

TX-32/28DT2 Service Manual

Specifications

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Safety

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PCB
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Service Support

Service and repair of this product is supported by Panasonic's LUCI interface.

This interface provides a link between the TV and a standard PC to allow a number of diagnostic and control functions to be performed.

For more details contact your local Panasonic company.


BACK

EXIT

Service Manual



Colour Television

TX-32DT2

TX-28DT2

EURO-4D Chassis

SPECIFICATION

(Information in brackets { } refer to TX-28DT2)

Power Source: 220-240V a.c., 50Hz

Power Consumption: 135W {118W}

Stand-by Power Consumption: 1,7W

Aerial Impedance: 75Ω unbalanced, Coaxial Type

Receiving System: PAL I, PAL-525/60
DVB
M.NTSC
NTSC (AV only)

Receiving Channels: UHF E21-E69

Intermediate Frequency:
Video/Audio
Video 39,5MHz
Audio 33,5MHz
32,95MHz (NICAM)
Colour 35,07MHz

Terminals:

DATA CONNECTIONS
MODEM (max 38,4kbps) (9 pin) male D-type
SERIAL (max 38,4kbps) (9 pin) female D-type
AUDIO MONITOR OUT
AV1 IN Audio (RCAx2) 500mV rms 1kΩ
Video (21 pin) 1V p-p 75Ω
Audio (21 pin) 500mV rms 10kΩ
RGB (21 pin)

AV1 OUT Video (21 pin) 1V p-p 75Ω
Audio (21 pin) 500mV rms 1kΩ

AV2 IN Video (21 pin) 1V p-p 75Ω
Audio (21 pin) 500mV rms 10kΩ
S-Video IN Y: 1V p-p 75Ω
(21-pin) C: 0,3V p-p 75Ω

AV2 OUT Video (21 pin) 1V p-p 75Ω
Audio (21 pin) 500mV rms 1kΩ
Selectable output (21 pin)

AV3 IN S-Video IN Y: 1V p-p 75Ω
(4-pin) C: 0,3V p-p 75Ω
Audio (RCAx2) 500mV rms 10kΩ
Video (RCAx1) 1V p-p 75Ω

High Voltage: 31,5kV ± 1kV {30,5kV ± 1kV}

Picture Tube: W76LPX955X06 76cm
{W66LQK185X06 66cm}

Audio Output: 2 x 20W (Music Power)
8Ω Impedance

Headphones: 8Ω Impedance
3,5mm

Accessories

supplied : Remote Control
2 x R6 (UM3) Batteries
Video Cabinet VS-PK1/2

Dimensions:

Height: 558mm {503mm}
Width: 812mm {720mm}
Depth: 572mm {527mm}

Net weight: 60kg {46kg}

Specifications are subject to change without notice.
Weights and dimensions shown are approximate.

NOTE: This Service Manual should be used in conjunction with the EURO-4D Supplement Technical guide.

NOTE: The DVB unit (V board) is not to be repaired, and must be replaced with an exchange unit (part number: TXN-V10ECG).

Panasonic CS (U.K.) Ltd.
WILLOUGHBY ROAD,
BRACKNELL,
BERKS.,
RG12 8FT.

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SAFETY PRECAUTIONS

GENERAL GUIDE LINES

1. It is advisable to insert an isolation transformer in the a.c. supply before servicing a hot chassis.
2. When servicing, observe the original lead dress in the high voltage circuits. If a short circuit is found, replace all parts that have been overheated or damaged by the short circuit.
3. After servicing, see that all the protective devices such as insulation barriers, insulation papers, shields and isolation R-C combinations are correctly installed.
4. When the receiver is not being used for a long period of time, unplug the power cord from the a.c. outlet.
5. Potentials as high as 32,5kV {31,5kV} are present when this receiver is in operation. Operation of the receiver without the rear cover involves the danger of a shock hazard from the receiver power supply. Servicing should not be attempted by anyone who is not familiar with the precautions necessary when working on high voltage equipment. Always discharge the anode of the tube.
6. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazard.

LEAKAGE CURRENT COLD CHECK

1. Unplug the a.c. cord and connect a jumper between the two prongs of the plug.
2. Turn on the receiver's power switch.
3. Measure the resistance value with an ohmmeter, between the jumpered a.c. plug and each exposed metallic cabinet part on the receiver, such as screw heads, aerials, connectors, control shafts etc. When the exposed metallic part has a return path to the chassis, the reading should be between 4M ohm and 20M ohm. When the exposed metal does not have a return path to the chassis, the reading must be infinite.

LEAKAGE CURRENT HOT CHECK

1. Plug the a.c. cord directly into the a.c. outlet. Do not use an isolation transformer for this check.
2. Connect a 2k Ω 10W resistor in series with an exposed metallic part on the receiver and an earth, such as a water pipe.
3. Use an a.c. voltmeter with high impedance to measure the potential across the resistor.

4. Check each exposed metallic part and check the voltage at each point.
5. Reverse the a.c. plug at the outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 1,4Vrms. In case a measurement is outside the limits specified, there is a possibility of a shock hazard, and the receiver should be repaired and rechecked before it is returned to the customer.

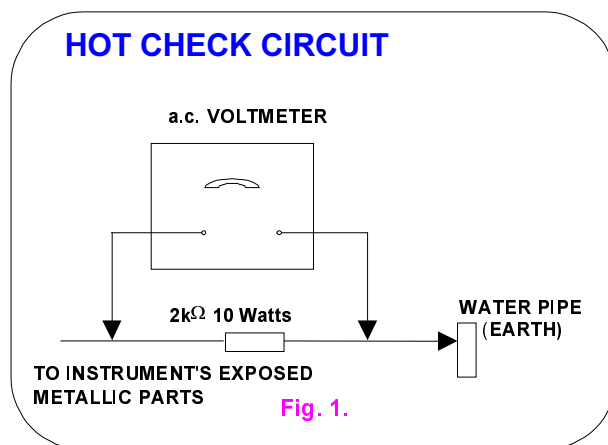


Fig. 1.

X-RADIATION WARNING

1. The potential sources of X-Radiation in TV sets are the high voltage section and the picture tube.
2. When using a picture tube test jig for service, ensure that the jig is capable of handling 32,5kV without causing X-Radiation.

NOTE: It is important to use an accurate periodically calibrated high voltage meter.

1. Set the brightness to minimum.
2. Measure the high voltage. The meter should indicate. 31,5kV \pm 1kV {30,5kV \pm 1kV}. If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.
3. To prevent any X-Radiation possibility, it is essential to use the specified tube.

SERVICE HINTS

How to remove the rear cover

1. Remove the 10 screws as shown in **Fig.2.**



Fig.2.

LOCATION OF CONTROLS

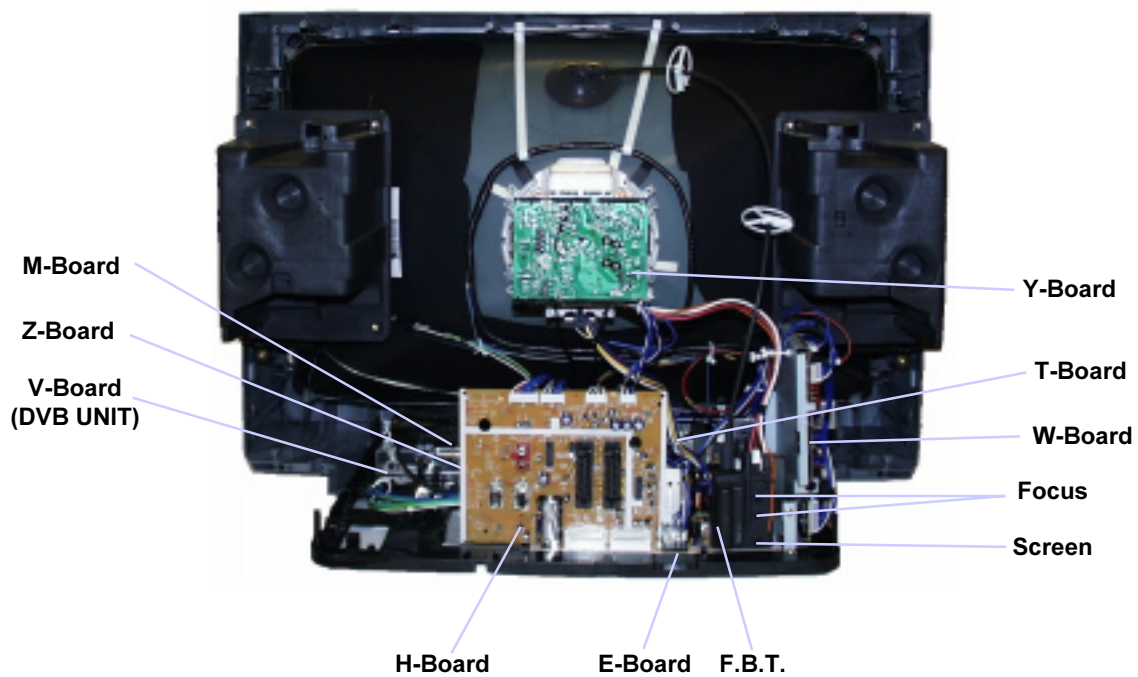



Fig.3.

ADJUSTMENT PROCEDURE

Item / Preparation	Adjustments																								
+B SET-UP 1. Receive a Greyscale signal. 2. Set the controls :- Brightness Minimum Contrast Minimum Volume Minimum	1. Set the +B voltage up as follows:- Adjust R811 so that B2 shows $148V \pm 1V$. 2. Confirm the following voltages. <table style="width: 100%; border: none;"> <tr> <td>B9 5</td> <td>$\pm 0,25V$</td> <td>B11 33</td> <td>$\pm 1,5V$</td> </tr> <tr> <td>B5 12</td> <td>$\pm 0,5V$</td> <td>B7 8</td> <td>$\pm 0,5V$</td> </tr> <tr> <td>B4 16</td> <td>$\pm 1V$</td> <td>B8 5,5</td> <td>$\pm 0,5V$</td> </tr> <tr> <td>B12 26</td> <td>$\pm 1V$</td> <td>B13 15</td> <td>$\pm 1V$</td> </tr> <tr> <td>B3 40</td> <td>$\pm 1,5V$</td> <td>B14 -15</td> <td>$\pm 1V$</td> </tr> <tr> <td>B1 215</td> <td>$\pm 10V$</td> <td></td> <td></td> </tr> </table>	B9 5	$\pm 0,25V$	B11 33	$\pm 1,5V$	B5 12	$\pm 0,5V$	B7 8	$\pm 0,5V$	B4 16	$\pm 1V$	B8 5,5	$\pm 0,5V$	B12 26	$\pm 1V$	B13 15	$\pm 1V$	B3 40	$\pm 1,5V$	B14 -15	$\pm 1V$	B1 215	$\pm 10V$		
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B4 16	$\pm 1V$	B8 5,5	$\pm 0,5V$																						
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B3 40	$\pm 1,5V$	B14 -15	$\pm 1V$																						
B1 215	$\pm 10V$																								
CUT OFF / Ug2 Test 1. Receive a Greyscale signal. 2. Degauss the tube externally. 3. Set the TV into Service Mode 1. 4. Select Cut off mode.	To adjust Cutoff connect an oscilloscope to the Blue cathode. Press " STR " and adjust "cutoff" value using the " Yellow " and " Blue " buttons until the black level is $160V \pm 5V$, press " STR " to store the value. Remove the oscilloscope. Select Ug2 adjustment and adjust the screen VR until the display shows "O.K."																								

FACTORY SETTINGS

To return customer settings to factory settings and clear owner ID of all information input by the customer, enter Self-Check mode. Press the down (-/v) button on the customer controls at the front of the TV set, at the same time pressing the **STATUS** button  on the remote control. To exit Self Check, switch off the TV set at the power button.

NOTE: Self Check should only be used when refurbishing the TV set and not during normal repair work.

VDP	O.K.	PCB	O.K.
TUN	O.K.	Cab	O.K.
E2	O.K.	Sum	Factory use only
MSP	O.K.		
OPTION 1	00		
OPTION 2	A1		
OPTION 3	02		
OPTION 4	40		
OPTION 5	B1		
OPTION 6	E9		

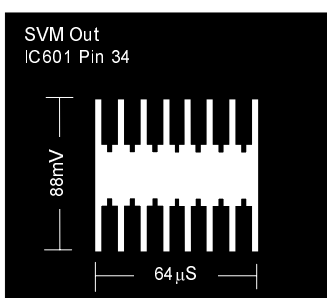
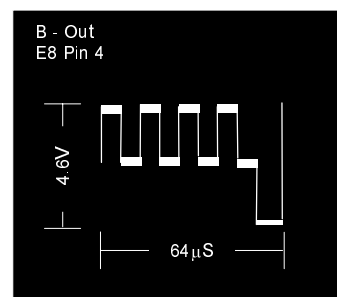
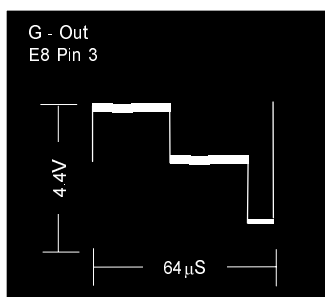
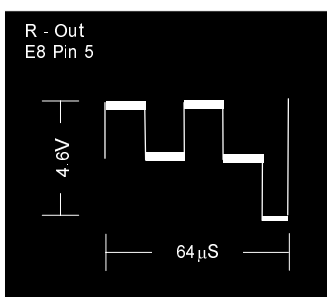
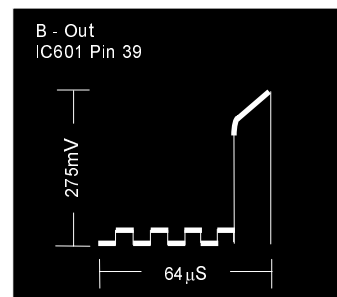
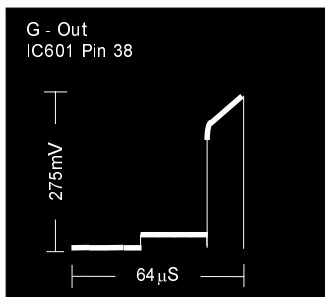
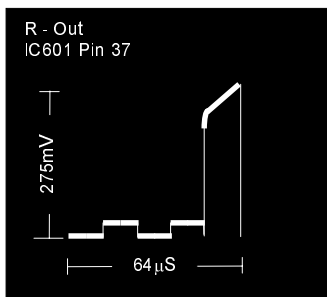
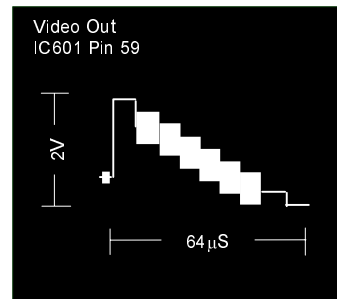
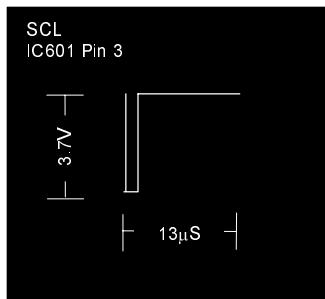
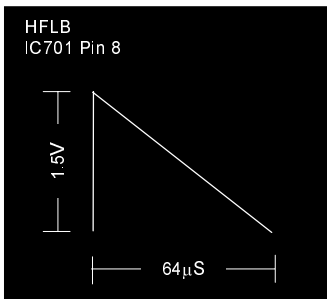
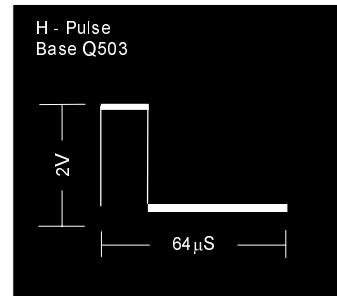
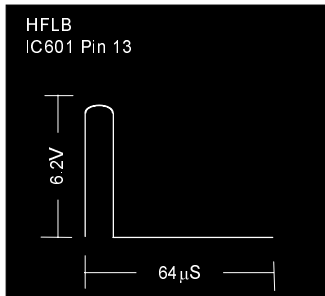
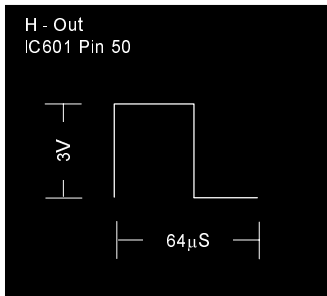
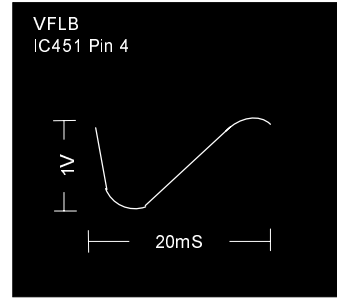
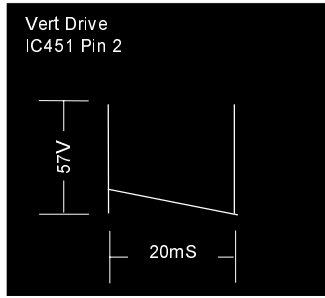
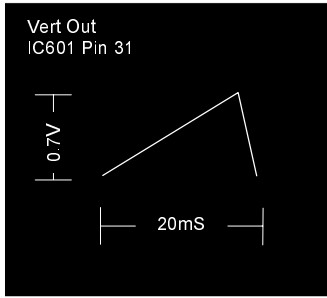
If the CCU ports have been checked and found to be incorrect or not located then " - - " will appear in place of "O.K.".

Service Aids

To aid in the service of our current chassis there are a number of Service Aids which have been made available.

- **LUCI** interface kit (**L**inked **U**tility **C**omputer **I**nterface)
 Part number: TZS6EZ002
 This contains interface and cables for connecting TV service connector and a PC as well as diagnostic software. As new models are introduced upgrade software will become available.
- **VICI** (**V**isual **I**nteractive **C**omputer **I**nformation)
 These C.D.'s contain multimedia documentation providing quick access to service information.
 Part No. [TZS7EZ006](#), [TZS7EZ005](#) & [TZS8EZ001](#)
 1. Service Manuals
 2. Instruction Books
 3. Technical Information
- **TASMIN** (**T**echnically **A**dvanced **S**ystem for **M**ultimedia **I**nteractive **N**otes)
 As well as providing a first step towards more interactive training this product also achieves quick access to Technical Information.

WAVEFORM PATTERN TABLE

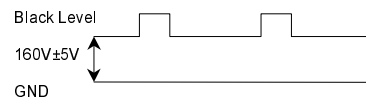


ALIGNMENT SETTINGS

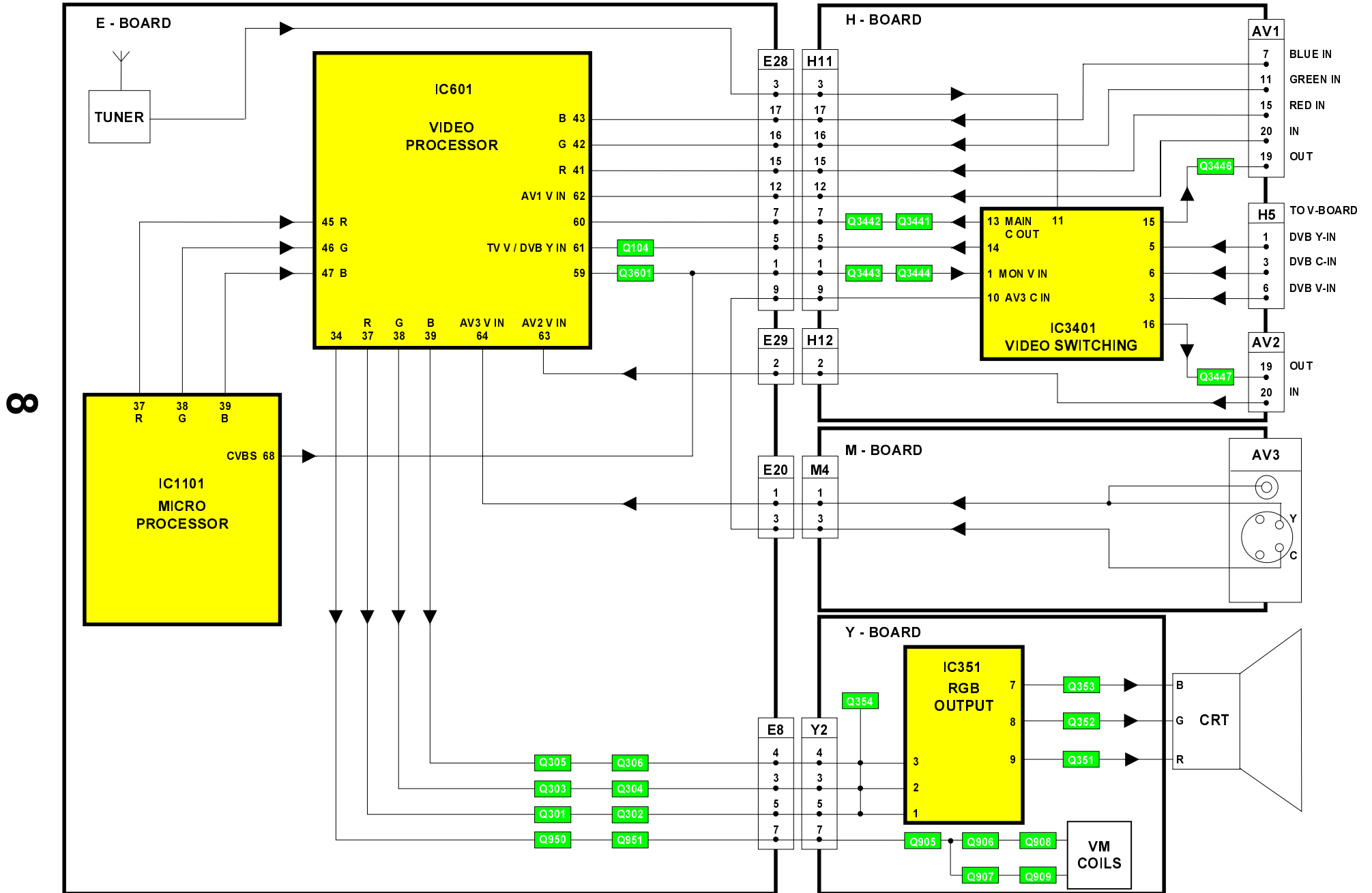
(The figures below are nominal and used for representative purposes only.)

1. Set the Bass to maximum position, set the Treble to minimum position, press the volume down button (-V) on the customer controls at the front of the TV and at the same time press the **INDEX** button on the remote control, this will place the TV into the Service Mode.
2. Press the **RED / GREEN** buttons to step up / down through the functions.
3. Press the **YELLOW / BLUE** buttons to alter the function values.
4. Press the **STR** button after each adjustment has been made to store the required values.
5. To exit the Service Mode, press the **"N"** button.

Alignment Function		Settings / Special features
Horizontal Position	H-Pos 061	Optimum setting.
Vertical Position	V-Pos 005	Optimum setting.
Horizontal Amplitude	H-Amp 055	Optimum setting.
Vert. Amplitude	V-Amp 054	Optimum setting.
EW-amplitude	E/W-Amp1 -128	Optimum setting.
EW-amplitude	E/W-Amp2 006	Optimum setting.
Trapezium-comp	Trapez-1 047	Optimum setting.
Trapezium-comp	Trapez-2 -128	Optimum setting.
Vertical Linearity	V-Lin 006	Optimum setting.
Vertical Symmetry	V-Sym 002	Optimum setting.
DVCO	DVCO -005	Receive a PAL Colour Bar Pattern. For DVCO alignment press " Blue " button, wait until the colours are changing slowly and press " STR ".
Cut-off DC	Cut-off 0171	To adjust Cutoff connect an oscilloscope to the blue cathode. Press " STR " and adjust "cutoff" value using the " Yellow " and " Blue " buttons until the black level is $160V \pm 5V$ press " STR " to store the value. Remove the oscilloscope. Select Ug2 adjustment and adjust the screen VR until the display shows "O.K."
Ug2 Test	Ug2 055 O.K.	
Highlight Lowlight	High 0902 0777 0864 Low 0117 0132 0112	Optimum setting.
Sub-Brightness	Sub-Brightness 255	Optimum setting.

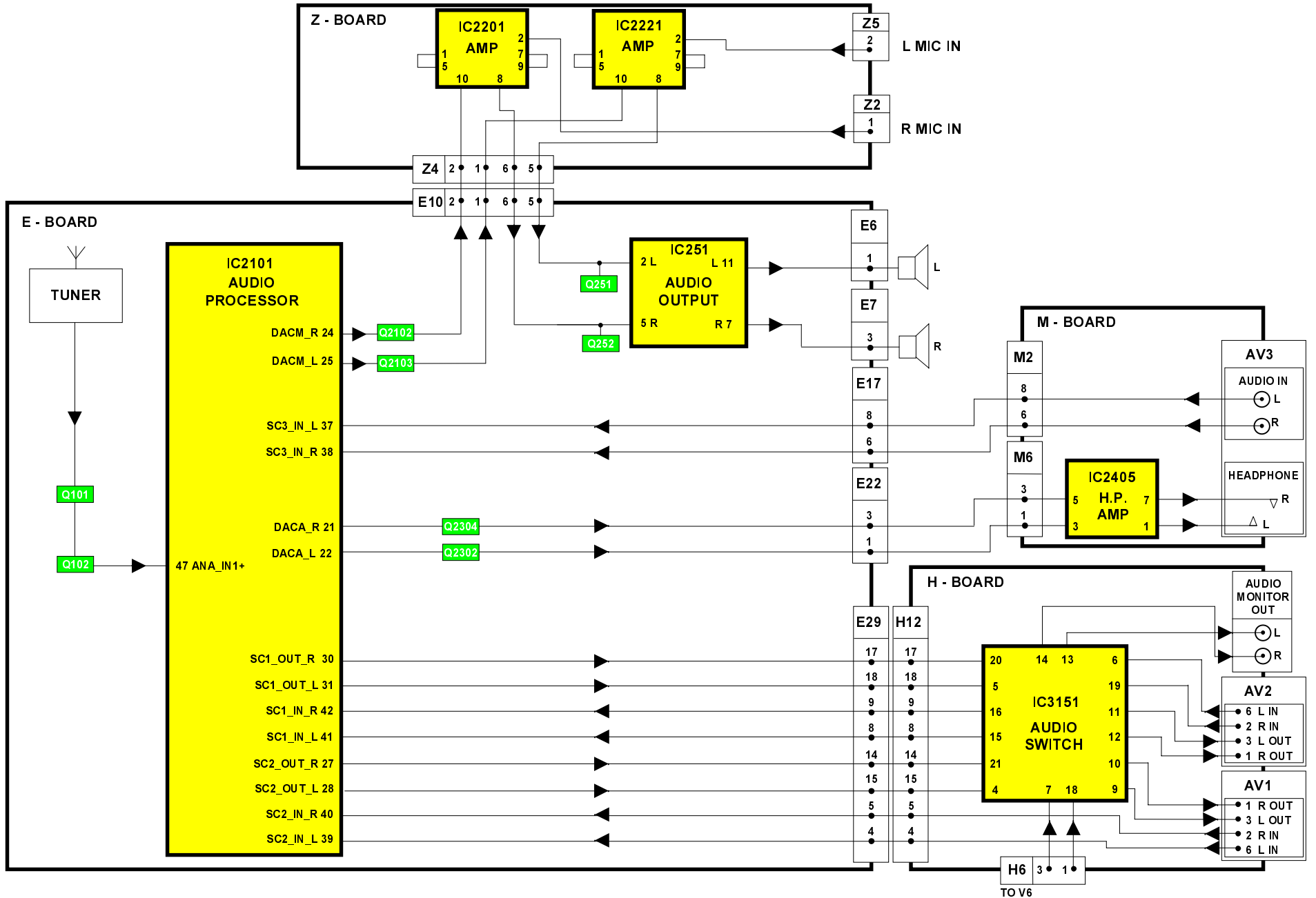


VIDEO BLOCK DIAGRAM



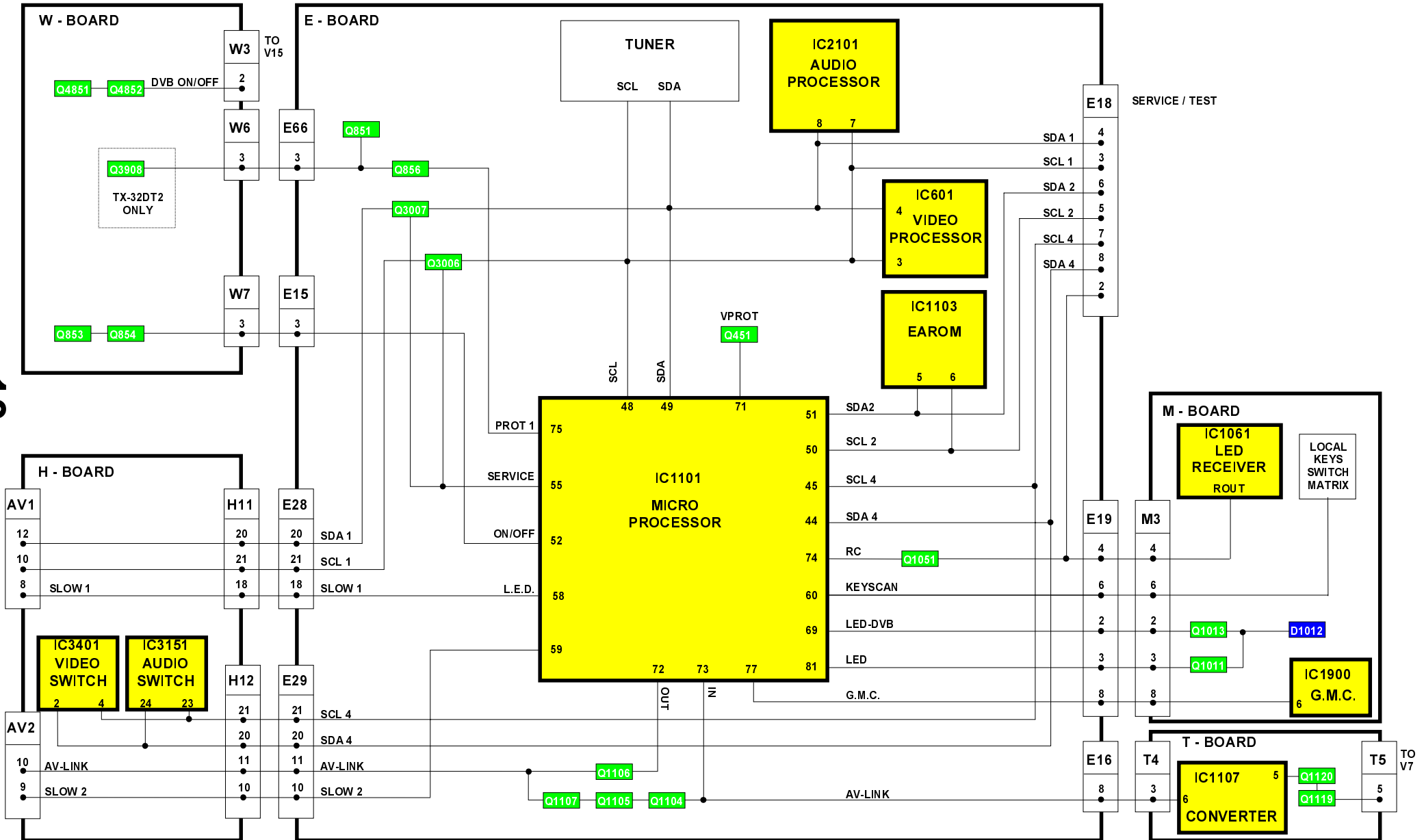
AUDIO BLOCK DIAGRAM

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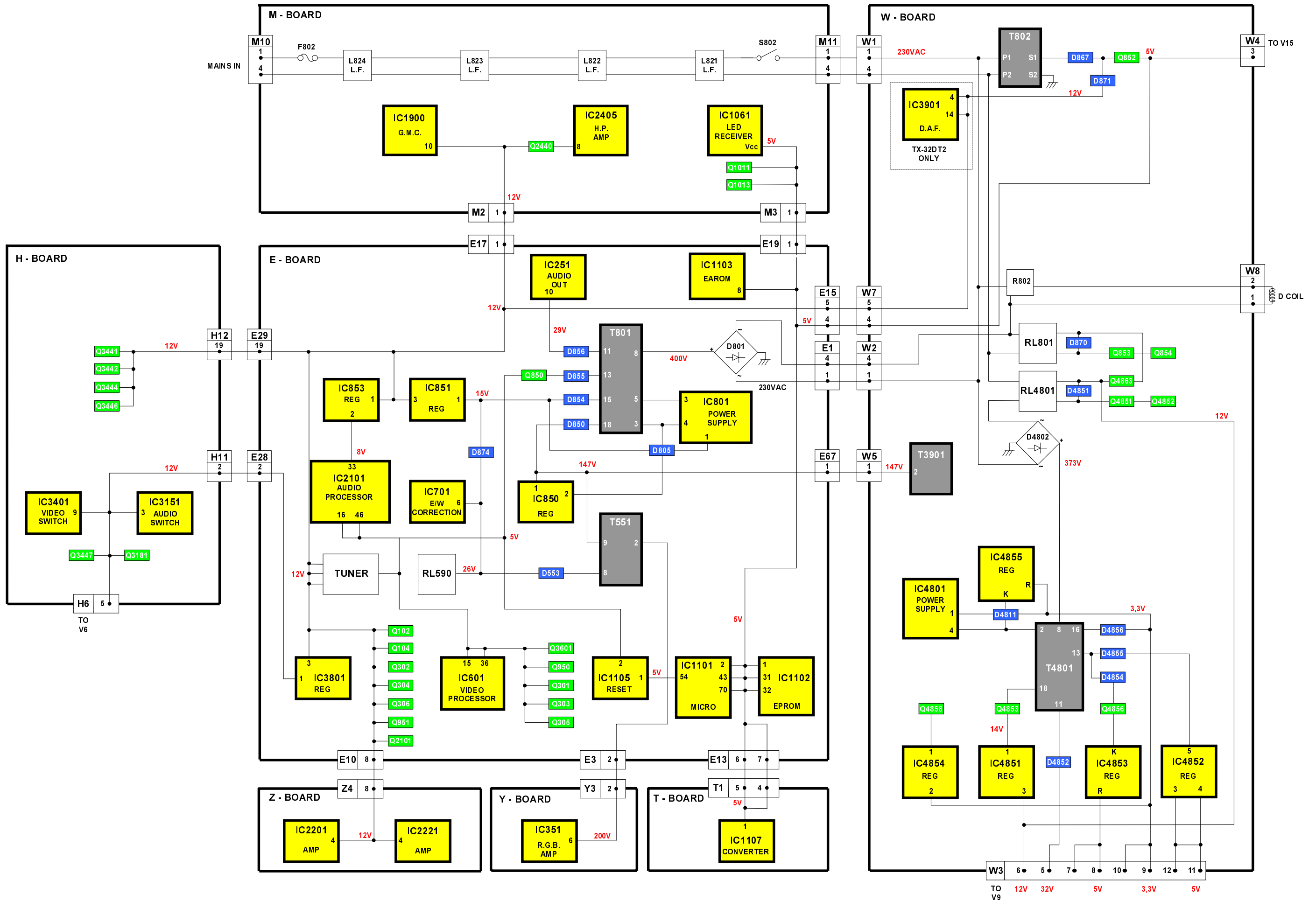


CONTROL BLOCK DIAGRAM

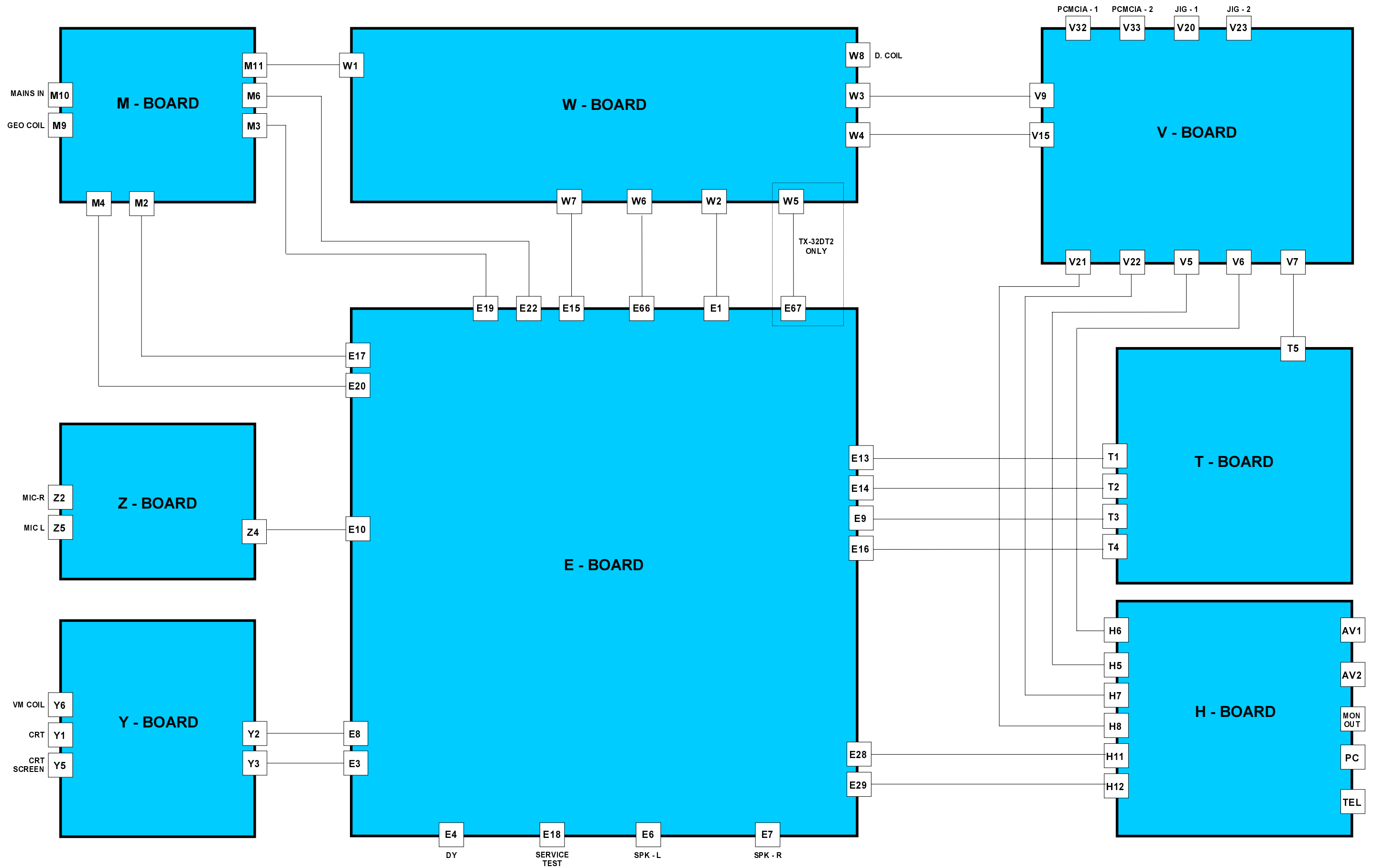
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POWER SUPPLY BLOCK DIAGRAM

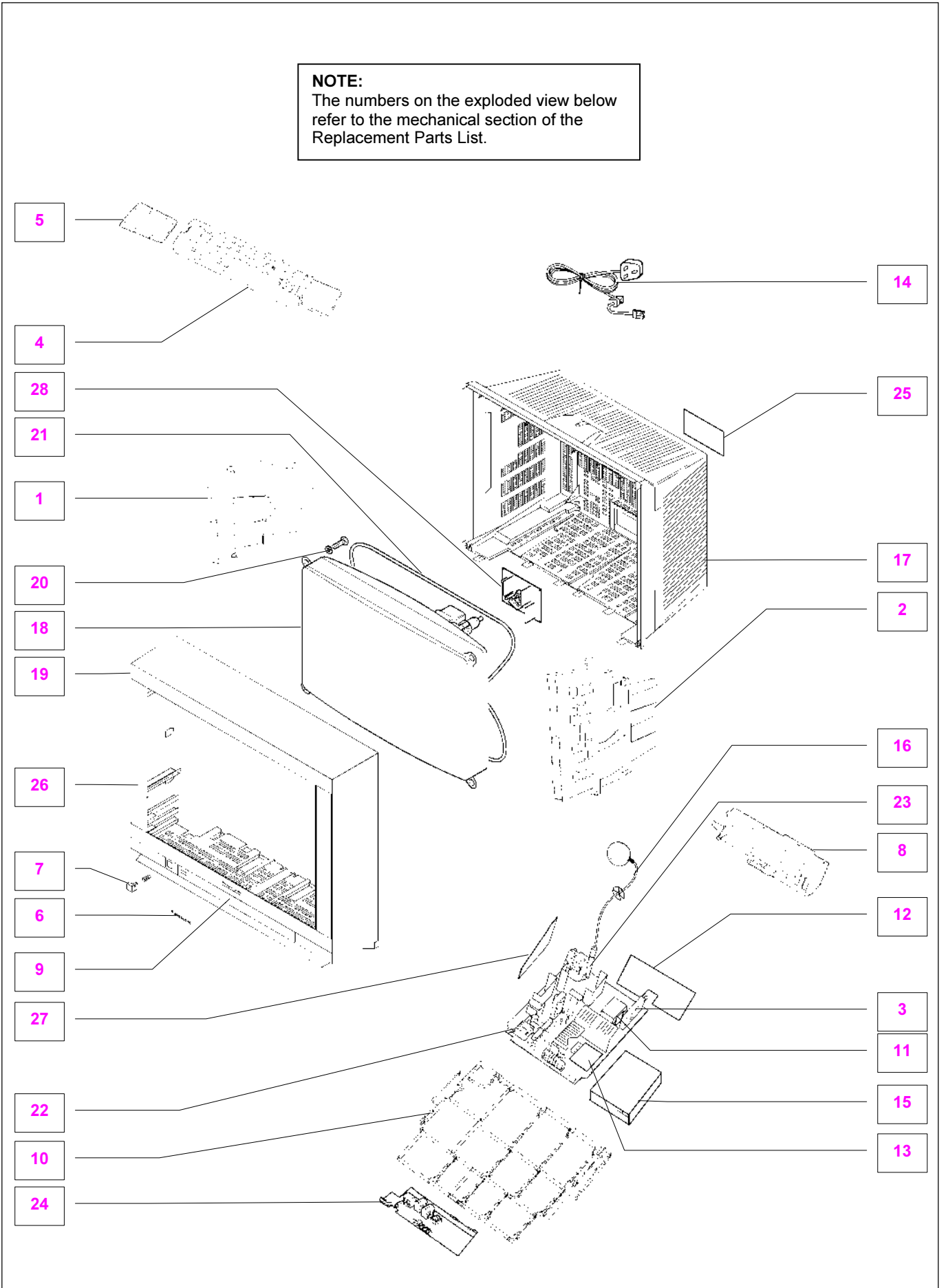


WIRING BLOCK DIAGRAM




PARTS LOCATION










NOTE:
The numbers on the exploded view below refer to the mechanical section of the Replacement Parts List.





REPLACEMENT PARTS LIST

Important Safety Notice

Components Identified by  mark have special characteristics important for safety.
 * When replacing any of these components, use only manufacturers specified parts.
 In case of ordering these spare parts, please always add the complete Model-Type number to your order.

Cct Ref	Parts Number	Description
COMMON PARTS		
MECHANICAL PARTS		
1	EAB10106BL	LEFT SPEAKER
2	EAB10106BR	RIGHT SPEAKER
3	ENG27601G	TUNER 
4	EUR511230	REMOTE CONTROL
5	EUR51EC904A	BATTERY COVER (REMOTE)
6	TBMA060	PANASONIC BADGE
7	TBX8E068	POWER BUTTON
8	TKP8E1305	AV COVER
9	TKP8E1313	DOOR LID
10	TMX8E038	CHASSIS FRAME
11	TNP8EZ001AC	Z P.C.B. 
12	TNPA1561AA	H P.C.B. 
13	TNPA1567AA	T P.C.B. 
14	TSX8E0032	POWER CORD 
15	TXN-V10ECG	DVB UNIT (EXCHANGE) 
MISCELLANEOUS COMPONENTS		
	31221212478	FIX CLIP
	832AG11D-ESL	IC SOCKET
	F9-4-220	RELAY
	KRCBC160928B	FERRITE CORE
	PLCC-84-T	84 PIN IC SOCKET
	TBM8E1935-1	PRESET LABEL
	TBM8E1936-1	BLANKING LABEL
	TBM8E1966	INDICATION SHEET
	TBM8E1967	DVB SHEET
	TBM8E1969	INDICATION SHEET
	TEK6940	LID CATCH
	TES8E019	POWER BUTTON SPRING
	TKP8E1288	LED COVER
	TKP8E1300	I.R. COVER
	UM-3DJ-2P	BATTERY PACK
	VS-PK1/2	VIDEO CABINET
R802	232266296706	THERMISTOR 
R803	232266296706	THERMISTOR 
INSTRUCTION BOOKS		
	TQB8E2840-2	ENGLISH 
I.C.s		
IC251	LA4282	AUDIO OUTPUT
IC351	TDA6103Q-N3	R.G.B. OUTPUT
IC451	LA7845N	VERTICAL OUTPUT
IC601	VDP3120BPPC2	VIDEO PROCESSOR
IC701	TEA2031A	E/W CORRECTION
IC801	STRF6654LF51	POWER SUPPLY
IC850	SE140N	ERROR AMPLIFIER

Cct Ref	Parts Number	Description
IC851	L78M12MRB	12V REGULATOR
IC853	AN78L08TA	8V REGULATOR
IC1061	RPM-637CBRL	LED RECEIVER
IC1101	SDA5450C69	MICRO PROCESSOR
IC1102	27C2001-AA01	EPROM *
IC1104	MN1381-R(TA)	RESET
IC1105	MN1381-T(TA)	RESET
IC1107	TVSA0233	CONVERTER
IC1900	LA6515	EARTH CORRECTION
IC2101	MSP3410DPOB4	AUDIO PROCESSOR
IC2201	AN6554NSF-E2	OPERATIONAL AMPLIFIER
IC2221	AN6554NSF-E2	OPERATIONAL AMPLIFIER
IC2405	NJM4556AD	HEADPHONE AMPLIFIER
IC3151	TEA6420	AUDIO SWITCH
IC3401	TEA6415C	VIDEO SWITCH
IC3801	AN7809FLB	9V REGULATOR
IC4801	STRF6653LF53	POWER SUPPLY
IC4851	AN78M12-LB	12V REGULATOR
IC4852	SI-3050CA	REGULATOR
IC4853	TL431CLPM	REGULATOR
IC4854	S-80728AN-Z	REGULATOR
IC4855	TL431CLPM	REGULATOR
FUSES		
F802	19181-3.15	FUSE 
F4801	TR5-T4000	FUSE 
F-802	EYF52BC	FUSE HOLDER
DIODES		
D001	MA4020	DIODE
D002	MA4020	DIODE
D251	MA2180BLFS	DIODE
D253	MA700TA5	DIODE
D254	MA700TA5	DIODE
D354	1SR124-4AT82	DIODE
D355	1SR124-4AT82	DIODE
D356	1SR124-4AT82	DIODE
D357	MA165TA5	DIODE
D358	MA165TA5	DIODE
D359	MA165TA5	DIODE
D360	MTZJT-7715A	DIODE
D361	MA165TA5	DIODE
D362	MA165TA5	DIODE
D363	MA165TA5	DIODE
D364	MA165TA5	DIODE
D453	MA165TA5	DIODE
D454	ERA15-02V3	DIODE
D456	MTZJT-775.6C	DIODE
D457	MA165TA5	DIODE
D501	MA165TA5	DIODE
D502	1SR124-4AT82	DIODE
D511	MTZJ4.7C	DIODE
D551	ERD07-15L7	DIODE
D552	RU3LFA1	DIODE

Cct Ref	Parts Number	Description
D553	1SR124-4AT82	DIODE
D554	1SR124-4AT82	DIODE
D556	MA165TA5	DIODE
D557	EU02	DIODE
D558	1SR124-4AT82	DIODE
D591	MA165TA5	DIODE
D601	DAN217T146	DIODE
D603	DAN217T146	DIODE
D605	DAN212KT146	DIODE
D606	MA165TA5	DIODE
D609	1SR124-4AT82	DIODE
D610	MA704ATX	DIODE
D614	MA165TA5	DIODE
D615	STZ6.2NT146	DIODE
D616	STZ6.2NT146	DIODE
D617	MA3068MTX	DIODE
D701	MA165TA5	DIODE
D702	MTZJT-775.1C	DIODE
D704	MA29TA5	DIODE
D705	MTZJT-775.6C	DIODE
D801	RBV-608LF-B	DIODE
D802	ERA22-10	DIODE
D803	1SR124-4AT82	DIODE
D804	1SR124-4AT82	DIODE
D805	TLP621GR-LF2	PHOTO COUPLER
D806	1SR124-4AT82	DIODE
D807	1SR124-4AT82	DIODE
D850	RU4BLF-L1	DIODE
D851	MTZJT776.2B	DIODE
D852	MA165TA5	DIODE
D853	MA2180BLFS	DIODE
D854	TVSRU2AMLFA5	DIODE
D855	FML22SLF610	DIODE
D856	RU4AMLF-M1	DIODE
D857	MTZJT-775.1B	DIODE
D858	MA165TA5	DIODE
D859	MA165TA5	DIODE
D861	MA165TA5	DIODE
D862	MTZJT-7736A	DIODE
D863	MA165TA5	DIODE
D865	MA165TA5	DIODE
D866	MA165TA5	DIODE
D867	EK06-V0	DIODE
D868	1N4150T-77	DIODE
D869	1N4150T-77	DIODE
D870	MA165TA5	DIODE
D871	1N4150T-77	DIODE
D873	MTZJT-775.6C	DIODE
D874	1SR124-4AT82	DIODE
D875	BZX79A75A26A	DIODE
D901	MA165TA5	DIODE
D902	MA165TA5	DIODE
D904	MA165TA5	DIODE
D905	MA165TA5	DIODE
D906	RLS72TE-11	DIODE
D1012	LN11WP38CF3	LED
D1101	MA165TA5	DIODE
D1102	MA165TA5	DIODE
D1104	MA165TA5	DIODE
D1105	MA704ATX	DIODE
D1112	MA165TA5	DIODE
D2101	MA723TA5	DIODE
D2102	MA723TA5	DIODE
D2103	MA723TA5	DIODE
D2104	MA723TA5	DIODE
D2105	MTZJT-778.2C	DIODE

Cct Ref	Parts Number	Description
D2411	MA165TA5	DIODE
D2413	MA165TA5	DIODE
D3151	MA2091ALFS	DIODE
D3181	MA170	DIODE
D3182	MA723TA5	DIODE
D3201	MTZJT-778.2C	DIODE
D3202	MTZJT-778.2C	DIODE
D3441	MA4100	DIODE
D3442	MTZJT-7712C	DIODE
D3443	MTZJT-7712C	DIODE
D3931	MTZJT-7724D	DIODE
D4801	MA2270LFS	DIODE
D4802	RBV4-08	DIODE
D4803	TMPG10G3	DIODE
D4804	ERA81004V3	DIODE
D4805	TMPG10G3	DIODE
D4807	AU01ZV0	DIODE
D4808	AU01ZV0	DIODE
D4809	AU01ZV0	DIODE
D4810	EG01CV0	DIODE
D4811	PC123FY2	DIODE
D4851	1SS254T-77	DIODE
D4852	EU02	DIODE
D4853	EU02	DIODE
D4854	D10SC6MRL	DIODE
D4855	D10SC6MRL	DIODE
D4856	D10SC6MRL	DIODE
D4857	MA29TA5	DIODE
D4858	MA1043MTA	DIODE
D4859	MA1270H	DIODE
D4861	MA29TA5	DIODE
D4862	MA723TA5	DIODE
D4863	MA723TA5	DIODE
TRANSISTORS		
Q101	BC847B	TRANSISTOR
Q102	BC847B	TRANSISTOR
Q104	BC847B	TRANSISTOR
Q251	2SD1328STX	TRANSISTOR
Q252	2SD1328STX	TRANSISTOR
Q253	BC847B	TRANSISTOR
Q254	BC847B	TRANSISTOR
Q301	BC847B	TRANSISTOR
Q302	FMY4T148	TRANSISTOR
Q303	BC847B	TRANSISTOR
Q304	FMY4T148	TRANSISTOR
Q305	BC847B	TRANSISTOR
Q306	FMY4T148	TRANSISTOR
Q351	2SA1767	TRANSISTOR
Q352	2SA1767	TRANSISTOR
Q353	2SA1767	TRANSISTOR
Q354	BC857B	TRANSISTOR
Q451	BC857B	TRANSISTOR
Q503	2SD2398-M2	TRANSISTOR
Q551	2SC5517000LK	TRANSISTOR
Q552	2SC1473-RN	TRANSISTOR
Q590	BC847B	TRANSISTOR
Q701	BC857B	TRANSISTOR
Q850	2SD2396K-M3	TRANSISTOR
Q851	BC857B	TRANSISTOR
Q852	2SC1383-S	TRANSISTOR
Q853	BC847B	TRANSISTOR
Q854	BC847B	TRANSISTOR
Q855	BC847B	TRANSISTOR
Q856	BC847B	TRANSISTOR
Q857	2SA1018QTA	TRANSISTOR
Q905	BC847B	TRANSISTOR

Cct Ref	Parts Number	Description
Q906	BC847B	TRANSISTOR
Q907	BC857B	TRANSISTOR
Q908	2SA1535ARLB	TRANSISTOR
Q909	2SC3944ARLB	TRANSISTOR
Q950	BC847B	TRANSISTOR
Q951	FMY4T148	TRANSISTOR
Q1011	BC857B	TRANSISTOR
Q1013	BC857B	TRANSISTOR
Q1051	BC847B	TRANSISTOR
Q1101	BC847B	TRANSISTOR
Q1104	BC847B	TRANSISTOR
Q1105	BC847B	TRANSISTOR
Q1106	BC847B	TRANSISTOR
Q1107	BC847B	TRANSISTOR
Q1108	BC847B	TRANSISTOR
Q1115	BC847B	TRANSISTOR
Q1118	BC857B	TRANSISTOR
Q1119	BC847B	TRANSISTOR
Q1120	BC847B	TRANSISTOR
Q1900	BC847B	TRANSISTOR
Q2101	BC857B	TRANSISTOR
Q2102	BC857B	TRANSISTOR
Q2103	BC857B	TRANSISTOR
Q2302	BC857B	TRANSISTOR
Q2304	BC857B	TRANSISTOR
Q2435	BC857B	TRANSISTOR
Q2436	BC847B	TRANSISTOR
Q2437	BC847B	TRANSISTOR
Q2440	BC847B	TRANSISTOR
Q3006	BC847B	TRANSISTOR
Q3007	BC847B	TRANSISTOR
Q3181	BC857B	TRANSISTOR
Q3182	BC857B	TRANSISTOR
Q3183	BC847B	TRANSISTOR
Q3184	BC847B	TRANSISTOR
Q3185	BC847B	TRANSISTOR
Q3186	BC847B	TRANSISTOR
Q3187	BC847B	TRANSISTOR
Q3188	BC847B	TRANSISTOR
Q3441	BC847B	TRANSISTOR
Q3442	BC847B	TRANSISTOR
Q3443	BC847B	TRANSISTOR
Q3444	BC847B	TRANSISTOR
Q3446	BC847B	TRANSISTOR
Q3447	BC847B	TRANSISTOR
Q3601	BC847B	TRANSISTOR
Q3921	BC847B	TRANSISTOR
Q4851	BC847B	TRANSISTOR
Q4852	BC847B	TRANSISTOR
Q4854	BC847B	TRANSISTOR
Q4855	BC857B	TRANSISTOR
Q4856	2SD1474PLB	TRANSISTOR
Q4857	BC857B	TRANSISTOR
Q4858	BC857B	TRANSISTOR
Q4859	BC857B	TRANSISTOR
Q4860	BC847B	TRANSISTOR
TRANSFORMERS		
T501	ETH19Y173AY	TRANSFORMER
T801	ETS42AE256AD	TRANSFORMER
T802	ETP35KAN619U	TRANSFORMER
T4801	ETS29AK347AC	TRANSFORMER
COILS		
L003	EXCELD35V	COIL
L004	EXCELSA35T	COIL
L007	EXCELD35V	COIL
L010	EXCEMT103DTM	COIL

Cct Ref	Parts Number	Description
L107	TLTACT6R8K	COIL
L302	TLTACT4R7K	COIL
L451	EXCELSA35T	COIL
L501	EXCELSA35T	COIL
L590	ELC08D682E	COIL
L601	TLTACT4R7K	COIL
L602	TLTACT4R7K	COIL
L603	ELEBR6R8KA	COIL
L607	ELJFC2R2KF	COIL
L641	EXCELSA24B	COIL
L642	EXCELD35V	COIL
L644	EXCELSA39V	COIL
L824	ELF18D486D	COIL
L850	EXCELSA35T	COIL
L851	EXCELSA35T	COIL
L852	ELEIE470KA	COIL
L853	EXCELSA35T	COIL
L854	EXCELSA35T	COIL
L855	EXCELSA35T	COIL
L901	EXCELSA24T	COIL
L902	EXCELSA24T	COIL
L1061	TLT331K991R	COIL
L1103	TLTACT100K	COIL
L1105	ELJFC2R2KF	COIL
L1900	EXCELD35V	COIL
L2101	TLTACT100K	COIL
L2103	EXCELSA35T	COIL
L2104	TLTACT4R7K	COIL
L2501	EXCELSA35T	COIL
L2502	EXCELSA35T	COIL
L3201	ELEBR6R8KA	COIL
L3202	ELEBR6R8KA	COIL
L3203	ELEBR6R8KA	COIL
L3204	ELEBR6R8KA	COIL
L3205	EXCELD35V	COIL
L3206	TLTACT2R2K	COIL
L3207	EXCELD35V	COIL
L3401	TLT015K991R	COIL
L3402	TLT015K991R	COIL
L3403	TLT015K991R	COIL
L3404	TLT015K991R	COIL
L3405	TLT022K991R	COIL
L3406	TLT015K991R	COIL
L3407	TLT015K991R	COIL
L3408	TLT015K991R	COIL
L3409	TLT015K991R	COIL
L3410	TLT022K991R	COIL
L3411	EXCELSA35T	COIL
L3412	EXCELSA35T	COIL
L3441	TLT100K991R	COIL
L3444	TLT100K991R	COIL
L3445	TLT100K991R	COIL
L4802	EXCELD35C	COIL
L4803	EXCELD35C	COIL
L4804	EXCELSA35B	COIL
L4852	EXCELD35V	COIL
R551	EXCELSA39V	COIL
FILTERS		
L821	ELF18D850C	LINE FILTER
L822	ELF18D850C	LINE FILTER
L823	ELF18N012A	LINE FILTER
CRYSTALS		
X601	4730007267	CRYSTAL
X1101	TSSA121	CRYSTAL
X1102	TSSA066	CRYSTAL
X2101	4730007158	CRYSTAL

Cct Ref	Parts Number	Description				
RESISTORS						
	ERC12GK825	SOLID	0.5W	10%	8M2	Ω
C101	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA1	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA1	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA2	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA2	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA3	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA3	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA4	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA5	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA5	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA6	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA6	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA7	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA8	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA8	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA9	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA9	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA10	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA10	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA11	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA12	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA12	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA13	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA13	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA14	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA14	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA15	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA15	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA16	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA16	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA17	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA17	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA18	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA19	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA20	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA21	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA22	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA23	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA24	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA25	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA25	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA26	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA26	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA27	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA27	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA28	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA29	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA29	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA30	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA30	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA31	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA32	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA33	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA34	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA35	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA36	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA37	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JA38	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA39	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA41	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA42	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA43	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA44	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA45	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω

Cct Ref	Parts Number	Description				
JA46	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA47	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA200	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA201	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA202	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA204	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA205	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA208	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA209	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA210	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA211	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA212	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA213	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA214	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA215	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA216	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA217	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA218	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA219	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA223	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA224	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JA225	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JSE10	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSE12	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSE22	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSE26	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSE33	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSE35	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSE42	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSE43	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSE50	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSE51	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSE53	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSH001	ERJ8GEY0R00	S.M.CARB	.125W	5%	0	Ω
JSH002	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSH004	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSH005	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSH010	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSM7	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSM26	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSM27	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSM29	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSM32	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSZ001	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
JSZ004	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
R001	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K	Ω
R002	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100	Ω
R003	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39K	Ω
R006	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100	Ω
R007	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100	Ω
R101	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0	Ω
R102	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K	Ω
R103	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2	Ω
R104	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3	Ω
R105	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100	Ω
R106	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680	Ω
R107	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K	Ω
R121	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470	Ω
R140	ERJ6GEYJ330	S.M.CARB	0.1W	5%	33	Ω
R251	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100	Ω
R252	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7	Ω
R253	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K	Ω
R254	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100	Ω
R255	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K	Ω
R256	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470	Ω
R258	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7	Ω

Cct Ref	Parts Number	Description				
R260	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R261	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω	
R262	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R263	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω	
R264	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R265	ERD25TJ2R2	CARBON	0.25W	5%	2R2 Ω	
R266	ERD25TJ2R2	CARBON	0.25W	5%	2R2 Ω	
R267	ERF7ZK4R7	WOUND	7W	10%	4R7 Ω	⚠
R268	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R269	ERQ14AJ101	METAL	0.25W	5%	100 Ω	⚠
R270	ERQ14AJ220	FUSIBLE	0.25W	5%	22 Ω	⚠
R271	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R272	ERF7ZK4R7	WOUND	7W	10%	4R7 Ω	⚠
R301	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 Ω	
R302	ERJ8GEYJ102	S.M.CARB	.125W	5%	1K0 Ω	
R303	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω	
R304	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330 Ω	
R305	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 Ω	
R306	ERJ8GEYJ102	S.M.CARB	.125W	5%	1K0 Ω	
R307	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω	
R308	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330 Ω	
R309	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 Ω	
R310	ERJ8GEYJ102	S.M.CARB	.125W	5%	1K0 Ω	
R311	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω	
R312	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330 Ω	
R351	ERJ6GEYJ302	S.M.CARB	0.1W	5%	3K Ω	
R352	ERJ6GEYJ302	S.M.CARB	0.1W	5%	3K Ω	
R353	ERJ6GEYJ302	S.M.CARB	0.1W	5%	3K Ω	
R354	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω	
R355	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω	
R356	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω	
R357	ERG12DJ114V	METAL	0.5W	5%	110K Ω	
R358	ERG12DJ114V	METAL	0.5W	5%	110K Ω	
R359	ERG12DJ114V	METAL	0.5W	5%	110K Ω	
R363	ERDS2FJ103T	CARBON	2W	5%	10K Ω	⚠
R364	ERDS2FJ103T	CARBON	2W	5%	10K Ω	⚠
R365	ERDS2FJ103T	CARBON	2W	5%	10K Ω	⚠
R366	ERDS1TJ152	CARBON	0.5W	5%	1K5 Ω	
R367	ERDS1TJ152	CARBON	0.5W	5%	1K5 Ω	
R368	ERDS1TJ152	CARBON	0.5W	5%	1K5 Ω	
R369	ERD25TJ472	CARBON	0.25W	5%	4K7 Ω	
R370	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω	
R372	ERQ12AJ181	FUSIBLE	0.5W	5%	180 Ω	⚠
R373	ERJ6GEYJ220	S.M.CARB	0.1W	5%	22 Ω	
R374	ERD25TJ274	CARBON	0.25W	5%	270K Ω	
R375	ERJ6GEYJ684	S.M.CARB	0.1W	5%	680K Ω	
R376	ERJ6GEYJ183	S.M.CARB	0.1W	5%	18K Ω	
R377	ERQ1CKPR68	FUSIBLE	1W	10%	R68 Ω	⚠
R378	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R379	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R380	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R381	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω	
R451	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω	
R452	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R453	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R454	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R455	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R456	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω	
R457	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω	
R458	ERD25TJ1R5	CARBON	0.25W	5%	1R5 Ω	
R459	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R460	ERDS1TJ221	CARBON	0.5W	5%	220 Ω	
R463	ERD25TJ222	CARBON	0.25W	5%	2K2 Ω	
R464	ERJ6GEYJ752	S.M.CARB	0.1W	5%	7K5 Ω	
R465	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω	
R502	ERJ6GEYJ511	S.M.CARB	0.1W	5%	510 Ω	

Cct Ref	Parts Number	Description				
R506	ERD25TJ560	CARBON	0.25W	5%	56 Ω	
R507	ERG2FJ151H	METAL	2W	5%	150 Ω	⚠
R509	ERDS1TJ152	CARBON	0.5W	5%	1K5 Ω	
R510	ERDS1TJ152	CARBON	0.5W	5%	1K5 Ω	
R555	ERQ12HKR33	METAL	0.5W	5%	R33 Ω	⚠
R557	ERD25TJ563	CARBON	0.25W	5%	56K Ω	
R558	ERD25TJ683	CARBON	0.25W	5%	68K Ω	
R559	ERQ12HKR33	METAL	0.5W	5%	R33 Ω	⚠
R560	ERJ6GEYJ274	S.M.CARB	0.1W	5%	270K Ω	
R561	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω	
R564	ERJ6GEYJ623	S.M.CARB	0.1W	5%	62K Ω	
R566	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56K Ω	
R591	ERG1SJ152	METAL	1W	5%	1K5 Ω	
R593	ERG1SJ152	METAL	1W	5%	1K5 Ω	
R594	ERG3FJ122H	METAL	3W	5%	1K2 Ω	⚠
R597	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R598	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2 Ω	
R599	ERDS1TJ680	CARBON	0.5W	5%	68 Ω	
R601	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R602	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820 Ω	
R603	ERJ8GEYJ103	S.M.CARB	.125W	5%	10K Ω	
R604	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R605	ERD25TJ331	CARBON	0.25W	5%	330 Ω	
R606	ERD25TJ331	CARBON	0.25W	5%	330 Ω	
R607	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820 Ω	
R608	ERJ6GEYJ271	S.M.CARB	0.1W	5%	270 Ω	
R609	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2 Ω	
R610	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R611	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R612	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω	
R613	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5 Ω	
R614	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2 Ω	
R615	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω	
R622	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R636	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω	
R645	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R647	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω	
R648	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R650	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω	
R651	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω	
R652	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω	
R653	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R654	ERJ6GEYJ622	S.M.CARB	0.1W	5%	6K2 Ω	
R655	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R658	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15K Ω	
R659	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R660	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R661	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω	
R662	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω	
R663	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω	
R664	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω	
R665	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω	
R666	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R703	ERG2FJ821	METAL	2W	5%	820 Ω	⚠
R704	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56K Ω	
R705	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω	
R706	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R707	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 Ω	
R708	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39K Ω	
R709	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39K Ω	
R710	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω	
R711	ERG1SJ101	METAL	1W	5%	100 Ω	
R712	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω	
R804	ERG3FJ563H	METAL	3W	5%	56K Ω	⚠
R805	ERD25TJ473	CARBON	0.25W	5%	47K Ω	
R806	ERD25TJ100	CARBON	0.25W	5%	10 Ω	

Cct Ref	Parts Number	Description				
R807	ERD25TJ332	CARBON	0.25W	5%	3K3 Ω	
R809	ERD25TJ681	CARBON	0.25W	5%	680 Ω	
R810	ERW2PKR27	WOUND	2W	10%	R27 Ω	⚡
R811	ERW2PKR27	WOUND	2W	10%	R27 Ω	⚡
R812	ERD75TAJ825	CARBON	0.75W	5%	8M2 Ω	⚡
R813	ERF7ZK2R7	WOUND	7W	20%	2R7 Ω	⚡
R814	ERD25TJ473	CARBON	0.25W	5%	47K Ω	
R815	ERD25TJ222	CARBON	0.25W	5%	2K2 Ω	
R821	ERC12ZGK105C	SOLID	0.5W	10%	1M Ω	
R850	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560 Ω	
R852	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R853	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω	
R854	ERG2FJ223	METAL	2W	5%	22K Ω	⚡
R855	ERJ6GEYJ752	S.M.CARB	0.1W	5%	7K5 Ω	
R857	ERJ6GEYJ752	S.M.CARB	0.1W	5%	7K5 Ω	
R858	ERJ6GEYJ752	S.M.CARB	0.1W	5%	7K5 Ω	
R859	ERJ6GEYJ753	S.M.CARB	0.1W	5%	75K Ω	
R860	ERQ1CJP2R2	FUSIBLE	1W	10%	2R2 Ω	⚡
R861	ERD25TJ221	CARBON	0.25W	5%	220 Ω	
R862	ERD25TJ272	CARBON	0.25W	5%	2K7 Ω	
R863	ERDS1TJ560	CARBON	0.5W	5%	56 Ω	
R864	ERDS1TJ181	CARBON	0.5W	5%	180 Ω	
R865	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R867	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R869	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω	
R870	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7 Ω	
R871	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15K Ω	
R872	ERG1SJ183	METAL	1W	5%	18K Ω	
R873	ERG1SJ223	METAL	1W	5%	22K Ω	
R874	ERD25TJ104	CARBON	0.25W	5%	100K Ω	
R876	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R877	ERW2PKR47	WOUND	2W	10%	R47 Ω	⚡
R878	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω	
R879	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680 Ω	
R882	ERG3FJ220H	METAL	3W	5%	22 Ω	⚡
R913	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω	
R914	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2 Ω	
R915	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5 Ω	
R916	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 Ω	
R919	ERQ14AJW390	FUSIBLE	0.25W	5%	39 Ω	⚡
R920	ERQ14AJW390	FUSIBLE	0.25W	5%	39 Ω	⚡
R921	ERD25TJ471	CARBON	0.25W	5%	470 Ω	
R922	ERD25TJ393	CARBON	0.25W	5%	39K Ω	
R923	ERD25TJ393	CARBON	0.25W	5%	39K Ω	
R924	ERDS1FJ390	CARBON	0.5W	5%	39 Ω	⚡
R925	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R926	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R927	ERD25TJ471	CARBON	0.25W	5%	470 Ω	
R928	ERD25TJ5R6	CARBON	0.25W	5%	5R6 Ω	
R929	ERDS1FJ471	CARBON	0.5W	5%	470 Ω	⚡
R930	ERD25TJ5R6	CARBON	0.25W	5%	5R6 Ω	
R931	ERDS1FJ390	CARBON	0.5W	5%	39 Ω	⚡
R935	ERQ14AJW3R9	FUSIBLE	0.25W	5%	3R9 Ω	⚡
R936	ERQ1CJP331	FUSIBLE	1W	5%	330 Ω	⚡
R951	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 Ω	
R952	ERJ8GEYJ102	S.M.CARB	.125W	5%	1K0 Ω	
R953	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω	
R954	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 Ω	
R1013	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω	
R1014	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R1015	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R1019	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R1020	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R1021	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R1023	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω	
R1051	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω	

Cct Ref	Parts Number	Description				
R1101	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1102	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω	
R1103	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330 Ω	
R1104	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330 Ω	
R1105	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω	
R1106	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω	
R1107	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω	
R1108	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω	
R1109	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω	
R1110	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω	
R1111	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω	
R1112	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω	
R1113	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1114	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1115	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω	
R1116	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1117	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1118	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω	
R1119	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω	
R1120	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1121	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1123	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1125	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω	
R1126	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1127	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1128	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8 Ω	
R1129	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8 Ω	
R1130	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R1131	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R1132	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1133	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7 Ω	
R1136	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω	
R1137	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R1138	ERJ6GEYJ105	S.M.CARB	0.1W	5%	1M Ω	
R1139	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω	
R1140	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω	
R1141	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω	
R1145	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1147	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1148	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1149	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω	
R1156	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1157	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω	
R1158	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R1159	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	
R1160	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω	
R1167	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10 Ω	
R1168	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω	
R1169	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω	
R1170	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω	
R1171	ERJ6GEYJ224	S.M.CARB	0.1W	5%	220K Ω	
R1172	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω	
R1173	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω	
R1174	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220 Ω	
R1175	ERJ6GEYJ225	S.M.CARB	0.1W	5%	2M2 Ω	
R1176	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10 Ω	
R1181	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1182	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1183	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω	
R1184	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω	
R1185	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1186	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1187	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1188	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1189	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω	
R1190	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω	

Cct Ref	Parts Number	Description			
R1192	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1201	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R1206	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R1215	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1224	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R1225	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R1226	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R1227	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R1228	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R1232	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R1234	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R1235	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R1236	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R1238	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R1240	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R1241	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1251	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2 Ω
R1252	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2 Ω
R1253	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3 Ω
R1254	ERJ6GEYJ512	S.M.CARB	0.1W	5%	5K1 Ω
R1255	ERJ6GEYJ912	S.M.CARB	0.1W	5%	9K1 Ω
R1256	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R1261	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R1900	ERQ12HJ150	FUSIBLE	0.1W	5%	15 Ω
R1901	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω
R1902	ERJ6GEYJ123	S.M.CARB	0.1W	5%	12K Ω
R1903	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R1904	ERDS1TJ2R2	CARBON	0.5W	5%	2R2 Ω
R1905	ERJ6GEYJ753	S.M.CARB	0.1W	5%	75K Ω
R1906	ERJ6GEYJ753	S.M.CARB	0.1W	5%	75K Ω
R1907	ERJ6GEYJ753	S.M.CARB	0.1W	5%	75K Ω
R1908	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R1909	ERDS1TJ2R2	CARBON	0.5W	5%	2R2 Ω
R1913	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R1914	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2101	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2102	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R2103	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R2109	ERJ6GEYJ183	S.M.CARB	0.1W	5%	18K Ω
R2110	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R2111	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220 Ω
R2112	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R2113	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6 Ω
R2114	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R2115	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2 Ω
R2116	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R2117	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R2118	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2 Ω
R2119	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R2120	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2 Ω
R2200	ERJ6GEYJ183	S.M.CARB	0.1W	5%	18K Ω
R2201	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56K Ω
R2203	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2204	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2 Ω
R2205	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6 Ω
R2206	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3 Ω
R2207	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R2208	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2209	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2210	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15K Ω
R2211	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3 Ω
R2212	ERJ6GEYJ123	S.M.CARB	0.1W	5%	12K Ω
R2213	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω
R2214	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2215	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2 Ω
R2220	ERJ6GEYJ183	S.M.CARB	0.1W	5%	18K Ω

Cct Ref	Parts Number	Description			
R2221	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56K Ω
R2223	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2224	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2 Ω
R2225	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6 Ω
R2226	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3 Ω
R2227	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R2228	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2229	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2230	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15K Ω
R2231	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3 Ω
R2232	ERJ6GEYJ123	S.M.CARB	0.1W	5%	12K Ω
R2233	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω
R2234	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2235	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2 Ω
R2305	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2 Ω
R2306	ERJ6GEYJ471Z	S.M.CARB	0.1W	5%	470 Ω
R2307	ERJ6GEYJ471Z	S.M.CARB	0.1W	5%	470 Ω
R2311	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2 Ω
R2456	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R2457	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R2458	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω
R2540	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680 Ω
R2541	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680 Ω
R2542	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R2543	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R2544	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3 Ω
R2545	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3 Ω
R2546	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R2547	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R2548	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2549	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2550	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R2551	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R2552	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2553	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2556	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R2557	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2558	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3046	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3047	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3048	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3049	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3050	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3058	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3059	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3060	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3061	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3062	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3063	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3065	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3066	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3067	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3068	ERJ8GEY0R00	S.M.CARB	.125W	5%	0 Ω
R3069	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3070	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3071	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3072	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3073	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3074	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3151	ERD2FCG560	CARBON	2W	2%	56 Ω
R3154	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3155	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3181	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15K Ω
R3182	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3183	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330 Ω
R3184	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7 Ω

Cct Ref	Parts Number	Description			
R3185	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3186	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R3187	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3188	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R3189	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3190	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R3191	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3192	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R3193	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3194	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R3195	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3196	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R3204	ERG2FJ151H	METAL	2W	5%	150 Ω
R3205	ERG2FJ151H	METAL	2W	5%	150 Ω
R3207	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3208	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15K Ω
R3209	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3210	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15K Ω
R3401	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3402	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3403	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3404	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3405	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33K Ω
R3406	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33K Ω
R3408	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3409	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3410	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3411	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3412	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R3413	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R3414	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R3415	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R3416	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3417	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3418	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3419	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3420	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33K Ω
R3421	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33K Ω
R3423	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3424	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3425	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3426	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R3427	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3428	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3441	ERD2FCG560	CARBON	2W	2%	56 Ω
R3442	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3443	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3444	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47 Ω
R3445	ERJ6GEYJ181	S.M.CARB	0.1W	5%	180 Ω
R3446	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47 Ω
R3447	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R3448	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R3449	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47 Ω
R3450	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47 Ω
R3451	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47 Ω
R3452	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R3453	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R3454	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R3455	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R3456	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47 Ω
R3457	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R3458	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47 Ω
R3459	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3460	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3461	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3462	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω

Cct Ref	Parts Number	Description			
R3463	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R3464	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R3465	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3466	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68 Ω
R3467	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3468	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3469	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3470	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω
R3471	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3472	ERJ6GEYJ302	S.M.CARB	0.1W	5%	3K Ω
R3473	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2 Ω
R3474	ERJ6GEYJ242	S.M.CARB	0.1W	5%	2K4 Ω
R3475	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 Ω
R3476	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680 Ω
R3479	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3482	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3486	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220 Ω
R3487	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3488	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3489	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68 Ω
R3492	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220 Ω
R3493	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3494	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3495	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68 Ω
R3496	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3497	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3601	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3602	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3603	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3604	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3605	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3606	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3607	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R3608	ERJ6GEYJ752	S.M.CARB	0.1W	5%	7K5 Ω
R3609	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R3610	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3965	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3966	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3967	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3968	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R3969	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R4802	ERG1SJ104P	METAL	0.5W	5%	100K Ω
R4803	ERG1SJ104P	METAL	0.5W	5%	100K Ω
R4805	ERX12SJ1R2	METAL	0.5W	5%	1R2 Ω
R4806	ERF5ZXJ150	WOUND	5W	5%	15 Ω
R4807	ERX12SJ1R2	METAL	0.5W	5%	1R2 Ω
R4808	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680 Ω
R4810	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2 Ω
R4811	ERG3FJ393H	METAL	0.25W	5%	39K Ω
R4812	ERG3FJ820H	METAL	3W	5%	82 Ω
R4813	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7 Ω
R4853	ERJ6GEYJ271	S.M.CARB	0.1W	5%	270 Ω
R4854	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R4855	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6 Ω
R4856	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R4857	ERQ14AJ331	METAL	0.25W	5%	330 Ω
R4858	ERO25CKF4121	METAL	0.25W	5%	120 Ω
R4859	ERO25CKF1002	METAL	0.25W	1%	10K Ω
R4860	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R4861	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R4862	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R4863	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R4864	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R4865	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R4866	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2 Ω
R4867	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω

Cct Ref	Parts Number	Description			
R4868	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R4869	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R4870	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R4871	ERO25CKF1052	METAL	0.25W	1%	10K5 Ω
R4872	ERO25CKF1002	METAL	0.25W	1%	10K Ω
R4873	ERX2FJR68H	METAL	0.5W	5%	R68 Ω
R4874	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R4875	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R4876	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R4877	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R4878	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R4879	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R4882	ERJ6GEYJ123	S.M.CARB	0.1W	5%	12K Ω
R4883	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
RL590	DH12D1-O-Q	RELAY			Ω
RL801	TSE1885-1	RELAY			Ω
RL4801	TSE1885-1	RELAY			Ω

CAPACITORS

C002	ECA1HMR33GB	ELECT	50V		0.33 μF
C003	ECJ2VF1H104Z	ELECT	350V		100nF
C004	ECJ2VF1H104Z	ELECT	350V		100nF
C005	ECA1CM221GB	ELECT	16V		220 μF
C006	ECJ2VF1H104Z	ELECT	350V		100nF
C007	ECJ2VF1H104Z	ELECT	350V		100nF
C008	ECUV1H561JCX	S.M. CAP	50V		560pF
C009	ECA1CM221GB	ELECT	16V		220 μF
C010	ECA1HM4R7GB	ELECT	50V		4.7 μF
C011	ECUV1H100DCX	S.M. CAP	50V		10pF
C012	ECUV1H100DCX	S.M. CAP	50V		10pF
C015	ECJ2VF1H104Z	ELECT	350V		100nF
C017	ECUV1H100DCX	S.M. CAP	50V		10pF
C019	ECJ2VF1H104Z	ELECT	350V		100nF
C102	ECJ2VF1H103Z	ELECT	350V		10nF
C103	ECJ2VF1H104Z	ELECT	350V		100nF
C106	ECUV1H560JCX	S.M. CAP	50V		56pF
C110	ECJ2VF1H104Z	ELECT	350V		100nF
C111	ECJ2VF1H104Z	ELECT	350V		100nF
C124	ECUV1H220JCX	S.M. CAP	50V		22pF
C125	ECUV1H100DCX	S.M. CAP	50V		10pF
C251	ECA1VM470B	ELECT	35V		47 μF
C252	ECUV1H103KBX	S.M. CAP	50V		10nF
C253	ECA1HM4R7GB	ELECT	50V		4.7 μF
C254	ECQM1H684J	FILM	50V		680nF
C255	ECA1EM101GB	ELECT	25V		100 μF
C256	ECUV1H103KBX	S.M. CAP	50V		10nF
C257	ECA1HM4R7GB	ELECT	50V		4.7 μF
C258	ECA1VM470B	ELECT	35V		47 μF
C259	ECQM1H684J	FILM	50V		680nF
C260	ECA1VM102GB	ELECT	35V		1 nF
C261	ECA1VM102GB	ELECT	35V		1 nF
C263	ECA1HM010GB	ELECT	50V		1 μF
C264	ECA1HHG222E	ELECT	50V		2200 μF
C266	ECA1HM010GB	ELECT	50V		1 μF
C267	ECJ2YB1H104K	ELECT	350V		100nF
C268	ECJ2YB1H104K	ELECT	350V		100nF
C270	ECJ2YB1H104K	ELECT	350V		100nF
C301	ECJ2VB1C104K	ELECT	350V		100nF
C302	ECJ2VB1C104K	ELECT	350V		100nF
C303	ECJ2VB1C104K	ELECT	350V		100nF
C304	ECA1HM100GB	ELECT	50V		10 μF
C351	ECUV1H090DCX	S.M. CAP	50V		90pF
C352	ECUV1H090DCX	S.M. CAP	50V		90pF
C353	ECUV1H090DCX	S.M. CAP	50V		90pF
C354	ECQM2104KZ	FILM	250V		100nF
C355	ECUV1H222JCX	S.M. CAP	50V		2.2nF
C356	ECUV1H222JCX	S.M. CAP	50V		2.2nF

Cct Ref	Parts Number	Description			
C357	ECUV1H222JCX	S.M. CAP	50V		2.2nF
C358	ECQM1H224J	FILM	50V		220nF
C360	ECKC3D152J	CERAMIC	2KV		1.5nF
C361	ECA1HMR47GB	ELECT	50V		0.47 μF
C363	ECA1VM471GB	ELECT	35V		470 μF
C364	ECJ2VF1H103Z	ELECT	350V		10nF
C366	ECA1HM100GB	ELECT	50V		10 μF
C451	ECUV1H102JX	S.M. CAP	50V		1 nF
C453	ECUV1H152KBX	S.M. CAP	50V		1.5pF
C454	ECUV1H223KBM	S.M. CAP	50V		22nF
C455	ECA1HM100GB	ELECT	50V		10 μF
C456	ECA1HHG221B	ELECT	50V		220 μF
C458	ECQB1222JF3	FILM	100V		2.2nF
C459	222236516154	FILM	160V		150nF
C461	ECCR2H270J	CERAMIC	500V		27pF
C508	ECQV1H105JZ	FILM	50V		1 μF
C509	ECA1VM470B	ELECT	35V		47 μF
C510	ECUV1H104KBX	S.M. CAP	50V		100nF
C511	ECQM2683JZ	FILM	250V		68nF
C552	ECWH20102JVY	FILM	200V		1 μF
C557	ECKC2H471J	CERAMIC	500V		470pF
C558	ECA1HHG471E	ELECT	50V		470 μF
C561	ECA1EHG102B	ELECT	25V		1000 μF
C562	ECKC2H101J	CERAMIC	500V		100pF
C563	ECA2EHG220B	ELECT	250V		20 μF
C564	ECEA2AN2R2SB	ELECT	100V		2.2 μF
C565	ECQP1H273J	FILM	100V		2700 μF
C566	ECKC2H471J	CERAMIC	500V		470pF
C567	ECA1HHG471E	ELECT	50V		470 μF
C568	ECKC2H471J	CERAMIC	500V		470pF
C569	ECKC2H102J	CERAMIC	500V		1 nF
C590	ECQE2334KF3	FILM	200V		330nF
C591	ECWF2564JBB	FILM	200V		560nF
C595	ECUV1H103KBX	S.M. CAP	50V		10nF
C598	ECWF2224JBB	FILM	200V		220nF
C601	ECUV1H104KBX	S.M. CAP	50V		100nF
C602	ECA1HM101GB	ELECT	50V		100 μF
C603	ECUV1H102JCX	S.M. CAP	50V		1 nF
C604	ECJ2VF1H223Z	ELECT	350V		22nF
C605	ECA1HM101GB	ELECT	50V		100 μF
C606	ECA1HM3R3GB	ELECT	50V		3.3 μF
C607	ECJ2VF1H104Z	ELECT	350V		100nF
C608	ECUV1H153KBX	S.M. CAP	50V		15nF
C609	ECUV1H153KBX	S.M. CAP	50V		15nF
C610	ECUV1H153KBX	S.M. CAP	50V		15nF
C611	ECUV1H153KBX	S.M. CAP	50V		15nF
C612	ECUV1H153KBX	S.M. CAP	50V		15nF
C613	ECUV1H153KBX	S.M. CAP	50V		15nF
C614	ECUV1H050CCX	S.M. CAP	50V		50pF
C615	ECUV1H050CCX	S.M. CAP	50V		50pF
C617	ECUV1H223KBX	S.M. CAP	50V		22nF
C618	ECA1CM221GB	ELECT	16V		220 μF
C619	ECJ2VB1H473K	ELECT	350V		47nF
C620	ECA1HM101GB	ELECT	50V		100 μF
C621	ECJ2VB1C104K	ELECT	350V		100nF
C622	ECUV1H683KBX	S.M. CAP	50V		68nF
C623	ECUV1H102JCX	S.M. CAP	50V		1 nF
C624	ECJ3VB1C474K	ELECT	3.5KV		470nF
C625	ECJ3VB1C474K	ELECT	3.5KV		470nF
C626	ECJ3VB1C474K	ELECT	3.5KV		470nF
C627	ECJ3VB1C474K	ELECT	3.5KV		470nF
C629	ECUV1H104KBX	S.M. CAP	50V		100nF
C630	ECUV1H100DCX	S.M. CAP	50V		10pF
C631	ECUV1H683ZFX	S.M. CAP	50V		68nF
C633	ECUV1H271JCX	S.M. CAP	50V		270pF
C634	ECUV1H271JCX	S.M. CAP	50V		270pF

Cct Ref	Parts Number	Description			
C635	ECUV1H180JCX	S.M. CAP	50V	18pF	
C636	ECUV1H221JCX	S.M. CAP	50V	220pF	
C637	ECUV1H101JCX	S.M. CAP	50V	100pF	
C638	ECUV1H471JCX	S.M. CAP	50V	470pF	
C639	ECUV1H332KBM	S.M. CAP	50V	3.3nF	
C640	ECUV1H221JCX	S.M. CAP	50V	220pF	
C641	ECUV1H221JCX	S.M. CAP	50V	220pF	
C642	ECUV1H103KBX	S.M. CAP	50V	10nF	
C644	ECUV1H221JCX	S.M. CAP	50V	220pF	
C648	ECUV1H151JCX	S.M. CAP	50V	150pF	
C701	ECA1HHG101B	ELECT	50V	100µF	
C702	ECUV1H103KBX	S.M. CAP	50V	10nF	
C703	ECEA1HGE100	ELECT	50V	10µF	
C704	ECQB1H223K	FILM	50V	22nF	
C705	ECQB1H222J	FILM	50V	2.2nF	
C801	ECQU2A224MN	FILM	250V	220nF	
C806	ECKCNA101MBB	CERAMIC	250V	100µF	
C807	ECKC2H472J	CERAMIC	500V	4.7nF	
C808	ECKC2H472J	CERAMIC	500V	4.7nF	
C809	ECKC2H472J	CERAMIC	500V	4.7nF	
C810	ECKC2H472J	CERAMIC	500V	4.7nF	
C811	ECOS2GA221CA	ELECT	400V	220µF	
C812	ECKC3A332J	CERAMIC	1KV	3.3nF	
C813	ECKC3D221JB	CERAMIC	2KV	220pF	
C814	ECKC3D102J	CERAMIC	2KV	1nF	
C815	ECKC1H471J	CERAMIC	50V	470pF	
C816	ECA1EM101GB	ELECT	25V	100µF	
C818	ECKCNS332J	CERAMIC	1.2KV	3.3nF	
C819	ECQB1H152K	FILM	50V	1.5nF	
C820	ECQB1H332K	FILM	50V	3.3nF	
C821	ECQU2A224MN	FILM	250V	220nF	
C822	ECQU2A224MN	FILM	250V	220nF	
C823	ECQU2A224MN	FILM	250V	220nF	
C824	ECQU2A224MN	FILM	250V	220nF	
C850	ECKC3D331J	CERAMIC	2KV	330pF	
C851	ECA2CM221E	ELECT	160V	220µF	
C852	ECA2CHG221E	ELECT	160V	220µF	
C853	ECKC2H471J	CERAMIC	500V	470pF	
C854	ECA1EHG102B	ELECT	25V	1000µF	
C855	ECKC2H471J	CERAMIC	500V	470pF	
C856	ECA1AHG222B	ELECT	10V	2200µF	
C857	ECKC2H471J	CERAMIC	500V	470pF	
C858	ECA1HHG102E	ELECT	50V	1nF	
C859	ECJ2VF1H104Z	ELECT	350V	100nF	
C860	ECA1HM101GB	ELECT	50V	100µF	
C862	ECJ2VF1H104Z	ELECT	350V	100nF	
C863	ECA1HM101GB	ELECT	50V	100µF	
C866	ECJ2VF1H104Z	ELECT	350V	100nF	
C867	ECA1HM100GB	ELECT	50V	10µF	
C868	ECA1HM100GB	ELECT	50V	10µF	
C869	ECA1VM101GB	ELECT	35V	100µF	
C870	ECA1EM471GB	ELECT	25V	470µF	
C871	ECA1CM102B	ELECT	16V	1000µF	
C872	ECA1CM471GB	ELECT	16V	470µF	
C873	ECA1HM100GB	ELECT	50V	10µF	
C875	ECA2CM4R7B	ELECT	160V	10µF	
C876	ECA1AHG471E	ELECT	10V	470pF	
C902	ECA1VM101GB	ELECT	35V	100µF	
C903	ECUV1H472KBX	S.M. CAP	50V	4.7nF	
C904	ECUV1H472KBX	S.M. CAP	50V	4.7nF	
C908	ECUV1H151JCX	S.M. CAP	50V	150pF	
C909	ECKC2H472J	CERAMIC	500V	4.7nF	
C910	ECKC2H472J	CERAMIC	500V	4.7nF	
C911	ECUV1H151JCX	S.M. CAP	50V	150pF	
C912	ECEA2CU100	ELECT	160V	10µF	
C913	ECA1HM101GB	ELECT	50V	100µF	

Cct Ref	Parts Number	Description			
C914	ECA1HM101GB	ELECT	50V	100µF	
C916	ECEA2CGE100	ELECT	160V	10µF	
C950	ECJ2VB1C104K	ELECT	350V	100nF	
C1014	ECA1HM101GB	ELECT	50V	100µF	
C1015	ECQM1H104J	FILM	50V	100nF	
C1016	ECQM1H104J	FILM	50V	100nF	
C1061	ECUV1H103KBX	S.M. CAP	50V	10nF	
C1062	ECA1HM101GB	ELECT	50V	100µF	
C1063	ECUV1H331JCX	S.M. CAP	50V	330pF	
C1101	ECJ2VF1H104Z	ELECT	350V	100nF	
C1102	ECA0JM101G	ELECT	6.3V	100µF	
C1103	ECUV1H220JCX	S.M. CAP	50V	22pF	
C1104	ECUV1H220JCX	S.M. CAP	50V	22pF	
C1105	ECUV1H101JCX	S.M. CAP	50V	100pF	
C1108	ECJ2VB1H333K	ELECT	350V	33nF	
C1111	ECA1HM100GB	ELECT	50V	10µF	
C1112	ECUV1H103KBX	S.M. CAP	50V	10nF	
C1115	ECJ3VB1C474K	ELECT	3.5KV	470nF	
C1116	ECUV1H472KBX	S.M. CAP	50V	4.7nF	
C1117	ECJ2VF1H104Z	ELECT	350V	100nF	
C1118	ECUV1H103KBX	S.M. CAP	50V	10nF	
C1119	ECUV1H221JCX	S.M. CAP	50V	220pF	
C1120	ECJ2VF1H104Z	ELECT	350V	100nF	
C1121	ECUV1H221JCX	S.M. CAP	50V	220pF	
C1122	ECJ2VF1H104Z	ELECT	350V	100nF	
C1123	ECUV1H471JCX	S.M. CAP	50V	470pF	
C1124	ECUV1H391JCX	S.M. CAP	50V	390pF	
C1125	ECUV1H391JCX	S.M. CAP	50V	390pF	
C1126	ECUV1H391JCX	S.M. CAP	50V	390pF	
C1127	ECUV1H221JCX	S.M. CAP	50V	220pF	
C1129	ECUV1H270JCX	S.M. CAP	50V	27pF	
C1132	ECUV1H330JCX	S.M. CAP	50V	33pF	
C1133	ECJ2VF1H104Z	ELECT	350V	100nF	
C1135	ECA0JM101G	ELECT	6.3V	100µF	
C1136	ECJ2VF1H104Z	ELECT	350V	100nF	
C1137	ECUV1H330JCX	S.M. CAP	50V	33pF	
C1141	ECJ2VF1H103Z	ELECT	350V	10nF	
C1142	ECUV1H151JCX	S.M. CAP	50V	150pF	
C1148	ECUV1H223KBX	S.M. CAP	50V	22nF	
C1149	ECUV1H103KBX	S.M. CAP	50V	10nF	
C1900	ECQB1H153K	FILM	50V	15nF	
C1901	ECUV1H103KBX	S.M. CAP	50V	10nF	
C1903	ECA1EM470GB	ELECT	25V	47µF	
C1904	ECQM1H104J	FILM	50V	100nF	
C1905	ECQM1H104J	FILM	50V	100nF	
C1910	ECUV1H103KBX	S.M. CAP	50V	10nF	
C2101	ECUV1H102JCX	S.M. CAP	50V	1nF	
C2102	ECUV1H102JCX	S.M. CAP	50V	1nF	
C2103	ECUV1H102JCX	S.M. CAP	50V	1nF	
C2104	ECUV1H102JCX	S.M. CAP	50V	1nF	
C2105	ECUV1H102JCX	S.M. CAP	50V	1nF	
C2106	ECUV1H102JCX	S.M. CAP	50V	1nF	
C2107	ECUV1H102JCX	S.M. CAP	50V	1nF	
C2108	ECUV1H102JCX	S.M. CAP	50V	1nF	
C2109	ECUV1H102JCX	S.M. CAP	50V	1nF	
C2110	ECUV1H102JCX	S.M. CAP	50V	1nF	
C2111	ECA1HM100GB	ELECT	50V	10µF	
C2112	ECA1HM100GB	ELECT	50V	10µF	
C2113	ECA1HM3R3GB	ELECT	50V	3.3µF	
C2114	ECJ2VF1H104Z	ELECT	350V	100nF	
C2115	ECUV1H221JCX	S.M. CAP	50V	220pF	
C2116	ECUV1H221JCX	S.M. CAP	50V	220pF	
C2117	ECUV1H221JCX	S.M. CAP	50V	220pF	
C2118	ECUV1H221JCX	S.M. CAP	50V	220pF	
C2119	ECUV1H221JCX	S.M. CAP	50V	220pF	
C2120	ECUV1H221JCX	S.M. CAP	50V	220pF	

Cct Ref	Parts Number	Description		
C2121	ECA1HM100GB	ELECT	50V	10µF
C2122	ECJ2VF1H104Z	ELECT	350V	100nF
C2123	ECUV1H221JCX	S.M. CAP	50V	220pF
C2124	ECUV1H070DTX	S.M. CAP	50V	70pF
C2125	ECUV1H470JCX	S.M. CAP	50V	47pF
C2126	ECUV1H070DTX	S.M. CAP	50V	70pF
C2127	ECUV1H010CCX	S.M. CAP	50V	1 pF
C2128	ECUV1H010CCX	S.M. CAP	50V	1 pF
C2129	ECA1CM102B	ELECT	16V	1000µF
C2130	ECA1CM331B	ELECT	16V	330µF
C2131	ECJ2VF1H103Z	ELECT	350V	10nF
C2132	ECJ2VF1H103Z	ELECT	350V	10nF
C2134	ECJ2VF1H103Z	ELECT	350V	10nF
C2135	ECA1HM101GB	ELECT	50V	100µF
C2136	ECJ2VF1H104Z	ELECT	350V	100nF
C2137	ECA1HM100GB	ELECT	50V	10µF
C2138	ECUV1H471KBX	S.M. CAP	50V	470pF
C2139	ECUV1H221JCX	S.M. CAP	50V	220pF
C2140	ECA1HM101GB	ELECT	50V	100µF
C2141	ECUV1H152JCX	S.M. CAP	50V	1.5pF
C2142	ECUV1H103KBX	S.M. CAP	50V	10nF
C2200	ECUV1H153KBX	S.M. CAP	50V	15nF
C2201	ECA1HM100GB	ELECT	50V	10µF
C2203	ECA1VM470B	ELECT	35V	47µF
C2204	ECA1HM4R7GB	ELECT	50V	4.7µF
C2205	ECUV1H562KBX	S.M. CAP	50V	5.6nF
C2206	ECA1HM100GB	ELECT	50V	10µF
C2207	ECUV1H332KBX	S.M. CAP	50V	3.3nF
C2208	ECUV1H104KBX	S.M. CAP	50V	100nF
C2209	ECUV1H681JCX	S.M. CAP	50V	680pF
C2211	ECJ2VF1H104Z	ELECT	350V	100nF
C2212	ECJ2VF1H104Z	ELECT	350V	100nF
C2215	ECUV1H102JCX	S.M. CAP	50V	1 nF
C2220	ECUV1H153KBX	S.M. CAP	50V	15nF
C2221	ECA1HM100GB	ELECT	50V	10µF
C2223	ECA1VM470B	ELECT	35V	47µF
C2224	ECA1HM4R7GB	ELECT	50V	4.7µF
C2225	ECUV1H562KBX	S.M. CAP	50V	5.6nF
C2226	ECA1HM100GB	ELECT	50V	10µF
C2227	ECUV1H332KBX	S.M. CAP	50V	3.3nF
C2228	ECUV1H104KBX	S.M. CAP	50V	100nF
C2229	ECUV1H681JCX	S.M. CAP	50V	680pF
C2231	ECJ2VF1H104Z	ELECT	350V	100nF
C2232	ECJ2VF1H104Z	ELECT	350V	100nF
C2235	ECUV1H102JCX	S.M. CAP	50V	1 nF
C2236	ECQB1H103J	FILM	50V	10nF
C2240	ECA1CM471GB	ELECT	16V	470µF
C2243	ECQB1H103J	FILM	50V	10nF
C2244	ECUV1H390JCX	S.M. CAP	50V	39pF
C2490	ECA1HM100GB	ELECT	50V	10µF
C2491	ECJ2YB1H104K	ELECT	350V	100nF
C2495	ECA1HM010GB	ELECT	50V	1µF
C2496	ECA1HM010GB	ELECT	50V	1µF
C2497	ECA1HM010GB	ELECT	50V	1µF
C2498	ECA1HM010GB	ELECT	50V	1µF
C2499	ECUV1H101JCX	S.M. CAP	50V	100pF
C2500	ECUV1H101JCX	S.M. CAP	50V	100pF
C2501	ECA1HM101GB	ELECT	50V	100µF
C2502	ECA1HM101GB	ELECT	50V	100µF
C2503	ECA1CM470GB	ELECT	16V	47µF
C2510	ECA1HM101GB	ELECT	50V	100µF
C2511	ECA1CM471GB	ELECT	16V	470µF
C2512	ECA1HM010GB	ELECT	50V	1µF
C2514	ECUV1H103KBX	S.M. CAP	50V	10nF
C3151	ECEA1CKA470	ELECT	16V	47µF
C3152	ECJ2VF1H473Z	ELECT	350V	47nF

Cct Ref	Parts Number	Description		
C3153	ECEA1CKA470	ELECT	16V	47µF
C3154	ECJ2VF1H104Z	ELECT	350V	100nF
C3155	ECEA1HKA4R7	ELECT	50V	4.7µF
C3156	EEANA1E4R7B	CERAMIC	25V	4R7µF
C3157	ECUV1H221JCX	S.M. CAP	50V	220pF
C3158	ECUV1H221JCX	S.M. CAP	50V	220pF
C3159	EEANA1E4R7B	CERAMIC	25V	4R7µF
C3160	ECEA1HKA4R7	ELECT	50V	4.7µF
C3161	ECEA1HKA4R7	ELECT	50V	4.7µF
C3162	ECEA1HKA4R7	ELECT	50V	4.7µF
C3163	ECEA1HKA4R7	ELECT	50V	4.7µF
C3164	ECEA1HKA4R7	ELECT	50V	4.7µF
C3165	EEANA1E4R7B	CERAMIC	25V	4R7µF
C3166	EEANA1E4R7B	CERAMIC	25V	4R7µF
C3167	ECEA1HKA4R7	ELECT	50V	4.7µF
C3168	ECEA1HKA4R7	ELECT	50V	4.7µF
C3181	ECA1EM471GB	ELECT	25V	470µF
C3182	ECA1EM471GB	ELECT	25V	470µF
C3183	ECA1EM471GB	ELECT	25V	470µF
C3203	ECUV1H561JCX	S.M. CAP	50V	560pF
C3204	ECUV1H561JCX	S.M. CAP	50V	560pF
C3205	ECA1HM470GB	ELECT	50V	47µF
C3206	ECUV1H561JCX	S.M. CAP	50V	560pF
C3207	ECUV1H561JCX	S.M. CAP	50V	560pF
C3208	ECA1HM470GB	ELECT	50V	47µF
C3209	ECUV1H561JCX	S.M. CAP	50V	560pF
C3210	ECUV1H561JCX	S.M. CAP	50V	560pF
C3223	ECUV1H271JCX	S.M. CAP	50V	270pF
C3224	ECUV1H271JCX	S.M. CAP	50V	270pF
C3401	ECEA1HKA100	ELECT	50V	10pF
C3402	ECEA1HKA100	ELECT	50V	10pF
C3403	ECEA1HKA4R7	ELECT	50V	4.7µF
C3404	ECEA1HKA4R7	ELECT	50V	4.7µF
C3405	ECUV1H561JCX	S.M. CAP	50V	560pF
C3406	ECUV1H561JCX	S.M. CAP	50V	560pF
C3407	ECUV1H561JCX	S.M. CAP	50V	560pF
C3408	ECUV1H561JCX	S.M. CAP	50V	560pF
C3409	ECUV1H561JCX	S.M. CAP	50V	560pF
C3410	ECUV1H561JCX	S.M. CAP	50V	560pF
C3411	ECUV1H561JCX	S.M. CAP	50V	560pF
C3412	ECUV1H561JCX	S.M. CAP	50V	560pF
C3414	ECUV1H271JCX	S.M. CAP	50V	270pF
C3415	ECUV1H271JCX	S.M. CAP	50V	270pF
C3416	ECUV1H102JCX	S.M. CAP	50V	1 nF
C3420	ECEA1HKA100	ELECT	50V	10pF
C3421	ECEA1HKA100	ELECT	50V	10pF
C3422	ECEA1HKA4R7	ELECT	50V	4.7µF
C3423	ECEA1HKA4R7	ELECT	50V	4.7µF
C3424	ECUV1H561JCX	S.M. CAP	50V	560pF
C3425	ECUV1H561JCX	S.M. CAP	50V	560pF
C3426	ECUV1H561JCX	S.M. CAP	50V	560pF
C3427	ECUV1H561JCX	S.M. CAP	50V	560pF
C3428	ECUV1H561JCX	S.M. CAP	50V	560pF
C3429	ECUV1H561JCX	S.M. CAP	50V	560pF
C3430	ECUV1H561JCX	S.M. CAP	50V	560pF
C3431	ECUV1H561JCX	S.M. CAP	50V	560pF
C3433	ECUV1H271JCX	S.M. CAP	50V	270pF
C3434	ECUV1H271JCX	S.M. CAP	50V	270pF
C3435	ECUV1H102JCX	S.M. CAP	50V	1 nF
C3436	ECUV1H561JCX	S.M. CAP	50V	560pF
C3437	ECUV1H561JCX	S.M. CAP	50V	560pF
C3438	ECUV1H561JCX	S.M. CAP	50V	560pF
C3439	ECUV1H561JCX	S.M. CAP	50V	560pF
C3441	ECEA1CKA470	ELECT	16V	47µF
C3442	ECJ2VF1H473Z	ELECT	350V	47nF
C3443	ECEA1HKA4R7	ELECT	50V	4.7µF

Cct Ref	Parts Number	Description			
C3444	ECEA1HKA4R7	ELECT	50V	4.7µF	
C3445	ECEA1HKA4R7	ELECT	50V	4.7µF	
C3446	ECJ2VF1H103Z	ELECT	350V	10nF	
C3447	ECJ2VF1H104Z	ELECT	350V	100nF	
C3448	ECEA1HKA010	ELECT	50V	1µF	
C3449	ECJ2VF1H104Z	ELECT	350V	100nF	
C3450	ECEA1CKA470	ELECT	16V	47µF	
C3451	ECJ2VF1H103Z	ELECT	350V	10nF	
C3452	ECEA1CKN4R7B	ELECT	16V	4R7µF	
C3453	ECJ2VF1H103Z	ELECT	350V	10nF	
C3454	ECUV1H103KBX	S.M. CAP	50V	10nF	
C3458	ECEA1CKA101	ELECT	16V	100µF	
C3459	ECJ2VF1H104Z	ELECT	350V	100nF	
C3460	ECUV1H103KBX	S.M. CAP	50V	10nF	
C3462	ECEA1CKA330	ELECT	16V	33µF	
C3468	ECEA1AKN470B	ELECT	10V	47µF	
C3469	ECEA1CKA101	ELECT	16V	100µF	
C3470	ECJ2VF1H104Z	ELECT	350V	100nF	
C3471	ECEA1CKA101	ELECT	16V	100µF	
C3472	ECJ2VF1H104Z	ELECT	350V	100nF	
C3473	ECCR1H180J	CERAMIC	50V	18pF	
C3481	ECA1EM471GB	ELECT	25V	470µF	
C3482	ECJ2VF1H104Z	ELECT	350V	100nF	
C3483	ECA1EM471GB	ELECT	25V	470µF	
C3484	ECJ2VF1H104Z	ELECT	350V	100nF	
C3485	ECEA1CKA101	ELECT	16V	100µF	
C3486	ECJ2VF1H104Z	ELECT	350V	100nF	
C3498	ECUV1H271JCX	S.M. CAP	50V	270pF	
C3499	ECUV1H271JCX	S.M. CAP	50V	270pF	
C3601	ECA1HM101GB	ELECT	50V	100µF	
C3802	ECA1HM100GB	ELECT	50V	10µF	
C3803	ECA1EM100GB	ELECT	25V	0.1µF	
C3804	ECJ2VF1H104Z	ELECT	350V	100nF	
C3831	ECUV1H104KBX	S.M. CAP	50V	100nF	
C4804	ECKC3D471JB	CERAMIC	2KV	470pF	
C4807	ECQB1H471KF3	FILM	50V	470pF	
C4808	ECQB1H122J	FILM	50V	1.2nF	
C4809	ECOS2GA560BB	ELECT	400V	56pF	
C4810	ECA1VM470B	ELECT	35V	47µF	
C4811	ECKC2H272J	CERAMIC	500V	2.7nF	
C4814	ECKCWS471J	CERAMIC	400V	470pF	
C4853	ECKC2H471J	CERAMIC	500V	470pF	
C4854	ECKC2H471J	CERAMIC	500V	470pF	
C4855	ECKC2H471J	CERAMIC	500V	470pF	
C4856	ECA1HM220GB	ELECT	50V	22µF	
C4857	ECA1EM471GB	ELECT	25V	470µF	
C4858	ECA1CM222GB	ELECT	16V	2200µF	
C4859	ECA1CM102B	ELECT	16V	1000µF	
C4860	ECA1CHG222B	ELECT	16V	2.2nF	
C4861	ECA1HM100GB	ELECT	50V	10µF	
C4862	ECA1CM102B	ELECT	16V	1000µF	
C4863	ECQM1H104J	FILM	50V	100nF	
C4864	ECA1HM100GB	ELECT	50V	10µF	
C4865	ECA0JM102GB	ELECT	6.3V	1000µF	
C4866	ECA1HM2R2GB	ELECT	50V	2.2µF	
C4867	ECA1HM010GB	ELECT	50V	1µF	
C4868	ECA1HM010GB	ELECT	50V	1µF	
C4869	ECA1HM4R7GB	ELECT	50V	4.7µF	
C4870	ECA0JM102GB	ELECT	6.3V	1000µF	
C4871	ECA1HM101GB	ELECT	50V	100µF	
C4872	ECQM1H104J	FILM	50V	100nF	
C4873	ECQM1H104J	FILM	50V	100nF	
C4874	ECA1HM101GB	ELECT	50V	100µF	
C4875	ECA1HM220GB	ELECT	50V	22µF	
JSE28	ECUV1H104KBX	S.M. CAP	50V	100nF	

Cct Ref	Parts Number	Description			
TERMINALS AND LINKS					
	821581-1	PLCC SOCKET			
	TJS59034	AUDIO PHONO TEMINAL			
JK3201	TJB8E027	AV TERMINAL			
JK3403	TJB8E014	RCA TERMINAL (2P)			
JK3404	JES-9S-4A3F	SERIAL CONNECTOR			
JK3405	TJSF47509	MODEM CONNECTOR			
SWITCHES					
S802	ESB92S11B	SWITCH			
S1251	EVQ23405R	SWITCH			
S1252	EVQ23405R	SWITCH			
S1253	EVQ23405R	SWITCH			
S1254	EVQ23405R	SWITCH			
S1255	EVQ23405R	SWITCH			
DIFFERENCES FOR MODEL TX-28DT2					
MECHANICAL PARTS					
16	ZTBZAD550A	ANODE CABLE			
17	TKU8E00471	BACK COVER			
18	W66LQK185X06	C.R.T.			
19	TKY8E382-1	CABINET			
20	VP17005-32	CRT FIXING SCREW			
21	TLK8E05153	DEGAUSS COIL			
22	TNPH0311AB	E P.C.B.			
23	ZTFM05006A	F.B.T.			
24	TNPA1562AB	M P.C.B.			
25	TQF8E2852	MODEL LABEL			
26	TKP8E1284	SPEAKER NET			
27	TNPA1563AB	W P.C.B.			
28	TNP8EY012AK	Y P.C.B.			
MISCELLANEOUS COMPONENTS					
	TBLG3019	SET FOOT (FRONT)			
	TBLG3020	SET FOOT (REAR)			
	TES2298	CRT EARTH SPRING			
	TLK8E05154	GEOMAGNETIC COIL			
	TPC8E4748-1	OUTER CARTON			
	TPD8E687	CUSHION TOP			
	TPD8E688	CUSHION BOTTOM			
I.C.s					
IC1103	X24C32PI-1A	EAROM *			
DIODES					
D607	MTZJT-775.1A	DIODE			
D620	MTZJT-7718C	DIODE			
COILS					
L591	ELH5L6123	COIL			
L592	ELC18B681E	COIL			
L594	ELHKLBO69B	COIL			
L595	ELC18B121L	COIL			
L595	ELC18B151L	COIL			
L701	ELC10D682E	COIL			
L1104	EXCELSA35T	COIL			
RESISTORS					
R461	ERW2PK1R2	WOUND	2W 10%	1R2 Ω	
R563	ERJ6GEYJ564	S.M.CARB	0.1W 5%	560K Ω	
R590	ERG2SJ181E	METAL	2W 5%	180 Ω	
R632	ERJ6GEYJ752	S.M.CARB	0.1W 5%	7K5 Ω	
R701	ERQ12AJ101	FUSIBLE	0.5W 5%	100 Ω	
R702	ERQ12HJ8R2	FUSIBLE	0.5W 5%	8R2 Ω	
R816	ERF10ZK4R7	WOUND	10W 5%	4R7 Ω	
R1910	ERDS1TJ1R0	CARBON	0.5W 5%	1 Ω	
R1911	ERDS1TJ1R0	CARBON	0.5W 5%	1 Ω	

Cct Ref	Parts Number	Description			
CAPACITORS					
C551	ECKC3D122J	CERAMIC	2KV	1.2nF	
C554	ECWF2514JBB	FILM	500V	510nF	
C555	ECWH20622JVB	FILM	200V	6.2nF	
C556	ECQM4223KC	FILM	400V	220nF	
C596	ECWH20682JVB	FILM	200V	6.8nF	
C597	ECQF4273JZH	FILM	400V	27nF	
C616	ECA1HM101GB	ELECT	50V	100µF	
C647	ECUV1H391JCX	S.M. CAP	50V	390pF	
C906	ECUV1H471KBX	S.M. CAP	50V	470pF	
C3202	ECUV1H103KBX	S.M. CAP	50V	10nF	

DIFFERENCES FOR MODEL TX-32DT2

MECHANICAL PARTS

16	KFT7CM197F	ANODE CABLE	
17	TKU8E00481	BACK COVER	
18	W76LPX955X06	C.R.T.	
19	TKY8E392	CABINET	
20	VP19151	CRT FIXING SCREW	
21	TLK8E05123	DEGAUSS COIL	
22	TNPH0311AA	E P.C.B.	
23	KFT5AV235F	F.B.T.	
24	TNPA1562AA	M P.C.B.	
25	TQF8E2851	MODEL LABEL	
26	TKP8E1285	SPEAKER NET	
27	TNPA1563AA	W P.C.B.	
28	TNP8EY017AB	Y P.C.B.	

MISCELLANEOUS COMPONENTS

	TLK8E05124	GEOMAGNETIC COIL	
	TPC8E4750	OUTER CARTON	
	TPD8E689	TOP CUSHION	
	TPD8E690	BOTTOM CUSHION	
	TPD8E703	SUB CUSHION	

I.C.s

IC1103	X24C32PI-1AA	EAROM *	
IC3901	AN5422K	DYNAMIC FOCUS	

DIODES

D607	MA4051	DIODE	
D618	MA723TA5	DIODE	
D620	MTZJT-778.2C	DIODE	
D911	MA4150	DIODE	
D3901	MTZJT-779.1C	DIODE	
D3907	ERA22-06V1	DIODE	
D3908	ERA22-06V1	DIODE	
D3909	MA165TA5	DIODE	
D3910	RP1HLFA5	DIODE	
D3911	RP1HLFA5	DIODE	
D3912	1SS254T-77	DIODE	

TRANSISTORS

Q3901	BC847B	TRANSISTOR	
Q3902	BC847B	TRANSISTOR	
Q3903	BC847B	TRANSISTOR	
Q3904	BC857B	TRANSISTOR	
Q3905	2SK1006RF122	TRANSISTOR	
Q3906	2SC4572RB	TRANSISTOR	
Q3907	BC847B	TRANSISTOR	
Q3908	BC847B	TRANSISTOR	

TRANSFORMERS

T3901	ETF18L32B	TRANSFORMER	
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COILS

L591	ELH5L6120	COIL	
L592	ELC18B102E	COIL	

Cct Ref	Parts Number	Description			
L594	ELHKLBO57B	COIL			
L645	EXCELSA39T	COIL			
L701	ELC10D822E	COIL			
L1106	EXCELSA39V	COIL			
L3902	ELC08D682E	COIL			
L3903	ELC08D332E	COIL			

RESISTORS

JA203	ERJ8GEY0R00	S.M.CARB	.125W	5%	0 Ω
JSW015	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R461	ERX2FJ1R0H	METAL	2W	5%	1 Ω
R563	ERJ6GEYJ334	S.M.CARB	0.1W	5%	330K Ω
R590	ERG1SJ101	METAL	1W	5%	100 Ω
R632	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R701	ERQ1CJP680	FUSIBLE	1W	5%	68 Ω
R702	ERQ12HJ150	FUSIBLE	0.1W	5%	15 Ω
R713	ERG1SJ180E	METAL	1W	5%	18 Ω
R816	ERF15ZJ121	WOUND	.125W	5%	120 Ω
R941	ERD25TJ331	CARBON	0.25W	5%	330 Ω
R1910	ERDS1TJ8R2	CARBON	0.5W	5%	8R2 Ω
R1911	ERDS1TJ8R2	CARBON	0.5W	5%	8R2 Ω
R3918	ERJ6GEYJ123	S.M.CARB	0.1W	5%	12K Ω
R3919	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω
R3920	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3921	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15K Ω
R3922	EVMEASA00B53	CONTROL			5K Ω
R3923	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6 Ω
R3925	ERO25CKF1272	METAL	0.25W	5%	2K7 Ω
R3926	ERO25CKF3242	METAL	0.25W	5%	2K4 Ω
R3927	ERD25TJ103	CARBON	0.25W	5%	10K Ω
R3928	ERDS1FJ103	CARBON	0.5W	5%	10K Ω
R3929	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R3930	ERDS1FJ103	CARBON	0.5W	5%	10K Ω
R3931	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R3932	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3933	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3934	ERJ6GEYJ125	S.M. CAR	0.1W	5%	1M2 Ω
R3935	ERDS1FJ561	CARBON	0.5W	5%	56 Ω
R3936	ERJ6GEYJ820	S.M.CARB	0.1W	5%	82 Ω
R3938	EVMEASA00B53	CONTROL			5K Ω
R3939	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R3941	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3942	ERD25TJ562	CARBON	0.25W	5%	5K6 Ω
R3943	ERD25TJ224	CARBON	0.25W	5%	220K Ω
R3944	ERJ6GEYJ125	S.M. CAR	0.1W	5%	1M2 Ω
R3945	ERJ6GEYJ125	S.M. CAR	0.1W	5%	1M2 Ω
R3946	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R3947	ERG2FJ123H	METAL	2W	5%	12K Ω
R3948	ERD25TJ184	CARBON	0.25W	5%	180K Ω
R3949	ERDS1FJ332	CARBON	0.5W	5%	3K3 Ω
R3950	ERG3FJ102H	METAL	3W	5%	1K Ω
R3951	ERD25TJ334	CARBON	0.25W	5%	330K Ω
R3952	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3953	ERG2FJ100H	METAL	2W	5%	10 Ω
R3954	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R3955	ERJ6GEYJ123	S.M.CARB	0.1W	5%	12K Ω
R3956	ERD25TJ104	CARBON	0.25W	5%	100K Ω
R3957	ERD25TJ104	CARBON	0.25W	5%	100K Ω
R3958	ERD25TJ104	CARBON	0.25W	5%	100K Ω
R3959	ERD25TJ104	CARBON	0.25W	5%	100K Ω
R3960	ERJ6GEYJ622	S.M.CARB	0.1W	5%	6K2 Ω
R3961	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6 Ω
R3962	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56K Ω
R3963	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56K Ω
R3972	ERG2FJ471	METAL	2W	5%	470 Ω
R3981	ERQ14AJ220	FUSIBLE	0.25W	5%	22 Ω
R3982	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33K Ω

Cct Ref	Parts Number	Description			
R3983	ERJ6GEYJ823	S.M.CARB	0.1W	5%	82K Ω
R3984	ERJ6GEYJ123	S.M.CARB	0.1W	5%	12K Ω
R3985	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3986	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3987	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3 Ω
R3988	ERJ6GEYJ684	S.M.CARB	0.1W	5%	680K Ω
R3989	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220 Ω
CAPACITORS					
C551	ECKC3D182JB	CERAMIC	2KV		1.8nF
C554	ECWF2564JBB	FILM	200V		560nF
C555	ECWH20562JVB	FILM	200V		5.6nF
C556	ECQF4153JZH	FILM	400V		1.5nF
C596	ECWH20562JVB	FILM	200V		5.6nF
C597	ECQF4123JZH	FILM	400V		1.2nF
C616	ECA1CM102B	ELECT	16V		1000 μ F
C643	ECA1CM102B	ELECT	16V		1000 μ F
C645	ECQB1H103J	FILM	50V		10nF
C646	ECUV1H103KBX	S.M. CAP	50V		10nF
C647	ECUV1H101JCX	S.M. CAP	50V		100pF
C921	ECBT1H471KB5	ELECT	50V		470 μ F
C3201	ECUV1H103KBX	S.M. CAP	50V		10nF
C3909	ECQB1H153K	FILM	50V		15nF
C3910	ECA1HM010GB	ELECT	50V		1 μ F
C3911	ECQB1H153K	FILM	50V		15nF
C3912	ECQM1472GZ	FILM	100V		4.7nF
C3913	ECQV1H105JZ	FILM	50V		1 μ F
C3914	ECA1CM331B	ELECT	16V		330 μ F
C3915	ECQB1H103J	FILM	50V		10nF
C3916	ECQM1H154J	FILM	50V		150nF
C3917	ECQM1H154J	FILM	50V		150nF
C3918	ECQB1H822K	FILM	50V		8.2nF
C3919	ECQB1H333J	FILM	50V		33nF
C3920	ECQB1H332K	FILM	50V		3.3nF
C3922	ECKC3A821J	CERAMIC	1KV		820pF
C3923	ECEA1HN100UB	ELECT	50V		10 μ F
C3924	ECKC3A182J	CERAMIC	1KV		1800pF
C3925	ECKC3A151J	CERAMIC	1KV		150pF
C3926	ECKC3A101J	CERAMIC	1KV		100pF
C3927	ECA1HM010GB	ELECT	50V		1 μ F
C3928	ECQM4223JZW	FILM	400V		22nF
C3929	ECQM4223JZW	FILM	400V		22nF
C3931	ECKC3D101J	CERAMIC	2KV		100pF
C3932	ECUV1H103KBX	S.M. CAP	50V		10nF
C3933	ECKC3A471J	CERAMIC	1KV		470pF
C3936	ECA2CM330B	ELECT	160V		33 μ F
C3939	ECA1HM3R3GB	ELECT	50V		3.3 μ F
C3940	ECA1CMH471B	ELECT	16V		470 μ F
C3941	ECA1HMHR47B	ELECT	50V		470 μ F
C3942	ECEA1HN010UB	ELECT	50V		1 μ F
C3943	ECUV1H101JCX	S.M. CAP	50V		100pF
C3944	ECQB1H103J	FILM	50V		10nF
C3945	ECA1HM100GB	ELECT	50V		10 μ F
C3946	ECQB1H333J	FILM	50V		33nF
C3947	ECKC3D102J	CERAMIC	2KV		1nF
C3948	ECQV1H105JZ	FILM	50V		1 μ F
C3955	ECQB1H563K	FILM	50V		56nF
C3956	ECWH20102JVY	FILM	200V		1 μ F
C3957	ECQP1H473JZ3	FILM	100V		47nF
C3958	ECQB1H152K	FILM	50V		1.5nF


Cct Ref	Parts Number	Description
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SCHEMATIC DIAGRAMS FOR MODELS

TX-32DT2 TX-28DT2


(EURO-4D CHASSIS)



IMPORTANT SAFETY NOTICE

Components identified by  mark have special characteristics important for safety. When replacing any of these components, use only manufacturers' specified parts.



NOTE

1. RESISTOR
All resistors are carbon 1/4W resistor, unless marked otherwise.
Unit of resistance is OHM (Ω) (k=1,000, M=1,000,000)
2. CAPACITORS
All capacitors are ceramic 50V unless marked otherwise.
Unit of capacitance is μ F unless otherwise stated.
3. COIL
Unit of inductance is μ H, unless otherwise stated.

4. TEST POINT
 Test Point Position

5. EARTH SYMBOL
 Chassis Earth (Cold)
 Line Earth (Hot)

6. VOLTAGE MEASUREMENT
Voltage is measured by a d.c. voltmeter.
Measurement conditions are as follows:
Power source a.c. 220V-240V, 50Hz
Receiving Signal Colour Bar signal (RF)
All customer controls Maximum position

7.
 Indicates the Video signal path
 Indicates the Audio signal path

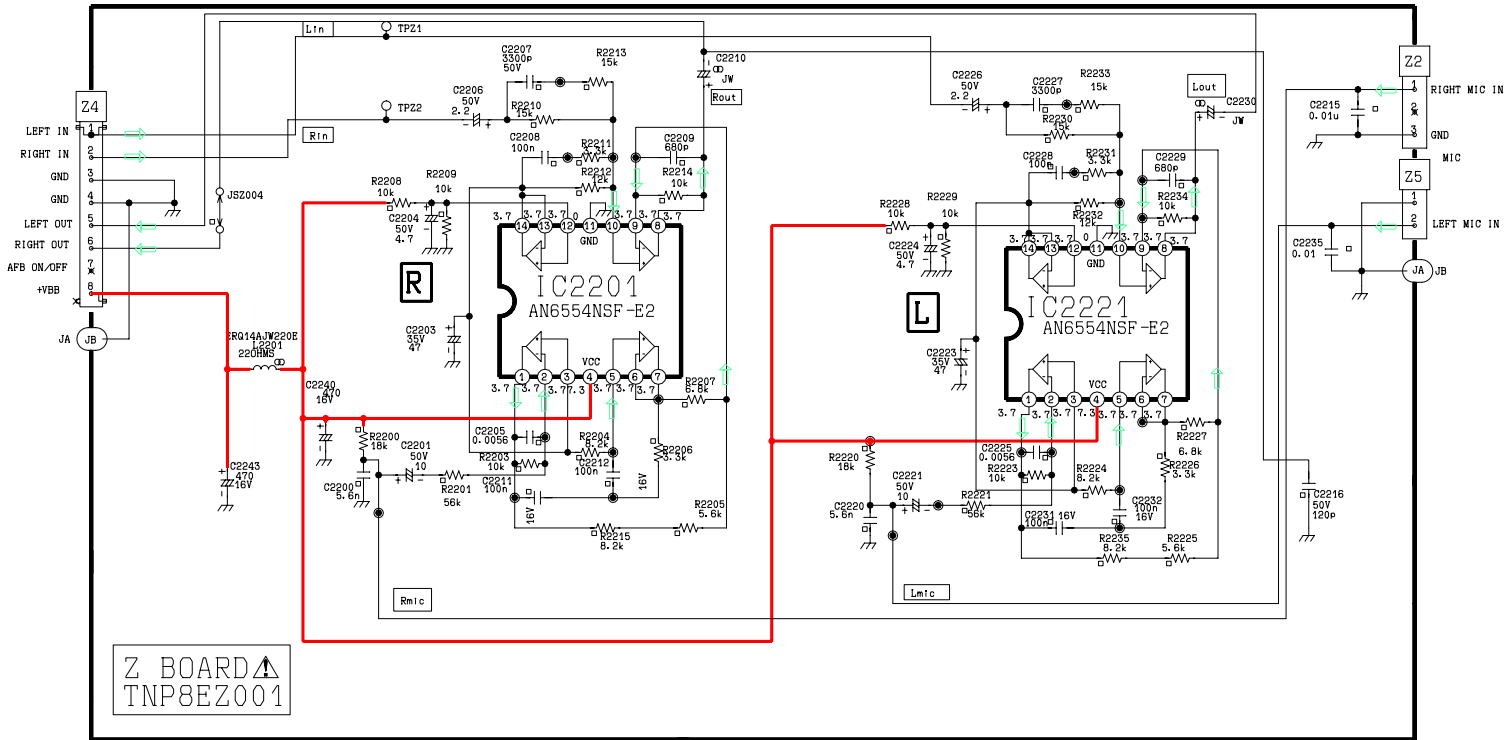
These schematic diagrams are the latest at time of printing and are subject to change without notice.

REMARKS

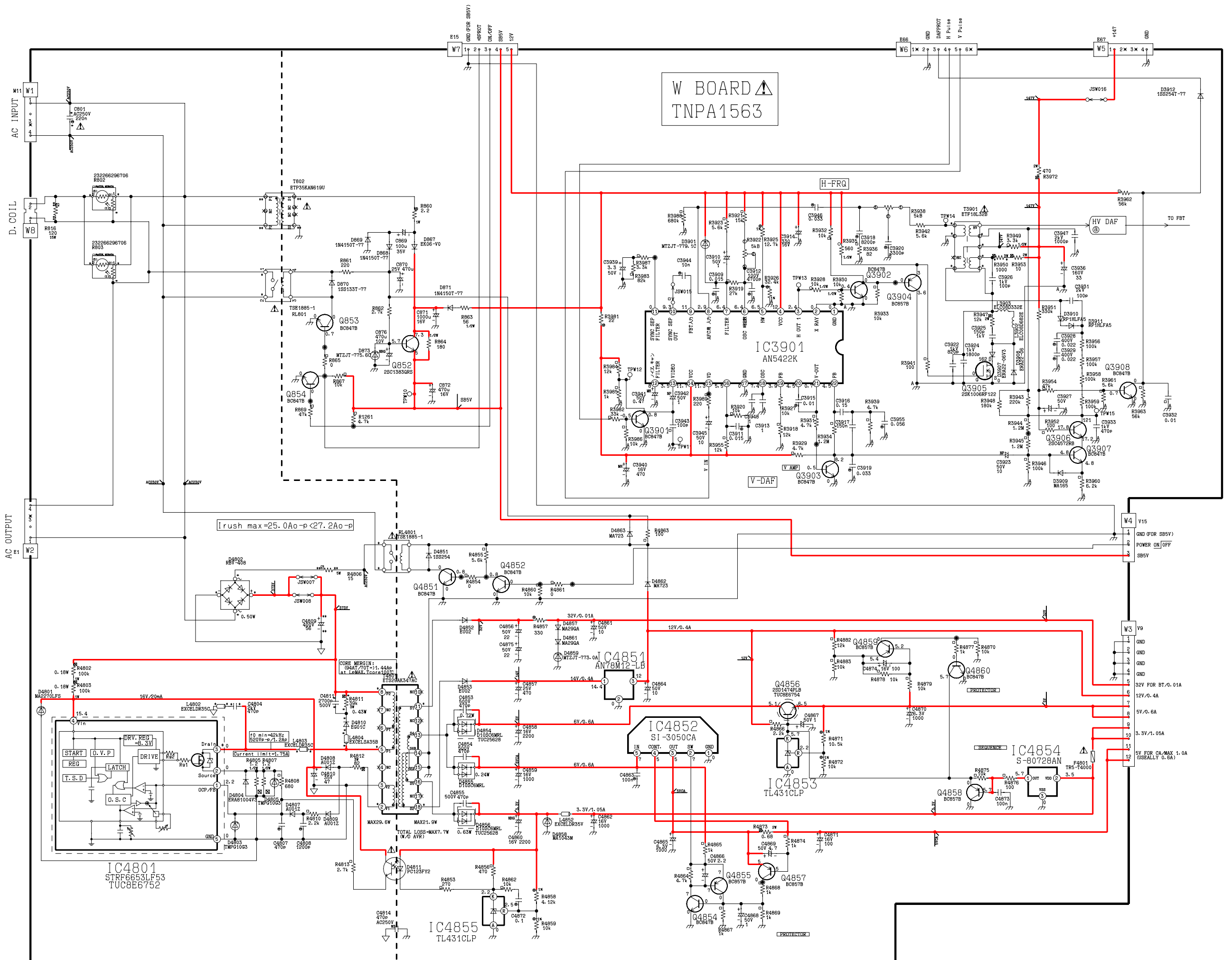
- a. Do not touch the hot part, or the hot and cold parts at the same time, as you are liable to a shock hazard.
- b. Do not short circuit the hot and cold circuits as electrical components may be damaged.
- c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously as this may cause fuse failure. Connect the earth of the instruments to the earth connection of the circuit being measured.
- d. Make sure to disconnect the power plug before removing the chassis.

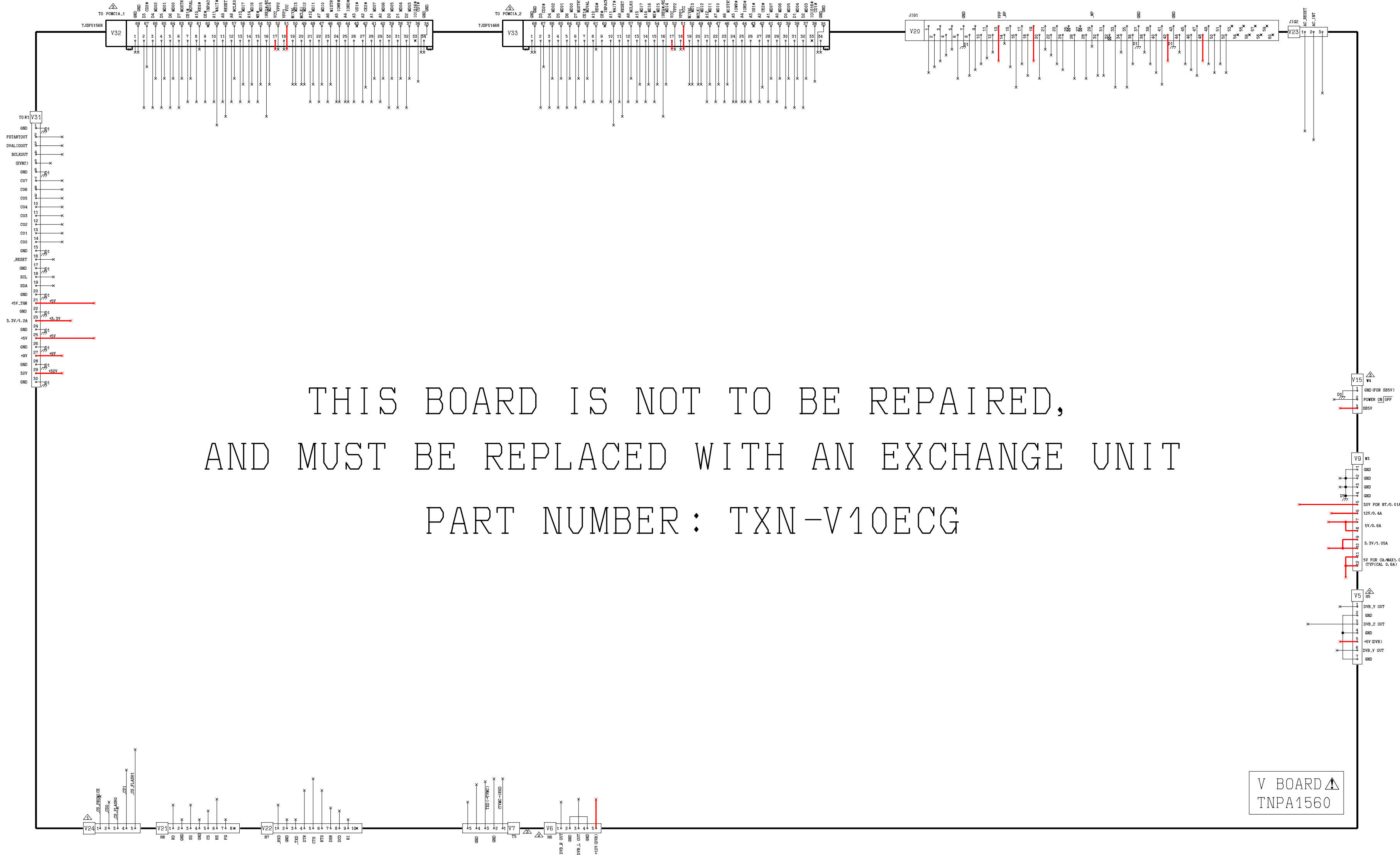
NOTE

1. The Power Supply Circuit contains a circuit area, which uses a separate power supply to isolate the earth connection. The circuit is defined by HOT and COLD indications in the schematic diagram. All circuits, except the Power Circuit, are COLD.



TX-32DT2

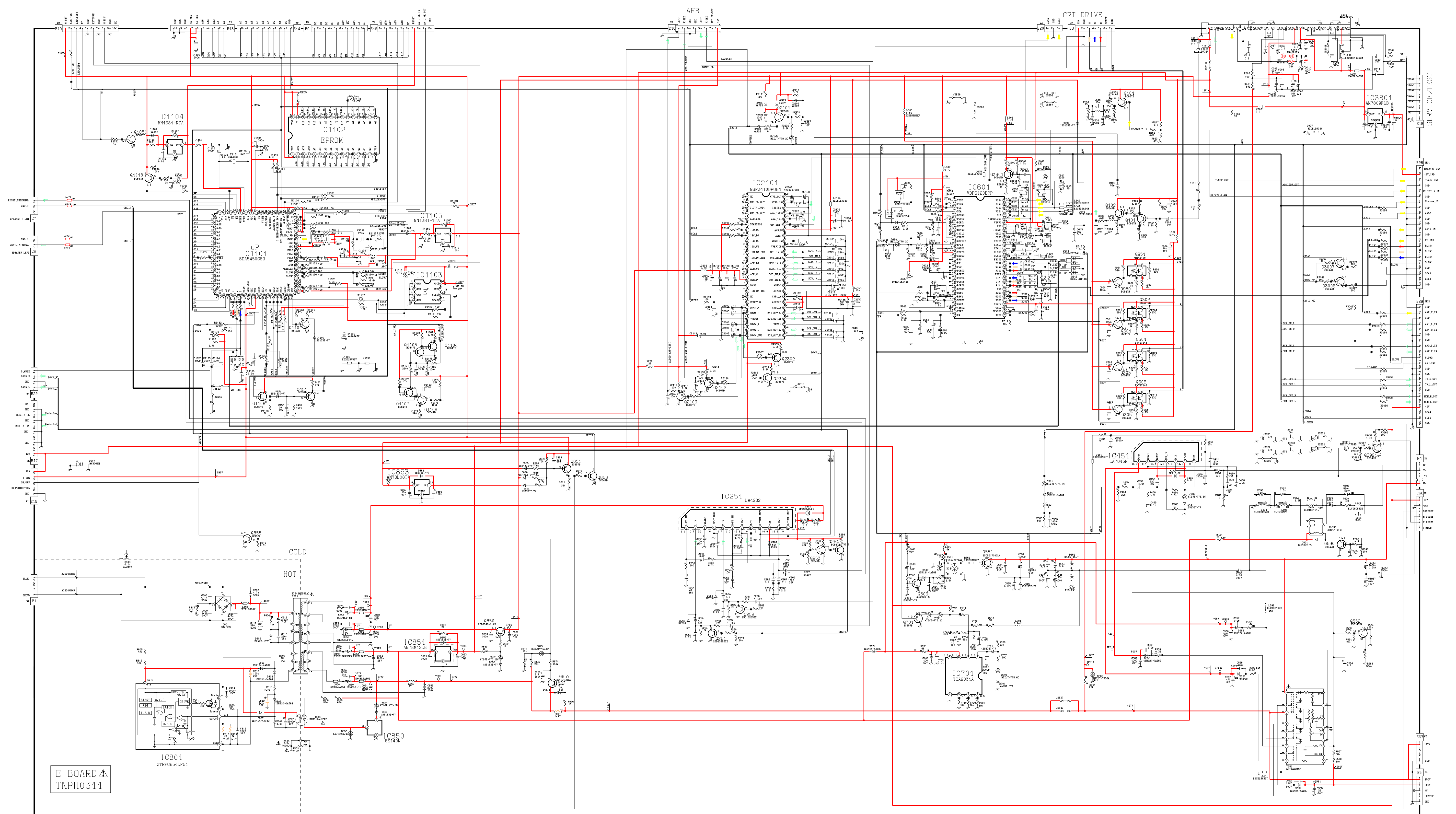




THIS BOARD IS NOT TO BE REPAIRED,
 AND MUST BE REPLACED WITH AN EXCHANGE UNIT
 PART NUMBER: TXN-V10ECG

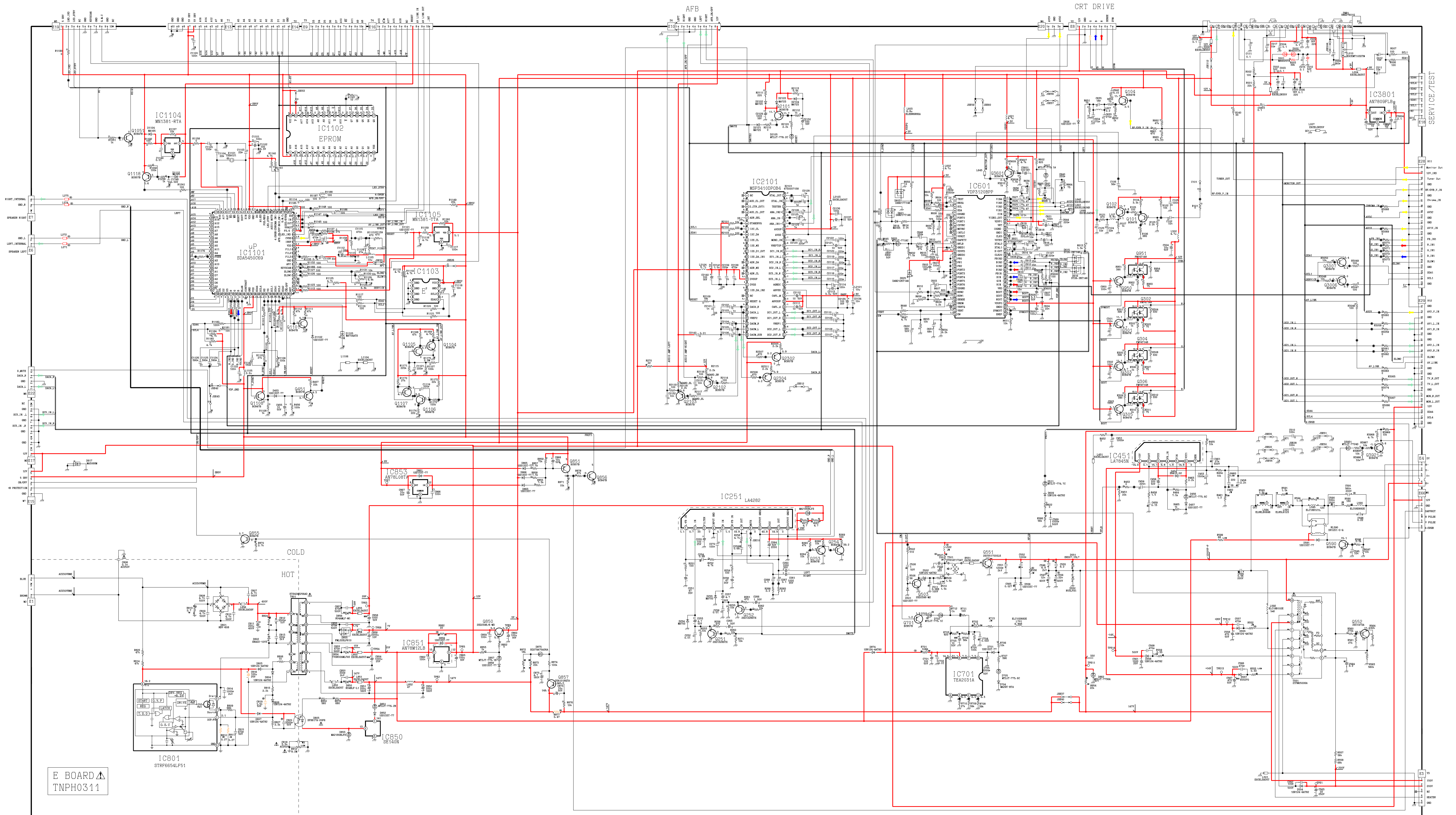
V BOARD
 TNPA1560

TX-32DT2



E BOARD
TNP0311

TX-28DT2

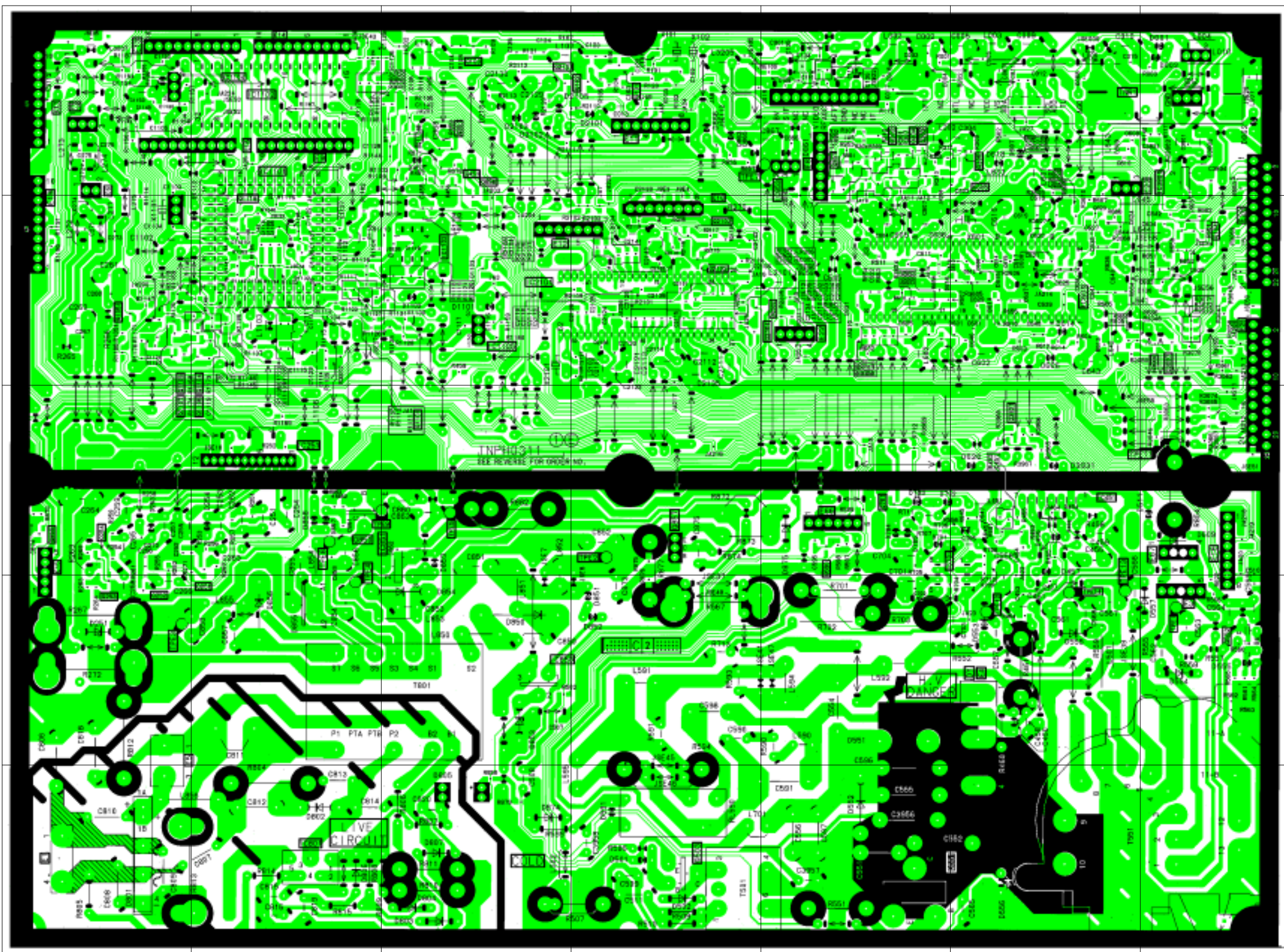


CONDUCTOR VIEWS

E - BOARD TNPH0311

TRAN'S	DIODES	D865	A4
Q101	A4	D001	A7
Q102	A4	D002	A7
Q103	A3	D251	D1
Q104	B7	D253	C1
Q251	D2	D254	C2
Q252	D1	D453	A3
Q253	D1	D454	C6
Q254	C1	D455	C6
Q301	B5	D457	C6
Q302	A5	D501	E4
Q303	A5	D502	E3
Q304	A5	D551	D5
Q305	A6	D552	E5
Q306	A6	D553	D6
Q451	A3	D554	D7
Q503	E4	D555	D7
Q551	E5	D556	E6
Q552	D7	D557	D7
Q590	C5	D558	D6
Q701	C5	D591	E4
Q850	C2	D601	B6
Q851	A3	D603	B5
Q855	C1	D605	B5
Q856	A3	D606	B6
Q857	C4	D607	A6
Q950	B5	D610	B6
Q951	A5	D611	C7
Q1051	B1	D614	B6
Q1101	C3	D615	B6
Q1104	B2	D616	B5
Q1105	B1	D617	A1
Q1106	C2	D618	A6
Q1107	C1	D620	C6
Q1108	A3	D701	C5
Q2101	A3	D703	C5
Q2102	B4	D704	C5
Q2103	B4	D705	C5
Q2302	B5	D801	E1
Q2304	B5	D802	E2
Q3006	B7	D803	E3
Q3007	B7	D804	E3
Q3601	A6	D805	E3
Q3921	C6	D806	E2
		D807	E3
		D850	D3
		D851	D4
		D852	D4
		D853	D3
		D854	D3
		D855	D2
		D856	D2
		D857	C2
		D858	C2
		D859	C3
		D861	A5
		D862	A7
		D863	A4

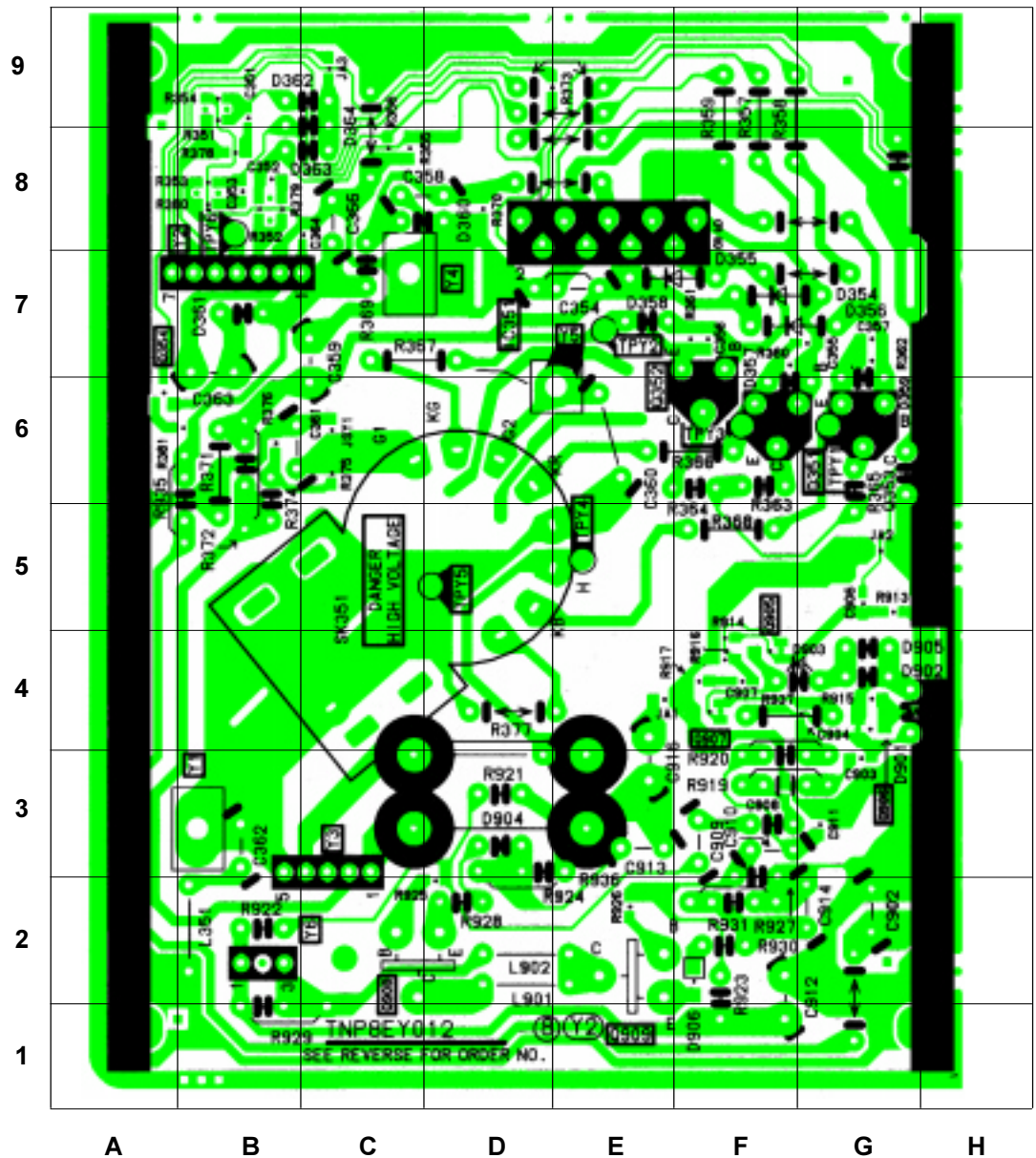
A
B
C
D
E



1 2 3 4 5 6 7

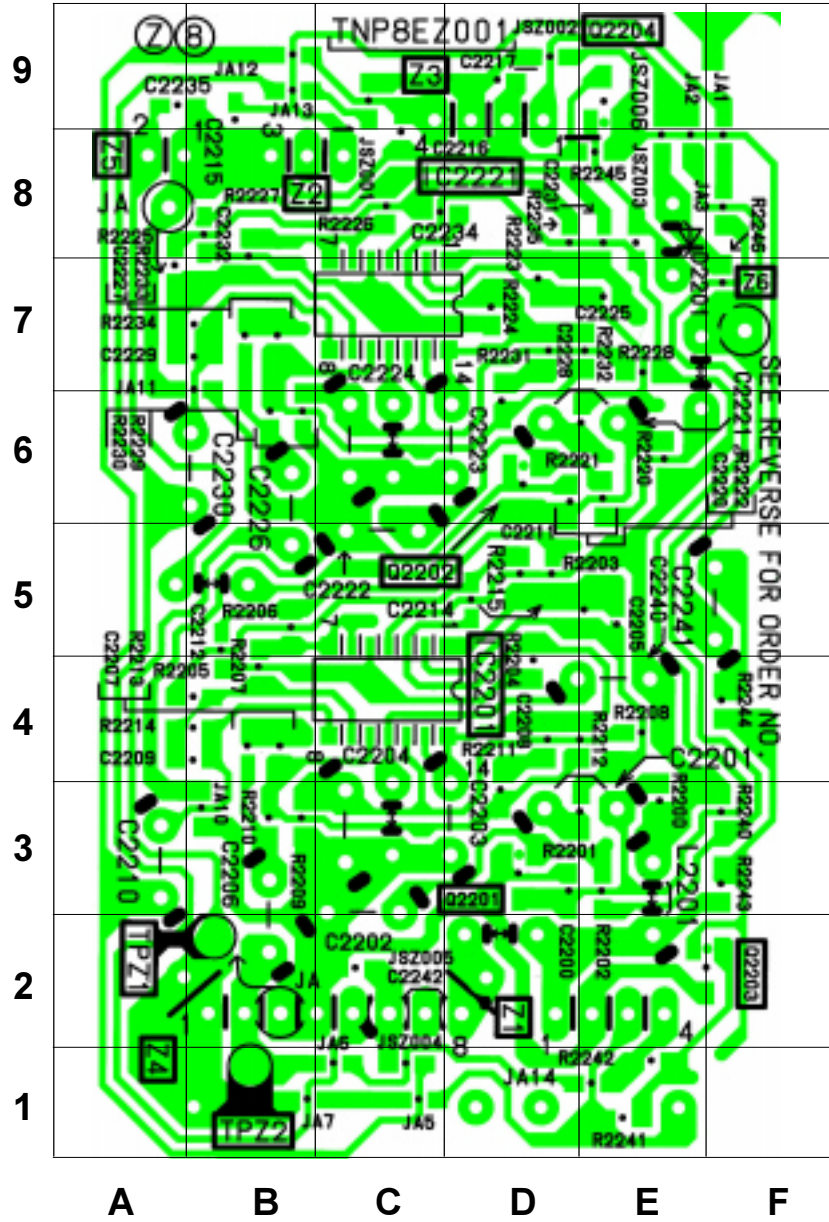
Y - BOARD TNP8EY012

TRANSISTORS	
Q909	E1
Q908	C2
Q907	F4
Q906	G3
Q905	F5
Q354	A7
Q353	G6
Q352	F6
Q351	F6
DIODES	
D906	F1
D905	G4
D904	D3
D902	G4
D901	G3
D364	C9
D363	C8
D362	B9
D361	B7
D360	D8
D359	G6
D358	E7
D357	F7
D356	G7
D355	F7
D354	G7
TEST POINTS	
TPY6	B8
TPY5	D5
TPY4	E5
TPY3	F6
TPY2	E7
TPY1	G6
IC'S	
IC351	E8



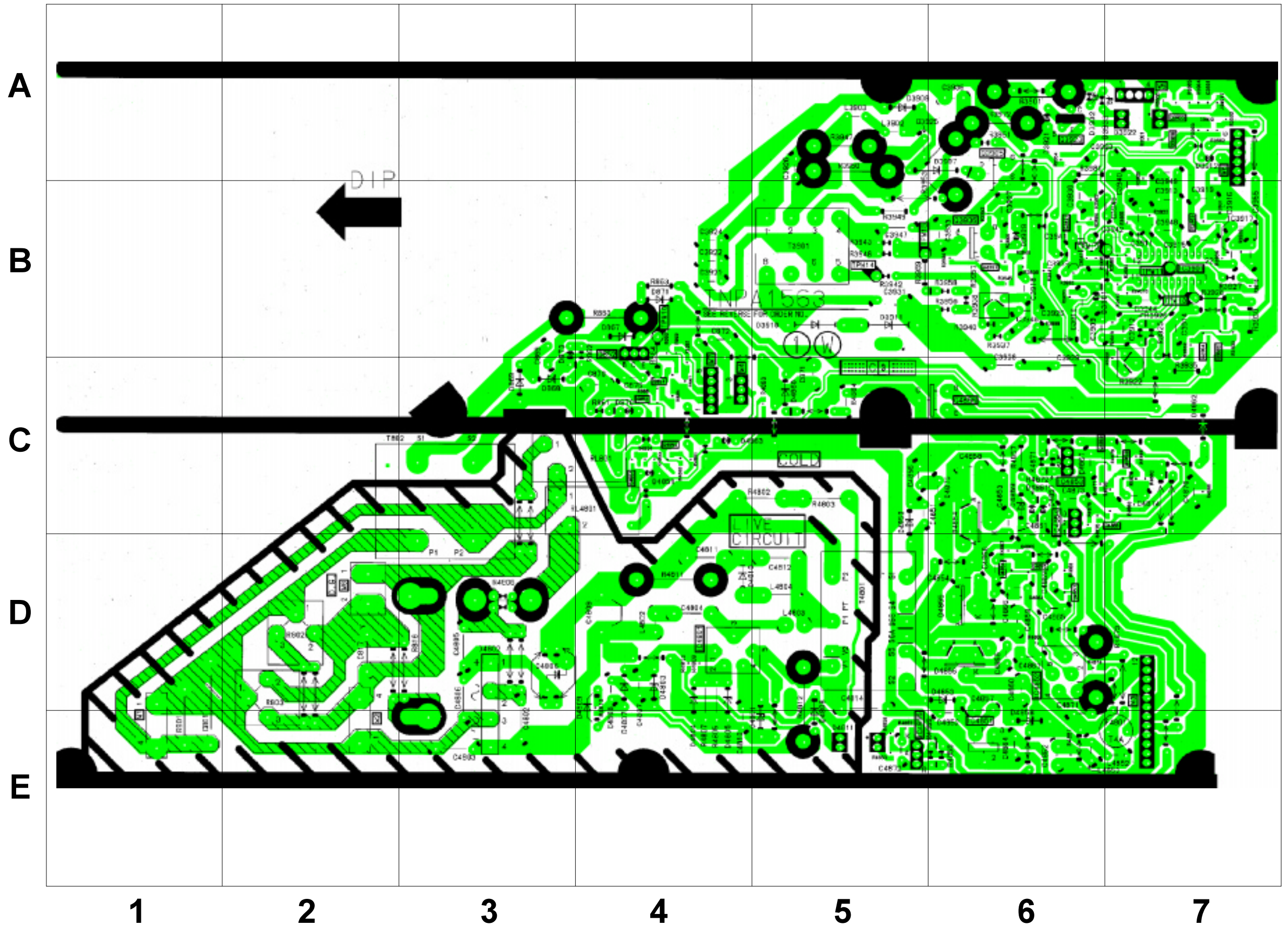
Z - BOARD TNP8EZ001

TRAN'S	
Q2201	D3
Q2202	C5
Q2203	F2
Q2204	E9
DIODES	
D2201	E8
TP'S	
TPZ1	B2
TPZ2	B1
IC'S	
IC2201	C4
IC2221	C7



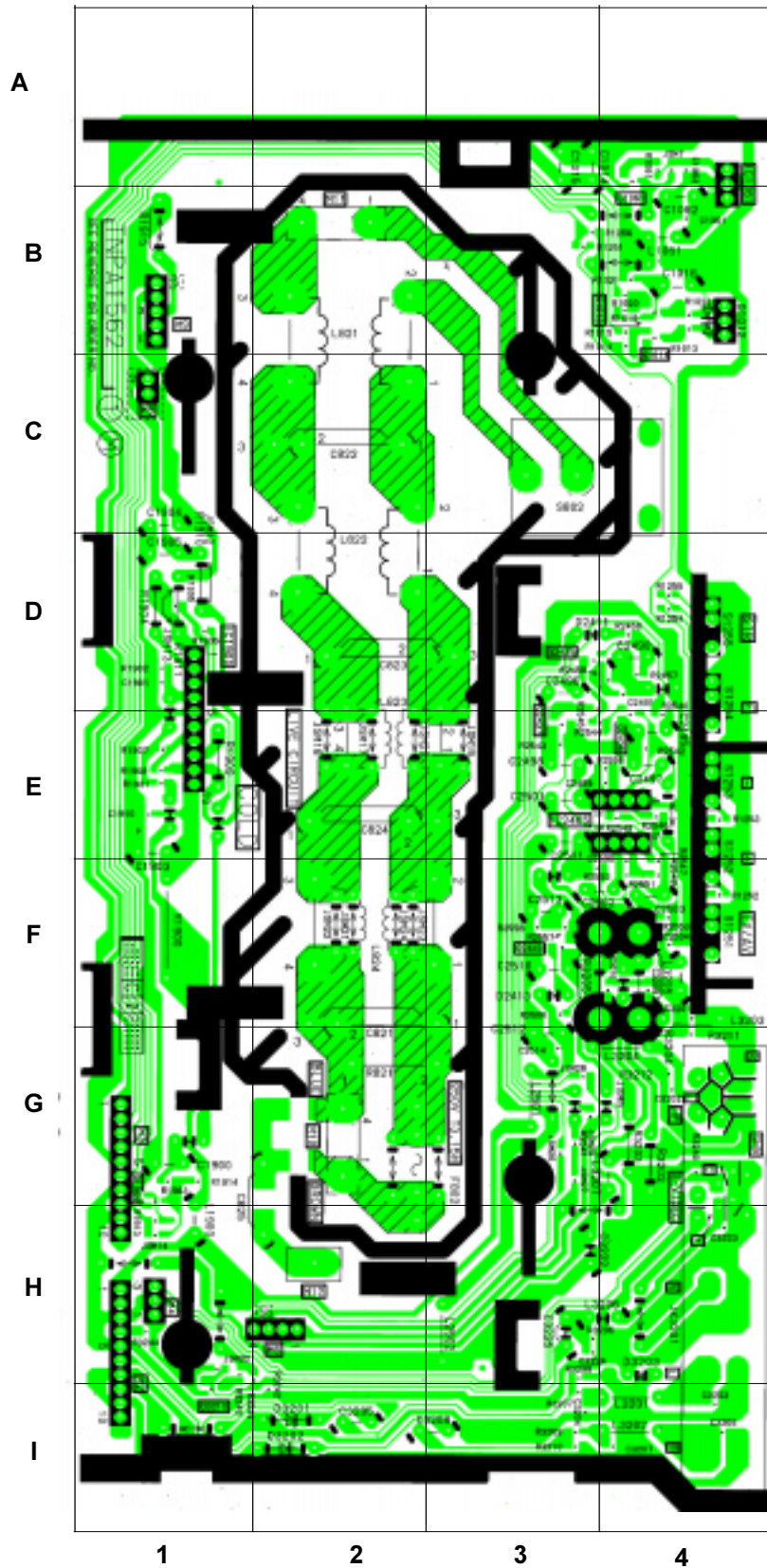
W - BOARD TNPA1563

TRAN'S		DIODES	
Q852	B4	D867	B4
Q853	C4	D868	C3
Q854	C4	D869	C3
Q3901	B6	D870	C4
Q3902	B7	D871	B4
Q3903	B7	D873	B3
Q3904	B7	D3901	B6
Q3905	A6	D3907	A6
Q3906	B6	D3908	A5
Q3907	B6	D3909	B6
Q3909	A7	D3910	B5
Q3922	A7	D3911	B5
Q3923	A6	D3912	A7
Q4851	C4	D3922	A7
Q4852	C4	D3932	A6
Q4854	D6	D3933	A7
Q4855	D6	D4801	E5
Q4856	C6	D4803	D4
Q4857	D6	D4805	D4
Q4858	C7	D4806	D3
Q4859	C7	D4807	D4
Q4860	C6	D4808	E5
IC'S		D4809	
IC3901	B7	D4810	D4
IC4801	D4	D4811	E5
IC4851	E6	D4851	C4
IC4852	D6	D4852	C5
IC4853	C6	D4853	D6
IC4854	C6	D4854	C6
IC4855	E5	D4855	D6
TP'S		D4856	
TPW10	B4	D4857	C6
TPW11	B7	D4858	E6
TPW12	B6	D4859	C6
TPW13	B7	D4860	C5
TPW14	B5	D4862	C7
TPW15	B5	D4863	C4



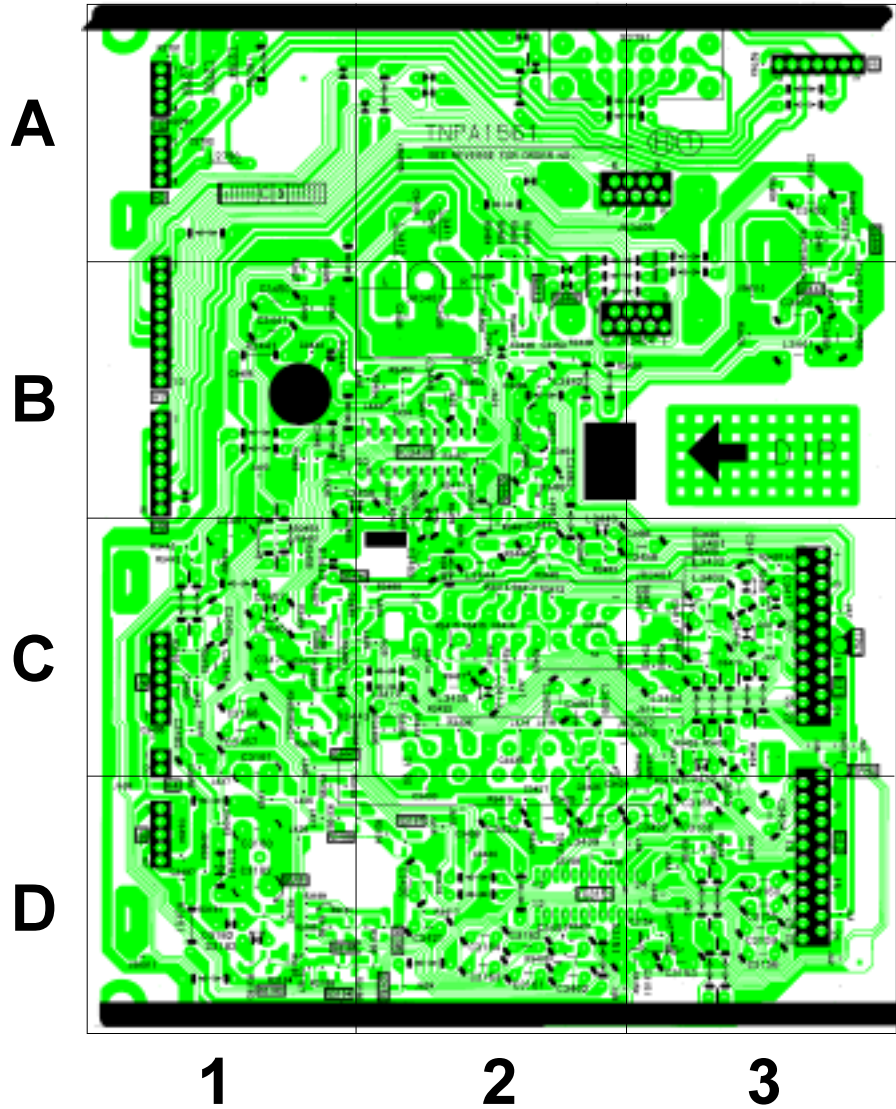
M - BOARD TNPA1562

TRANSISTORS	
Q1011	B4
Q1013	B4
Q1061	B4
Q2435	D3
Q2436	E4
Q2437	E3
Q2440	F3
Q3210	I1
DIODES	
D1012	B4
D1900	G1
D2411	D3
D2413	F3
D3201	I2
D3202	I2
D3203	H4
IC'S	
IC1061	A4
IC1900	D1
IC2405	E3



H - BOARD TNPA1561

TRANSISTORS	
Q3181	D1
Q3182	D1
Q3183	D2
Q3184	D1
Q3185	D2
Q3186	D1
Q3187	D2
Q3188	D1
Q3441	B2
Q3442	B2
Q3443	B3
Q3444	A3
Q3445	B2
Q3446	C1
Q3447	C1
DIODES	
D3151	D2
D3181	D1
D3182	D1
D3183	D1
D3441	B1
D3442	C1
D3443	C1
IC'S	
IC3151	D2
IC3401	B2
TP'S	
TPH1	C3
TPH2	C3



Y - BOARD TNP8EY017

TRANSISTORS	
Q909	E1
Q908	C1
Q907	F4
Q906	G3
Q905	F5
Q354	A7
Q353	G6
Q352	F6
Q351	F6
DIODES	
D906	F1
D905	G4
D904	D3
D902	G4
D901	G4
D364	C9
D363	B8
D362	B9
D361	A7
D360	D8
D359	G6
D358	E7
D357	F7
D356	G7
D355	F8
D354	G7
TEST POINTS	
TPY6	B8
TPY5	D5
TPY4	E5
TPY3	F6
TPY2	E7
TPY1	G6
IC'S	
IC351	E8

