Abbreviations

The *1998 Data Book* uses the following abbreviations and acronyms:

ACAP	Altera Consultants Alliance Program
ACCESS	Altera Commitment to Cooperative Engineering Solutions
AHDL	Altera Hardware Description Language
AMPP	Altera Megafunction Partners Program
APD	Active parallel down
APU	Active parallel up
AN	Application note
AS	Active serial
ASCII	American Standard Code for Information Interchange
ASIC	Application-specific integrated circuit
ASSP	Application-specific standard product
ATM	Asynchronous transfer mode
BGA	Ball-grid array
BNF	Backus-Naur form
BPR	Bypass register
BSC	Boundary-scan cell
BSDL	Boundary-scan description language
BST	Boundary-scan test
CAE	Computer-aided engineering
CerDIP	Ceramic dual in-line package
CMD	Command File
CMOS	Complementary metal-oxide semiconductor
CPLD	Complex programmable logic device
CPU	Central processing unit
CQFP	Ceramic quad flat pack
CRC	Cyclic redundancy code
DIP	Dual in-line package
DRAM	Dynamic random access memory
DS	Data sheet
DSP	Digital signal processing
DUT	Device under test
EAB	Embedded array block
EAU	Electronic application utility
EDA	Electronic design automation
EDF	EDIF Input File
EDIF	Electronic Design Interchange Format
EEPROM	Electrically erasable programmable read-only memory

EPLD	Erasable programmable logic device
EPROM	Erasable programmable read-only memory
ESD	Electrostatic discharge
FFT	Fast Fourier transform
FIFO	First-in first-out
FIN	Fitter Input File (**.fin**)
FIR	Finite impulse response
FIT	Fit File (**.fit**)
FLEX	Flexible Logic Element MatriX
FPGA	Field-programmable gate array
FTP	File transfer protocol
GAL	Generic array logic
GDF	Graphic Design File (**.gdf**)
HDL	Hardware description language
HEX	Hexadecimal File
IC	Integrated circuit
ICR	In-circuit reconfigurability
ICT	In-circuit test
IEEE	Institute of Electrical and Electronic Engineers
IIR	Infinite impulse response
INC	Include File (**.inc**)
INI	Initialization File (**.ini**)
I/O	Input/output
IOC	Input/output cell
IOE	Input/output element
IR	Instruction register
ISA	Industry-standard architecture
ISP	In-system programmability
JCF	JTAG Chain File (**.jcf**)
JED	JEDEC File (**.jed**)
JLCC	Ceramic J-lead chip carrier
JTAG	Joint Test Action Group
LAB	Logic array block
LCA	Logic cell array
LE	Logic element
LED	Light-emitting diode
LMF	Library Mapping File (**.lmf**)
LOG	Log File (**.log**)
LPM	Library of parameterized modules
LSB	Least significant bit
LSI	Large-scale integration
LUT	Look-up table
MAC	Multiplier-accumulator
MAX	Multiple Array MatriX
MD-SAS	Multi-device sequential active serial
MMF	MAX+PLUS II Message File (**.mmf**)

MPU	Master programming unit
MRI	Magnetic resonance imaging
MSB	Most significant bit
MSI	Medium-scale integration
MSPS	Million samples per second
MTBF	Mean time between failures
MTF	Message Text File (**.mtf**)
NRE	Non-recurring engineering
OCR	Optical character recognition
OEM	Original equipment manufacturer
OTP	One-time-programmable
PAL	Programmable array logic
PC	Personal computer
PCB	Printed circuit board
PCI	Peripheral component interconnect
PDIP	Plastic dual in-line package
PGA	Pin-grid array
PIA	Programmable interconnect array
PIB	Product information bulletin
PLCC	Plastic J-lead chip carrier
PLD	Programmable logic device
PLL	Phase-locked loop
POF	Programmer Object File (**.pof**)
POR	Power-On Reset
PPA	Passive parallel asynchronous
PPS	Passive parallel synchronous
PQFP	Plastic quad flat pack
PROM	Programmable read-only memory
PS	Passive serial
QFP	Quad flat pack
RAM	Random access memory
ROM	Read-only memory
RPT	Report File (**.rpt**)
RQFP	Power quad flat pack
RTL	Register transfer level
SAM	Stand-Alone Microsequencer
SOF	SRAM Object File (**.sof**)
SOIC	Small-outline integrated circuit
SR	Staging register
SRAM	Static random access memory
SSG	Synchronous signal generator
SSI	Small-scale integration
SYM	Symbol File (**.sym**)
TDF	Text Design File (**.tdf**)
TQFP	Thin quad flat pack
TTF	Tabular Text File (**.ttf**)

TTL	Transistor-to-transistor logic
UES	User electronic signature
UV	Ultraviolet
VEC	Vector File (**.vec**)
VHD	VHDL Design File (**.vhd**)
VHDL	VHSIC Hardware Description Language
VHSIC	Very high speed integrated circuit
VITAL	VHDL Initiative Toward ASIC Libraries
VLSI	Very large-scale integration
WDF	Waveform Design File (**.wdf**)
WWW	World-wide web
WYSIWYG	What-you-see-is-what-you-get
XNF	Xilinx Netlist Format File (**.xnf**)
ZIF	Zero-insertion-force