTER

PCF8591	8-bit AD/DA converter with I²C bus interface

MICROCONTROLLERS MOS
NMOS single-chip 8-bit µC

MAB8021	1Kx8 ROM, 64x8 RAM
MAB8031AH	128x8 RAM; ROM-less version of MAB8051AH
MAB8032AH	256x8 RAM; ROM-less version of MAB8052AH
MAB8035HL	64x8 RAM; ROM-less version of MAB8048H
MAB8039HL	128x8 RAM; ROM-less version of MAB8049H
MAB8040HL	256x8 RAM; ROM-less version of MAB8050H
MAB8041A	1Kx8 ROM, 64x8 RAM
MAB8048H	1Kx8 ROM, 64x8 RAM
MAB8049H	2Kx8 ROM, 128x8 RAM
MAB8050H	4Kx8 ROM, 256x8 RAM
MAB8051AH	4Kx8 ROM, 128x8 RAM
MAB8052AH	8Kx8 PROM, 256x8 bytes RAM
MAB8401WP	like MAB8400 but with 8-bit LED-driver
MAB8411	1K ROM/64 RAM bytes
MAB8421	2K ROM/64 RAM bytes plus 8-bit LED driver
MAB8422	2K ROM/64 RAM bytes
MAB8441	4K ROM/128 RAM bytes plus 8-bit LED driver
MAB8442	4K ROM/128 RAM bytes
MAB8461	6K ROM/128 RAM bytes plus 8-bit LED driver
MAF8021	1K ROM/64 RAM bytes
MAF8031AH	128K RAM; ROM-less version of MAB8051AH; extended temperature
MAF80A31AH	128K RAM; ROM-less version of MAB8051H; reduced frequency; extended temperature
MAF8035HL	64K RAM; ROM-less version of MAB8048H; extended temperature
MAF80A35HL	64K RAM; ROM-less version of MAB8048H; reduced frequency; extended temperature
MAF8039HL	128K RAM; ROM-less version of MAB8049H; extended temperature
MAF80A39HL	128K RAM; ROM-less version of MAB8049H; reduced frequency; extended temperature
MAF8040HL	256K RAM; ROM-less version of MAB8050H; extended temperature
MAF80A40HL	256K RAM; ROM-less version of MAB8050H; reduced frequency; extended temperature
MAF8048H	1Kx8 ROM, 64x8 RAM; extended temperature
MAF80A48H	1Kx8 ROM, 64x8 RAM; reduced frequency; extended temperature
MAF8049H	2Kx8 ROM, 128x8 RAM; extended temperature
MAF80A49H	2Kx8 ROM, 128x8 RAM; reduced frequency; extended temperature
MAF8050H	4Kx8 ROM, 256x8 RAM; extended temperature
MAF80A50H	4Kx8 ROM, 256x8 RAM; reduced frequency; extended temperature
MAF8051H	4Kx8 ROM, 128x8 RAM; extended temperature
MAF80A51H	4Kx8 ROM, 128x8 RAM; reduced frequency; extended temperature
MAF8411	1K ROM/64 RAM bytes
MAF80A11	1Kx8 ROM, 64x8 RAM; reduced frequency; extended temperature
MAF8421	2K ROM/64 RAM bytes plus 8-bit LED driver
MAF80A21	2Kx8 ROM, 64x8 RAM; reduced frequency; extended temperature
MAF8422	2K ROM/64 RAM bytes; extended temperature
MAF84A22	2K ROM/64 RAM bytes; reduced frequency; extended temperature
MAF8441	4K ROM/128 RAM bytes plus 8-bit LED driver
MAF84A41	4K ROM/128 RAM bytes; reduced frequency; extended temperature
MAF8442	4K ROM/128 RAM bytes; extended temperature
MAF84A42	4K ROM/128 RAM bytes; reduced frequency; extended temperature
MAF8461	6K ROM/128 RAM bytes plus 8-bit LED driver
MAF84A61	6K ROM/128 RAM bytes; reduced frequency; extended temperature

CMOS single-chip 8-bit μC

PCB80C31	128K RAM; ROM-less version of PCB80C51
PCB80C39	128K RAM; ROM-less version of PCB80C49
PCB80C49	2Kx8 ROM, 128x8 RAM
PCB80C51	4Kx8 ROM, 128x8 RAM
PCB85C51	128K RAM; ROM-less version of PCB80C51; 28-pin EPROM on top
PCF80C39	128K RAM; ROM-less version of PCB80C49; extended temperature
PCF80C49	2K ROM/128 RAM bytes; extended temperature

Derivates of PCB80C51 CMOS

PCB80C351	128K RAM; ROM-less version of PCB83C351
PCB80C451	128K RAM; ROM-less version of PCB83C451
PCB80C552	256K RAM; ROM-less version of PCB83C552
PCB80C652	256K RAM; ROM-less version of PCB83C652
PCB83C351	4K ROM/128 RAM bytes; 1x16-bit capture timer/counter; I^2C (HW/SW) and D^2B 9-bit (HW) on chip
PCF83C451	4K ROM/128 RAM bytes; 2x8-bit quasi bidirectional ports; 4 data-signals connected to port 6
PCB83C552	8K ROM/256 RAM bytes; 1x16-bit capture/compare timer/counter; 1 watch-dog-timer and 2 pulse width modulated signals; 1x8-bit input connected to A/D converter
PCB83C652	8K ROM/256 RAM bytes; serial I/O UART and I^2C-HW

VIDEO GAMES

TDA2505	SECAM encoder
SCN2650A	8-bit Microprocessor
MEA8000	Voice Synthesizer
PCF8200	Voice Synthesizer
SAA1099	microprocessor controlled stereo sound generator sound effects
OM1099	demonstration board for SAA1099
TEA1011	preamplifier and amplifier for systems minitel and games
TEA2000	NTSC/PAL colour encoder and video summer (64 different colours)

BIPOLAR INTEGRATED CIRCUITS FOR TELEPHONE SUBSCRIBER SETS

DTMF diallers with line interface

TEA1075P	DTMF generator for telephone dialling

Speech/transmission circuits

TEA1042	telephone transmission circuit for handsfree loudspeaking
TEA1060	versatile telephone transmission circuit with dialler interface; for dynamic and magnetic microphones
TEA1061	versatile telephone transmission circuit with dialler interface; for piezoelectric and electret microphones
TEA1066T	telephone transmission circuit
TEA1067	see 1060/1061 for low voltage
TEA1068	versatile telephone transmission circuit with dialler interface and for high and low omic microphones
TEA1080	supply circuit for telephone set peripherals

DTMF/speech transmission combination

TEA1046P	DTMF/speech transmission IC for telephone applications

CMOS INTEGRATED CIRCUITS FOR TELEPHONE SUBSCRIBER SETS

DTMF dialler with redial

PCD3310	DTMF/pulse dialler with redial

Pulse diallers with redial

PCD3320	interrupted current-loop dialling circuit
PCD3321	interrupted current-loop dialling circuit
PCD3322	interrupted current-loop dialling circuit
PCD3323	interrupted current-loop dialling circuit
PCD3325A	interrupted current-loop dialling circuit
PCD3326	interrupted current-loop dialling circuit
PCD3327P	interrupted current-loop dialling circuit

Pulse repertory dialler/telephone-set controller

PCD3315	pulse repertory dialler
PCD3341	pulse repertory dialler/telephone-set controller
PCD3343	microcontroller for telephone-set

Microcontroller peripherals (DTMF/MODEM, RAM, LCD, clock)

PCD3311	DTMF generator/modem generator with I^2C bus interface
PCD3312	DTMF generator/modem generator with I^2C bus interface
PCF1251	micropower voltage detector
PCF2111	LCD duplex driver; 64 segments
PCF8570	256x8-bit static RAM with I^2C bus interface
PCF8571	128x8-bit static RAM with I^2C bus interface
PCF8573	clock/calender with serial I/O; I^2C bus interface
PCF8574	remote I/O expander/LED driver
PCF8576	universal LCD driver for low multiplex rates (1:1 to 1:4); I^2C bus interface
PCF8577	LCD direct driver (32 segments) or duplex driver (64 segments) with I^2C bus interface

Multi-tone ringer

PCD3360	programmable multi-tone ringer

ANALOG WATCHES

PCA1200 (family)	32 kHz watch circuit	
PCA1260	32 kHz watch circuit with motor pulse control	
PCA1400 (family)	32 kHz watch circuit; electrically trimmable	

ANALOG CLOCKS

PCA1512	4 MHz d.c. alarm clock circuit; bipolar motor:	$T = 2$ s; $t_p = 1$ s
PCA1517	4 MHz a.c. alarm clock circuit; bipolar motor:	$T = 2$ s; $t_p = 46{,}8$ ms
PCA1564	32 kHz a.c. alarm clock circuit; bipolar motor:	$T = 2$ s; $t_p = 46{,}8$ ms
PCA1574	32 kHz a.c. alarm clock circuit; bipolar motor:	$T = 2$ s; $t_p = 46{,}8$ ms
PCA1580 (family)	32 kHz alarm clock; electrical trimmable	

CAR CLOCKS

PCF1171	4-digit LCD car clock circuit
PCF1172	3,5-digit LCD car clock circuit

MODULATORS

TCA240; D	dual long-tailed pair/double-balanced modulator

I.F./A.F. CIRCUITS

TCA770A; D	i.f. limiting amplifier, FM detector and a.f. preamplifier

CONTROL CIRCUITS FOR SWITCHED-MODE POWER SUPPLIES (SMPS)

NE/SE5560	SMPS control circuit
NE/SE5561	SMPS control circuit
SG3524	SMPS control circuit
TDA1060; A; B	control circuits for SMPS
TEA1039	control circuit for SMPS
μA723/723C	precision voltage regulator

MOTOR DRIVE CIRCUITS

SAA1027	stepping motor control circuit
SAK150BT	servo-motor control circuit
TEA1012	stepping motor control circuit

TRANSISTOR ARRAYS

CA3081	seven-transistor array; common emitter
CA3082	seven-transistor array; common collector
CA3183	high voltage five-transistor array
TDA3083;D	five-transistor array
ULN2003/4	high-voltage/high-current Darlington transistor array

SPEECH SYNTHESIZERS

MEA8000	voice synthesizer
PCF8200	voice synthesizer
OM8000	standard Euro-card demo for MEA8000
OM8001	speech demonstration box
OM8002	dutch diphone board
OM8010	stand-alone speech editing system
OM8200	Euro-card demo for PCF8200
OM8201	speech demo box for PCF8200
OM8209	update pachage for OM8010
OM8210	speech editing system for PCF8200

MISCELLANEOUS

MEB3000	PDV-bus interface circuit
NE542	dual low-noise preamp
NE544	servo amplifier
NE570/571/SA571	analog compandor
NE572	programmable analog compandor
PCF1251	micropower voltage detector
SAA1029	universal industrial logic and interface circuit
TDA1432P;T	8-bit D/A converter (CMOS)
TDA1540D; P	14-bit DAC with 85 dB S/N ratio
TDA1721	8-bit multiplying DAC
TDA5702	8-bit D/A converter (bipolar)
TDA5703	8-bit A/D converter (bipolar)
TEA1017	13-bit series-parallel converter and display driver
μA758	FM stereo multiplex decoder; PLL

DOMESTIC APPLIANCES

SAB3045	motor speed controller (e.g. washing machines)
TCA280Å	general-purpose triggering circuit
TDA1023	proportional-control triac triggering circuit
TDA1024	on-off triac triggering circuit

DATA COMMUNICATIONS

SCN2641	Asynchronous Communication Interface (ACI)
SCN2651	Programmable Communications Interface (PCI)
SCN2652	Multi-Protocol Communications Controller (MPCC)
SCN2653	Polynomial Generator Checker (PGC)
SCN2661	Enhanced Programmable Communications Interface (EPCI)
SCN2681	Dual Asynchronous Receiver/Transmitter (DUART)

VIDEO DISPLAY (CRT)

SAA5350	EUROM, CRT controller (CEPT standard)
SCB2673	Video Attributes Controller (VAC)
SCB2675	Color/Monochrome Attributes Controller (CMAC)
SCB2677	Video Attributes Controller (VAC)
SCN2670	Display Character and Graphics Generator (DCGG)
SCN2671	Programmable Keyboard & Comm Controller (PKCC)
SCN2672	Programmable Video Timing Controller (PVTC)
SCN2674	Advanced Video Display Controller (AVDC)

8-BIT MICROPROCESSOR FAMILY

8T31*	Transparent I/O Port;8-bit bidirectional
8T32*	Addressable I/O Port;8-bit bidirectional,synchronous
8T36*	Addressable I/O Port;8-bit bidirectional,asynchronous
8X300*	Microcontroller; 250 ns cycle time
8X305	Microcontroller; 200 ns cycle time
8X310	Interrupt controller
8X320	Bus Interface Array; 2-port RAM for 8/16-bit mailbox interface
8X330	Floppy Disk Formatter/Controller
8X350	Bipolar RAM; 256x8 high-speed memory with bus interface
8X353	Bipolar RAM; 32x8 high-speed memory with bus interface
8X355	LIFO RAM; 32x8 high-speed LIFO stack with bus interface
8X360	Memory Address Director
8X371	Transparent I/O Port;8-bit bidirectional
8X372	Addressable I/O Port;8-bit bidirectional,synchronous
8X374	Addressable I/O Port;8-bit bidirectional,synchronous with parity
8X376	Addressable I/O Port;8-bit bidirectional,asynchronous
8X382	Addressable I/O Port;4-in/4-out

Prototyping aids

8X300KT2SK	memory expansion for 8X305 prototyping kit
8X300KT1SK	8X305 prototyping and evaluation board
8X305ICEPACK	development system and emulator (available from SIGEN Corp. USA)
EZ-PRO	8X300/8X305 development system (available from American Automation - USA)

Software

8X300AS2SS	8X300/8X305 cross assembler for Intel Intellec system
8X300AS3SS	8X300/8X305 cross assembler; FORTRAN, ASCII, 1600 BPI
8X300AS4SS	8X300/8X305 cross assembler; FORTRAN, EBCDIC, 1600 BPI

Bipolar LSI support products

9401/8X01A	CRC generator/checker
9403	64-bit FIFO buffer memory (16x4)
8X60	FIFO CAM controller (4K RAM)

* Not recommended for new designs

8-BIT MICROPROCESSOR FAMILY

16-BIT MICROPROCESSOR FAMILY: SC68000 SERIES

Microprocessor unit (MPU)

SCN68000	16/32-bit MPU; 16-bit external/32-bit internal MPU; 17 general purpose 32-bit registers; 16 MB linear address space
SCN68010	16/32-bit MPU; 16-bit external/32-bit internal MPU; 17 general purpose 32-bit registers; 16 MB linear address space
PCB68070	16-bit MPU, plus DMA, MMU and peripheral functions (CMOS)

Direct memory access

SCN68430	Direct Memory Access Interface (DMAI); single-channel DMA interface; cycle steal or burst data transfers; supports 32-bit transfers on VME bus

Data communication

SCN68562	Dual Universal Serial Communications Controller (DUSCC); dual channel, asynchronous; byte control protocols, BISYNC DDCMP X.21; bit-oriented protocol HDLC, ADCCP, SDLC, X.25; DMA interface, counter timer
SCN68652	Multi-Protocol Communications Controller (MPCC); synchronous communications controller; bit and byte protocols; CRC
SCN68653	Polynomial Generator Checker (PGC); error correction, code generation/comparator circuit; comparator circuit; companion chip to MPCC or EPCI
SCN68661	Enhanced Programmable Communications Interface (EPCI); universal synchronous/asynchronous double buffered RxTx internal baud rate generator; three versions with different baud rates
SCN68681	Dual Asynchronous Receiver/Transmitter (DUART); dual channel, quad buffered receiver; double buffered transmitter; independent baud rate selection; the SCN68681 is for non-multiplexed bus processors like SCN68000; the SCN2681 is for multiplexed bus processors like Intel/Zilog etc.

Disk control

SCB68459	Disk Phase Lock Loop (DPLL); companion device to SCN68454 (IMDC) used for interfacing to more than on IMDC
SCN68454	Intelligent Multiple Disk Controller (IMDC); simultaneously controls up to 4 hard or floppy drives in any combination SA1000 or ST506 interfaces

Memory access control

SCC68905	Basic Memory Access Controller (BMAC)

Interface

SCB68172	VMS bus controller (BUSCON) interface circuit; master-slave configurations, processor or DMA interface

MICROCONTROLLERS MOS
NMOS single-chip 8-bit µC

MAB8021	1Kx8 ROM, 64x8 RAM
MAB8031AH	ROM-less version of MAB8051AH
MAB8032AH	ROM-less version of MAB8052AH
MAB8035HL	ROM-less version of MAB8048H
MAB8039HL	ROM-less version of MAB8049H
MAB8040HL	ROM-less version of MAB8050H
MAB8041A	1Kx8 ROM, 64x8 RAM
MAB8048H	1Kx8 ROM, 64x8 RAM
MAB8049H	2Kx8 ROM, 128x8 RAM
MAB8050H	4Kx8 ROM, 256x8 RAM
MAB8051AH	4Kx8 ROM, 128x8 RAM
MAB8052AH	8Kx8 PROM, 256x8 bytes RAM
MAB8401WP	128x8 RAM; external program memory plus 8-bit LED-driver
MAB8411	1K ROM/64 RAM bytes
MAB8421	2K ROM/64 RAM bytes plus 8-bit LED driver
MAB8422	2K ROM/64 RAM bytes
MAB8441	4K ROM/128 RAM bytes plus 8-bit LED driver
MAB8442	4K ROM/128 RAM bytes
MAB8461	6K ROM/128 RAM bytes plus 8-bit LED driver
MAF8021	1K ROM/64 RAM bytes
MAF8031AH	ROM-less version of MAB8051AH; extended temperature
MAF80A31AH	ROM-less version of MAB8051H; reduced frequency; extended temperature
MAF8035HL	ROM-less version of MAB8048H; extended temperature
MAF80A35HL	ROM-less version of MAB8048H; reduced frequency; extended temperature
MAF8039HL	ROM-less version of MAB8049H; extended temperature
MAF80A39HL	ROM-less version of MAB8049H; reduced frequency; extended temperature
MAF8040HL	ROM-less version of MAB8050H; extended temperature
MAF80A40HL	ROM-less version of MAB8050H; reduced frequency; extended temperature
MAF8048H	1Kx8 ROM, 64x8 RAM; extended temperature
MAF80A48H	1Kx8 ROM, 64x8 RAM; reduced frequency; extended temperature
MAF8049H	2Kx8 ROM, 128x8 RAM; extended temperature
MAF80A49H	2Kx8 ROM, 128x8 RAM; reduced frequency; extended temperature
MAF8050H	4Kx8 ROM, 256x8 RAM; extended temperature
MAF80A50H	4Kx8 ROM, 256x8 RAM; reduced frequency; extended temperature
MAF8051H	4Kx8 ROM, 128x8 RAM; extended temperature
MAF80A51H	4Kx8 ROM, 128x8 RAM; reduced frequency; extended temperature
MAF8411	1K ROM/64 RAM bytes
MAF80A11	1Kx8 ROM, 64x8 RAM; reduced frequency; extended temperature
MAF8421	2K ROM/64 RAM bytes plus 8-bit LED driver
MAF80A21	2Kx8 ROM, 64x8 RAM; reduced frequency; extended temperature
MAF8422	2K ROM/64 RAM bytes; extended temperature
MAF84A22	2K ROM/64 RAM bytes; reduced frequency; extended temperature
MAF8441	4K ROM/128 RAM bytes plus 8-bit LED driver
MAF84A41	4K ROM/128 RAM bytes; reduced frequency; extended temperature
MAF8442	4K ROM/128 RAM bytes; extended temperature
MAF84A42	4K ROM/128 RAM bytes; reduced frequency; extended temperature
MAF8461	6K ROM/128 RAM bytes plus 8-bit LED driver
MAF84A61	6K ROM/128 RAM bytes; reduced frequency; extended temperature

CMOS single-chip 8-bit μC

PCB80C31	ROM-less version of PCB80C51
PCB80C39	ROM-less version of PCB80C49
PCB80C49	2Kx8 ROM, 128x8 RAM
PCB80C51	4Kx8 ROM, 128x8 RAM
PCB85C51	ROM-less version of PCB80C51; 28-pin EPROM on top
PCF80C39	ROM-less version of PCB80C49; extended temperature
PCF80C49	2K ROM/128 RAM bytes; extended temperature

Derivates of PCB80C51 CMOS

PCB80C351	ROM-less version of PCB83C351
PCB80C451	ROM-less version of PCB83C451
PCB80C552	ROM-less version of PCB83C552
PCB80C652	ROM-less version of PCB83C652
PCB83C351	4K ROM/128 RAM bytes; 1x16-bit capture timer/counter; I^2C (HW/SW) and D^2B 9-bit (HW) on chip
PCF83C451	4K ROM/128 RAM bytes; 2x8-bit quasi bidirectional ports; 4 data-signals connected to port 6
PCB83C552	8K ROM/256 RAM bytes; 1x16-bit capture/compare timer/counter; 1 watch-dog-timer and 2 pulse width modulated signals; 1x8-bit input connected to A/D converter
PCB83C652	8K ROM/256 RAM bytes; serial I/O UART and I^2C-HW

PERIPHERAL CIRCUITS

PCF1251	micropower voltage converter
PCF2100	LCD duplex driver; 40 segments
PCF2110	LCD duplex driver; 60 segments and 2 LEDs
PCF2111	LCD duplex driver; 64 segments
PCF2112	LCD driver; 32 segments
PCF8570	256x8-bit static CMOS RAM with I^2C bus interface
PCF8571	128x8-bit static CMOS RAM with I^2C bus interface
PCF8573P	clock/calendar with serial I/O; I^2C bus interface
PCF8574	remote 8-bit I/O for I^2C bus
PCF8576	universal LCD driver for low multiplex rates (1:1 to 1:4); I^2C bus interface
PCF8577	universal LCD driver for low multiplex rates (1:1 to 1:4) I^2C bus interface
PCF8591	8-bit AD/DA converter with I^2C bus interface

IFL SERIES 20

82S151	Field Programmable Gate Array (FPGA) (18x15x12)
82S153	Field Programmable Logic Array (FPLA) (18x42x10)
82S153A	Field Programmable Logic Array (FPLA) (18x42x10)
82S155	Field Programmable Logic Sequencer (FPLS) (16x45x12) 4-bit register
82S157	Field Programmable Logic Sequencer (FPLS) (16x45x12) 6-bit register
82S159	Field Programmable Logic Sequencer (FPLS) (16x45x12) 8-bit register

IFL SERIES 24

82S161	Field Programmable Logic Array (FPLA) (12x48x8)
82S162	Field Programmable Gate Array (FPGA) (16x5)
82S163	Field Programmable Gate Array (FPGA) (12x9)
82S167(A)	Field Programmable Logic Sequencer (FPLS) (14x48x6)
82S168	Field Programmable Logic Sequencer (FPLS) (12x48x8)
82S173	Field Programmable Logic Array (FPLA) (22x42x10)
82S179	Field Programmable Logic Sequencer (FLPS) (12x42x12)

IFL SERIES 28

82S100/101	Field Programmable Logic Array (FPLA) (16x48x8)
82S103	Field Programmable Gate Array (FPGA) (16x9x9)
82S105	Field Programmable Logic Sequencer (FPLS) (16x48x8)
82S105A	Field Programmable Logic Sequencer (FPLS) (16x48x8)

IFL SOFTWARE SUPPORT

AMAZE	Boolean equation entry and simulator packages for VAX-VMS, PDP-RSX11, IBMPC-MSDOS
cupl®	Boolean equation entry and simulator packages for VAX-VMS and UNIX, IBMPC/XT-MSDOS, CP/M-80 and CP/M-86 (available from Assisted Technology, Inc., 2381 Zanker Road, Suite 150, San Jose, California 95131, USA)

CMOS

Standard Speed

		PCF0330 PCC0330	PCF0450 PCC0450	PCF0700 PCC0700	PCF1100 PCC1100
Gate equivalents (2-input)		330	448	704	1116
Cell units		165	224	352	558
Rows of cell units		11	14	16	18
Cell units per row		15	16	22	31
Horizontal mask-programmable interconnection strips					
above top row of cell units	max.	5	5	5	6
between cell units	max.	10	9	10	13
below bottom row of cell units	max.	5	5	5	6
Bonding pads	max.	40	28	40	68
Input/output stages with choice of		38	26	38	66
3-state I/O	max.	34	26	38	66
drivers	max.	38	14	22	66
buffers	max.	38	12	16	66
Schmitt-triggers	max.	34	8	10	66
Pin pull-up/pull-down resistors	max.	34	26	34	66
Chip size		13,6 mm^2	14,6 mm^2	21,9 mm^2	40,0 mm^2
Chip dimensions	x	3,52 mm	3,45 mm	4,44 mm	6,25 mm
	y	3,87 mm	4,24 mm	4,94 mm	6,40 mm
Gate delays					
at V_{DD} = 5 V	max.	16 ns	16 ns	16 ns	16 ns
	typ.	8 ns	8 ns	8 ns	8 ns
at V_{DD} = 10 V	max.	6,4 ns	6,4 ns	6,4 ns	6,4 ns
	typ.	3,2 ns	3,2 ns	3,2 ns	3,2 ns
at V_{DD} = 15 V	max.	4 ns	4 ns	4 ns	4 ns
	typ.	2 ns	2 ns	2 ns	2 ns
Maximum toggle frequency					
at V_{DD} = 5 V	min.	6 MHz	6 MHz	6 MHz	6 MHz
at V_{DD} = 10 V	min.	12 MHz	12 MHz	12 MHz	12 MHz
at V_{DD} = 15 V	min.	15 MHz	15 MHz	15 MHz	15 MHz

CMOS (cont.)

High speed

		PCF0336 PCF0336	PCF0456 PCC0456	PCF0706 PCC0706	PCF1106 PCC1106
Gate equivalent (2-input)		330	448	704	1116
Cell units		165	224	352	558
Rows of cell units		11	14	16	18
Cell units per row		15	16	22	31
Horizontal mask-programmable interconnection strips					
above top row of cell units	max.	5	5	5	6
between cell units	max.	10	9	10	13
below bottom row of cell units	max.	5	5	5	6
Bonding pads	max.	40	28	40	68
Input/output stages with choice of		38	26	38	66
3-state I/O	max.	34	26	38	66
drivers	max.	34	14	22	66
buffers	max.	38	12	16	66
Schmitt-triggers	max.	34	8	10	66
Pin pull-up/pull-down resistors	max.	34	26	34	66
Chip size		13,8 mm^2	15,0 mm^2	22,3 mm^2	40,4 mm^2
Chip dimensions	x	3,55 mm	3,49 mm	4,48 mm	6,28 mm
	y	3,90 mm	4,30 mm	4,98 mm	6,43 mm
Gate delays					
at V_{CC} = 2,0 V	typ.	9 ns	9 ns	9 ns	9 ns
at V_{DD} = 5,0 V	typ.	2,6 ns	2,6 ns	2,6 ns	2,6 ns
at V_{CC} = 6,0 V	typ.	2,2 ns	2,2 ns	2,2 ns	2,2 ns
Maximum toggle frequency					
at V_{CC} = 2,0 V	typ.	10 MHz	10 MHz	10 MHz	10 MHz
at V_{CC} = 5,0 V	typ.	39 MHz	39 MHz	39 MHz	39 MHz
at V_{CC} = 6,0 V	typ.	47 MHz	47 MHz	47 MHz	47 MHz

ISL

8A1542	1472 gates; 42 I/Os
8A1664	1620 gates; 64 I/Os
8A1864	1740 gates; 72 I/Os
8A2176	2088 gates; 76 I/Os

ECL (ACE); 10K or 100K compatible

THE ACE CELL ARRAY FAMILY

	ACE 600	ACE 900	ACE 1400	ACE1320	ACE 2200	ACE 3000
Commercial name						
10 K	22XXX	23XXX	24XXX	25XXX	26XXX	27XXX
100 K	221XXX	231XXX	241XXX	251XXX	261XXX	271XXX
Equivalent gates						
typical	450	650	1050	700	1600	700
maximum	600	900	1400	1000	2200	1000
Major log cell sites	24	36	60	52	100	36
Minor log cell sites	10	22	12	14	16	16
Input cell sites	30	30	-	-	-	-
I/O cell sites	28	28	96	112	128	128
Number of pins						
GRID	64	64	144	144	144	144
FLAT PACK	68	68	84	84 or 148	84 or 148	148
Supply pins						
GRID	6	6	16	16	16	16
FLAT PACK	10	10	20	20 or 28	20 or 28	28
On-chip RAM (BIT)	-	-	-	320	-	1280

PACKAGE CODING

Type 1st digit		Sealing process 2nd digit		Pins 3rd digit		Heatsink 4th digit	
Symbol	Meaning	Symbol	Meaning	Symbol	Meaning	Symbol	Meaning
P	Pin Grid	B	Glued CAP	None	64	S	Short
Y	Flat Pack	C	Soldered CAP	R	68		Extrusions
				M	84	H	Vert. fins
				K	144	P	Hor. plates
				T	148		

CMOS

Compact Cell Logic

ISL

Composite Cell Logic

Full custom facilities available in MOS and Bipolar technologies.

SPEECH SYNTHESIZERS

MEA8000	voice synthesizer
PCF8200	voice synthesizer
OM8000	standard Euro-card demo for MEA8000
OM8001	speech demonstration box
OM8002	dutch diphone board
OM8010	stand-alone speech editing system
OM8200	Euro-card demo for PCF8200
OM8201	speech demo box for PCF8200
OM8209	update package for OM8010
OM8210	speech editing system for PCF8200

Alphanumeric Index

In the following index three columns are given.

The first column shows the IC type numbers in alpha-numerical sequence. The second column gives the package code, the third the number of pins and the fourth the pin position (see next page for explanation); the fifth column the reference page number in this catalogue and the sixth refers to the relevant Handbook (IC.., see list below). Where only loose datasheets exist, the column shows the symbol ● ;
a hyphen (-) indicates that **NO** data are available at date of printing this publication.

book	title
	EXISTING SERIES
IC4	Digital integrated circuits - CMOS HE4000B family (superseded by IC04N/86)
IC6	Professional analogue integrated circuits (superseded by IC11N/86)
IC7	Signetics bipolar memories (superseded by IC10N/86)
	NEW SERIES
IC01N	Radio, audio and associated systems - Bipolar, MOS (published 1985)
IC02N	Video and associated systems - Bipolar, MOS (published 1985)
IC03N	Telephony equipment - Bipolar, MOS (published 1985)
IC04N	HE4000B logic family - CMOS
IC05N	HE4000B logic family uncased integrated circuits - CMOS (published 1984)
IC06N	High-speed CMOS;PC74HC/HCU/HCT - logic families (published 1985)
IC07N	PC74HC/HCU/HCT uncased integrated circuits - HCMOS
IC08N	10K and 100K logic families - ECL (published 1984)
IC09N	Logic series - TTL (published 1984)
IC10N	Memories - MOS, TTL, ECL
IC11N	Linear LSI (published 1985)
IC12N	Semi-custom gate arrays & cell libraries - ISL, ECL, CMOS
IC13N	Semi-custom - Integrated Fuse Logic (published 1985)
IC14N	Microprocessors, microcontrollers & peripherals - Bipolar, MOS (published 1985)
IC15N	Logic series - FAST TTL (published 1984)

EXPLANATION OF PACKAGE CODE/PIN POSITION COLUMNS

In the following list most of the packages used are mentioned.
It is the intention to give for all our devices the full package code e.g.:

SOT38BE.12; SOT102HE.01; SOT141BA.01; SOT165CA.03 etc.

A complete package code consists of:

basic number	- SOT38
version letter(s)	- BE
variant number	- .12

package code	description	pin position
SOT14	10-lead cylindrical; metal (TO-74)	CYL
SOT18/13	3-lead cylindrical; metal (TO-18)	CYL
SOT18/17	4-lead cylindrical; metal (TO-72)	CYL
SOT20	4-lead single in-line; plastic (SOT-20)	SIL
SOT27K,M,P,T	14-lead dual in-line; plastic	DIL
SOT32	TO-126; 3 lead single in-line	SIL
SOT38	16-lead dual in-line; plastic	DIL
SOT38BE.2	16-lead dual in-line; plastic power	DIL
SOT38WE.2	16-lead dual in-line; plastic with internal heat spreader	DIL
SOT38Z	16-lead dual in-line; plastic	DIL
SOT58	16-lead quadruple in-line; plastic	QIL
SOT73A,B,C	14-lead dual in-line; ceramic (CERDIP)	DIL
SOT74A,B,C	16-lead dual in-line; ceramic (CERDIP)	DIL
SOT88B	40-lead dual in-line; metal ceramic (CERDIL)	DIL
SOT94	24-lead dual in-line; ceramic (CERDIP)	DIL
SOT95C	6-lead mini-pack; plastic (SO-6)	SO6
SOT96A	8-lead mini-pack; plastic (SO-8)	SO8
SOT96C	8-lead mini-pack; plastic (SO-8)	SO8
SOT97A	8-lead dual in-line; plastic	DIL
SOT101A	24-lead dual in-line; plastic	DIL
SOT101A,B	24-lead dual in-line; plastic (with internal heat spreader)	DIL
SOT102CA	18-lead dual in-line; plastic	DIL
SOT102CS,HE,KE	18-lead dual in-line; plastic	DIL
SOT102F,G,N,P	18-lead dual in-line; plastic	DIL
SOT108A	14-lead mini-pack; plastic (SO-14)	SO14
SOT109A	16-lead mini-pack; plastic (SO-16)	SO16
SOT110B	9-lead single in-line; plastic	SIL
SOT116	22-lead dual in-line; plastic	DIL
SOT117	28-lead dual in-line; plastic	DIL
SOT117	28-lead dual in-line; plastic (with internal heat spreader)	DIL
SOT117D	28-lead dual in-line; plastic	DIL

package code	description	pin position
SOT129	40-lead dual in-line; plastic	DIL
SOT131A,B	9-lead single in-line; plastic power	SIL
SOT133A,B	18-lead dual in-line; ceramic (CERDIP)	DIL
SOT134A	22-lead dual in-line; ceramic (CERDIP)	DIL
SOT135A	28-lead dual in-line; ceramic (CERDIP)	DIL
SOT136A	28-lead mini-pack; plastic (SO-28)	SO28
SOT137A	24-lead mini-pack; plastic (SO-24)	SO24
SOT138	24-lead flat-pack; ceramic (CERDIP)	FP;4x6
SOT141B	13-lead sil-bent-to-dil; plastic power	SBD
SOT141BA	13-lead sil-bent-to-dil; plastic power	SBD
SOT142	9-lead single in-line; plastic	SIL
SOT145	40-lead dual in-line; ceramic (CERDIP)	DIL
SOT146	20-lead dual in-line; plastic	DIL
SOT149	24-lead dual in-line; ceramic (CERDIP)	DIL
SOT150	12-lead dual in-line; plastic with metal cooling fin	DIL
SOT151A	8-lead dual in-line; ceramic (CERDIP)	DIL
SOT152B,C	20-lead dual in-line; ceramic (CERDIP)	DIL
SOT153B	8-lead dual in-line; metal ceramic (CERDIL)	DIL
SOT154B	20-lead dual in-line; metal ceramic (CERDIL)	DIL
SOT157A,B	9-lead sil-bent-to-dil; plastic power	SBD
SOT158A	40-lead mini-pack; plastic (VSO-40)	VSO40
SOT158B	40-lead mini-pack; plastic (opposite bent leads) (VSO-40)	VS04
SOT159A	44-lead mini-pack; plastic (VSO-44)	VSO44
SOT162A	16-lead mini-pack; plastic (SO-16L)	SO16L
SOT163A	20-lead mini-pack; plastic (SO-20)	SO20
SOT167	56-lead quadruple in-line; plastic	QIL
SOT169A	64-pin plug in package	GRID
SOT176	8-lead mini-pack; plastic (SO-8L)	SO8L
SOT187A	44-lead plastic leaded chip-carrier	PLCC
SOT188A	68-lead plastic leaded chip-carrier	PLCC
SOT189A	84-lead plastic leaded chip-carrier	PLCC
SOT190	56-lead mini-pack; plastic (VSO-56)	VSO56
SOT193	13-lead single in-line; plastic power	SIL
FO75	64-pin grid array package without heatspreader	GRID
FO99	64-pin grid array package with heatspreader	GRID
FO108	144-pin grid array package without heatspreader	GRID
FO128	144-pin grid array package with heatspreader	GRID
D	SIGNETICS plastic mini-pack (SO)	SOxx
F	SIGNETICS dual in-line; ceramic (CERDIP)	DIL
I	SIGNETICS dual in-line; metal ceramic (hermetic)(CERDIL)	DIL
N	SIGNETICS dual in-line; plastic	DIL

For the following package a package code has not yet been defined.

-	28-lead "Piggy-back" with 28-lead EPROM on top	PB

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
ACE600	-	64	GRID	77	IC08N
-	-	68	FP	77	-
ACE900	-	64	GRID	77	IC08N
-	-	68	FP	77	-
ACE1320	-	144	GRID	77	IC08N
-	-	84	FP	77	-
-	-	148	FP	77	-
ACE1400	-	144	GRID	77	IC08N
-	-	84	FP	77	-
ACE2200	-	144	GRID	77	IC08N
-	-	84	FP	77	-
-	-	148	FP	77	-
ACE3000	-	144	GRID	77	-
-	-	148	FP	77	-
ADC0801;-1	F,N	20	DIL	45	IC11N
ADC0802;-1	F,N	20	DIL	45	IC11N
ADC0803;-1	F,N	20	DIL	45	IC11N
ADC0804;-1	F,N	20	DIL	45	IC11N
ADC0805;-1	F,N	20	DIL	45	IC11N
AM6012	-	-	-	45	-
CA3081	F,N	16	DIL	47;65	IC11N
CA3089	N	16	DIL	47	IC11N
DAC-08series	F,N	16	DIL	45	IC11N
HEC4001BDB	SOT73	14	DIL	8	IC04N
HEC4002BDB	SOT73	14	DIL	8	IC04N
HEC4007UBDB	SOT73	14	DIL	8	IC04N
HEC4011BDB	SOT73	14	DIL	8	IC04N
HEC4012BDB	SOT73	14	DIL	8	IC04N
HEC4013BDB	SOT73	14	DIL	9	IC04N
HEC4014BDB	SOT74	16	DIL	9	IC04N
HEC4015BDB	SOT74	16	DIL	9	IC04N
HEC4016BDB	SOT73	14	DIL	10	IC04N
HEC4017BDB	SOT74	16	DIL	9	IC04N
HEC4019BDB	SOT74	16	DIL	10	IC04N
HEC4020BDB	SOT74	16	DIL	9	IC04N
HEC4023BDB	SOT73	14	DIL	8	IC04N
HEC4024BDB	SOT73	14	DIL	9	IC04N
HEC4025BDB	SOT73	14	DIL	8	IC04N
HEC4027BDB	SOT74	16	DIL	9	IC04N
HEC4030BDB	SOT73	14	DIL	8	IC04N
HEC4035BDB	SOT74	16	DIL	9	IC04N
HEC4040BDB	SOT74	16	DIL	9	IC04N
HEC4042BDB	SOT74	16	DIL	10	IC04N
HEC4047BDB	SOT73	14	DIL	10	IC04N
HEC4049BDB	SOT74	16	DIL	8	IC04N
HEC4050BDB	SOT74	16	DIL	8	IC04N
HEC4051BDB	SOT74	16	DIL	10	IC04N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
HEC4066BDB	SOT73	14	DIL	10	IC04N
HEC4068BDB	SOT73	14	DIL	8	IC04N
HEC4069UBDB	SOT73	14	DIL	8	IC04N
HEC4070BDB	SOT73	14	DIL	8	IC04N
HEC4071BDB	SOT73	14	DIL	8	IC04N
HEC4073BDB	SOT73	14	DIL	8	IC04N
HEC4081BDB	SOT73	14	DIL	8	IC04N
HEC4093BDB	SOT73	14	DIL	11	IC04N
HEC4094BDB	SOT74	16	DIL	9	IC04N
HEC4505BDB	SOT73	14	DIL	11	IC04N
HEC4510BDB	SOT74	16	DIL	9	IC04N
HEC4511BDB	SOT74	16	DIL	10	IC04N
HEC4512BDB	SOT74	16	DIL	10	IC04N
HEC4519BDB	SOT74	16	DIL	10	IC04N
HEC4520BDB	SOT74	16	DIL	9	IC04N
HEC4528BDB	SOT74	16	DIL	10	IC04N
HEC4539BDB	SOT74	16	DIL	10	IC04N
HEC4541BDB	SOT73	14	DIL	10	IC04N
HEC4556BDB	SOT74	16	DIL	10	IC04N
HEC4557BDB	SOT74	16	DIL	9	IC04N
HEC4585BDB	SOT74	16	DIL	10	IC04N
HEC4750VD	SOT135A	28	DIL	11	IC04N
HEC4750VDB	SOT135A	28	DIL	11	IC04N
HEC4751VD	SOT135A	28	DIL	9	IC04N
HEC4751VDB	SOT135A	28	DIL	9	IC04N
HEC40097BDB	SOT74	16	DIL	8	IC04N
HEC40098BDB	SOT74	16	DIL	8	IC04N
HEC40174BDB	SOT74	16	DIL	9	IC04N
HEC40175BDB	SOT74	16	DIL	9	IC04N
HEC40194BDB	SOT74	16	DIL	9	IC04N
HEC40195BDB	SOT74	16	DIL	9	IC04N
HEF4000BD	SOT73	14	DIL	8	IC04N
HEF4000BP	SOT27	14	DIL	8	IC04N
HEF4000BT	SOT108A	14	SO14	8	IC04N
HEF4000BU	-	12	pads	8	IC05N
HEF4001BD	SOT73	14	DIL	8	IC04N
HEF4001BP	SOT27	14	DIL	8	IC04N
HEF4001BT	SOT108A	14	SO14	8	IC04N
HEF4001BU	-	14	pads	8	IC05N
HEF4001UBD	SOT73	14	DIL	8	IC04N
HEF4001UBP	SOT27	14	DIL	8	IC04N
HEF4001UBT	SOT108A	14	SO14	8	IC04N
HEF4001UBU	-	14	pads	8	IC05N
HEF4002BD	SOT73	14	DIL	8	IC04N
HEF4002BP	SOT27	14	DIL	8	IC04N
HEF4002BT	SOT108A	14	SO14	8	IC04N
HEF4002BU	-	12	pads	8	IC05N
HEF4006BD	SOT73	14	DIL	9	IC04N
HEF4006BP	SOT27	14	DIL	9	IC04N
HEF4006BT	SOT108A	14	SO14	9	IC04N
HEF4006BU	-	13	pads	9	IC05N
HEF4007UBD	SOT73	14	DIL	8	IC04N
HEF4007UBP	SOT27	14	DIL	8	IC04N
HEF4007UBT	SOT108A	14	SO14	8	IC04N
HEF4007UBU	-	14	pads	8	IC05N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
HEF4008BD	SOT74	16	DIL	10	IC04N
HEF4008BP	SOT38Z	16	DIL	10	IC04N
HEF4008BT	SOT109A	16	SO16	10	IC04N
HEF4008BU	-	16	pads	10	IC05N
HEF4011BD	SOT73	14	DIL	8	IC04N
HEF4011BP	SOT27	14	DIL	8	IC04N
HEF4011BT	SOT108A	14	SO14	8	IC04N
HEF4011BU	-	14	pads	8	IC05N
HEF4011UBD	SOT73	14	DIL	8	IC04N
HEF4011UBP	SOT27	14	DIL	8	IC04N
HEF4011UBT	SOT108A	14	SO14	8	IC04N
HEF4011UBU	-	14	pads	8	IC05N
HEF4012BD	SOT73	14	DIL	8	IC04N
HEF4012BP	SOT27	14	DIL	8	IC04N
HEF4012BT	SOT108A	14	SO14	8	IC04N
HEF4012BU	-	12	pads	8	IC05N
HEF4013BD	SOT73	14	DIL	9	IC04N
HEF4013BP	SOT27	14	DIL	9	IC04N
HEF4013BT	SOT108A	14	SO14	9	IC04N
HEF4013BU	-	14	pads	9	IC05N
HEF4014BD	SOT74	16	DIL	9	IC04N
HEF4014BP	SOT38Z	16	DIL	9	IC04N
HEF4014BT	SOT109A	16	SO16	9	IC04N
HEF4014BU	-	16	pads	9	IC05N
HEF4015BD	SOT74	16	DIL	9	IC04N
HEF4015BP	SOT38Z	16	DIL	9	IC04N
HEF4015BT	SOT109A	16	SO16	9	IC04N
HEF4015BU	-	16	pads	9	IC05N
HEF4016BD	SOT73	14	DIL	10	IC04N
HEF4016BP	SOT27	14	DIL	10	IC04N
HEF4016BT	SOT108A	14	SO14	10	IC04N
HEF4016BU	-	14	pads	10	IC05N
HEF4017BD	SOT74	16	DIL	9	IC04N
HEF4017BP	SOT38Z	16	DIL	9	IC04N
HEF4017BT	SOT109A	16	SO16	9	IC04N
HEF4017BU	-	16	pads	9	IC05N
HEF4018BD	SOT74	16	DIL	9	IC04N
HEF4018BP	SOT38Z	16	DIL	9	IC04N
HEF4018BT	SOT109A	16	SO16	9	IC04N
HEF4018BU	-	16	pads	9	IC05N
HEF4019BD	SOT74	16	DIL	10	IC04N
HEF4019BP	SOT38Z	16	DIL	10	IC04N
HEF4019BT	SOT109A	16	SO16	10	IC04N
HEF4019BU	-	16	pads	10	IC05N
HEF4020BD	SOT74	16	DIL	9	IC04N
HEF4020BP	SOT38Z	16	DIL	9	IC04N
HEF4020BT	SOT109A	16	SO16	9	IC04N
HEF4020BU	-	16	pads	9	IC05N
HEF4021BD	SOT74	16	DIL	9	IC04N
HEF4021BP	SOT38Z	16	DIL	9	IC04N
HEF4021BT	SOT109A	16	SO16	9	IC04N
HEF4021BU	-	16	pads	9	IC05N
HEF4022BD	SOT74	16	DIL	9	IC04N
HEF4022BP	SOT38Z	16	DIL	9	IC04N
HEF4022BT	SOT109A	16	SO16	9	IC04N
HEF4022BU	-	14	pads	9	IC05N
HEF4023BD	SOT73	14	DIL	8	IC04N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
HEF4023BP	SOT27	14	DIL	8	IC04N
HEF4023BT	SOT108A	14	SO14	8	IC04N
HEF4023BU	-	14	pads	8	IC05N
HEF4024BD	SOT73	14	DIL	9	IC04N
HEF4024BP	SOT27	14	DIL	9	IC04N
HEF4024BT	SOT108A	14	SO14	9	IC04N
HEF4024BU	-	11	pads	9	IC05N
HEF4025BD	SOT73	14	DIL	8	IC04N
HEF4025BP	SOT27	14	DIL	8	IC04N
HEF4025BT	SOT108A	14	SO14	8	IC04N
HEF4025BU	-	14	pads	8	IC05N
HEF4027BD	SOT74	16	DIL	9	IC04N
HEF4027BP	SOT38Z	16	DIL	9	IC04N
HEF4027BT	SOT109A	16	SO16	9	IC04N
HEF4027BU	-	16	pads	9	IC05N
HEF4028BD	SOT74	16	DIL	10	IC04N
HEF4028BP	SOT38Z	16	DIL	10	IC04N
HEF4028BT	SOT109A	16	SO16	10	IC04N
HEF4028BU	-	16	pads	10	IC05N
HEF4029BD	SOT74	16	DIL	9	IC04N
HEF4029BP	SOT38Z	16	DIL	9	IC04N
HEF4029BT	SOT109A	16	SO16	9	IC04N
HEF4029BU	-	16	pads	9	IC05N
HEF4030BD	SOT73	14	DIL	8	IC04N
HEF4030BP	SOT27	14	DIL	8	IC04N
HEF4030BT	SOT108A	14	SO14	8	IC04N
HEF4030BU	-	14	pads	8	IC05N
HEF4031BD	SOT74	16	DIL	9	IC04N
HEF4031BP	SOT38Z	16	DIL	9	IC04N
HEF4031BT	SOT109A	16	SO16	9	IC04N
HEF4031BU	-	9	pads	9	IC05N
HEF4035BD	SOT74	16	DIL	9	IC04N
HEF4035BP	SOT38Z	16	DIL	9	IC04N
HEF4035BT	SOT109A	16	SO16	9	IC04N
HEF4035BU	-	16	pads	9	IC05N
HEF4040BD	SOT74	16	DIL	9	IC04N
HEF4040BP	SOT38Z	16	DIL	9	IC04N
HEF4040BT	SOT109A	16	SO16	9	IC04N
HEF4040BU	-	16	pads	9	IC05N
HEF4041BD	SOT73	14	DIL	8	IC04N
HEF4041BP	SOT27	14	DIL	8	IC04N
HEF4041BT	SOT108A	14	SO14	8	IC04N
HEF4041BU	-	14	pads	8	IC05N
HEF4042BD	SOT74	16	DIL	10	IC04N
HEF4042BP	SOT38Z	16	DIL	10	IC04N
HEF4042BT	SOT109A	16	SO16	10	IC04N
HEF4042BU	-	16	pads	10	IC05N
HEF4043BD	SOT74	16	DIL	10	IC04N
HEF4043BP	SOT38Z	16	DIL	10	IC04N
HEF4043BT	SOT109A	16	SO16	10	IC04N
HEF4043BU	-	15	pads	10	IC05N
HEF4044BD	SOT74	16	DIL	10	IC04N
HEF4044BP	SOT38Z	16	DIL	10	IC04N
HEF4044BT	SOT109A	16	SO16	10	IC04N
HEF4044BU	-	15	pads	10	IC05N
HEF4046BD	SOT74	16	DIL	11;47	IC04N
HEF4046BP	SOT38Z	16	DIL	11;47	IC04N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
HEF4046BT	SOT109A	16	SO16	11;47	IC04N
HEF4046BU	-	16	pads	11;47	IC05N
HEF4047BD	SOT73	14	DIL	10	IC04N
HEF4047BP	SOT27	14	DIL	10	IC04N
HEF4047BT	SOT108A	14	SO14	10	IC04N
HEF4047BU	-	14	pads	10	IC05N
HEF4049BD	SOT74	16	DIL	8	IC04N
HEF4049BP	SOT38Z	16	DIL	8	IC04N
HEF4049BT	SOT109A	16	SO16	8	IC04N
HEF4049BU	-	14	pads	8	IC05N
HEF4050BD	SOT74	16	DIL	8	IC04N
HEF4050BP	SOT38Z	16	DIL	8	IC04N
HEF4050BT	SOT109A	16	SO16	8	IC04N
HEF4050BU	-	14	pads	8	IC05N
HEF4051BD	SOT74	16	DIL	10	IC04N
HEF4051BP	SOT38Z	16	DIL	10	IC04N
HEF4051BT	SOT109A	16	SO16	10	IC04N
HEF4051BU	-	16	pads	10	IC05N
HEF4052BD	SOT74	16	DIL	10	IC04N
HEF4052BP	SOT38Z	16	DIL	10	IC04N
HEF4052BT	SOT109A	16	SO16	10	IC04N
HEF4052BU	-	16	pads	10	IC05N
HEF4053BD	SOT74	16	DIL	10	IC04N
HEF4053BP	SOT38Z	16	DIL	10	IC04N
HEF4053BT	SOT109A	16	SO16	10	IC04N
HEF4053BU	-	16	pads	10	IC05N
HEF4059BD	SOT94	24	DIL	9	IC04N
HEF4059BP	SOT101A	24	DIL	9	IC04N
HEF4059BT	SOT137A	24	SO24	9	IC04N
HEF4059BU	-	24	pads	9	IC05N
HEF4060BD	SOT74	16	DIL	9	IC04N
HEF4060BP	SOT38Z	16	DIL	9	IC04N
HEF4060BT	SOT109A	16	SO16	9	IC04N
HEF4060BU	-	16	pads	9	IC05N
HEF4066BD	SOT73	14	DIL	10	IC04N
HEF4066BP	SOT27	14	DIL	10	IC04N
HEF4066BT	SOT108A	14	SO14	10	IC04N
HEF4066BU	-	14	pads	10	IC05N
HEF4067BD	SOT94	24	DIL	10	IC04N
HEF4067BP	SOT101A	24	DIL	10	IC04N
HEF4067BT	SOT137A	24	SO24	10	IC04N
HEF4067BU	-	24	pads	10	IC05N
HEF4068BD	SOT73	14	DIL	8	IC04N
HEF4068BP	SOT27	14	DIL	8	IC04N
HEF4068BT	SOT108A	14	SO14	8	IC04N
HEF4068BU	-	11	pads	8	IC05N
HEF4069UBD	SOT73	14	DIL	8	IC04N
HEF4069UBP	SOT27	14	DIL	8	IC04N
HEF4069UBT	SOT108A	14	SO14	8	IC04N
HEF4069UBU	-	14	pads	8	IC05N
HEF4070BD	SOT73	14	DIL	8	IC04N
HEF4070BP	SOT27	14	DIL	8	IC04N
HEF4070BT	SOT108A	14	SO14	8	IC04N
HEF4070BU	-	14	pads	8	IC05N
HEF4071BD	SOT73	14	DIL	8	IC04N
HEF4071BP	SOT27	14	DIL	8	IC04N
HEF4071BT	SOT108A	14	SO14	8	IC04N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
HEF4071BU	-	14	pads	8	IC05N
HEF4072BD	SOT73	14	DIL	8	IC04N
HEF4072BP	SOT27	14	DIL	8	IC04N
HEF4072BT	SOT108A	14	SO14	8	IC04N
HEF4072BU	-	12	pads	8	IC05N
HEF4073BD	SOT73	14	DIL	8	IC04N
HEF4073BP	SOT27	14	DIL	8	IC04N
HEF4073BT	SOT108A	14	SO14	8	IC04N
HEF4073BU	-	14	pads	8	IC05N
HEF4075BD	SOT73	14	DIL	8	IC04N
HEF4075BP	SOT27	14	DIL	8	IC04N
HEF4075BT	SOT108A	14	SO14	8	IC04N
HEF4075BU	-	14	pads	8	IC05N
HEF4076BD	SOT74	16	DIL	9	IC04N
HEF4076BP	SOT38Z	16	DIL	9	IC04N
HEF4076BT	SOT109A	16	SO16	9	IC04N
HEF4076BU	-	16	pads	9	IC05N
HEF4077BD	SOT73	14	DIL	8	IC04N
HEF4077BP	SOT27	14	DIL	8	IC04N
HEF4077BT	SOT108A	14	SO14	8	IC04N
HEF4077BU	-	14	pads	8	IC05N
HEF4078BD	SOT73	14	DIL	8	IC04N
HEF4078BP	SOT27	14	DIL	8	IC04N
HEF4078BT	SOT108A	14	SO14	8	IC04N
HEF4078BU	-	11	pads	8	IC05N
HEF4081BD	SOT73	14	DIL	8	IC04N
HEF4081BP	SOT27	14	DIL	8	IC04N
HEF4081BT	SOT108A	14	SO14	8	IC04N
HEF4081BU	-	14	pads	8	IC05N
HEF4082BD	SOT73	14	DIL	8	IC04N
HEF4082BP	SOT27	14	DIL	8	IC04N
HEF4082BT	SOT108A	14	SO14	8	IC04N
HEF4082BU	-	12	pads	8	IC05N
HEF4085BD	SOT73	14	DIL	8	IC04N
HEF4085BP	SOT27	14	DIL	8	IC04N
HEF4085BT	SOT108A	14	SO14	8	IC04N
HEF4085BU	-	14	pads	8	IC05N
HEF4086BD	SOT73	14	DIL	8	IC04N
HEF4086BP	SOT27	14	DIL	8	IC04N
HEF4086BT	SOT108A	14	SO14	8	IC04N
HEF4086BU	-	13	pads	8	IC05N
HEF4093BD	SOT73	14	DIL	11	IC04N
HEF4093BP	SOT27	14	DIL	11	IC04N
HEF4093BT	SOT108A	14	SO14	11	IC04N
HEF4093BU	-	14	pads	11	IC05N
HEF4094BD	SOT74	16	DIL	9	IC04N
HEF4094BP	SOT38Z	16	DIL	9	IC04N
HEF4094BT	SOT109A	16	SO16	9	IC04N
HEF4094BU	-	16	pads	9	IC05N
HEF4104BD	SOT74	16	DIL	11	IC04N
HEF4104BP	SOT38Z	16	DIL	11	IC04N
HEF4104BT	SOT109A	16	SO16	11	IC04N
HEF4104BU	-	16	pads	11	IC05N
HEF4502BD	SOT74	16	DIL	8	IC04N
HEF4502BP	SOT38Z	16	DIL	8	IC04N
HEF4502BT	SOT109A	16	SO16	8	IC04N
HEF4502BU	-	16	pads	8	IC05N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
HEF4505BD	SOT73	14	DIL	11	IC04N
HEF4505BP	SOT27	14	DIL	11	IC04N
HEF4505BU	-	14	pads	11	IC05N
HEF4508BD	SOT94	24	DIL	10	IC04N
HEF4508BP	SOT101A	24	DIL	10	IC04N
HEF4508BT	SOT137A	24	SO24	10	IC04N
HEF4508BU	-	24	pads	10	IC05N
HEF4510BD	SOT74	16	DIL	9	IC04N
HEF4510BP	SOT38Z	16	DIL	9	IC04N
HEF4510BT	SOT162A	16	SO16L	9	IC04N
HEF4510BU	-	16	pads	9	IC05N
HEF4511BD	SOT74	16	DIL	10	IC04N
HEF4511BP	SOT38Z	16	DIL	10	IC04N
HEF4511BT	SOT109A	16	SO16	10	IC04N
HEF4511BU	-	16	pads	10	IC05N
HEF4512BD	SOT74	16	DIL	10	IC04N
HEF4512BP	SOT38Z	16	DIL	10	IC04N
HEF4512BT	SOT109A	16	SO16	10	IC04N
HEF4512BU	-	16	pads	10	IC05N
HEF4514BD	SOT94	24	DIL	10	IC04N
HEF4514BP	SOT101A	24	DIL	10	IC04N
HEF4514BT	SOT137A	24	SO24	10	IC04N
HEF4514BU	-	24	pads	10	IC05N
HEF4515BD	SOT94	24	DIL	10	IC04N
HEF4515BP	SOT101A	24	DIL	10	IC04N
HEF4515BT	SOT137A	24	SO24	10	IC04N
HEF4515BU	-	24	pads	10	IC05N
HEF4516BD	SOT74	16	DIL	9	IC04N
HEF4516BP	SOT38Z	16	DIL	9	IC04N
HEF4516BT	SOT162A	16	SO16L	9	IC04N
HEF4516BU	-	16	pads	9	IC05N
HEF4517BD	SOT74	16	DIL	9	IC04N
HEF4517BP	SOT38Z	16	DIL	9	IC04N
HEF4517BT	SOT162A	16	SO16L	9	IC04N
HEF4517BU	-	16	pads	9	IC05N
HEF4518BD	SOT74	16	DIL	9	IC04N
HEF4518BP	SOT38Z	16	DIL	9	IC04N
HEF4518BT	SOT109A	16	SO16	9	IC04N
HEF4518BU	-	16	pads	9	IC05N
HEF4519BD	SOT74	16	DIL	10	IC04N
HEF4519BP	SOT38Z	16	DIL	10	IC04N
HEF4519BT	SOT109A	16	SO16	10	IC04N
HEF4519BU	-	16	pads	10	IC05N
HEF4520BD	SOT74	16	DIL	9	IC04N
HEF4520BP	SOT38Z	16	DIL	9	IC04N
HEF4520BT	SOT109A	16	SO16	9	IC04N
HEF4520BU	-	16	pads	9	IC05N
HEF4521BD	SOT74	16	DIL	9	IC04N
HEF4521BP	SOT38Z	16	DIL	9	IC04N
HEF4521BT	SOT109A	16	SO16	9	IC04N
HEF4521BU	-	16	pads	9	IC05N
HEF4522BD	SOT74	16	DIL	9	IC04N
HEF4522BP	SOT38Z	16	DIL	9	IC04N
HEF4522BT	SOT109A	16	SO16	9	IC04N
HEF4522BU	-	16	pads	9	IC05N
HEF4526BD	SOT74	16	DIL	9	IC04N
HEF4526BP	SOT38Z	16	DIL	9	IC04N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
HEF4526BT	SOT109A	16	SO16	9	IC04N
HEF4526BU	-	16	pads	9	IC05N
HEF4527BD	SOT74	16	DIL	11	IC04N
HEF4527BP	SOT38Z	16	DIL	11	IC04N
HEF4527BT	SOT109A	16	SO16	11	IC04N
HEF4527BU	-	16	pads	11	IC05N
HEF4528BD	SOT74	16	DIL	10	IC04N
HEF4528BP	SOT38Z	16	DIL	10	IC04N
HEF4528BT	SOT109A	16	SO16	10	IC04N
HEF4528BU	-	16	pads	10	IC05N
HEF4531BD	SOT74	16	DIL	10	IC04N
HEF4531BP	SOT38Z	16	DIL	10	IC04N
HEF4531BT	SOT109A	16	SO16	10	IC04N
HEF4531BU	-	16	pads	10	IC05N
HEF4532BD	SOT74	16	DIL	10	IC04N
HEF4532BP	SOT38Z	16	DIL	10	IC04N
HEF4532BT	SOT109A	16	SO16	10	IC04N
HEF4532BU	-	16	pads	10	IC05N
HEF4534BD	SOT94	24	DIL	9	IC04N
HEF4534BP	SOT101A	24	DIL	9	IC04N
HEF4534BT	SOT137A	24	SO24	9	IC04N
HEF4534BU	-	24	pads	9	IC05N
HEF4538BD	SOT74	16	DIL	10	IC04N
HEF4538BP	SOT38Z	16	DIL	10	IC04N
HEF4538BT	SOT109A	16	SO16	10	IC04N
HEF4538BU	-	16	pads	10	IC05N
HEF4539BD	SOT74	16	DIL	10	IC04N
HEF4539BP	SOT38Z	16	DIL	10	IC04N
HEF4539BT	SOT109A	16	SO16	10	IC04N
HEF4539BU	-	16	pads	10	IC05N
HEF4541BD	SOT73	14	DIL	10	IC04N
HEF4541BP	SOT27	14	DIL	10	IC04N
HEF4541BT	SOT108A	14	SO14	10	IC04N
HEF4541BU	-	12	pads	10	IC05N
HEF4543BD	SOT74	16	DIL	10	IC04N
HEF4543BP	SOT38Z	16	DIL	10	IC04N
HEF4543BT	SOT109A	16	SO16	10	IC04N
HEF4543BU	-	16	pads	10	IC05N
HEF4555BD	SOT74	16	DIL	10	IC04N
HEF4555BP	SOT38Z	16	DIL	10	IC04N
HEF4555BT	SOT109A	16	SO16	10	IC04N
HEF4555BU	-	16	pads	10	IC05N
HEF4556BD	SOT74	16	DIL	10	IC04N
HEF4556BP	SOT38Z	16	DIL	10	IC04N
HEF4556BT	SOT109A	16	SO16	10	IC04N
HEF4556BU	-	16	pads	10	IC05N
HEF4557BD	SOT74	16	DIL	9	IC04N
HEF4557BP	SOT38Z	16	DIL	9	IC04N
HEF4557BT	SOT162A	16	SO16	9	IC04N
HEF4557BU	-	16	pads	9	IC05N
HEF4585BD	SOT74	16	DIL	10	IC04N
HEF4585BP	SOT38Z	16	DIL	10	IC04N
HEF4585BT	SOT109A	16	SO16	10	IC04N
HEF4585BU	-	16	pads	10	IC05N
HEF4720BD	SOT74	16	DIL	11	IC04N
HEF4720VD	SOT74	16	DIL	11	IC04N
HEF4720BP	SOT38Z	16	SO16	11	IC04N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
HEF4720VP	SOT38Z	16	DIL	11	IC04N
HEF4720BT	SOT162A	16	SO16L	11	IC04N
HEF4720VT	SOT162A	16	SO16L	11	IC04N
HEF4720VU	-	15	pads	11	IC05N
HEF4724BD	SOT74	16	DIL	10	IC04N
HEF4724BP	SOT38Z	16	DIL	10	IC04N
HEF4724BT	SOT109A	16	SO16	10	IC04N
HEF4724BU	-	16	pads	10	IC05N
HEF4731BD	SOT73	14	DIL	9	IC04N
HEF4731VD	SOT73	14	DIL	9	IC04N
HEF4731BP	SOT27	14	DIL	9	IC04N
HEF4731VP	SOT27	14	DIL	9	IC04N
HEF4731VU	-	14	pads	9	IC05N
HEF4737BD	SOT133	18	DIL	9	IC04N
HEF4737VD	SOT133	18	DIL	9	IC04N
HEF4737BP	SOT102A	18	DIL	9	IC04N
HEF4737VP	SOT102A	18	DIL	9	IC04N
HEF4737VU	-	18	pads	9	IC05N
HEF4738VP	SOT129	40	DIL	11	IC04N
HEF4750VD	SOT135A	28	DIL	11;49	IC04N
HEF4750VU	-	28	pads	11;49	IC05N
HEF4751VD	SOT135A	28	DIL	9;49	IC04N
HEF4751VP	SOT117	28	DIL	9;49	IC04N
HEF4751VT	SOT136A	28	SO28	9;49	IC04N
HEF4751VU	-	28	pads	9;49	IC05N
HEF4752VD	SOT135A	28	DIL	11;50	IC04N
HEF4752VP	SOT117	28	DIL	11;50	IC04N
HEF4752VT	SOT136A	28	SO28	11;50	IC04N
HEF4753BD	SOT133	18	DIL	10	IC04N
HEF4753BP	SOT102A	18	DIL	10	IC04N
HEF4753VU	-	18	pads	10	IC05N
HEF4754VD	SOT135A	28	DIL	11	IC04N
HEF4754VP	SOT117	28	DIL	11	IC04N
HEF4754VT	SOT136A	28	SO28	11	IC04N
HEF4754VU	-	28	pads	11	IC05N
HEF4755VD	SOT135A	28	DIL	11	IC04N
HEF4755VP	SOT117	28	DIL	11	IC04N
HEF4755VT	SOT136A	28	SO28	11	IC04N
HEF4755VU	-	28	pads	11	IC05N
HEF40097BD	SOT74	16	DIL	8	IC04N
HEF40097BP	SOT38Z	16	DIL	8	IC04N
HEF40097BT	SOT109A	16	SO16	8	IC04N
HEF40097BU	-	16	pads	8	IC05N
HEF40098BD	SOT74	16	DIL	8	IC04N
HEF40098BP	SOT38Z	16	DIL	8	IC04N
HEF40098BT	SOT109A	16	SO16	8	IC04N
HEF40098BU	-	16	pads	8	IC05N
HEF40106BD	SOT73	14	DIL	11	IC04N
HEF40106BP	SOT27	14	DIL	11	IC04N
HEF40106BT	SOT108A	14	SO14	11	IC04N
HEF40106BU	-	14	pads	11	IC05N
HEF40160BD	SOT74	16	DIL	9	IC04N
HEF40160BP	SOT38Z	16	DIL	9	IC04N
HEF40160BT	SOT109A	16	SO16	9	IC04N
HEF40160BU	-	16	pads	9	IC05N
HEF40161BD	SOT74	16	DIL	9	IC04N
HEF40161BP	SOT38Z	16	DIL	9	IC04N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
HEF40161BT	SOT109A	16	SO16	9	IC04N
HEF40161BU	-	16	pads	9	IC05N
HEF40162BD	SOT74	16	DIL	9	IC04N
HEF40162BP	SOT38Z	16	DIL	9	IC04N
HEF40162BT	SOT109A	16	SO16	9	IC04N
HEF40162BU	-	16	pads	9	IC05N
HEF40163BD	SOT74	16	DIL	9	IC04N
HEF40163BP	SOT38Z	16	DIL	9	IC04N
HEF40163BT	SOT109A	16	SO16	9	IC04N
HEF40163BU	-	16	pads	9	IC05N
HEF40174BD	SOT74	16	DIL	9	IC04N
HEF40174BP	SOT38Z	16	DIL	9	IC04N
HEF40174BT	SOT109A	16	SO16	9	IC04N
HEF40174BU	-	16	pads	9	IC05N
HEF40175BD	SOT74	16	DIL	9	IC04N
HEF40175BP	SOT38Z	16	DIL	9	IC04N
HEF40175BT	SOT109A	16	SO16	9	IC04N
HEF40175BU	-	16	pads	9	IC05N
HEF40192BD	SOT74	16	DIL	9	IC04N
HEF40192BP	SOT38Z	16	DIL	9	IC04N
HEF40192BT	SOT109A	16	SO16	9	IC04N
HEF40192BU	-	16	pads	9	IC05N
HEF40193BD	SOT74	16	DIL	9	IC04N
HEF40193BP	SOT38Z	16	DIL	9	IC04N
HEF40193BT	SOT109A	16	SO16	9	IC04N
HEF40193BU	-	16	pads	9	IC05N
HEF40194BD	SOT74	16	DIL	9	IC04N
HEF40194BP	SOT38Z	16	DIL	9	IC04N
HEF40194BT	SOT109A	16	SO16	9	IC04N
HEF40194BU	-	16	pads	9	IC05N
HEF40195BD	SOT74	16	DIL	9	IC04N
HEF40195BP	SOT38Z	16	DIL	9	IC04N
HEF40195BT	SOT109A	16	SO16	9	IC04N
HEF40195BU	-	16	pads	9	IC05N
HEF40240BP	SOT146	20	DIL	11	IC04N
HEF40240BT	SOT163A	20	SO20	11	IC04N
HEF40240BU	-	20	pads	11	IC05N
HEF40244BP	SOT146	20	DIL	11	IC04N
HEF40244BT	SOT163A	20	SO20	11	IC04N
HEF40244BU	-	20	pads	11	IC05N
HEF40245BP	SOT146	20	DIL	11	IC04N
HEF40245BT	SOT163A	20	SO20	11	IC04N
HEF40245BU	-	20	pads	11	IC05N
HEF40373BP	SOT146	20	DIL	11	IC04N
HEF40373BT	SOT163A	20	SO20	11	IC04N
HEF40373BU	-	20	pads	11	IC05N
HEF40374BP	SOT146	20	DIL	11	IC04N
HEF40374BT	SOT163A	20	SO20	11	IC04N
HEF40374BU	-	20	pads	11	IC05N
LF398	F,N	8	DIL	46	IC11N
LM111	F,N/D	8	DIL/SO8	45	IC11N
LM119	F/D	14	DIL/SO14	45	IC11N
LM124	F,N/D	14	DIL/SO14	46	IC11N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
LM139	F,N/D	14	DIL/SO14	45	IC11N
LM158	F,N	8	DIL	46	IC11N
LM193	F,N	8	DIL	45	IC11N
LM211	F,N/D	8	DIL/SO8	45	IC11N
LM219	F/D	14	DIL/SO14	45	IC11N
LM224	F,N/D	14	DIL/SO14	46	IC11N
LM239	F,N/D	14	DIL/SO14	45	IC11N
LM258	F,N	8	DIL	46	IC11N
LM293	F,N	8	DIL	45	IC11N
LM311	F,N/D	8	DIL/SO8	45	IC11N
LM319	F/D	14	DIL/SO14	45	IC11N
LM324	F,N/D	14	DIL/SO14	46	IC11N
LM339	F,N/D	14	DIL/SO14	45	IC11N
LM358	F,N	8	DIL	46	IC11N
LM393	F,N	8	DIL	45	IC11N
LM1870	N	20	DIL	47;52	IC11N
LM2901	F,N/D	14	DIL/SO14	45	IC11N
LM2903	F,N	8	DIL	45	IC11N
MAB8021P	SOT117	28	DIL	60;70	IC01N;IC02N;IC11
MAB8031AH-12P	SOT129	40	DIL	60;70	●
MAB8031AH-15P	SOT129	40	DIL	60;70	●
MAB8032AHP	SOT129	40	DIL	60;70	●
MAB8032AHWP	SOT187A	44	PLCC	60;70	●
MAB8035HLP	SOT129	40	DIL	60;70	IC01N;IC02N;IC11
MAB8035HLT	SOT158A	40	VSO40	60;70	IC01N;IC02N;IC11
MAB8039HL-6P	SOT129	40	DIL	60;70	●
MAB8039HL-11P	SOT129	40	DIL	60;70	●
MAB8040HLP	SOT129	40	DIL	60;70	●
MAB8048HP	SOT129	40	DIL	60;70	IC01N;IC02N;IC11
MAB8048HT	SOT158A	40	VSO40	60;70	IC01N;IC02N;IC11
MAB8049H-6P	SOT129	40	DIL	60;70	●
MAB8049H-11P	SOT129	40	DIL	60;70	●
MAB8050HP	SOT129	40	DIL	60;70	IC11
MAB8051AHP	SOT129	40	DIL	60;70	●
MAB8052AHP	SOT129	40	DIL	60;70	●
MAB8052AHWP	SOT187A	44	PLCC	60;70	●
MAB8401B	-	28 + 28	PB	60;70	IC01N;IC02N;IC11
MAB8401WP	SOT188A	68	PLCC	60;70	IC01N;IC02N;IC11
MAB8411P	SOT117D	28	DIL	60;70	IC01N;IC02N;IC11
MAB8411T	SOT136A	28	SO28	60;70	IC01N;IC02N;IC11
MAB8421P	SOT117D	28	DIL	60;70	●
MAB8421T	SOT136A	28	SO28	60;70	●
MAB8422P	SOT146	20	DIL	60;70	●
MAB8441P	SOT117D	28	DIL	60;70	●
MAB8441T	SOT136A	28	SO28	60;70	●
MAB8442P	SOT146	20	DIL	60;70	●
MAB8461P	SOT117D	28	DIL	60;70	●
MAF8021P	SOT117	28	DIL	60;70	IC01N;IC02N;IC11
MAF80A31AHP	SOT129	40	DIL	60;70	●
MAF8031AHP	SOT129	40	DIL	60;70	●
MAF80A35HLP	SOT158A	40	VSO40	60;70	●
MAF8035HLT	SOT158A	40	VSO40	60;70	●
MAF80A39HLP	SOT129	40	DIL	60;70	●

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
MAF8039HLP	SOT129	40	DIL	60;70	●
MAF80A40HLP	SOT129	40	DIL	60;70	●
MAF8040HLP	SOT129	40	DIL	60;70	●
MAF8048HP	SOT129	40	DIL	60;70	●
MAF80A49AHP	SOT129	40	DIL	60;70	●
MAF8049HLT	SOT158A	40	VSO40	60;70	●
MAF8049H-11P	SOT129	40	DIL	60;70	●
MAF80A50HP	SOT129	40	DIL	60;70	●
MAF8050HP	SOT129	40	DIL	60;70	●
MAF80A51AHP	SOT129	40	DIL	60;70	●
MAF8051AHP	SOT129	40	DIL	60;70	●
MAF84A11P	SOT117D	28	DIL	60;70	●
MAF8411P	SOT117D	28	DIL	60;70	●
MAF8411T	SOT136A	28	SO28	60;70	●
MAF84A21P	SOT117D	28	DIL	60;70	●
MAF8421P	SOT117D	28	DIL	60;70	●
MAF8421T	SOT136A	28	SO28	60;70	●
MAF8422P	SOT146	20	DIL	60;70	●
MAF84A22P	SOT146	20	DIL	60;70	●
MAF84A41P	SOT117D	28	DIL	60;70	●
MAF8441P	SOT117D	28	DIL	60;70	●
MAF8441T	SOT136A	28	SO28	60;70	●
MAF84A42P	SOT146	20	DIL	60;70	●
MAF8442P	SOT146	20	DIL	60;70	●
MAF84A61P	SOT117D	28	DIL	60;70	●
MAF8461P	SOT117D	28	DIL	60;70	●
MC1408-7	F,N/D	16	DIL/SO16	45	IC11N
MC1408-8	F,N/D	16	DIL/SO16	45	IC11N
MC1458	F,N/D	8	DIL/SO8	46	IC11N
MC1488	F,N	14	DIL	45	IC11N
MC1489	F,N	14	DIL	45	IC11N
MC1489A	F,N	14	DIL	45	IC11N
MC1496	F,N	14	DIL	47;52	IC11N
MC1508-8	F,N/D	16	DIL/SO16	45	IC11N
MC1558	F,N/D	8	DIL/SO8	46	IC11N
MC1596	F,N	14	DIL	47;52	IC11N
MC3302	F,N/D	14	DIL/SO14	45	IC11N
MC3303	F,N/D	14	DIL/SO14	46	IC11N
MC3403	F,N/D	14	DIL/SO14	46	IC11N
MC3410	F	16	DIL	45	IC11N
MC3503	F,N/D	14	DIL/SO14	46	IC11N
MC3510	F	16	DIL	45	IC11N
MEB3000	SOT101A	24	DIL	51;61;66;79	IC01N
MEE3000	-	-	-	66	-
NE521	F,N/D	14	DIL/SO14	45	IC11N
NE522	F,N/D	14	DIL/SO14	45	IC11N
NE527	F,N/D	14	DIL/SO14	45	IC11N
NE529	F,N/D	14	DIL/SO14	45	IC11N
NE530	F,N	8	DIL	46	IC11N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
NE531	F,N	8	DIL	46	IC11N
NE532	F,N	8	DIL	46	IC11N
NE538	F,N	8	DIL	46	IC11N
NE542	N	8	DIL	66	IC11N
NE544	N	14	DIL	46;66	IC11N
NE555	F,(F),N/D	8(14)	DIL/SO8	46	IC11N
NE556	F,N/D	14	DIL/SO14	46	IC11N
NE556-1	F,N/D	14	DIL/SO14	46	IC11N
NE558	F,N	16	DIL	46	IC11N
NE564	I,N/D	16	DIL/SO16	47	IC11N
NE565	F,N/D	14	DIL/SO14	47	IC11N
NE566	F,(N)/D	14(8)	DIL/SO8	47	IC11N
NE567	F,N/D	8	DIL/SO8	47	IC11N
NE570	F,N/D	16	DIL/SO16	47;66	IC11N
NE571	F,N/D	16	DIL/SO16	47;66	IC11N
NE572	N/D	16	DIL/SO16	47;66	IC11N
NE587	F,N	18	DIL	45;48	IC11N
NE589	F,N	18	DIL	45;48	IC11N
NE590	F,N	16	DIL	45	IC11N
NE591	F,N	18	DIL	45	IC11N
NE592	F,N/D	14	DIL/SO14	46;56	IC11N
NE594	F,N	18	DIL	45;48	IC11N
NE602	D,N	8	DIL	47	IC11N
NE604	D,N	16	DIL	47	IC11N
NE612	-	-	-	47	-
NE614	-	-	-	47	-
NE645	N	16	DIL	52	IC11N
NE646	N	16	DIL	52	IC11N
NE648	N	16	DIL	52	IC11N
NE649	N	16	DIL	52	IC11N
NE650	N	16	DIL	52	IC11N
NE4558	F,N/D	8	DIL/SO8	45	IC11N
NE5018	F,N	22	DIL	45	IC11N
NE5019	F,N	22	DIL	45	IC11N
NE5020	F,N	24	DIL	45	IC11N
NE5034	F	18	DIL	45	IC11N
NE5036	F,N/D	8/14	DIL/SO14	45	IC11N
NE5037	F,N/D	16	DIL/SO16	45	IC11N
NE5044	N/D	16	DIL/SO16	46;52	IC11N
NE5045	N/D	16	DIL/SO16	46;52	IC11N
NE5080	N	16	DIL	45	IC11N
NE5081	N	20	DIL	45	IC11N
NE5090	F,N	16	DIL	45	IC11N
NE5118	F,N	22	DIL	45	IC11N
NE5119	F,N	22	DIL	45	IC11N
NE5205	-	-	-	46	-
NE5230	-	-	-	46	-
NE5410	F	16	DIL	45	IC11N
NE5512	F,N/D	8	DIL/SO8	45	IC11N
NE5514	F,N/D	14/16	DIL/SO16	45	IC11N
NE5517	N/D	16	DIL/SO16	45	IC11N
NE5517A	N/D	16	DIL/SO16	45	IC11N
NE5520	F,(N)/D	16(14)	DIL/SO16	45	IC11N
NE5521	-	-	-	45	-
NE5532	F,N	8	DIL	46	IC11N
NE5532A	F,N	8	DIL	46	IC11N
NE5533	N	14	DIL	46	IC11N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
NE5533A	N	14	DIL	46	IC11N
NE5534	F,N/D	8	DIL/SO8	46	IC11N
NE5534A	F,N/D	8	DIL/SO8	46	IC11N
NE5535	N	8	DIL	46	IC11N
NE5537	N	8	DIL	46	IC11N
NE5539	F,N/D	14	DIL/SO14	46	IC11N
NE5560	F,N/D	16	DIL/SO16	65	IC11N
NE5561	F,N/D	8	DIL/SO8	65	IC11N
NE5562	F,N/D	20	DIL/SO20	47	IC11N
NE5563	-	-	-	47	-
NE5568	F,N/D	8	DIL/SO8	47	IC11N
NE5592	D,N	14	DIL	46	IC11N
OM200/S2	SOT20	4	SIL	52	IC01N
OM1099	-	-	-	61	-
OM8000	p.c.b.	-	-	51;66;79	-
OM8001	p.c.b.	-	-	51;66;79	-
OM8002	p.c.b.	-	-	51;66;79	-
OM8010	p.c.b.	-	-	51;66;79	-
OM8200	p.c.b.	-	-	51;66;79	IC01N
OM8201	p.c.b.	-	-	51;66;79	IC01N
OM8202	p.c.b.	-	-	51;66;79	-
OM8209	p.c.b.	-	-	51;66;79	-
OM8210	p.c.b.	-	-	51;66;79	IC01N
PCA1200	-	-	-	64	-
PCA1260	-	-	-	64	-
PCA1400	-	-	-	64	-
PCA1512	-	-	-	64	-
PCA1517	SOT97A	8	DIL	64	-
PCA1564	SOT97A	8	DIL	64	-
PCA1574	SOT97A	8	DIL	64	-
PCA1580	-	-	-	64	-
PCB80C31P	SOT129	40	DIL	61;71	●
PCB80C31WP	SOT187A	44	PLCC	61;71	●
PCB80C39P	SOT129	40	DIL	61;71	●
PCB80C39WP	SOT187A	44	PLCC	61;71	●
PCB80C49P	SOT129	40	DIL	61;71	●
PCB80C49WP	SOT187A	44	PLCC	61;71	●
PCB80C51P	SOT129	40	DIL	61;71	●
PCB80C51WP	SOT187A	44	PLCC	61;71	●
PCB80C351	-	-	-	61;71	-
PCB80C451	-	-	-	61;71	-
PCB80C552	-	-	-	61;71	-
PCB80C652	-	-	-	61;71	-
PCB83C351	-	-	-	61;71	-
PCB83C451	-	-	-	61;71	-
PCB83C552	-	-	-	61;71	-
PCB83C652	-	-	-	61;71	-
PCB8582	SOT97	8	DIL	44	-
PCB68070WP	SOT189A	84	PLCC	61;69;71	●

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PCC0330	SOT97C2	8	DIL	74	●
PCC0330	SOT97C2	8	DIL	74	●
PCC0330	SOT153B0	8	DIL	74	●
PCC0330	SOT73C3	14	DIL	74	●
PCC0330	SOT83B4	14	DIL	74	●
PCC0330	SOT38C13	16	DIL	74	●
PCC0330	SOT74C3	16	DIL	74	●
PCC0330	SOT84B4	16	DIL	74	●
PCC0330	SOT162AE4	16	SO16	74	●
PCC0330	SOT85B0	18	DIL	74	●
PCC0330	SOT102G13	18	DIL	74	●
PCC0330	SOT146C1	20	DIL	74	●
PCC0330	SOT152B4	20	DIL	74	●
PCC0330	SOT154B0	20	DIL	74	●
PCC0330	SOT163AE4	20	SO20	74	●
PCC0330	SOT116C1	22	DIL	74	●
PCC0330	SOT118B0	22	DIL	74	●
PCC0330	SOT134A1	22	DIL	74	●
PCC0330	SOT86A0	24	DIL	74	●
PCC0330	SOT94A4	24	DIL	74	●
PCC0330	SOT101D13	24	DIL	74	●
PCC0330	SOT137AE1	24	SO24	74	●
PCC0330	SOT87A0	28	DIL	74	●
PCC0330	SOT117D16	28	DIL	74	●
PCC0330	SOT135A	28	DIL	74	●
PCC0330	SOT136AE4	28	SO28	74	●
PCC0330	SOT88A4	40	DIL	74	●
PCC0330	SOT129C2	40	DIL	74	●
PCC0330	SOT145A7	40	DIL	74	●
PCC0330	SOT158A3	40	VSO40	74	●
PCC0336	SOT97C2	8	DIL	75	●
PCC0336	SOT153B0	8	DIL	75	●
PCC0336	SOT73C3	14	DIL	75	●
PCC0336	SOT83B4	14	DIL	75	●
PCC0336	SOT38C13	16	DIL	75	●
PCC0336	SOT74C3	16	DIL	75	●
PCC0336	SOT84B4	16	DIL	75	●
PCC0336	SOT162AE4	16	SO16	75	●
PCC0336	SOT85B0	18	DIL	75	●
PCC0336	SOT102G13	18	DIL	75	●
PCC0336	SOT146C1	20	DIL	75	●
PCC0336	SOT152B4	20	DIL	75	●
PCC0336	SOT154B0	20	DIL	75	●
PCC0336	SOT163AE4	20	SO20	75	●
PCC0336	SOT116C1	22	DIL	75	●
PCC0336	SOT118B0	22	DIL	75	●
PCC0336	SOT134A1	22	DIL	75	●
PCC0336	SOT86A0	24	DIL	75	●
PCC0336	SOT94A4	24	DIL	75	●
PCC0336	SOT101D13	24	DIL	75	●
PCC0336	SOT137AE1	24	SO24	75	●
PCC0336	SOT87A0	28	DIL	75	●
PCC0336	SOT117D16	28	DIL	75	●
PCC0336	SOT135A	28	DIL	75	●
PCC0336	SOT136AE4	28	SO28	75	●

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
PCC0336	SOT88A4	40	DIL	75	●
PCC0336	SOT129C2	40	DIL	75	●
PCC0336	SOT145A7	40	DIL	75	●
PCC0336	SOT158A3	40	VSO40	75	●
PCC0450	SOT97C2	8	DIL	74	●
PCC0450	SOT153B0	8	DIL	74	●
PCC0450	SOT73C3	14	DIL	74	●
PCC0450	SOT83B4	14	DIL	74	●
PCC0450	SOT74C3	16	DIL	74	●
PCC0450	SOT84B4	16	DIL	74	●
PCC0450	SOT162AE4	16	SO16L	74	●
PCC0450	SOT85B0	18	DIL	74	●
PCC0450	SOT102G13	18	DIL	74	●
PCC0450	SOT146C1	20	DIL	74	●
PCC0450	SOT152B4	20	DIL	74	●
PCC0450	SOT154B0	20	DIL	74	●
PCC0450	SOT163AE4	20	SO20	74	●
PCC0450	SOT116C1	22	DIL	74	●
PCC0450	SOT118B0	22	DIL	74	●
PCC0450	SOT134A1	22	DIL	74	●
PCC0450	SOT86A0	24	DIL	74	●
PCC0450	SOT94A4	24	DIL	74	●
PCC0450	SOT101D13	24	DIL	74	●
PCC0450	SOT137AE1	24	SO24	74	●
PCC0450	SOT87A0	28	DIL	74	●
PCC0450	SOT117D16	28	DIL	74	●
PCC0450	SOT136AE4	28	SO28	74	●
PCC0450	SOT135A4	28	DIL	74	●
PCC0456	SOT97C2	8	DIL	75	●
PCC0456	SOT153B0	8	DIL	75	●
PCC0456	SOT73C3	14	DIL	75	●
PCC0456	SOT83B4	14	DIL	75	●
PCC0456	SOT74C3	16	DIL	75	●
PCC0456	SOT84B4	16	DIL	75	●
PCC0456	SOT162AE4	16	SO16L	75	●
PCC0456	SOT85B0	18	DIL	75	●
PCC0456	SOT102G13	18	DIL	75	●
PCC0456	SOT146C1	20	DIL	75	●
PCC0456	SOT152B4	20	DIL	75	●
PCC0456	SOT154B0	20	DIL	75	●
PCC0456	SOT163AE4	20	SO20	75	●
PCC0456	SOT116C1	22	DIL	75	●
PCC0456	SOT118B0	22	DIL	75	●
PCC0456	SOT134A1	22	DIL	75	●
PCC0456	SOT86A0	24	DIL	75	●
PCC0456	SOT94A4	24	DIL	75	●
PCC0456	SOT101D13	24	DIL	75	●
PCC0456	SOT137AE1	24	SO24	75	●
PCC0456	SOT87A0	28	DIL	75	●
PCC0456	SOT117D16	28	DIL	75	●
PCC0456	SOT136AE4	28	SO28	75	●
PCC0456	SOT135A4	28	DIL	75	●

Alphanumeric index

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
PCC0700	SOT116C2	22	DIL	74	●
PCC0700	SOT116C2	22	DIL	74	●
PCC0700	SOT118B0	22	DIL	74	●
PCC0700	SOT134A1	22	DIL	74	●
PCC0700	SOT86A4	24	DIL	74	●
PCC0700	SOT94A3	24	DIL	74	●
PCC0700	SOT101BE1	24	DIL	74	●
PCC0700	SOT87A4	28	DIL	74	●
PCC0700	SOT117D16	28	DIL	74	●
PCC0700	SOT135A4	28	DIL	74	●
PCC0700	SOT136AE5	28	SO28	74	●
PCC0700	SOT129C2	40	DIL	74	●
PCC0700	SOT88A4	40	DIL	74	●
PCC0700	SOT145A7	40	DIL	74	●
PCC0700	SOT158A5	40	VSO40	74	●
PCC0706	SOT116C2	22	DIL	75	●
PCC0706	SOT118B0	22	DIL	75	●
PCC0706	SOT134A1	22	DIL	75	●
PCC0706	SOT86A4	24	DIL	75	●
PCC0706	SOT94A3	24	DIL	75	●
PCC0706	SOT101BE1	24	DIL	75	●
PCC0706	SOT87A4	28	DIL	75	●
PCC0706	SOT117D16	28	DIL	75	●
PCC0706	SOT135A4	28	DIL	75	●
PCC0706	SOT136AE5	28	SO28	75	●
PCC0706	SOT129C2	40	DIL	75	●
PCC0706	SOT88A4	40	DIL	75	●
PCC0706	SOT145A7	40	DIL	75	●
PCC0706	SOT158A5	40	VSO40	75	●
PCC1100	SOT87B6	28	DIL	74	●
PCC1100	SOT88B5	40	DIL	74	●
PCC1100	SOT129C3	40	DIL	74	●
PCC1100	SOT145A3	40	DIL	74	●
PCC1106	SOT87B6	28	DIL	75	●
PCC1106	SOT88B5	40	DIL	75	●
PCC1106	SOT129C3	40	DIL	75	●
PCC1106	SOT145A3	40	DIL	75	●
PCD3310P	SOT146	20	DIL	63	-
PCD3310T	SOT136	28	SO	63	-
PCD3311P	SOT27	14	DIL	63	●
PCD3311T	SOT162A	16	SO16L	63	●
PCD3312P	SOT97A	8	DIL	63	●
PCD3312T	SOT176	8	VSO8	63	●
PCD3315P	SOT117	28	DIL	63;70	-
PCD3315T	SOT136	28	SO	63;70	-
PCD3320P	SOT102G	18	DIL	63	●
PCD3321P	SOT102G	18	DIL	63	●
PCD3322P	SOT102G	18	DIL	63	●
PCD3323P	SOT117D	28	DIL	63	●

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
PCD3323T	SOT136A	28	SO28	63	●
PCD3325AP	SOT102G	18	DIL	63	●
PCD3326	-	-	-	63	-
PCD3327P	SOT102G	18	DIL	63	●
PCD3341P	SOT102G	18	DIL	63	●
PCD3341T	SOT136A	28	SO28	63	-
PCD3343P	SOT117D	28	DIL	63;70	●
PCD3343T	SOT136A	28	SO28	63;70	●
PCD3360P	SOT38	16	DIL	63	-
PCD3360T	SOT162A	16	SO16L	63	-
PCD5101P	SOT116	22	DIL	44;48	●
PCD5101T	SOT137A	24	SO24	44;48	●
PCD5114D	SOT133	18	DIL	44;48	-
PCD5114P	SOT102G	18	DIL	44;48	-
PCF0330	SOT97C2	8	DIL	74	●
PCF0330	SOT153B0	8	DIL	74	●
PCF0330	SOT73C3	14	DIL	74	●
PCF0330	SOT83B4	14	DIL	74	●
PCF0330	SOT38C13	16	DIL	74	●
PCF0330	SOT74C3	16	DIL	74	●
PCF0330	SOT84B4	16	DIL	74	●
PCF0330	SOT162AE4	16	SO16	74	●
PCF0330	SOT85B0	18	DIL	74	●
PCF0330	SOT102G13	18	DIL	74	●
PCF0330	SOT146C1	20	DIL	74	●
PCF0330	SOT152B4	20	DIL	74	●
PCF0330	SOT154B0	20	DIL	74	●
PCF0330	SOT163AE4	20	SO20	74	●
PCF0330	SOT116C1	22	DIL	74	●
PCF0330	SOT118B0	22	DIL	74	●
PCF0330	SOT134A1	22	DIL	74	●
PCF0330	SOT86A0	24	DIL	74	●
PCF0330	SOT94A4	24	DIL	74	●
PCF0330	SOT101D13	24	DIL	74	●
PCF0330	SOT137AE1	24	SO24	74	●
PCF0330	SOT87A0	28	DIL	74	●
PCF0330	SOT117D16	28	DIL	74	●
PCF0330	SOT135A	28	DIL	74	●
PCF0330	SOT136AE4	28	SO28	74	●
PCF0330	SOT88A4	40	DIL	74	●
PCF0330	SOT129C2	40	DIL	74	●
PCF0330	SOT145A7	40	DIL	74	●
PCF0330	SOT158A3	40	VSO40	74	●
PCF0336	SOT97C2	8	DIL	75	●
PCF0336	SOT153B0	8	DIL	75	●
PCF0336	SOT73C3	14	DIL	75	●
PCF0336	SOT83B4	14	DIL	75	●
PCF0336	SOT38C13	16	DIL	75	●
PCF0336	SOT74C3	16	DIL	75	●
PCF0336	SOT84B4	16	DIL	75	●
PCF0336	SOT162AE4	16	SO16	75	●
PCF0336	SOT85B0	18	DIL	75	●
PCF0336	SOT102G13	18	DIL	75	●
PCF0336	SOT146C1	20	DIL	75	●

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
PCF0336	SOT152B4	20	DIL	75	●
PCF0336	SOT154B0	20	DIL	75	●
PCF0336	SOT163AE4	20	SO20	75	●
PCF0336	SOT116C1	22	DIL	75	●
PCF0336	SOT118B0	22	DIL	75	●
PCF0336	SOT134A1	22	DIL	75	●
PCF0336	SOT86A0	24	DIL	75	●
PCF0336	SOT94A4	24	DIL	75	●
PCF0336	SOT101D13	24	DIL	75	●
PCF0336	SOT137AE1	24	SO24	75	●
PCF0336	SOT87A0	28	DIL	75	●
PCF0336	SOT117D16	28	DIL	75	●
PCF0336	SOT135A	28	DIL	75	●
PCF0336	SOT136AE4	28	SO28	75	●
PCF0336	SOT88A4	40	DIL	75	●
PCF0336	SOT129C2	40	DIL	75	●
PCF0336	SOT145A7	40	DIL	75	●
PCF0336	SOT158A3	40	VSO40	75	●
PCF0450	SOT97C2	8	DIL	74	●
PCF0450	SOT153B0	8	DIL	74	●
PCF0450	SOT73C3	14	DIL	74	●
PCF0450	SOT83B4	14	DIL	74	●
PCF0450	SOT74C3	16	DIL	74	●
PCF0450	SOT84B4	16	DIL	74	●
PCF0450	SOT162AE4	16	SO16L	74	●
PCF0450	SOT85B0	18	DIL	74	●
PCF0450	SOT102G13	18	DIL	74	●
PCF0450	SOT146C1	20	DIL	74	●
PCF0450	SOT152B4	20	DIL	74	●
PCF0450	SOT154B0	20	DIL	74	●
PCF0450	SOT163AE4	20	SO20	74	●
PCF0450	SOT116C1	22	DIL	74	●
PCF0450	SOT118B0	22	DIL	74	●
PCF0450	SOT134A1	22	DIL	74	●
PCF0450	SOT86A0	24	DIL	74	●
PCF0450	SOT94A4	24	DIL	74	●
PCF0450	SOT101D13	24	DIL	74	●
PCF0450	SOT137AE1	24	SO24	74	●
PCF0450	SOT87A0	28	DIL	74	●
PCF0450	SOT117D16	28	DIL	74	●
PCF0450	SOT136AE4	28	SO28	74	●
PCF0450	SOT135A4	28	DIL	74	●
PCF0456	SOT97C2	8	DIL	75	●
PCF0456	SOT153B0	8	DIL	75	●
PCF0456	SOT73C3	14	DIL	75	●
PCF0456	SOT83B4	14	DIL	75	●
PCF0456	SOT74C3	16	DIL	75	●
PCF0456	SOT84B4	16	DIL	75	●
PCF0456	SOT162AE4	16	SO16L	75	●
PCF0456	SOT85B0	18	DIL	75	●
PCF0456	SOT102G13	18	DIL	75	●
PCF0456	SOT146C1	20	DIL	75	●
PCF0456	SOT152B4	20	DIL	75	●

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
PCF0456	SOT154B0	20	DIL	75	●
PCF0456	SOT163AE4	20	SO20	75	●
PCF0456	SOT116C1	22	DIL	75	●
PCF0456	SOT118B0	22	DIL	75	●
PCF0456	SOT134A1	22	DIL	75	●
PCF0456	SOT86A0	24	DIL	75	●
PCF0456	SOT94A4	24	DIL	75	●
PCF0456	SOT101D13	24	DIL	75	●
PCF0456	SOT137AE1	24	SO24	75	●
PCF0456	SOT87A0	28	DIL	75	●
PCF0456	SOT117D16	28	DIL	75	●
PCF0456	SOT136AE4	28	SO28	75	●
PCF0456	SOT135A4	28	DIL	75	●
PCF0700	SOT116C2	22	DIL	74	●
PCF0700	SOT118B0	22	DIL	74	●
PCF0700	SOT134A1	22	DIL	74	●
PCF0700	SOT86A4	24	DIL	74	●
PCF0700	SOT94A3	24	DIL	74	●
PCF0700	SOT101BE1	24	DIL	74	●
PCF0700	SOT87A4	28	DIL	74	●
PCF0700	SOT117D16	28	DIL	74	●
PCF0700	SOT135A4	28	DIL	74	●
PCF0700	SOT136AE5	28	SO28	74	●
PCF0700	SOT129C2	40	DIL	74	●
PCF0700	SOT88A4	40	DIL	74	●
PCF0700	SOT145A7	40	DIL	74	●
PCF0700	SOT158A5	40	VSO40	74	●
PCF0706	SOT116C2	22	DIL	75	●
PCF0706	SOT118B0	22	DIL	75	●
PCF0706	SOT134A1	22	DIL	75	●
PCF0706	SOT86A4	24	DIL	75	●
PCF0706	SOT94A3	24	DIL	75	●
PCF0706	SOT101BE1	24	DIL	75	●
PCF0706	SOT87A4	28	DIL	75	●
PCF0706	SOT117D16	28	DIL	75	●
PCF0706	SOT135A4	28	DIL	75	●
PCF0706	SOT136AE5	28	SO28	75	●
PCF0706	SOT129C2	40	DIL	75	●
PCF0706	SOT88A4	40	DIL	75	●
PCF0706	SOT145A7	40	DIL	75	●
PCF0706	SOT158A5	40	VSO40	75	●
PCF1100	SOT87B6	28	DIL	74	●
PCF1100	SOT88B5	40	DIL	74	●
PCF1100	SOT129C3	40	DIL	74	●
PCF1100	SOT145A3	40	DIL	74	●
PCF1106	SOT87B6	28	DIL	75	●
PCF1106	SOT88B5	40	DIL	75	●
PCF1106	SOT129C3	40	DIL	75	●
PCF1106	SOT145A3	40	DIL	75	●

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
PCF1171BT	SOT158B	40	VSO40	64	●
PCF1171BT	SOT158B	40	VSO40	64	●
PCF1171U	uncased	40	pads	64	●
PCF1172BT	SOT158B	40	VSO40	64	●
PCF1172U	uncased	40	pads	64	●
PCF1251P	SOT97A	8	DIL	63;66;71;	●
PCF1251T	SOT96	8	SO8	63;66;71;	●
PCF1303T	SOT136A	28	SO28	48	-
PCF2100P	SOT117D	28	DIL	48;61;59;71	IC01N;IC02N
PCF2100T	SOT136A	28	SO28	48;61;59;71	IC01N;IC02N
PCF2110P	SOT129	40	DIL	48;61;59;71	IC01N;IC02N
PCF2110T	SOT158A	40	VSO40	48;61;59;71	IC01N;IC02N
PCF2111P	SOT129	40	DIL	48;61;59;63;71	IC01N;IC02N
PCF2111T	SOT158A	40	VSO40	48;61;59;63;71	IC01N;IC02N
PCF2112P	SOT129	40	DIL	48;61;59;71	IC01N;IC02N
PCF2112T	SOT158A	40	VSO40	48;61;59;71	IC01N;IC02N
PCF80C39P	SOT129	40	DIL	61;71	●
PCF80C39WP	SOT187A	44	PLCC	61;71	●
PCF80C49P	SOT129	40	DIL	61;71	●
PCF80C49WP	SOT187A	44	PLCC	61;71	●
PCF8200	SOT101A	24	DIL	51;61;66;79	IC01N
PCF8500B	-	28 + 28	PB	70	-
PCF8570P	SOT97A	8	DIL	44;48;59;63;71	●
PCF8570T	SOT176	8	SO8L	44;48;59;63;71	●
PCF8571P	SOT97	8	DIL8	48;59;63;71	●
PCF8571T	SOT176	8	SO8L	48;59;63;71	●
PCF8573P	SOT-38	16	DIL	48;57;63;71	●
PCF8573T	SOT162	8	SO16L	48;57;63;71	●
PCF8574P	SOT38	16	DIL	59;63;71	●
PCF8574T	SOT162A	16	SO16L	48;51;63;71	●
PCF8576T	SOT190	56	VSO56	48;59;61;63;71	●
PCF8577P	SOT129	40	DIL	48;59;61;63;71	●
PCF8577T	SOT158A	40	VSO40	48;59;61;63;71	●
PCF8591P	SOT38	16	DIL16	48;59;71	●
PCF85791	SOT162	16	SO16L	48;59;71	●
PNA7509	SOT101	24	DIL	45;48	●
PNA7510P	SOT101	24	DIL	45;48	-
PNA7510T	SOT137A	24	SO24	45;48	-
PNA7518	SOT38	16	DIL	45;48	IC02N
SA571	F,N/D	16	DIL/SO16	47;66	IC11N
SA572	D,N	16	DIL	47	IC11N
SA594	F,N	18	DIL	45;48	IC11N
SA602	D,N	8	DIL	47	IC11N
SA604	D,N	16	DIL	47	IC11N
SA723	D,F/N	14	DIL/SO14	47	IC11N
SAA1027	SOT38AE2	16	DIL	65	IC6
SAA1029	SOT38SE2	16	DIL	66	IC6
SAA1043	SOT117	28	DIL	55	●
SAA1044	SOT38	16	DIL	55	●
SAA1056P	SOT38Z	16	DIL	59	IC01N;IC02N
SAA1057	SOT102HE4	18	DIL	49;59	IC01N;IC02N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
SAA1060	SOT101BE6	24	DIL	51;57;59	IC01N;IC02N
SAA1062A	SOT117BE1	28	DIL	51;59	IC01N
SAA1062AT	SOT136AD4	28	SO28	51;59	IC01N
SAA1063	SOT101BE6	24	DIL	51	IC01N
SAA1082P	SOT117	28	DIL	57	IC02N
SAA1097	SOT38	16	DIL	59	-
SAA1099	SOT102CS	18	DIL	61	IC01N
SAA1300	SOT142BE	9	SIL	49;59	IC01N;IC02N
SAA3004P	SOT146C1	20	DIL	57	IC01N;IC02N
SAA3004T	SOT163AC3	20	SO20	57	IC01N;IC02N
SAA3006P	SOT117	28	DIL	57	IC02N
SAA3006T	SOT136A	28	SO28	57	IC02N
SAA3007	-	20	DIL	57	-
SAA3008	-	20	DIL	57	-
SAA3027P	SOT117	28	DIL	57	●
SAA3027T	SOT136A	28	SO28	57	●
SAA3028	SOT38Z	16	DIL	57	●
SAA5020	SOT101A	24	DIL	58	IC01N;IC02N
SAA5025D	SOT117D	28	DIL	58	●
SAA5030	SOT101A	24	DIL	58	IC01N;IC02N
SAA5040B	SOT117	28	DIL	58	IC01N;IC02N
SAA5041	SOT117	28	DIL	58	IC01N;IC02N
SAA5042	SOT117	28	DIL	58	IC01N;IC02N
SAA5045	SOT117D	28	DIL	58	●
SAA5050	SOT117	28	DIL	58	IC01N;IC02N
SAA5051	SOT117	28	DIL	58	IC01N;IC02N
SAA5052	SOT117	28	DIL	58	IC01N;IC02N
SAA5053	SOT117	28	DIL	58	IC01N;IC02N
SAA5054	SOT117	28	DIL	58	IC01N;IC02N
SAA5055	SOT117	28	DIL	58	IC01N;IC02N
SAA5056	SOT117	28	DIL	58	IC01N;IC02N
SAA5057	SOT117	28	DIL	58	IC01N;IC02N
SAA5070	SOT129	40	DIL	58	IC01N;IC02N
SAA5230	SOT117	28	DIL	58	●
SAA5235	SOT117BE	28	DIL	55	●
SAA5240A;B	SOT129	40	DIL	58	●
SAA5350	SOT129	40	DIL	58;67	-
SAA7210	SOT129	40	DIL	51	-
SAA7220	SOT101A	24	DIL	51	-
SAA9001	SOT117	28	DIL	54;58	-
SAA9010	SOT129	40	DIL	54;58	-
SAA9020	SOT101	24	DIL	54;58	-
SAA9030	SOT101D13	24	DIL	54;58	-
SAA9035	SOT158.3	40	DIL	54	-
SAA9040	SOT101AE4	28	DIL	54;58	-
SAA9045	SOT158.3	40	DIL	54	-
SAA9050	SOT129	40	DIL	59	-
SAA9055	SOT117	28	DIL	59	-
SAA9057	SOT146A	20	DIL	59	-
SAA9058	SOT146A	20	DIL	59	-
SAA90XX	-	-	-	59	-
SAB1164P	SOT97A	8	DIL	48;57	●
SAB1165P	SOT97A	8	DIL	48;57	●
SAB1256P	SOT97	8	DIL	48;57	●
SAB3035	SOT117BE	28	DIL	57	IC01N;IC02N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
SAB3036	SOT102HE4	18	DIL	57	IC01N;IC02N
SAB3037	SOT101BE6	24	DIL	57	IC01N;IC02N
SAB3045	-	18	DIL	67	-
SAB3064	-	-	-	48	-
SAB6456	SOT97	8	DIL	48;57	-
SAB6456T	SOT96	8	DIL	48;57	-
SAD1009P	SOT101DE3	24	DIL	55	-
SAD1009T	SOT137AE1	24	SO24	55	-
SAF1032P	SOT102A	18	DIL	57	IC01N;IC02N
SAF1039P	SOT38Z	16	DIL	57	IC01N;IC02N
SAK150BT	SOT108A	14	SO14	65	IC6
SBB6116L-10P	SOT101A	24	DIL	44	●
SBB6116L-12P	SOT101A	24	DIL	44	●
SBB6164	SOT117	28	DIL	44	●
SCB2673	N,I	40	DIL	67	IC11
SCB2675	N,I	40	DIL	67	IC11
SCB2677	N,I	40	DIL	67	●
SCB68154	-	-	-	69	-
SCB68155	-	-	-	69	-
SCB68171	-	-	-	69	-
SCB68172	-	-	-	69	-
SCB68175	-	-	-	69	-
SCB68430	-	-	-	69	IC11
SCB68459	-	-	-	69	●
SCC68173	-	-	-	69	-
SCC68905	-	-	-	69	-
SCC68906	-	-	-	69	-
SCC68910	-	-	-	69	-
SCC68920	-	-	-	69	-
SCN2641	N	24	DIL	67;69	IC11
SCN2650A	SOT129	40	DIL	61	IC11
SCN2651	N,I	28	DIL	67	IC11
SCN2652	N,I	40	DIL	67	IC11
SCN2653	N,I	16	DIL	67	IC11
SCN2661	N,I	28	DIL	67	IC11
SCN2670	N,I	28	DIL	67	IC11
SCN2671	N,I	40	DIL	67	IC11
SCN2672	N,I	40	DIL	67	IC11
SCN2674	N,I	40	DIL	67	IC11
SCN2681	N,I	40	DIL	67	IC11
SCN68000	-	-	-	69	IC11
SCN68010	-	-	-	69	-
SCN68020	-	-	-	69	-
SCN68070	-	-	-	69	-

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SCN68430	N	48	DIL	69	IC11
SCN68454	-	-	-	69	●
SCN68562	-	-	-	69	●
SCN68652	-	-	-	69	●
SCN68653	-	-	-	69	●
SCN68661	-	-	-	69	●
SCN68681	-	-	-	69	IC11
SE521	F,N/D	14	DIL/SO14	45	IC11N
SE522	F,N/D	14	DIL/SO14	45	IC11N
SE527	F,N/D	14	DIL/SO14	45	IC11N
SE529	F,N/D	14	DIL/SO14	45	IC11N
SE530	F,N	8	DIL	46	IC11N
SE531	F,N	8	DIL	46	IC11N
SE532	F,N	8	DIL	46	IC11N
SE538	F,N	8	DIL	46	IC11N
SE555	F,(F),N/D	8(14)	DIL/SO8	46	IC11N
SE556	F,N/D	14	DIL/SO14	46	IC11N
SE556-1	F,N/D	14	DIL/SO14	46	IC11N
SE558	F,N	16	DIL	46	IC11N
SE564	I,N/D	16	DIL/SO16	47	IC11N
SE565	F,N/D	14	DIL/SO14	47	IC11N
SE566	F,(N)/D	14(8)	DIL/SO8	47	IC11N
SE567	F,N/D	8	DIL/SO8	47	IC11N
SE592	F,N/D	14	DIL/SO14	46;56	IC11N
SE594	F,N	18	DIL	48	IC02N
SE4558	F,N/D	8	DIL/SO8	45	IC11N
SE5018	F,N	22	DIL	45	IC11N
SE5019	F,N	22	DIL	45	IC11N
SE5118	F,N	22	DIL	45	IC11N
SE5119	F,N	22	DIL	45	IC11N
SE5410	F	16	DIL	45	IC11N
SE5512	F,N/D	8	DIL/SO8	46	IC11N
SE5514	F,N/D	14/16	DIL/SO16	46	IC11N
SE5532	F,N	8	DIL	46	IC11N
SE5532A	F,N	8	DIL	46	IC11N
SE5534	F,N/D	8	DIL/SO8	46	IC11N
SE5534A	F,N/D	8	DIL/SO8	46	IC11N
SE5535	N	8	DIL	46	IC11N
SE5537	N	8	DIL	46	IC11N
SE5539	F,N/D	14	DIL/SO14	46	IC11N
SE5560	F,N/D	16	DIL/SO16	47;65	IC11N
SE5561	F,N/D	8	DIL/SO8	47;65	IC11N
SE5562	F,N/D	20	DIL/SO20	47	IC11N
SE5563	-	-	-	47	-
SG1526A	F,N	18	DIL	47	IC11N
SG2526A	F,N	18	DIL	47	IC11N
SG3524	F,N/D	16	DIL/SO16	65	IC11N
SG3526A	F,N	18	DIL	47	IC11N
TAA263	SOT18/7	4	CYL	52	IC01N
TAA320	SOT18/13	3	CYL	52	IC01N
TAA320A	SOT18/13	3	CYL	52	IC01N

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TBA120U	SOT27	14	DIL	55	IC02N
TBA540	SOT38	16	DIL	53	IC02N
TBA920S	SOT38WE	16	DIL	54	
TCA240	SOT38	16	DIL	65	IC6
TCA240D	SOT109A	16	SO16	65	IC6
TCA280A	SOT38	16	DIL	67	IC6
TCA420A	SOT38	16	DIL	49	-
TCA520B	SOT97A	8	DIL	46	IC6
TCA520D	SOT96A	8	SO8	46	IC6
TCA640	SOT38SE2	16	DIL	53	IC02N
TCA650	SOT38SE2	16	DIL	53	IC02N
TCA660B	SOT38SE2	16	DIL	53	IC02N
TCA730A	SOT38	16	DIL	50	IC01N
TCA740A	SOT38	16	DIL	50	IC01N
TCA770A	SOT38	16	DIL	65	IC6
TCA770D	SOT108A	14	SO14	65	IC6
TDA1001B	SOT38	16	DIL	49	IC01N
TDA1001BT	SOT109A	16	SO16	49	IC01N
TDA1002A	SOT38	16	DIL	50	IC01N
TDA1005A	SOT38WE2	16	DIL	49	IC01N
TDA1005AT	SOT109AC7	16	SO16	49	IC01N
TDA1010A	SOT110BE	9	SIL	50	IC01N
TDA1011	SOT110BE	9	SIL	50	IC01N
TDA1012	SOT38WE2	16	DIL	50	IC01N
TDA1013A	SOT110BE	9	SIL	50;55	IC01N
TDA1015	SOT110BE	9	SIL	50	IC01N
TDA1015T	SOT110	9	SIL	50	IC01N
TDA1016	SOT38WE2	16	DIL	50	IC01N
TDA1020	SOT110BE	9	SIL	50	IC01N
TDA1023	SOT38	16	DIL	67	IC6
TDA1024	SOT97A	8	DIL	67	IC6
TDA1029	SOT38	16	DIL	50;55	IC01N;IC02N
TDA1059B	SOT32	3	SIL	50	IC01N
TDA1059C	SOT32	3	SIL	50	IC01N
TDA1060	SOT38WE2	16	DIL	66	IC6
TDA1060A	SOT38WE2	16	DIL	65	IC6
TDA1060B	SOT74	16	DIL	65	IC6
TDA1072	SOT38	16	DIL	49	IC01N
TDA1072A	SOT38	16	DIL	49	●
TDA1074A	SOT102HE	18	DIL	50	IC01N
TDA1082	SOT38	16	DIL	56	IC02N
TDA1432P	SOT38Z	16	DIL	45;66	-
TDA1432T	SOT109A	16	SO16	45;66	-
TDA1506	SOT38WE2	16	DIL	50	IC01N
TDA1508	SOT102HE	18	DIL	50	IC01N
TDA1510	SOT141B	13	SBD	50	IC01N
TDA1512	SOT131B	9	SIL	50;55	IC01N;IC02N
TDA1512Q	SOT157B	9	SBD	50;55	IC01N;IC02N
TDA1514	-	9	SIL	50	-
TDA1515	SOT141B	13	SBD	50	IC01N
TDA1520	SOT131A	9	SIL	50;55	IC01N;IC02N

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TDA1520A	SOT131A	9	SIL	50;55	IC01N;IC02N
TDA1520AQ	SOT157A	9	SBD	50;55	IC01N;IC02N
TDA1520B	-	9	SIL	50	-
TDA1520Q	SOT157A	9	SBD	50;55	IC01N;IC02N
TDA1521	-	9	SIL	50	●
TDA1522	SOT142	9	SIL	50	IC01N
TDA1524A	SOT102HE	18	DIL	50;55	IC01N;IC02N
TDA1533	SOT102CS	18	DIL	50	IC01N
TDA1534A	SOT117	28	DIL	45	-
TDA1540D	SOT135A	28	DIL	45;51;52;66	IC01N;IC6
TDA1540P	SOT117BE	28	DIL	45;51;52;66	IC01N;IC6
TDA1541	SOT117	28	DIL	51	-
TDA1542	SOT117	28	DIL	51	-
TDA1559	SOT32	3	SIL	50	IC01N
TDA1574	SOT102HE	18	DIL	49	IC01N
TDA1576	SOT102HE	18	DIL	49	IC01N
TDA1578A	SOT102HE	18	DIL	49	IC01N
TDA1579	SOT102HE	18	DIL	49	IC01N
TDA1589	SOT102HE	18	DIL	49	IC01N
TDA1596	SOT102HE	18	DIL	49	IC01N
TDA1598	SOT102HE	18	DIL	49	IC01N
TDA1600	-	24	DIL	50	-
TDA1721	SOT38Z	16	DIL	66	-
TDA2501	SOT38WE9	16	DIL	55	IC02N
TDA2504P	SOT101BE6	24	DIL	55	●
TDA2504T	SOT137	24	SO24	55	●
TDA2505	SOT117	28	DIL	61	●
TDA2506	SOT101A	24	DIL	56	●
TDA2506T	SOT137A	24	SO24	56	●
TDA2507	SOT38	16	DIL	56	●
TDA2507T	SOT162A	16	SO16L	56	●
TDA2540	SOT38	16	DIL	53	IC02N
TDA2540Q	SOT58	16	QIL	53	IC02N
TDA2541	SOT38	16	DIL	53	IC02N
TDA2541Q	SOT58	16	QIL	53	IC02N
TDA2542	SOT38	16	DIL	53	IC02N
TDA2542Q	SOT58	16	QIL	53	IC02N
TDA2543	SOT102CS	18	DIL	55	IC02N
TDA2544	SOT38WE2	16	DIL	53	IC02N
TDA2544Q	SOT58	16	QIL	53	IC02N
TDA2545A	SOT38	16	DIL	55	IC02N
TDA2546A	SOT102CS	18	DIL	55	IC02N
TDA2548	SOT38	16	DIL	53	IC02N
TDA2548Q	SOT58	16	QIL	53	IC02N
TDA2549	SOT101A	24	DIL	53	IC02N
TDA2555	SOT102HE	18	DIL	55	●
TDA2557	SOT102	18	DIL	55	●
TDA2577A	SOT102HE4	18	DIL	54	IC02N
TDA2578A	SOT102HE4	18	DIL	54	IC02N
TDA2579	SOT102HE4	18	DIL	54	IC02N
TDA2581	SOT38	16	DIL	56	IC02N
TDA2581Q	SOT58	16	QIL	56	IC02N
TDA2582	SOT38WE2	16	DIL	56	IC02N
TDA2582Q	SOT58	16	QIL	56	IC02N
TDA2593	SOT38	16	DIL	54	IC02N
TDA2594	SOT102DS	18	DIL	54	IC02N
TDA2595	SOT102CS	18	DIL	54	●

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TDA2611A	SOT110BE	9	SIL	50;55	IC01N;IC02N
TDA2653A	SOT141B	13	SBD	53	IC02N
TDA2654	SOT110BE	9	SIL	53	IC02N
TDA2655B	SOT150	12	DIL	53	IC02N
TDA2730	SOT38	16	DIL	55	IC02N
TDA2740	SOT38	16	DIL	55	IC02N
TDA2791	SOT38	16	DIL	55	IC02N
TDA2795	SOT102DS	18	DIL	55	IC02N
TDA3083	SOT38Z	16	DIL	65	IC6
TDA3083D	SOT109A	16	SO16	65	IC6
TDA3501	SOT117	28	DIL	53	IC02N
TDA3505	SOT117	28	DIL	53	IC02N
TDA3510	SOT101A	24	DIL	53	IC02N
TDA3540	SOT38WE2	16	DIL	53	IC02N
TDA3540Q	SOT58	16	QIL	53	IC02N
TDA3541	SOT38WE2	16	DIL	53	IC02N
TDA3541Q	SOT58	16	QIL	53	IC02N
TDA3560	SOT117BE1	28	DIL	53	IC02N
TDA3561A	SOT117BE1	28	DIL	53	IC02N
TDA3562A	SOT117BE1	28	DIL	53	IC02N
TDA3563	SOT117BE1	28	DIL	53	IC02N
TDA3564	SOT101BE6	24	DIL	53	IC02N
TDA3565	SOT102HE4	18	DIL	53	●
TDA3571B	SOT102HE4	18	DIL	54	IC02N
TDA3576B	SOT102HE4	18	DIL	54	IC02N
TDA3586	SOT117BE	28	DIL	54	
TDA3590	SOT101BE6	24	DIL	53	IC02N
TDA3590A	SOT101BE6	24	DIL	53	IC02N
TDA3591	SOT101BE6	24	DIL	53	IC02N
TDA3591A	SOT101BE6	24	DIL	53	●
TDA3650B	SOT141B	13	SBD	54	IC02N
TDA3651	SOT110BE	9	SIL	54	IC02N
TDA3651A	SOT131B	9	SIL	54	IC02N
TDA3651AQ	SOT157B	9	SBD	54	IC02N
TDA3652	SOT131B	9	SIL	54	IC02N
TDA3652Q	SOT157B	9	SBD	54	IC02N
TDA3653	SOT110BE	9	SIL	54	IC02N
TDA3653A	SOT131B	9	SIL	54	IC02N
TDA3654	SOT131B	9	SIL	54	-
TDA3720	SOT102HE	18	DIL	55	IC02N
TDA3724	SOT102HE	18	DIL	55	●
TDA3730	SOT117	28	DIL	55	IC02N
TDA3740	SOT117	28	DIL	55	●
TDA3755	SOT102HE	18	DIL	55	●
TDA3760	SOT117BE	28	DIL	55	-
TDA3765	SOT117BE	28	DIL	55	●
TDA3766	SOT117BE	28	DIL	55	-
TDA3771	SOT102CS	18	DIL	55	IC02N
TDA3780	SOT102CS	18	DIL	55	IC02N
TDA3791	SOT38WE2	16	DIL	55	IC02N
TDA3800G	SOT117	28	DIL	55	IC02N
TDA3800GS	SOT117	28	DIL	55	IC02N
TDA3806	SOT102HE	18	DIL	55	-
TDA3810	SOT102CS	18	DIL	50;55	IC02N
TDA4301	SOT108A	14	SO14	55	●
TDA4302	SOT38	16	DIL	55	-
TDA4302T	SOT162	16	SO16	55	-

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TDA4303	SOT117BE	28	DIL	55	-
TDA4303T	SOT136AE4	28	SO28	55	-
TDA4304	SOT136A	20	SO28	55	●
TDA4305	SOT38	16	DIL	55	-
TDA4305T	SOT108	14	SO14	55	-
TDA4306	SOT146	20	DIL	55	-
TDA4306T	SOT163	20	SO20	55	-
TDA4500	SOT117	28	DIL	56	IC02N
TDA4501	SOT117BE1	28	DIL	56	●
TDA4503	SOT117BE1	28	DIL	56	-
TDA4505	SOT117	28	DIL	56	●
TDA4510	SOT38	16	DIL	53	IC02N
TDA4532	SOT117	28	DIL	53	●
TDA4555	SOT117	28	DIL	53	IC02N
TDA4556	SOT117	28	DIL	53	IC02N
TDA4565	SOT102HE	18	DIL	53	-
TDA4570	SOT38WE	16	DIL	53	-
TDA5030	SOT102CS	18	DIL	56	IC02N
TDA5030A	SOT102CS	18	DIL	56	IC02N
TDA5030AT	SOT163A	20	SO20	56	IC02N
TDA5702	SOT38	16	DIL	45;55;66	-
TDA5703	SOT101A	24	DIL	45;55;66	-
TDA5708	SOT117BE	28	DIL	51	●
TDA5708T	SOT136A	20	SO20	51	-
TDA5709	SOT146EE4	20	DIL	51	●
TDA5709T	SOT163A	20	SO20	51	-
TDA7000	SOT102HE	18	DIL	49;51	IC01N
TDA7010T	SOT109A	16	SO16	49;51	IC01N
TDA7020	SOT38WE	16	DIL	49;51	●
TDA7020T	SOT109A	16	SO16	49;51	-
TDA7021	SOT38WE	16	DIL	49;51	●
TDA7021T	SOT109AE	16	SO16	49;51	●
TDA7030T	SOT163AE	20	SO20	49;51;59	●
TDA7040T	SOT96A	8	SO8	49;51	●
TDA7050T	SOT96A	8	SO8	50	●
TDA8420	SOT117	28	DIL	50	-
TDA8440	SOT102	18	DIL	56	●
TDA8442	SOT38	16	DIL	53;56	●
tda8443	-	-	-	56	-
TDA9045	SOT102	18	DIL	56	-
TDA9080	SOT117	28	DIL	53	-
TDB1710P	SOT27	14	DIL	45	-
TDD1742T	SOT136A	28	SO28	49	-
TEA0651	SOT102HE	18	DIL	52	IC01N
TEA0652	SOT102HE	18	DIL	52	IC01N
TEA0653P	SOT102HE	18	DIL	52	IC01N
TEA0653T	SOT163A	20	SO20	52	-
TEA0654	SOT101A	24	DIL	52	IC01N
TEA0665	SOT117	28	DIL	52	IC01N
TEA0665T	SOT136A	28	S028	52	IC01N
TEA0666	SOT117BE	28	DIL	52	IC01N

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TEA0666T	SOT136AE	28	S028	52	●
TEA0670T	SOT136A	28	SO28	51;52	●
TEA1011	SOT38	16	DIL	56;61	●
TEA1012	SOT38WE1	16	DIL	65	●
TEA1017	SOT102HE4	18	DIL	66	IC6
TEA1039	SOT110BE	9	SIL	65	IC6
TEA1042	SOT101BE6	24	DIL	62	IC03N
TEA1046P	SOT101BE3	24	DIL	62	IC03N
TEA1060	SOT102HE1	18	DIL	62	IC03N
TEA1061	SOT102HE1	18	DIL	62	IC03N
TEA1066T	SOT163	20	SO20	62	●
TEA1067	SOT102	18	DIL	62	●
TEA1068	SOT102HE	18	DIL	62	●
TEA1080	SOT97A	8	DIL	62	●
TEA1075P	SOT102HE3	18	DIL	62	IC03N
TEA2000	SOT102HE	18	DIL	56;61	●
TEA5550	SOT38WE2	16	DIL	49	IC01N
TEA5560	SOT142BE	9	SIL	49	IC01N
TEA5570	SOT38WE3	16	DIL	49	IC01N
TEA5580	SOT38WE1	16	DIL	49	IC01N
TEA6000	SOT102HE	18	DIL	49	IC01N
TEA6300	SOT117	28	DIL	50;55	●
ULN2001	-	-	-	47;65	IC11N
ULN2003	F,N	16	DIL	47;65	IC11N
ULN2004	F,N	16	DIL	47;65	IC11N
µA723	F,N/D	14	DIL/SO14	47;65	IC11N
µA723C	F,N/D	14	DIL/SO14	47;65	IC11N
µA733	F,N	14	DIL	46;56	IC11N
µA733C	F,N	14	DIL	46;56	IC11N
µA741	F,N/D	8	DIL/SO8	46	IC11N
µA741C	F,N/D	8	DIL/SO8	46	IC11N
µA747	F,N/D	14	DIL/SO14	46	IC11N
µA747C	F,N/D	14	DIL/SO14	46	IC11N
µA758	N	16	DIL	47;66	IC11N
8A1542	-	-	-	76	●
8A1664	-	-	-	76	●
8A1864	-	-	-	76	●
8A2176	-	-	-	76	●
8T09	-	-	-	33	IC09N
8T10	-	-	-	33	IC09N
8T13	-	16	DIL/SO16	33	IC09N
8T15	-	-	-	33	IC09N
8T16	-	-	-	33	IC09N
8T20	-	-	-	33	IC09N
8T22	-	-	-	33	IC09N
8T23	-	-	-	33	IC09N
8T24	-	16	DIL/SO16L	33	IC09N
8T26A	-	16	DIL	33	IC09N
8T28	-	16	DIL	33	IC09N

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8T31	N,F	24	DIL	68	IC11
8T32	N,F	24	DIL	68	IC11
8T34	-	-	-	33	-
8T36	N,F	24	DIL	68	IC11
8T37	-	-	-	33	-
8T38	-	-	-	33	-
8T95	-	16	DIL	33	IC09N
8T96	-	16	DIL	33	IC09N
8T97	-	16	DIL/SO16L	33	IC09N
8T98	-	16	DIL/SO16L	33	IC09N
8T125	N	20	DIL	33	IC09N
8T126	N	16	DIL	33	IC09N
8T127	N	16	DIL	33	IC09N
8T128	N	16	DIL	33	IC09N
8T129	N	16	DIL	33	IC09N
8T245	-	20	DIL	33	-
8T380	-	14	DIL/SO14	33	IC09N
8T3404	-	16	DIL	33	IC09N
8TS805	-	20	DIL	33	IC09N
8TS806	-	20	DIL	33	IC09N
8TS807	-	20	DIL	33	IC09N
8TS808	-	20	DIL	33	IC09N
8TS809	-	20	DIL	33	-
8X01A	N	14	DIL	68	IC11
8X60	N,F	28	DIL	68	IC11
8X300	I	50	DIL	68	IC11
8X300KT1SK	-	-	-	68	-
8X300KT2SK	-	-	-	68	-
8X305ICEPACK	-	-	-	68	-
8X305	N,I	50	DIL	68	IC11
8X310	N	40	DIL	68	IC11
8X320	N,I	40	DIL	68	IC11
8X330	N	40	DIL	68	IC11
8X350	N,F	22	DIL	41;68	IC7;IC11
8X353	N,F	20	DIL	68	IC11
8X355	N,F	20	DIL	68	IC11
8X360	N,I	40	DIL	68	IC11
8X371	N	24	DIL	68	IC11
8X372	N	24	DIL	68	IC11
8X374	N	28	DIL	68	IC11
8X376	N	24	DIL	68	IC11
8X382	N	24	DIL	68	IC11
74F00	D,N	14	DIL/SO14	25	IC15N
74F02	D,N	14	DIL/SO14	25	IC15N
74F04	D,N	14	DIL/SO14	25	IC15N
74F08	D,N	14	DIL/SO14	25	IC15N
74F10	D,N	14	DIL/SO14	25	IC15N
74F11	D,N	14	DIL/SO14	25	IC15N
74F13	D,N	14	DIL/SO14	27	IC15N
74F14	D,N	14	DIL/SO14	27	IC15N
74F20	D,N	14	DIL/SO14	25	IC15N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
74F27	D,N	14	DIL/SO14	25	-
74F30	-	14	DIL	25	-
74F32	D,N	14	DIL/SO14	25	IC15N
74F37	D,N	14	DIL/SO14	25	IC15N
74F38	D,N	14	DIL/SO14	25	IC15N
74F40	D,N	14	DIL/SO14	25	IC15N
74F51	D,N	14	DIL/SO14	25	-
74F64	D,N	14	DIL/SO14	25	IC15N
74F74	D,N	14	DIL/SO14	27	IC15N
74F85	D,N	14	DIL/SO16L	31	IC15N
74F86	D,N	14	DIL/SO14	25	IC15N
74F109	D,N	16	DIL/SO16	27	IC15N
74F112	-	16	DIL	27	IC15N
74F113	-	16	DIL	27	IC15N
74F114	-	16	DIL	27	IC15N
74F125	D,N	14	DIL/SO14	26	-
74F126	D,N	14	DIL/SO14	26	-
74F132	D,N	14	DIL/SO14	27	IC15N
74F138	D,N	16	DIL/SO16	30	IC15N
74F139	D,N	16	DIL/SO16	30	IC15N
74F148	-	16	DIL	30	IC15N
74F151	D,N	16	DIL/SO16	30	IC15N
74F153	D,N	16	DIL/SO16	30	IC15N
74F157	D,N	16	DIL/SO16	30	IC15N
74F158	D,N	16	DIL/SO16	30	IC15N
74F160A	-	16	DIL	28	IC15N
74F161A	-	16	DIL	28	IC15N
74F162A	-	16	DIL	28	IC15N
74F163A	-	16	DIL	28	IC15N
74F164	-	16	DIL	27	IC15N
74F165	-	16	DIL	27	-
74F168A	-	16	DIL	28	IC15N
74F169A	-	16	DIL	28	IC15N
74F174	D,N	16	DIL/SO16	27	IC15N
74F175	D,N	16	DIL/SO16	27	IC15N
74F181	N	24	DIL	31	IC15N
74F182	-	16	DIL	31	IC15N
74F189	-	16	DIL	31	IC15N
74F190	-	16	DIL	28	IC15N
74F191	-	16	DIL	28	IC15N
74F192	-	16	DIL	28	IC15N
74F193	-	16	DIL	28	IC15N
74F194	D,N	16	DIL/SO16	27	IC15N
74F195	D,N	16	DIL/SO16	27	IC15N
74F198	-	24	DIL	27	IC15N
74F199	-	24	DIL	27	-
74F225	N	-	DIL	27	-
74F240	D,N	20	DIL/SO20	26	IC15N
74F241	D,N	20	DIL/SO20	26	IC15N
74F242	D,N	14	DIL/SO14	26	IC15N
74F243	D,N	14	DIL/SO14	26	IC15N
74F244	D,N	20	DIL/SO20	26	IC15N
74F245	D,N	20	DIL/SO20	26	IC15N
74F251	-	16	DIL	30	IC15N
74F253	D,N	16	DIL/SO16	30	IC15N
74F256	D,N	16	DIL/SO16	29	IC15N
74F257	D,N	16	DIL/SO16	30	IC15N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
74F258	D,N	16	DIL/SO16	30	IC15N
74F259	N	16	DIL	29	IC15N
74F260	N	14	DIL	25	-
74F269	D,N	24	DIL/SO24	28	IC15N
74F273	D,N	20	DIL/SO20	27	IC15N
74F280A	D,N	14	DIL/SO14	31	IC15N
74F283	-	16	DIL	31	IC15N
74F298	D,N	16	DIL/SO16	30	IC15N
74F299	-	20	DIL	27	IC15N
74F322	-	20	DIL	27	IC15N
74F323	-	20	DIL	27	IC15N
74F350	D,N	16	DIL/SO16	31	IC15N
74F352	D,N	16	DIL/SO16	30	IC15N
74F353	D,N	16	DIL/SO16	30	IC15N
74F365A	D,N	16	DIL/SO16	26	IC15N
74F366A	D,N	16	DIL/SO16	26	IC15N
74F367A	D,N	16	DIL/SO16	26	IC15N
74F368A	D,N	16	DIL/SO16	26	IC15N
74F373	D,N	20	DIL/SO20	29	IC15N
74F374	D,N	20	DIL/SO20	27	IC15N
74F377	D,N	20	DIL/SO20	27	IC15N
74F378	D,N	16	DIL/SO16	27	IC15N
74F379	D,N	16	DIL/SO16	27	IC15N
74F381	-	20	DIL	31	IC15N
74F382	-	20	DIL	31	IC15N
74F384	-	16	DIL	30	IC15N
74F385	-	20	DIL	31	IC15N
74F395A	D,N	16	DIL/SO16	27	IC15N
74F398	D,N	20	DIL/SO20	27	IC15N
74F399	D,N	16	DIL/SO16	27	IC15N
74F412	-	24	DIL	28	IC15N
74F432	-	24	DIL	28	-
74F455	N	24	DIL	31	-
74F456	N	24	DIL	31	-
74F521	D,N	20	DIL/SO20	31	IC15N
74F524	-	20	DIL	31	IC15N
74F533	D,N	20	DIL/SO20	29	IC15N
74F534	D,N	20	DIL/SO20	29	IC15N
74F537	-	20	DIL	30	-
74F538	-	20	DIL	30	-
74F539	-	20	DIL	30	-
74F540	D,N	20	DIL/SO20	26	-
74F541	D,N	20	DIL/SO20	26	-
74F543	-	24	DIL	29	-
74F544	-	24	DIL	29	-
74F545	D,N	20	DIL/SO20	26	IC15N
74F547	-	20	DIL	30	IC15N
74F548	-	20	DIL	30	IC15N
74F550	-	28	DIL	26	-
74F551	-	28	DIL	26	-
74F552	-	28	DIL	26	-
74F557	-	40	DIL	30	-
74F558	-	40	DIL	30	-
74F563	-	20	DIL	29	-
74F564	-	20	DIL	27	-
74F568A	-	20	DIL	28	-
74F569A	-	20	DIL	28	-

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
74F573	-	20	DIL	29	-
74F574	-	20	DIL	27	-
74F579	N	20	DIL	28	IC15N
74F588	N	20	DIL	26	IC15N
74F595	N	16	DIL	28	IC15N
74F597	-	16	DIL	28	IC15N
74F598	-	16	DIL	28	IC15N
74F604	D,N	28	DIL/SO28	29	IC15N
74F605	D,N	28	DIL/SO28	29	IC15N
74F620	D,N	20	DIL/SO2O	26	IC15N
74F621	D,N	20	DIL/SO2O	26	IC15N
74F622	D,N	20	DIL/SO2O	26	ICI5N
74F623	N	20	DIL/	26	ICI5N
74F630	-	28	DIL	31	IC15N
74F631	-	28	DIL	31	IC15N
74F640	D,N	20	DIL/SO20	26	-
74F641	D,N	20	DIL/SO20	26	-
74F642	N	20	DIL	26	-
74F646	-	24	DIL	26	IC15N
74F647	-	24	DIL	26	IC15N
74F648	-	24	DIL	26	IC15N
74F649	-	24	DIL	26	IC15N
74F655A	N	24	DIL	31	IC15N
74F656A	N	24	DIL	31	IC15N
74F657	N	24	DIL	31	IC15N
74F673	-	24	DIL	28	IC15N
74F674	-	24	DIL	28	IC15N
74F675	-	24	DIL	28	IC15N
74F676	-	24	DIL	28	IC15N
74F764	-	40	DIL	31	-
74F765	D,N	40	DIL/SO40	31	-
74F779	-	16	DIL	..	IC15N
74F784	-	20	DIL	31	IC15N
74F821	-	24	DIL	28	-
74F822	-	24	DIL	28	-
74F823	-	24	DIL	28	-
74F824	-	24	DIL	28	-
74F825	-	24	DIL	28	-
74F826	-	24	DIL	28	-
74F827	-	24	DIL	25	-
74F828	-	24	DIL	25	-
74F841	-	24	DIL	29	-
74F842	-	24	DIL	29	-
74F843	-	24	DIL	29	-
74F844	-	24	DIL	29	-
74F845	-	24	DIL	29	-
74F846	-	24	DIL	29	-
74F861	-	24	DIL	26	-
74F862	-	24	DIL	26	-
74F863	-	24	DIL	26	-
74F864	-	24	DIL	26	-
74F881	-	24	DIL	31	-
74F882	-	24	DIL	31	-
74F1240	N	20	DIL	25	-
74F1241	N	20	DIL	25	-
74F1242	N	20	DIL	26	-
74F1243	N	20	DIL	26	-

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
74F1244	N	20	DIL	25	-
74F1245	-	20	DIL	25	-
74F3037	N	16	DIL	26	IC15N
74F3038	N	16	DIL	26	-
74F3040	N	16	DIL	26	IC15N
74F30240	-	24	DIL	26	-
74F30241	-	24	DIL	26	-
74F30244	-	24	DIL	26	-
74HC/HCT00P	SOT27	14	DIL	20	IC06N
74HC/HCT00T	SOT108A	14	SO14	20	IC06N
74HC/HCT02P	SOT27	14	DIL	20	IC06N
74HC/HCT02T	SOT108A	14	SO14	20	IC06N
74HC/HCT03P	SOT27	14	DIL	20	IC06N
74HC/HCT03T	SOT108A	14	SO14	20	IC06N
74HC/HCT04P	SOT27	14	DIL	20	IC06N
74HC/HCT04T	SOT108A	14	SO14	20	IC06N
74HCU04P	SOT27	14	DIL	20	IC06N
74HCU04T	SOT108A	14	SO14	20	IC06N
74HC/HCT08P	SOT27	14	DIL	20	IC06N
74HC/HCT08T	SOT108A	14	SO14	20	IC06N
74HC/HCT10P	SOT27	14	DIL	20	IC06N
74HC/HCT10T	SOT108A	14	SO14	20	IC06N
74HC/HCT11P	SOT27	14	DIL	20	IC06N
74HC/HCT11T	SOT108A	14	SO14	20	IC06N
74HC/HCT14P	SOT27	14	DIL	23	IC06N
74HC/HCT14T	SOT108A	14	SO14	23	IC06N
74HC/HCT20P	SOT27	14	DIL	20	IC06N
74HC/HCT20T	SOT108A	14	SO14	20	IC06N
74HC/HCT21P	SOT27	14	DIL	20	IC06N
74HC/HCT21T	SOT108A	14	SO14	20	IC06N
74HC/HCT27P	SOT27	14	DIL	20	IC06N
74HC/HCT27T	SOT108A	14	SO14	20	IC06N
74HC/HCT30P	SOT27	14	DIL	20	IC06N
74HC/HCT30T	SOT108A	14	SO14	20	IC06N
74HC/HCT32P	SOT27	14	DIL	20	IC06N
74HC/HCT32T	SOT108A	14	SO14	20	IC06N
74HC/HCT42P	SOT38Z	16	DIL	23	IC06N
74HC/HCT42T	SOT109A	16	SO16	23	IC06N
74HC58P	SOT27	14	DIL	20	IC06N
74HC58T	SOT108A	14	SO14	20	IC06N
74HC/HCT73P	SOT27	14	DIL	21	IC06N
74HC/HCT73T	SOT108A	14	SO14	21	IC06N
74HC/HCT74P	SOT27	14	DIL	21	IC06N
74HC/HCT74T	SOT108A	14	SO14	21	IC06N
74HC/HCT75P	SOT38Z	16	DIL	21	IC06N
74HC/HCT75T	SOT109A	16	SO16	21	IC06N
74HC/HCT85P	SOT38Z	16	DIL	22	IC06N
74HC/HCT85T	SOT109A	16	SO16	22	IC06N
74HC/HCT86P	SOT27	14	DIL	20	IC06N
74HC/HCT86T	SOT108A	14	SO14	20	IC06N
74HC/HCT93P	SOT27	14	DIL	22	IC06N
74HC/HCT93T	SOT108A	14	DIL	22	IC06N
74HC/HCT107P	SOT27	14	DIL	21	IC06N
74HC/HCT107T	SOT108A	14	SO14	21	IC06N
74HC/HCT109P	SOT38Z	16	DIL	21	IC06N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
74HC/HCT109T	SOT109A	16	SO16	21	IC06N
74HC/HCT112P	SOT38Z	16	DIL	21	IC06N
74HC/HCT112T	SOT109A	16	SO16	21	IC06N
74HC/HCT123P	SOT38Z	16	DIL	23	IC06N
74HC/HCT123T	SOT109A	16	SO16	23	IC06N
74HC/HCT125P	SOT27	14	DIL	20	IC06N
74HC/HCT125T	SOT108A	14	SO14	20	IC06N
74HC/HCT126P	SOT27	14	DIL	20	IC06N
74HC/HCT126T	SOT108A	14	SO14	20	IC06N
74HC/HCT132P	SOT27	14	DIL	23	IC06N
74HC/HCT132T	SOT108A	14	SO14	23	IC06N
74HC/HCT137P	SOT38Z	16	DIL	23	IC06N
74HC/HCT137T	SOT109A	16	SO16	23	IC06N
74HC/HCT138P	SOT38Z	16	DIL	23	IC06N
74HC/HCT138T	SOT109A	16	SO16	23	IC06N
74HC/HCT139P	SOT38Z	16	DIL	23	IC06N
74HC/HCT139T	SOT109A	16	SO16	23	IC06N
74HC/HCT147P	SOT38Z	16	DIL	23	IC06N
74HC/HCT147T	SOT109A	16	SO16	23	IC06N
74HC/HCT151P	SOT38Z	16	DIL	22	IC06N
74HC/HCT151T	SOT109A	16	SO16	22	IC06N
74HC/HCT153P	SOT38Z	16	DIL	22	IC06N
74HC/HCT153T	SOT109A	16	SO16	22	IC06N
74HC/HCT154P	SOT101A	24	DIL	23	IC06N
74HC/HCT154T	SOT137A	24	SO24	23	IC06N
74HC/HCT157P	SOT38Z	16	DIL	22	IC06N
74HC/HCT157T	SOT109A	16	SO16	22	IC06N
74HC/HCT158P	SOT38Z	16	DIL	22	IC06N
74HC/HCT158T	SOT109A	16	SO16	22	IC06N
74HC/HCT160P	SOT38Z	16	DIL	22	IC06N
74HC/HCT160T	SOT109A	16	SO16	22	IC06N
74HC/HCT161P	SOT38Z	16	DIL	22	IC06N
74HC/HCT161T	SOT109A	16	SO16	22	IC06N
74HC/HCT162P	SOT38Z	16	DIL	22	IC06N
74HC/HCT162T	SOT109A	16	SO16	22	IC06N
74HC/HCT163P	SOT38Z	16	DIL	22	IC06N
74HC/HCT163T	SOT109A	16	SO16	22	IC06N
74HC/HCT164P	SOT27	14	DIL	21	IC06N
74HC/HCT164T	SOT108A	14	SO14	21	IC06N
74HC/HCT165P	SOT38Z	16	DIL	21	IC06N
74HC/HCT165T	SOT109A	16	SO16	21	IC06N
74HC/HCT166P	SOT38Z	16	DIL	21	IC06N
74HC/HCT166T	SOT109A	16	SO16	21	IC06N
74HC/HCT173P	SOT38Z	16	DIL	21	IC06N
74HC/HCT173T	SOT109A	16	SO16	21	IC06N
74HC/HCT174P	SOT38Z	16	DIL	21	IC06N
74HC/HCT174T	SOT109A	16	SO16	21	IC06N
74HC/HCT175P	SOT38Z	16	DIL	21	IC06N
74HC/HCT175T	SOT109A	16	SO16	21	IC06N
74HC/HCT181P	SOT101A	24	DIL	22	IC06N
74HC/HCT181T	SOT137A	24	SO24	22	IC06N
74HC/HCT182P	SOT38Z	16	DIL	22	IC06N
74HC/HCT182T	SOT109A	16	SO16	22	IC06N
74HC/HCT190P	SOT38Z	16	DIL	22	IC06N
74HC/HCT190T	SOT109A	16	SO16	22	IC06N
74HC/HCT191P	SOT38Z	16	DIL	22	IC06N
74HC/HCT191T	SOT109A	16	SO16	22	IC06N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
74HC/HCT192P	SOT38Z	16	DIL	22	IC06N
74HC/HCT192T	SOT109A	16	SO16	22	IC06N
74HC/HCT193P	SOT38Z	16	DIL	22	IC06N
74HC/HCT193T	SOT109A	16	SO16	22	IC06N
74HC/HCT194P	SOT38Z	16	DIL	21	IC06N
74HC/HCT194T	SOT109A	16	SO16	21	IC06N
74HC/HCT195P	SOT38Z	16	DIL	21	IC06N
74HC/HCT195T	SOT109A	16	SO16	21	IC06N
74HC/HCT221P	SOT38Z	16	DIL	23	IC06N
74HC/HCT221T	SOT109A	16	SO16	23	IC06N
74HC/HCT237P	SOT38Z	16	DIL	23	IC06N
74HC/HCT237T	SOT109A	16	SO16	23	IC06N
74HC/HCT238P	SOT38Z	16	DIL	23	IC06N
74HC/HCT238T	SOT109A	16	SO16	23	IC06N
74HC/HCT240P	SOT146	20	DIL	20	IC06N
74HC/HCT240T	SOT163A	20	SO20	20	IC06N
74HC/HCT241P	SOT146	20	DIL	20	IC06N
74HC/HCT241T	SOT163A	20	SO20	20	IC06N
74HC/HCT242P	SOT27	14	DIL	23	IC06N
74HC/HCT242T	SOT108A	14	SO14	23	IC06N
74HC/HCT243P	SOT27	14	DIL	23	IC06N
74HC/HCT243T	SOT108A	14	SO14	23	IC06N
74HC/HCT244P	SOT146	20	DIL	20	IC06N
74HC/HCT244T	SOT163A	20	SO20	20	IC06N
74HC/HCT245P	SOT146	20	DIL	23	IC06N
74HC/HCT245T	SOT163A	20	SO20	23	IC06N
74HC/HCT251P	SOT38Z	16	DIL	22	IC06N
74HC/HCT251T	SOT109A	16	SO16	22	IC06N
74HC/HCT253P	SOT38Z	16	DIL	22	IC06N
74HC/HCT253T	SOT109A	16	SO16	22	IC06N
74HC/HCT257P	SOT38Z	16	DIL	22	IC06N
74HC/HCT257T	SOT109A	16	SO16	22	IC06N
74HC/HCT258P	SOT38Z	16	DIL	22	IC06N
74HC/HCT258T	SOT109A	16	SO16	22	IC06N
74HC/HCT259P	SOT38Z	16	DIL	21	IC06N
74HC/HCT259T	SOT109A	16	SO16	21	IC06N
74HC7266P	SOT27	14	DIL	20	IC06N
74HC7266T	SOT108A	14	SO14	20	IC06N
74HC/HCT273P	SOT146	20	DIL	21	IC06N
74HC/HCT273T	SOT163A	20	SO20	21	IC06N
74HC/HCT280P	SOT27	14	DIL	22	IC06N
74HC/HCT280T	SOT108A	14	SO14	22	IC06N
74HC/HCT283P	SOT38Z	16	DIL	22	IC06N
74HC/HCT283T	SOT109A	16	SO16	22	IC06N
74HC/HCT297P	SOT38Z	16	DIL	23	IC06N
74HC/HCT297T	SOT109A	16	SO16	23	IC06N
74HC/HCT299P	SOT146	20	DIL	21	IC06N
74HC/HCT299T	SOT163A	20	SO20	21	IC06N
74HC/HCT354P	SOT146	20	DIL	22	IC06N
74HC/HCT354T	SOT163A	20	SO20	22	IC06N
74HC/HCT356P	SOT146	20	DIL	22	IC06N
74HC/HCT356T	SOT163A	20	SO20	22	IC06N
74HC/HCT365P	SOT38Z	16	DIL	20	IC06N
74HC/HCT365T	SOT109A	16	SO16	20	IC06N
74HC/HCT366P	SOT38Z	16	DIL	20	IC06N
74HC/HCT366T	SOT109A	16	SO16	20	IC06N
74HC/HCT367P	SOT38Z	16	DIL	20	IC06N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
74HC/HCT367T	SOT109A	16	SO16	20	IC06N
74HC/HCT368P	SOT38Z	16	DIL	20	IC06N
74HC/HCT368T	SOT109A	16	SO16	20	IC06N
74HC/HCT373P	SOT146	20	DIL	21	IC06N
74HC/HCT373T	SOT163A	20	SO20	21	IC06N
74HC/HCT374P	SOT146	20	DIL	21	IC06N
74HC/HCT374T	SOT163A	20	SO20	21	IC06N
74HC/HCT377P	SOT146	20	DIL	21	IC06N
74HC/HCT377T	SOT163A	20	SO20	21	IC06N
74HC/HCT390P	SOT38Z	16	DIL	22	IC06N
74HC/HCT390T	SOT109A	16	SO16	22	IC06N
74HC/HCT393P	SOT38Z	16	DIL	22	IC06N
74HC/HCT393T	SOT109A	16	SO16	22	IC06N
74HC/HCT423P	SOT38Z	16	DIL	23	IC06N
74HC/HCT423T	SOT109A	16	SO16	23	IC06N
74HC/HCT533P	SOT146	20	DIL	21	IC06N
74HC/HCT533T	SOT163A	20	SO20	21	IC06N
74HC/HCT534P	SOT146	20	DIL	21	IC06N
74HC/HCT534T	SOT163A	20	SO20	21	IC06N
74HC/HCT540P	SOT146	20	DIL	20	IC06N
74HC/HCT540T	SOT163A	20	SO20	20	IC06N
74HC/HCT541P	SOT146	20	DIL	20	IC06N
74HC/HCT541T	SOT163A	20	SO20	20	IC06N
74HC/HCT563P	SOT146	20	DIL	21	IC06N
74HC/HCT563T	SOT163A	20	SO20	21	IC06N
74HC/HCT564P	SOT146	20	DIL	21	IC06N
74HC/HCT564T	SOT163A	20	SO20	21	IC06N
74HC/HCT573P	SOT146	20	DIL	21	IC06N
74HC/HCT573T	SOT163A	20	SO20	21	IC06N
74HC/HCT574P	SOT146	20	DIL	21	IC06N
74HC/HCT574T	SOT163A	20	SO20	21	IC06N
74HC/HCT583P	SOT38Z	16	DIL	22	IC06N
74HC/HCT583T	SOT109A	16	SO16	22	IC06N
74HC/HCT7597P	SOT38Z	16	DIL	21	IC06N
74HC/HCT7597T	SOT109A	16	SO16	21	IC06N
74HC/HCT640P	SOT146	20	DIL	23	IC06N
74HC/HCT640T	SOT163A	20	SO20	23	IC06N
74HC/HCT643P	SOT146	20	DIL	23	IC06N
74HC/HCT643T	SOT163A	20	SO20	23	IC06N
74HC/HCT646P	SOT101A	24	DIL	23	IC06N
74HC/HCT646T	SOT137A	24	SO24	23	IC06N
74HC/HCT648P	SOT101A	24	DIL	23	IC06N
74HC/HCT648T	SOT137A	24	SO24	23	IC06N
74HC/HCT670P	SOT38Z	16	DIL	21	IC06N
74HC/HCT670T	SOT109A	16	SO16	21	IC06N
74HC/HCT688P	SOT146	20	DIL	22	IC06N
74HC/HCT688T	SOT163A	20	SO20	22	IC06N
74HC/HCT4002P	SOT27	14	DIL	20	IC06N
74HC/HCT4002T	SOT108A	14	SO14	20	IC06N
74HC/HCT4015P	SOT38Z	16	DIL	21	IC06N
74HC/HCT4015T	SOT109A	16	SO16	21	IC06N
74HC/HCT4016P	SOT27	14	DIL	23	IC06N
74HC/HCT4016T	SOT108A	14	SO14	23	IC06N
74HC/HCT4017P	SOT38Z	16	DIL	22	IC06N
74HC/HCT4017T	SOT109A	16	SO16	22	IC06N
74HC/HCT4020P	SOT38Z	16	DIL	22	IC06N
74HC/HCT4020T	SOT109A	16	SO16	22	IC06N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
74HC/HCT4024P	SOT27	14	DIL	22	IC06N
74HC/HCT4024T	SOT108A	14	SO14	22	IC06N
74HC/HCT4040P	SOT38Z	16	DIL	22	IC06N
74HC/HCT4040T	SOT109A	16	SO16	22	IC06N
74HC/HCT4046P	SOT38Z	16	DIL	23	IC06N
74HC/HCT4046T	SOT109A	16	SO16	23	IC06N
74HC/HCT4046AP	SOT38Z	16	DIL	23	IC06N
74HC/HCT4046AT	SOT109A	16	SO16	23	IC06N
74HC4049P	SOT38Z	16	DIL	20	IC06N
74HC4049T	SOT109A	16	SO16	20	IC06N
74HC4050P	SOT38Z	16	DIL	20	IC06N
74HC4050T	SOT109A	16	SO16	20	IC06N
74HC/HCT4051P	SOT38Z	16	DIL	23	IC06N
74HC/HCT4051T	SOT109A	16	SO16	23	IC06N
74HC/HCT4052P	SOT38Z	16	DIL	23	IC06N
74HC/HCT4052T	SOT109A	16	SO16	23	IC06N
74HC/HCT4053P	SOT38Z	16	DIL	23	IC06N
74HC/HCT4053T	SOT109A	16	SO16	23	IC06N
74HC/HCT4059P	SOT101A	24	DIL	22	IC06N
74HC/HCT4059T	SOT137A	24	SO24	22	IC06N
74HC/HCT4060P	SOT38Z	16	DIL	22	IC06N
74HC/HCT4060T	SOT109A	16	SO16	22	IC06N
74HC/HCT4066P	SOT27	14	DIL	23	IC06N
74HC/HCT4066T	SOT108A	14	SO14	23	IC06N
74HC/HCT4067P	SOT101A	24	DIL	23	IC06N
74HC/HCT4067T	SOT137A	24	SO24	23	IC06N
74HC/HCT4075P	SOT27	14	DIL	20	IC06N
74HC/HCT4075T	SOT108A	14	SO14	20	IC06N
74HC/HCT4094P	SOT38Z	16	DIL	21	IC06N
74HC/HCT4094T	SOT109A	16	SO16	21	IC06N
74HC/HCT4316P	SOT38Z	16	DIL	23	IC06N
74HC/HCT4316T	SOT109A	16	SO16	23	IC06N
74HC/HCT4351P	SOT102A	18	DIL	23	IC06N
74HC/HCT4352P	SOT102A	18	DIL	23	IC06N
74HC/HCT4353P	SOT102A	18	DIL	23	IC06N
74HC/HCT4510P	SOT38Z	16	DIL	22	IC06N
74HC/HCT4510T	SOT109A	16	SO16	22	IC06N
74HC/HCT4511P	SOT38Z	16	DIL	23	IC06N
74HC/HCT4511T	SOT109A	16	SO16	23	IC06N
74HC/HCT4514P	SOT101A	24	DIL	23	IC06N
74HC/HCT4514T	SOT137A	24	SO24	23	IC06N
74HC/HCT4515P	SOT101A	24	DIL	23	IC06N
74HC/HCT4515T	SOT137A	24	SO24	23	IC06N
74HC/HCT4516P	SOT38Z	16	DIL	22	IC06N
74HC/HCT4516T	SOT109A	16	SO16	22	IC06N
74HC/HCT4518P	SOT38Z	16	DIL	22	IC06N
74HC/HCT4518T	SOT109A	16	SO16	22	IC06N
74HC/HCT4520P	SOT38Z	16	DIL	22	IC06N
74HC/HCT4520T	SOT109A	16	SO16	22	IC06N
74HC/HCT4538P	SOT27	14	DIL	23	IC06N
74HC/HCT4538T	SOT108A	14	SO14	23	IC06N
74HC/HCT4543P	SOT38Z	16	DIL	23	IC06N
74HC/HCT4543T	SOT109A	16	SO16	23	IC06N
74HC/HCT7030P	SOT117D	28	DIL	21	IC06N
74HC/HCT7030T	SOT136A	28	SO28	21	IC06N
74HC/HCT7046P	SOT38Z	16	DIL	23	IC06N
74HC/HCT7046T	SOT109A	16	SO16	23	IC06N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
74HC/HCT40102P	SOT38Z	16	DIL	22	IC06N
74HC/HCT40102T	SOT109A	16	SO16	22	IC06N
74HC/HCT40103P	SOT38Z	16	DIL	22	IC06N
74HC/HCT40103T	SOT109A	16	SO16	22	IC06N
74HC/HCT40104P	SOT38Z	16	DIL	21	IC06N
74HC/HCT40104T	SOT109A	16	SO16	21	IC06N
74HC/HCT40105P	SOT38Z	16	DIL	21	IC06N
74HC/HCT40105T	SOT109A	16	SO16	21	IC06N
74LS00	D,N	14	DIL/SO14	25	IC09N
74LS01	N	14	DIL	25	IC09N
74LS02	D,N	14	DIL/SO14	25	IC09N
74LS04	D,N	14	DIL/SO14	25	IC09N
74LS05	D,N	14	DIL/SO14	25	IC09N
74LS08	D,N	14	DIL/SO14	25	IC09N
74LS09	D,N	14	DIL/SO14	25	IC09N
74LS10	D,N	14	DIL/SO14	25	IC09N
74LS11	D,N	14	DIL/SO14	25	IC09N
74LS13	N	14	DIL	27	IC09N
74LS14	D,N	14	DIL/SO14	27	IC09N
74LS20	D,N	14	DIL/SO14	25	IC09N
74LS21	D,N	14	DIL/SO14	25	IC09N
74LS26	D,N	14	DIL/SO14	25	IC09N
74LS27	D,N	14	DIL/SO14	25	IC09N
74LS30	D,N	14	DIL/SO14	25	IC09N
74LS32	D,N	14	DIL/SO14	25	IC09N
74LS33	N	14	DIL	25	IC09N
74LS37	N	14	DIL	25	IC09N
74LS38	D,N	14	DIL/SO14	25	IC09N
74LS40	N	14	DIL	25	IC09N
74LS42	D,N	16	DIL/SO16L	30	IC09N
74LS51	D,N	14	DIL/SO14	25	IC09N
74L654	D,N	14	DIL/SO14	25	IC09N
74LS73	N	14	DIL	27	IC09N
74LS74A	D,N	14	DIL/SO14	27	IC09N
74LS75	D,N	16	DIL/SO16	29	IC09N
74LS76	N	16	DIL	27	IC09N
74LS83A	D,N	16	DIL/SO16	31	IC09N
74LS85	D,N	16	DIL/SO16	31	IC09N
74LS86	D,N	14	DIL/SO14	25	IC09N
74LS90	N	14	DIL	28	IC09N
74LS92	N	14	DIL	28	IC09N
74LS93	D,N	14	DIL/SO14	28	IC09N
74LS95B	N	14	DIL	27	IC09N
74LS96	N	16	DIL	27	IC09N
74LS107	D,N	14	DIL/SO14	27	IC09N
74LS109	D,N	16	DIL/SO16	27	IC09N
74LS112	D,N	16	DIL/SO16	27	IC09N
74LS113	N	14	DIL	27	IC09N
74LS125	D,N	14	DIL/SO14	26	IC09N
74LS126	N	14	DIL	26	IC09N
74LS132	N	14	DIL	27	IC09N
74LS136	N	14	DIL	25	IC09N
74LS138	D,N	16	DIL/SO16	30	IC09N
74LS139	D,N	16	DIL/SO16	30	IC09N
74LS151	D,N	16	DIL/SO16	30	IC09N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
74LS153	D,N	16	DIL/SO16	30	IC09N
74LS154	D,N	24	DIL/SO24	30	IC09N
74LS155	D,N	16	DIL/SO16L	30	IC09N
74LS156	D,N	16	DIL/SO16	30	IC09N
74LS157	D,N	16	DIL/SO16	30	IC09N
74LS158	D,N	16	DIL/SO16	30	IC09N
74LS160A	N	16	DIL	28	IC09N
74LS161A	D,N	16	DIL/SO16	28	IC09N
74LS162A	N	16	DIL	28	IC09N
74LS163A	D,N	16	DIL/SO16	28	IC09N
74LS164	D,N	14	DIL/SO14	27	IC09N
74LS168A	N	16	DIL	28	IC09N
74LS169A	D,N	16	DIL/SO16	28	IC09N
74LS170	N	16	DIL	27	IC09N
74LS173	D,N	16	DIL/SO16L	27	IC09N
74LS174	D,N	16	DIL/SO16	27	IC09N
74LS175	D,N	16	DIL/SO16	27	IC09N
74LS181	N	24	DIL	31	IC09N
74LS191	D,N	16	DIL/SO16L	28	IC09N
74LS192	N	16	DIL	28	IC09N
74LS193	D,N	16	DIL/SO16L	28	IC09N
74LS194A	D,N	16	DIL/SO16	27	IC09N
74LS195A	D,N	16	DIL/SO16	27	IC09N
74LS197	D,N	14	DIL/SO14	28	IC09N
74LS240	D,N	20	DIL/SO20	26	IC09N
74LS241	D,N	20	DIL/SO20	26	IC09N
74LS242	N	14	DIL	26	IC09N
74LS243	N	14	DIL	26	IC09N
74LS244	D,N	20	DIL/SO20	26	IC09N
74LS245	D,N	20	DIL/SO20	26	IC09N
74LS251A	N	16	DIL	30	IC09N
74LS253	D,N	16	DIL/SO16	30	IC09N
74LS256	D,N	16	DIL/SO16	29	IC09N
74LS257A	D,N	16	DIL/SO16L	30	IC09N
74LS258A	D,N	16	DIL/SO16L	30	IC09N
74LS259	D,N	16	DIL/SO16	29	IC09N
74LS260	D,N	14	DIL/SO14	25	IC09N
74LS266	D,N	14	DIL/SO14	25	IC09N
74LS273	D,N	20	DIL/SO20	27	IC09N
74LS283	D,N	16	DIL/SO16	31	IC09N
74LS290	D,N	14	DIL/SO14	28	IC09N
74LS293	D,N	14	DIL/SO14	28	IC09N
74LS295B	N	14	DIL	27	IC09N
74LS298	N	16	DIL	30	IC09N
74LS301	N,F	16	DIL	31;41	-
74LS352	N	16	DIL	30	IC09N
74LS353	D,N	16	DIL/SO16	30	IC09N
74LS363	N	20	DIL	29	IC09N
74LS364	N	20	DIL	27	IC09N
74LS365A	D,N	16	DIL/SO16	26	IC09N
74LS366A	N	16	DIL	26	IC09N
74LS367A	D,N	16	DIL/SO16	26	IC09N
74LS368A	D,N	16	DIL/SO16	26	IC09N
74LS373	D,N	20	DIL/SO20	29	IC09N
74LS374	D,N	20	DIL/SO20	27	IC09N
74LS375	D,N	16	DIL/SO16L	29	IC09N
74LS377	D,N	20	DIL/SO20	27	IC09N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
74LS378	N	16	DIL	27	IC09N
74LS390	D,N	16	DIL/SO16L	28	IC09N
74LS393	D,N	14	DIL/SO14	28	IC09N
74LS395A	N	16	DIL	27	IC09N
74LS445	N	16	DIL	29	IC09N
74LS490	N	16	DIL	28	IC09N
74LS540	N	20	DIL	26	IC09N
74LS541	N	20	DIL	26	IC09N
74LS568A	N	20	DIL	28	IC09N
74LS569A	N	20	DIL	28	IC09N
74LS620	N	20	DIL	26	IC09N
74LS621	N	20	DIL	26	IC09N
74LS622	N	20	DIL	26	IC09N
74LS623	N	20	DIL	26	IC09N
74LS640	N	20	DIL	28	IC09N
74LS640-1	N	20	DIL	26	IC09N
74LS641	N	20	DIL	26	IC09N
74LS641-1	N	20	DIL	26	IC09N
74LS642	N	20	DIL	26	IC09N
74LS642-1	N	20	DIL	26	IC09N
74LS645	N	20	DIL	26	IC09N
74LS645-1	N	20	DIL	26	IC09N
74LS670	D,N	16	DIL/SO16L	28	IC09N
74LS764	D,N	40	DIL/SO40	31	IC09N
74LS765	D,N	40	DIL/SO40	31	-
74LS1801	-	-	-	31	-
74LS1802	-	-	-	31	-
74S00	D,N	14	DIL/SO14	25	IC09N
74S02	D,N	14	DIL/SO14	25	IC09N
74S03	D,N	14	DIL/SO14	25	IC09N
74S04	D,N	14	DIL/SO14	25	IC09N
74S05	D,N	14	DIL/SO14	25	IC09N
74S08	D,N	14	DIL/SO14	25	IC09N
74S10	D,N	14	DIL/SO14	25	IC09N
74S11	D,N	14	DIL/SO14	25	IC09N
74S20	D,N	14	DIL/SO14	25	IC09N
74S32	D,N	14	DIL/SO14	25	IC09N
74S37	D,N	14	DIL/SO14	25	IC09N
74S38	D,N	14	DIL/SO14	25	IC09N
74S40	N	14	DIL	25	IC09N
74S51	D,N	14	DIL/SO14	25	IC09N
74S64	D,N	14	DIL/SO14	25	IC09N
74S74	D,N	14	DIL/SO14	27	IC09N
74S85	D,N	16	DIL/SO16	31	IC09N
74S86	D,N	14	DIL/SO14	25	IC09N
74S112	N	16	DIL	27	IC09N
74S113	N	14	DIL	27	IC09N
74S133	D,N	16	DIL/SO16L	25	IC09N
74S134	D,N	16	DIL/SO16L	25	IC09N
74S135	N	16	DIL	25	IC09N
74S138	D,N	16	DIL/SO16L	30	IC09N
74S139	D,N	16	DIL/SO16L	30	IC09N
74S140	N	14	DIL	29	IC09N
74S151	D,N	16	DIL/SO16	30	IC09N
74S153	D,N	16	DIL/SO16L	30	IC09N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
74S157	D,N	16	DIL/SO16L	30	IC09N
74S158	D,N	16	DIL/SO16L	30	IC09N
74S168A	D,N	16	DIL/SO16L	28	IC09N
74S169A	D,N	16	DIL/SO16L	28	IC09N
74S172	N	24	DIL	27	IC09N
74S174	D,N	16	DIL/SO16L	27	IC09N
74S175	D,N	16	DIL/SO16	27	IC09N
74S181	N	24	DIL	31	IC09N
74S182	D,N	16	DIL/SO16	31	IC09N
74S189	N,F	16	DIL	31;41	-
74S194	D,N	16	DIL/SO16	27	IC09N
74S195	N	16	DIL	27	IC09N
74S225	N	-	DIL	27	-
74S240	D,N	20	DIL/SO20	26	IC09N
74S241	N	20	DIL	26	IC09N
74S242	N	14	DIL	26	IC09N
74S243	N	14	DIL	26	IC09N
74S244	N	20	DIL	26	IC09N
74S251	N	16	DIL	30	IC09N
74S253	D,N	16	DIL/SO16	30	IC09N
74S257	D,N	16	DIL/SO16L	30	IC09N
74S258	N	16	DIL	30	IC09N
74S260	D,N	14	DIL/SO14	25	IC09N
74S273	D,N	20	DIL/SO20	27	IC09N
74S280	N	14	DIL	31	IC09N
74S301	N,F	16	DIL	31;41	-
74S350	N	16	DIL	31	IC09N
74S373	D,N	20	DIL/SO20	29	IC09N
74S374	D,N	20	DIL/SO20	27	IC09N
74S534	N	20	DIL	29	IC09N
82HS137	N,F	18	DIL	42	IC7
82HS187	N	24	DIL	42	-
82HS189	N	24	DIL	42	-
82HS195	N,F	20	DIL	43	IC7
82HS195A	N	20	DIL	43	-
82HS195B	N	20	DIL	43	-
82HS321	N,F	24	DIL	43	IC7
82HS321A	N	24	DIL	43	-
82HS321B	N	24	DIL	43	-
82HS641	N,F	24	DIL	43	IC7
82HS641A	N	24	DIL	43	-
82HS641B	N	24	DIL	43	-
82LS16	N,F	16	DIL	41	IC7
82LS135	N,F	20	DIL	42	●
82LS181	N,F	24	DIL	42	IC7
82S09	N,F	28	DIL	41	IC7
82S09A	N,F	28	DIL	41	IC7
82S16	N,F	16	DIL	41	IC7
82S19	N,F	28	DIL	41	IC7
82S23	N,F	16	DIL	42	IC7
82S23A	N,F	16	DIL	42	IC7

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
82S41	-	-	-	32	-
82S50	-	-	-	32	-
82S52	-	-	-	32	-
82S62	-	-	-	32	-
82S82	-	-	-	32	-
82S83	-	-	-	32	-
82S100	N,F	28	DIL	72	IC10
82S101	N,F	28	DIL	72	IC10
82S103	N,F	28	DIL	72	IC10
82S105	N,F	28	DIL	72	IC10
82S105A	N,F	28	DIL	72	IC10
82S115	N,F	24	DIL	42	IC7
82S123	N,F	16	DIL	42	IC7
82S123A	N,F	16	DIL	42	IC7
82S126	N,F	16	DIL	42	IC7
82S126A	N,F	16	DIL	42	IC7
82S129	N,F	16	DIL	42	IC7
82S129A	N,F	16	DIL	42	IC7
82S130	N,F	16	DIL	42	IC7
82S130A	N,F	16	DIL	42	IC7
82S131	N,F	16	DIL	42	IC7
82S131A	N,F	16	DIL	42	IC7
82S135	N,F	20	DIL	42	IC7
82S137	N,F	18	DIL	42	IC7
82S137A	N,F	18	DIL	42	IC7
82S137B	N,F	18	DIL	42	IC7
82S147	N,F	20	DIL	42	IC7
82S147A	N,F	20	DIL	42	IC7
82S151	N,F	20	DIL	72	IC10
82S152	N,F	20	DIL	72	IC10
82S153	N,F	20	DIL	72	IC10
82S153A	N,F	20	DIL	72	IC10
82S155	N,F	20	DIL	72	IC10
82S157	N,F	20	DIL	72	IC10
82S159	N,F	20	DIL	72	IC10
82S161	N,F	24	DIL	72	●
82S162	N,F	24	DIL	72	IC10
82S163	N,F	24	DIL	72	IC10
82S167(A)	N,F	24	DIL	72	●
82S168	N	24	DIL	72	●
82S173	N	24	DIL	72	●
82S179	N	24	DIL	72	●
82S181	N,F	24	DIL	42	IC7
82S181A	N,F	24	DIL	42	IC7
82S181B	N,F	24	DIL	42	IC7
82S183	N,F	24	DIL	42	IC7
82S185	N,F	18	DIL	42	IC7
82S185A	N,F	18	DIL	42	IC7
82S185B	N,F	18	DIL	42	IC7
82S191	N,F	24	DIL	42	IC7
82S191A	N,F	24	DIL	42	IC7
82S191B	N,F	24	DIL	42	IC10
82S195	N,F	20	DIL	42	IC7
82S212	N,F	22	DIL	41	IC7
82S212A	N,F	22	DIL	41	IC10
82S321	N	24	DIL	43	-

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
23-101PB	FO75	64	GRID	48	●
23-101PB	FO75	64	GRID	48	●
23-101PBH	FO99	64	GRID	48	●
231-101PB	FO75	64	GRID	48	●
231-101PBH	FO99	64	GRID	48	●
241-141PBK	FO108	144	GRID	48	●
241-141PBKH	FO128	144	GRID	48	●
2332	N,SOT101A	24	DIL	44	●
2364	N	28	DIL	44	●
2616	N,SOT101A	24	DIL	44	●
2632	N,SOT101A	24	DIL	44	●
2664	N,SOT101A	24	DIL	44	●
27C64	N	28	DIL	44	●
27C256	N	24	DIL	44	-
3101A	N,F	16	DIL	41	IC7
7400	N	14	DIL	25	IC09N
7402	N	14	DIL	25	IC09N
7403	N	14	DIL	25	IC09N
7404	N	14	DIL	25	IC09N
7405	N	14	DIL	25	IC09N
7406	D,N	14	DIL/SO14	25	IC09N
7407	D,N	14	DIL/SO14	25	IC09N
7408	N	14	DIL	25	IC09N
7410	N	14	DIL	25	IC09N
7411	N	14	DIL	25	IC09N
7413	N	14	DIL	27	IC09N
7414	D,N	14	DIL/SO14	27	IC09N
7416	N	14	DIL	25	IC09N
7417	D,N	14	DIL/SO14	25	IC09N
7420	N	14	DIL	25	IC09N
7421	N	14	DIL	25	IC09N
7425	N	14	DIL	25	IC09N
7426	N	14	DIL	25	IC09N
7427	N	14	DIL	25	IC09N
7428	N	14	DIL	25	IC09N
7430	N	14	DIL	25	IC09N
7432	N	14	DIL	25	IC09N
7433	N	14	DIL	25	IC09N
7437	N	14	DIL	25	IC09N
7438	N	14	DIL	25	IC09N
7439	N	14	DIL	25	IC09N
7440	N	14	DIL	25	IC09N
7442	N	16	DIL	30	IC09N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
7445	N	16	DIL	29	IC09N
7450	N	14	DIL	25	-
7451	N	14	DIL	25	IC09N
7473	N	14	DIL	27	IC09N
7474	N	14	DIL	27	IC09N
7475	N	16	DIL	29	IC09N
7476	N	16	DIL	27	IC09N
7483	N	16	DIL	31	IC09N
7485	N	16	DIL	31	IC09N
7486	N	14	DIL	25	IC09N
7490	N	14	DIL	28	IC09N
7492	N	14	DIL	28	IC09N
7493	N	14	DIL	28	IC09N
7494	N	16	DIL	27	IC09N
7495	N	14	DIL	27	IC09N
7496	N	16	DIL	27	IC09N
8234	-	-	-	32	-
8242	-	-	-	32	-
8262	-	-	-	32	-
8266	-	-	-	32	-
8271	-	-	-	32	-
8273	-	-	-	32	-
8274	-	-	-	32	-
8881	-	-	-	32	-
8890	-	-	-	32	-
8891	-	-	-	32	-
9309	-	-	-	32	-
9310	-	-	-	32	-
9316	-	-	-	32	-
9322	-	-	-	32	-
9324	-	-	-	32	-
9334	-	-	-	32	-
9386	-	-	-	32	-
9401	N	14	DIL	68	●
9403	N	24	DIL	68	●
9602	-	-	-	32	-
10100F	SOT74	16	DIL	36	IC08N
10100N	SOT38Z	16	DIL	36	IC08N
10101F	SOT74	16	DIL	36	IC08N
10101N	SOT38Z	16	DIL	36	IC08N
10102F	SOT74	16	DIL	36	IC08N
10102N	SOT38Z	16	DIL	36	IC08N
10103F	SOT74	16	DIL	36	IC08N
10103N	SOT38Z	16	DIL	36	IC08N
10104F	SOT74	16	DIL	36	IC08N
10104N	SOT38Z	16	DIL	36	IC08N
10105F	SOT74	16	DIL	36	IC08N

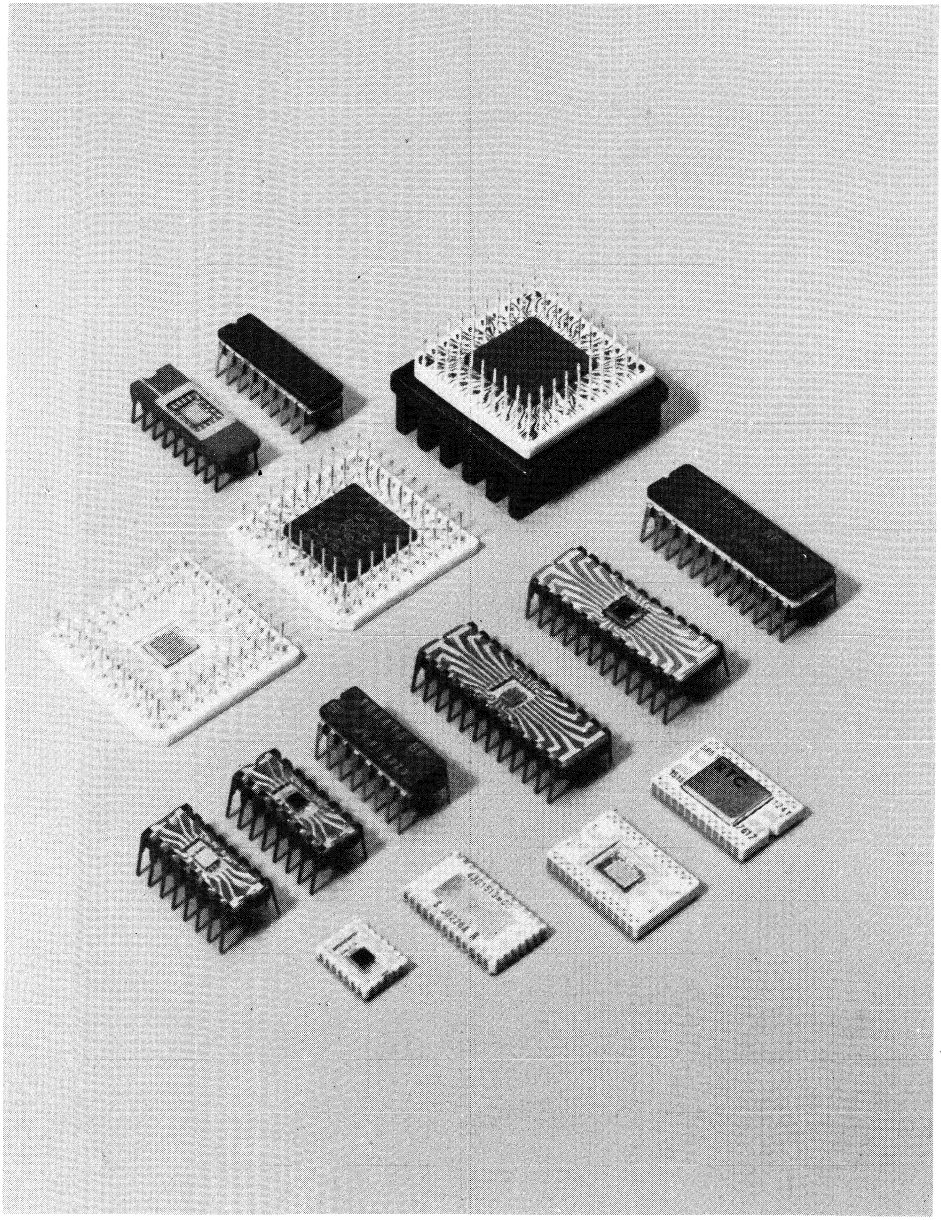
type no.	package code	no. of pins	pin position	catalogue page no.	handbook
10105N	SOT38Z	16	DIL	36	IC08N
10106F	SOT74	16	DIL	36	IC08N
10106N	SOT38Z	16	DIL	36	IC08N
10107F	SOT74	16	DIL	36	IC08N
10107N	SOT38Z	16	DIL	36	IC08N
10108F	SOT74	16	DIL	36	IC08N
10108N	SOT38Z	16	DIL	36	IC08N
10109F	SOT74	16	DIL	36	IC08N
10109N	SOT38Z	16	DIL	36	IC08N
10110F	SOT74	16	DIL	36	IC08N
10110N	SOT38Z	16	DIL	36	IC08N
10111F	SOT74	16	DIL	36	IC08N
10111N	SOT38Z	16	DIL	36	IC08N
10113F	SOT74	16	DIL	36	IC08N
10113N	SOT38Z	16	DIL	36	IC08N
10114F	SOT74	16	DIL	36	IC08N
10114N	SOT38Z	16	DIL	36	IC08N
10115F	SOT74	16	DIL	36	IC08N
10115N	SOT38Z	16	DIL	36	IC08N
10116F	SOT74	16	DIL	36	IC08N
10116N	SOT38Z	16	DIL	36	IC08N
10117F	SOT74	16	DIL	36	IC08N
10117N	SOT38Z	16	DIL	36	IC08N
10118F	SOT74	16	DIL	36	IC08N
10118N	SOT38Z	16	DIL	36	IC08N
10119F	SOT74	16	DIL	36	IC08N
10119N	SOT38Z	16	DIL	36	IC08N
10121F	SOT74	16	DIL	36	IC08N
10121N	SOT38Z	16	DIL	36	IC08N
10123F	SOT74	16	DIL	36	IC08N
10123N	SOT38Z	16	DIL	36	IC08N
10124F	SOT74	16	DIL	36	IC08N
10124N	SOT38Z	16	DIL	36	IC08N
10125F	SOT74	16	DIL	36	IC08N
10125N	SOT38Z	16	DIL	36	IC08N
10129F	SOT74	16	DIL	36	IC08N
10129N	SOT38Z	16	DIL	36	IC08N
10130F	SOT74	16	DIL	37	IC08N
10130N	SOT38Z	16	DIL	37	IC08N
10131F	SOT74	16	DIL	37	IC08N
10131N	SOT38Z	16	DIL	37	IC08N
10132F	SOT74	16	DIL	37	IC08N
10132N	SOT38Z	16	DIL	37	IC08N
10133F	SOT74	16	DIL	37	IC08N
10133N	SOT38Z	16	DIL	37	IC08N
10134F	SOT74	16	DIL	37	IC08N
10134N	SOT38Z	16	DIL	37	IC08N
10135F	SOT74	16	DIL	37	IC08N
10135N	SOT38Z	16	DIL	37	IC08N
10136F	SOT74	16	DIL	37	IC08N
10136N	SOT38Z	16	DIL	37	IC08N
10137F	SOT74	16	DIL	37	IC08N
10137N	SOT38Z	16	DIL	37	IC08N
10139F	SOT74	16	DIL	44	●
10139N	SOT38Z	16	DIL	44	●
10141F	SOT74	16	DIL	37	IC08N
10141N	SOT38Z	16	DIL	37	IC08N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
10149F	SOT74	16	DIL	44	IC08N
10155F	SOT133;FK	18	DIL	44	IC7
10155N	SOT102A;NK	18	DIL	44	IC7
10158F	SOT74	16	DIL	37	IC08N
10158N	SOT38Z	16	DIL	37	IC08N
10159F	SOT74	16	DIL	37	IC08N
10159N	SOT38Z	16	DIL	37	IC08N
10160F	SOT74	16	DIL	37	IC08N
10160N	SOT38	16	DIL	37	IC08N
10161F	SOT74	16	DIL	37	IC08N
10161N	SOT38Z	16	DIL	37	IC08N
10162F	SOT74	16	DIL	37	IC08N
10162N	SOT38Z	16	DIL	37	IC08N
10164F	SOT74	16	DIL	37	IC08N
10164N	SOT38Z	16	DIL	37	IC08N
10165F	SOT74	16	DIL	37	IC08N
10165N	SOT38Z	16	DIL	37	IC08N
10171F	SOT74	16	DIL	37	IC08N
10171N	SOT38Z	16	DIL	37	IC08N
10172F	SOT74	16	DIL	37	IC08N
10172N	SOT38Z	16	DIL	37	IC08N
10173F	SOT74	16	DIL	37	IC08N
10173N	SOT38Z	16	DIL	37	IC08N
10174F	SOT74	16	DIL	37	IC08N
10174N	SOT38Z	16	DIL	37	IC08N
10175F	SOT74	16	DIL	37	IC08N
10175N	SOT38Z	16	DIL	37	IC08N
10176F	SOT74	16	DIL	37	IC08N
10176N	SOT38Z	16	DIL	37	IC08N
10179F	SOT74	16	DIL	37	IC08N
10179N	SOT38Z	16	DIL	37	IC08N
10180F	SOT74	16	DIL	37	IC08N
10180N	SOT38Z	16	DIL	37	IC08N
10181F	SOT149	24	DIL	37	IC08N
10181N	SOT101	24	DIL	37	IC08N
10188F	SOT74	16	DIL	36	IC08N
10188N	SOT38Z	16	DIL	36	IC08N
10189F	SOT74	16	DIL	36	IC08N
10189N	SOT38Z	16	DIL	36	IC08N
10191F	SOT74	16	DIL	37	IC08N
10191N	SOT38Z	16	DIL	37	IC08N
10192F	SOT74	16	DIL	36	IC08N
10192N	SOT38Z	16	DIL	36	IC08N
10210F	SOT74	16	DIL	36	IC08N
10210N	SOT38Z	16	DIL	36	IC08N
10211F	SOT74	16	DIL	36	IC08N
10211N	SOT38Z	16	DIL	36	IC08N
10216F	SOT74	16	DIL	36	IC08N
10216N	SOT38Z	16	DIL	36	IC08N
10231F	SOT74	16	DIL	37	IC08N
10231N	SOT38Z	16	DIL	37	IC08N
10422CF	SOT149	24	DIL	44	IC7
10422CY	SOT138	24	FP;4x6	44	IC7
10422F	SOT149	24	DIL	44	IC7
10422AF	SOT149	24	DIL	44	IC7
10422BF	SOT149	24	DIL	44	IC7
10422AY	SOT138	24	FP;4x6	44	IC7

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
10470F	SOT133	18	DIL	44	IC7
10470AF	SOT133	18	DIL	44	IC7
10474F	SOT149	24	DIL	44	IC7
10474AF	SOT149	24	DIL	44	IC7
23128	N	28	DIL	44	●
23256A	N,SOT117	28	DIL	44	●
23512A	N	28	DIL	44	●
74107	N	14	DIL	27	IC09N
74109	N	16	DIL	27	IC09N
74116	N	24	DIL	29	IC09N
74121	D,N	14	DIL/SO14	27	IC09N
74123	D,N	16	DIL/SO16L	27	IC09N
74125	N	14	DIL	26	IC09N
74126	N	14	DIL	26	IC09N
74128	N	14	DIL	26	IC09N
74132	N	14	DIL	27	IC09N
74145	D,N	16	DIL/SO16L	29	IC09N
74147	N	16	DIL	30	IC09N
74148	D,N	16	DIL/SO16L	30	IC09N
74150	N	24	DIL	30	IC09N
74151	N	16	DIL	30	IC09N
74153	N	16	DIL	30	IC09N
74154	N	24	DIL	30	IC09N
74155	N	16	DIL	30	IC09N
74156	N	16	DIL	30	IC09N
74157	N	16	DIL	30	IC09N
74158	N	16	DIL	30	IC09N
74160	N	16	DIL	28	IC09N
74161	N	16	DIL	28	IC09N
74163	N	16	DIL	28	IC09N
74164	N	14	DIL	27	IC09N
74165	N	16	DIL	27	IC09N
74166	D,N	16	DIL/SO16L	27	IC09N
74170	N	16	DIL	27	IC09N
74173	N	16	DIL	27	IC09N
74174	N	16	DIL	27	IC09N
74175	N	16	DIL	27	IC09N
74180	N	14	DIL	31	IC09N
74181	N	24	DIL	31	IC09N
74190	N	16	DIL	28	IC09N
74191	N	16	DIL	28	IC09N
74192	N	16	DIL	28	IC09N
74193	N	16	DIL	28	IC09N
74194	N	16	DIL	27	IC09N
74195	N	16	DIL	27	IC09N
74199	N	24	DIL	27	IC09N
74221	D,N	16	DIL/SO16L	27	IC09N
74279	D,N	16	DIL/SO16	29	IC09N
74298	N	16	DIL	30	IC09N
74365A	N	16	DIL	26	IC09N
74366A	N	16	DIL	26	IC09N
74367A	N	16	DIL	26	IC09N
74368A	N	16	DIL	26	IC09N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
100101F	SOT149	24	DIL	40	IC08N
100101F	SOT149	24	DIL	40	IC08N
100101Y	SOT138	24	FP;4x6	40	IC08N
100102F	SOT149	24	DIL	40	IC08N
100102Y	SOT138	24	FP;4x6	40	IC08N
100107F	SOT149	24	DIL	40	IC08N
100107Y	SOT138	24	FP;4x6	40	IC08N
100112F	SOT149	24	DIL	40	IC08N
100112Y	SOT138	24	FP;4x6	40	IC08N
100113F	SOT149	24	DIL	40	IC08N
100113Y	SOT138	24	FP;4x6	40	IC08N
100114F	SOT149	24	DIL	40	IC08N
100114Y	SOT138	24	FP;4x6	40	IC08N
100117F	SOT149	24	DIL	40	IC08N
100117Y	SOT138	24	FP;4x6	40	IC08N
100118F	SOT149	24	DIL	40	IC08N
100118Y	SOT138	24	FP;4x6	40	IC08N
100122F	SOT149	24	DIL	40	IC08N
100122Y	SOT138	24	FP;4x6	40	IC08N
100123F	SOT149	24	DIL	40	IC08N
100123Y	SOT138	24	FP;4x6	40	IC08N
100126F	SOT149	24	DIL	40	IC08N
100126Y	SOT138	24	FP;4x6	40	IC08N
100131F;AF	SOT149	24	DIL	40	IC08N
100131Y;AY	SOT138	24	FP;4x6	40	IC08N
100136F	SOT149	24	DIL	40	IC08N
100136Y	SOT138	24	FP;4x6	40	IC08N
100141F	SOT149	24	DIL	40	IC08N
100141Y	SOT138	24	FP;4x6	40	IC08N
100142F	SOT149	24	DIL	44	IC08N
100142Y	SOT138	24	FP;4x6	44	IC08N
100145F	SOT149	24	DIL	40	IC08N
100145Y	SOT138	24	FP;4x6	40	IC08N
100149F	-	-	-	44	IC7
100149Y	-	-	-	44	IC7
100150F	SOT149	24	DIL	40	IC08N
100150Y	SOT138	24	FP;4x6	40	IC08N
100151F	SOT149	24	DIL	40	IC08N
100151Y	SOT138	24	FP;4x6	40	IC08N
100155F	SOT149	24	DIL	40	IC08N
100155Y	SOT138	24	FP;4x6	40	IC08N
100158F	SOT149	24	DIL	40	IC08N
100158Y	SOT138	24	FP;4x6	40	IC08N
100160F	SOT149	24	DIL	40	IC08N
100160Y	SOT138	24	FP;4x6	40	IC08N
100163F	SOT149	24	DIL	40	IC08N
100163Y	SOT138	24	FP;4x6	40	IC08N
100164F	SOT149	24	DIL	40	IC08N
100164Y	SOT138	24	FP;4x6	40	IC08N
100165F	SOT149	24	DIL	40	IC08N
100165Y	SOT138	24	FP;4x6	40	IC08N
100166F	SOT149	24	DIL	40	IC08N
100166Y	SOT138	24	FP;4x6	40	IC08N
100170F	SOT149	24	DIL	40	IC08N
100170Y	SOT138	24	FP;4x6	40	IC08N
100171F	SOT149	24	DIL	40	IC08N
100171Y	SOT138	24	FP;4x6	40	IC08N

type no.	package code	no. of pins	pin position	catalogue page no.	handbook
100175F	SOT74	16	DIL	40	IC08N
100179F	SOT149	24	DIL	40	IC08N
100179Y	SOT138	24	FP;4x6	40	IC08N
100180F	SOT149	24	DIL	40	IC08N
100180Y	SOT138	24	FP;4x6	40	IC08N
100181F	SOT149	24	DIL	40	IC08N
100181Y	SOT138	24	FP;4x6	40	IC08N
100255F	SOT74B	16	DIL	40	●
100422F	SOT149	24	DIL	44	IC7
100422AF	SOT149	24	DIL	44	IC7
100422BF	SOT149	24	DIL	44	IC7
100422CF	SOT149	24	DIL	44	IC7
100422CY	SOT138	24	FP;4x6	44	IC7
100470F	SOT133	18	DIL	44	IC7
100470AF	SOT133	18	DIL	44	IC7
100474F	SOT149	24	DIL	44	IC7
100474AF	SOT149	24	DIL	44	IC7
100474AY	SOT138	24	FP;4x6	44	IC7



Electronic components and materials

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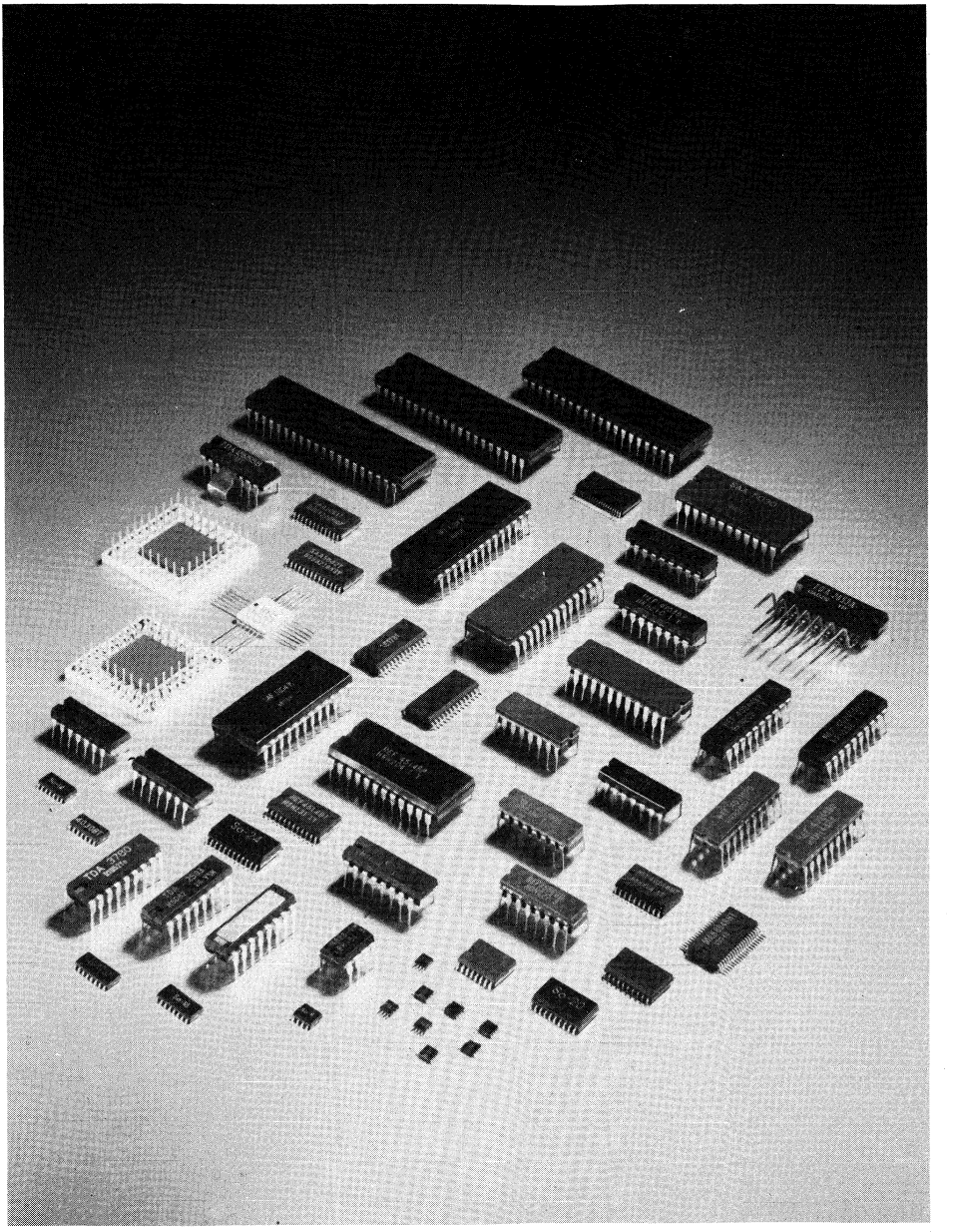

Electronic
components
and materials

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ELECTRON TUBES (BLUE SERIES)
The blue series of data handbooks comprises:

T1 **Tubes for r.f. heating**

T2a **Transmitting tubes for communications, glass types**

T2b **Transmitting tubes for communications, ceramic types**

T3 **Klystrons**

T4 **Magnetrons for microwave heating**

T5 **Cathode-ray tubes**
Instrument tubes, monitor and display tubes, C.R. tubes for special applications

T6 **Geiger-Müller tubes**

T7 **Gas-filled tubes** (will not be reprinted)

T8 **Colour display systems**
Colour TV picture tubes, colour data graphic display tube assemblies, deflection units

T9 **Photo and electron multipliers**

T10 **Plumbicon camera tubes and accessories**

T11 **Microwave semiconductors and components**

T12 **Vidicon and Newvicon camera tubes**

T13 **Image intensifiers and infrared detectors**

T15 **Dry reed switches**

T16 **Monochrome tubes and deflection units**
Black and white TV picture tubes, monochrome data graphic display tubes, deflection units

COMPONENTS AND MATERIALS (GREEN SERIES)
The green series of data handbooks comprises:

C1 **Programmable controller modules**
PLC modules, PC20 modules

C2 **Television tuners, coaxial aerial input assemblies, surface acoustic wave filters**

C3 **Loudspeakers**

C4 **Ferroxcube potcores, square cores and cross cores**

C5 **Ferroxcube for power, audio/video and accelerators**

C6 **Synchronous motors and gearboxes**

C7 **Variable capacitors**

C8 **Variable mains transformers**

C9 **Piezoelectric quartz devices**

C10 **Connectors**

C11 **Varistors, thermistors and sensors**

C12 **Potentiometers, encoders and switches**

C13 **Fixed resistors**

C14 **Electrolytic and solid capacitors**

C15 **Ceramic capacitors**

C16 **Permanent magnet materials**

C17 **Stepping motors and associated electronics**

C18 **Direct current motors**

C19 **Piezoelectric ceramics**

C20 **Wire-wound components for TVs and monitors**

C21 **Assemblies for industrial use**
HNIL FZ/30 series, NORbits 60-, 61-, 90-series, input devices

C22 **Film capacitors**

Our Data Handbook System comprises over seventy books with specifications on electronic components, subassemblies and materials. The System is made up of four series of handbooks.

SEMICONDUCTORS	**RED**
INTEGRATED CIRCUITS	**PURPLE**
ELECTRON TUBES	**BLUE**
COMPONENTS AND MATERIALS	**GREEN**

The data handbooks contain all pertinent data available at the time of publication, and each is revised and reissued periodically.
When ratings or specifications differ from those published in the preceding edition they are indicated with arrows in the page margin. Where application information is given it is advisory and does not form part of the product specification.
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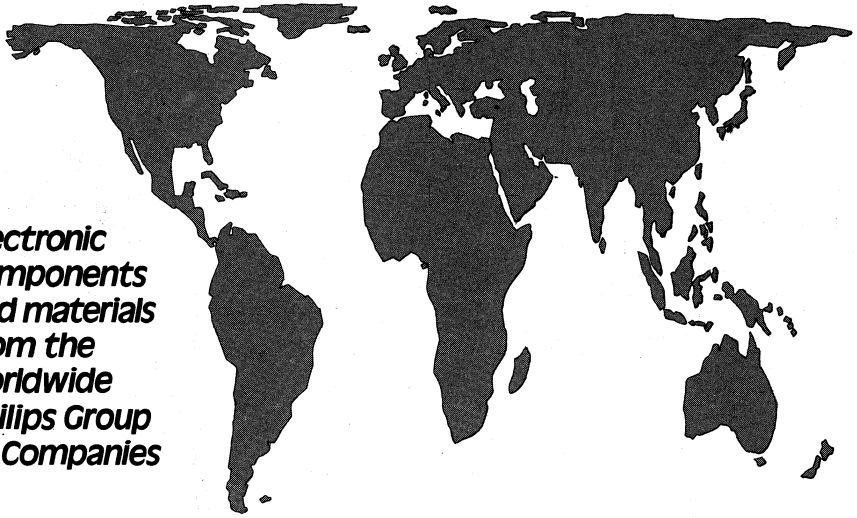

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