ORDER No. PCZ0409017C2

Service Manual

Colour Television

TX-29PM11D
TX-29PM11F
TX-29PM11P

GP2 Chassis

SPECIFICATIONS

Power Source:	220-240V a.c., 50Hz
Power Consumption:	101W
Stand-by Power Consumption:	0,9W
Aerial Impedance:	75Ω unbalanced, Coaxial Type
Receiving System:	PAL-I, B/G, D/K, PAL-525/60 SECAM B/G, D/K, L/L' M.NTSC (AV only) NTSC (AV only)

Receiving Channels:

VHF E2-E12	VHF H1-H2 (ITALY)
VHF A-H (ITALY)	VHF R1-R2
VHF R3-R5	VHF R6-R12
UHF E21-E69	CATV (S01-S05)
CATV S1-S10 (M1-M10)	CATV S11-S20 (U1-U10)
CATV S21-S41 (HYPERBAND)	

Intermediate Frequency:
Video/Audio

Video	38,9MHz, 33,9MHz
Sound	33,4MHz (B/G), 33,16MHz (A2) 33,05MHz (NICAM B/G,D/K,L) 32,4MHz (D/K),32,66MHz (CZ STEREO) 40,4MHz (L'), 39,75MHz (L'NICAM)
Colour	34,47MHz (PAL) 34,5MHz, 34,65MHz (SECAM) 38,3MHz, 38,15MHz (SECAM L')

Terminals:

AUDIO MONITOR OUT	Audio (RCAx2)	500mV rms 1kΩ
AV1 IN	Video (21 pin)	1V p-p 75Ω
	Audio (21 pin)	500mV rms 10kΩ
	RGB (21 pin)	0,7V p-p 75Ω
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 (21-pin)	Y: 1V p-p 75Ω C:0,3V p-p 75Ω
AV2 OUT	Video (21 pin)	1V p-p 75Ω
	Audio (21 pin)	500mV rms 1kΩ
AV3 IN	S-Video IN (4-pin)	Y: 1V p-p 75Ω C:0,3V p-p 75Ω
	Audio (RCAx2)	500mV rms 10kΩ
	Video (RCAx1)	1V p-p 75Ω

High Voltage:	31kV ± 1kV	
Picture Tube:	A68EPD10X70	68cm
Audio Output:	2x10W RMS, 2x20W MPO, 8Ω impedance	
Headphones:	8Ω Impedance	
Accessories supplied :	Remote Control 2 x R6 (UM3) Batteries	

Dimensions:

Height:	584mm
Width:	781mm
Depth:	531mm

Net weight: 43kg

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

Panasonic

CONTENTS

SAFETY PRECAUTION

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 32kV 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 2kΩ 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 previous measurements.
6. The potential at any point should not exceed 1,4 Vrms. 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.

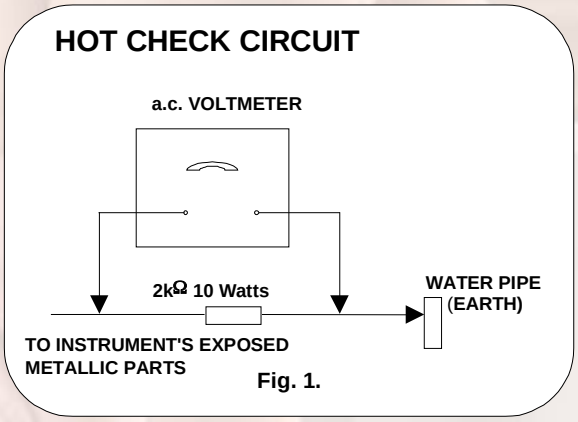


Fig. 1.

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 32kV 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: 31kV ± 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.

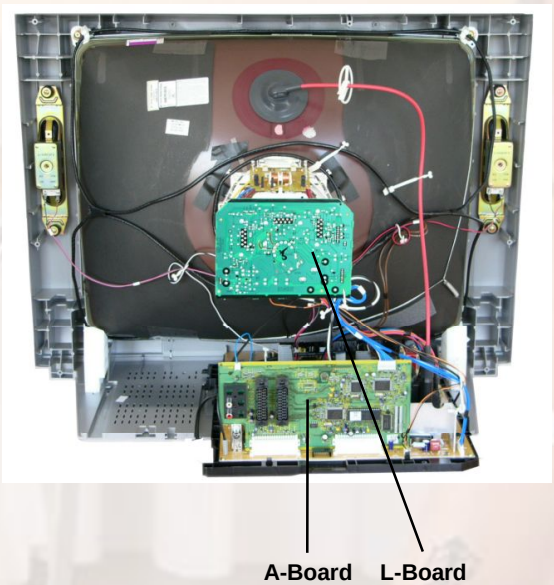
SERVICE HINTS

How to remove the rear cover

1. Remove the 12 screws as shown in **Fig.2.**

Fig. 2

LOCATION OF CONTROLS



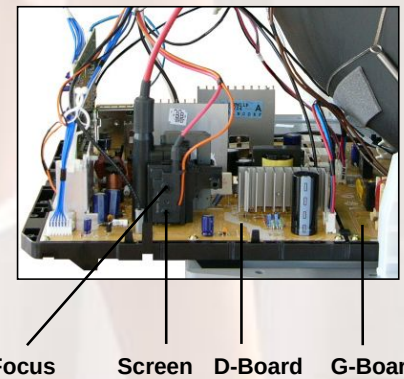
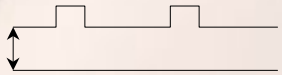


Fig. 3

ADJUSTMENT PROCEDURE

Item / Preparation	Adjustments
+B SET-UP 1. Receive a Window pattern. 2. Set the controls : Brightness Minimum Contrast Minimum Volume Minimum	Confirm the following voltages: **TPD1** 205 ± 10V **D9 pin3** 9 ± 0,5V **TPD2** 137 ± 2V **D9 pin7** 10,5 ± 0,5V **TPD3** 42 ± 2V **D2 pin22** 3,3 ± 0,1V **TPD5** 42 ± 2V **D2 pin26** 2,5 ± 0,1V **TPD6** 12,5 ± 1V **D2 pin14** 3,3 ± 0,1V **TPD7** -12,5 ± 1V **D9 pin5** 5 ± 0,5V **TPD8** 30,5 ± 1V **D9 pin11** 6,5 ± 0,5V **TPD11** 5 ± 0,5V
CUT OFF / Ug2 Test 1. Receive a Window pattern. 2. Set Viewing Mode: Normal 3. Normalize the TV set. 4. Set brightness: Minimum	To adjust Cutoff connect an oscilloscope to the Blue cathode. Adjust the screen VR until the black level is 160V +5V/-5V. Black Level 160V+5V/-5V GND 

SELF CHECK

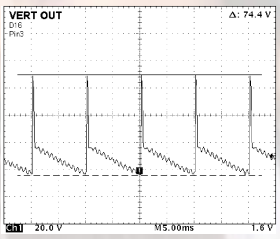
Self-check is used to automatically check the bus lines and hexadecimal code of the TV set.To enter Self-Check mode, press the **STATUS** + button on the remote control and at the same time press the down **(-/v)** button on the customer controls at the front the TV set. To exit Self Check, switch off the TV set at the power button.

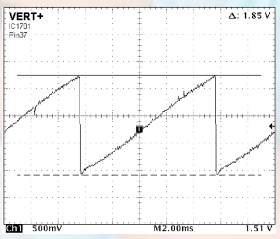
E2	O.K.	SUM	**
DDP	O.K.		
VSP	O.K.		
VPCD	O.K.		
AVSW	O.K.		
TUN	O.K.		
MSP	O.K.		
DPL	---		
MAS	---		

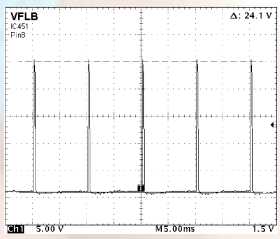
	TX-29PM11D	TX-29PM11F TX-29PM11P
OPTION 1	0F	0F
OPTION 2	00	00
OPTION 3	A0	A0
OPTION 4	11	11
OPTION 5	00	00
OPTION 6	05	05
OPTION 7	7F	7F
OPTION 8	D0	50
OPTION 9	00	00
OPTION 10	80	80
OPTION 11	1B	1B
OPTION 12	00	00
OPTION 13	0C	0C
CHECK	BB	3B

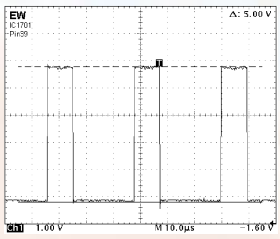
If the CCU ports have been checked and found to be incorrect or not located then " - - " will appear in place of "O.K.".

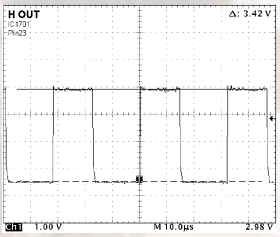
WAVEFORM PATTERN TABLE

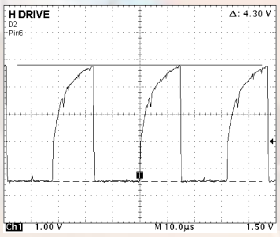


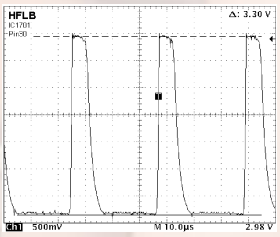


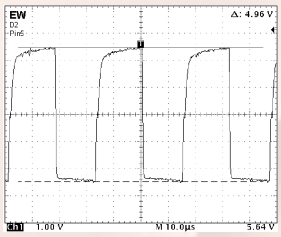


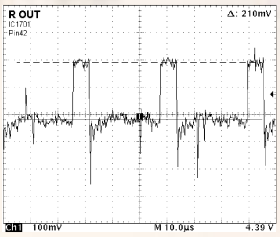


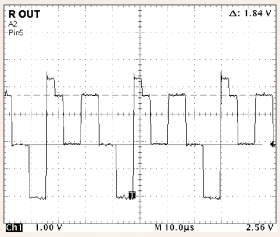


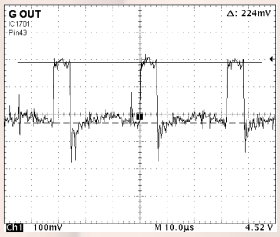


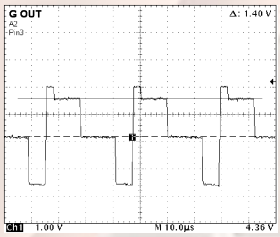


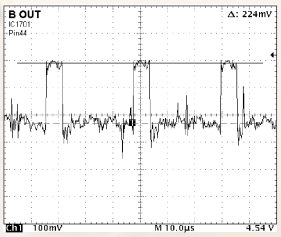


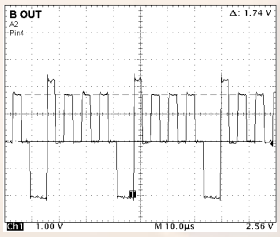


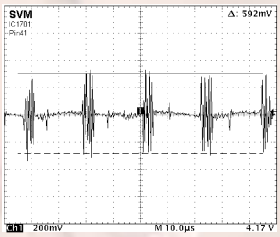


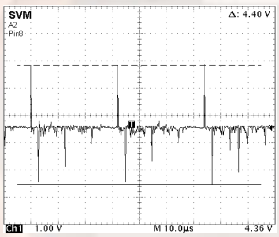


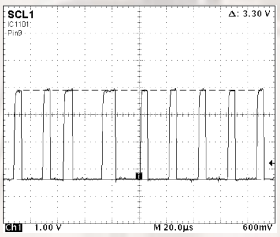


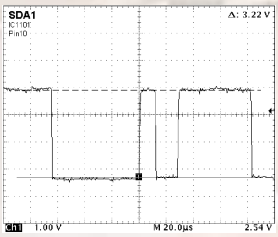


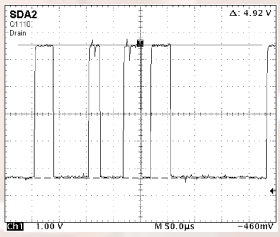


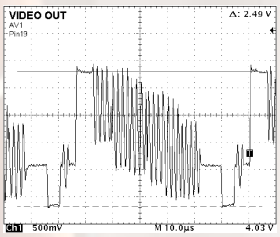












CONDITIONS:	CONTRAST...MAX,	BRIGHTNESS...MID,	COLOUR...MID,	SHARPNESS...MID

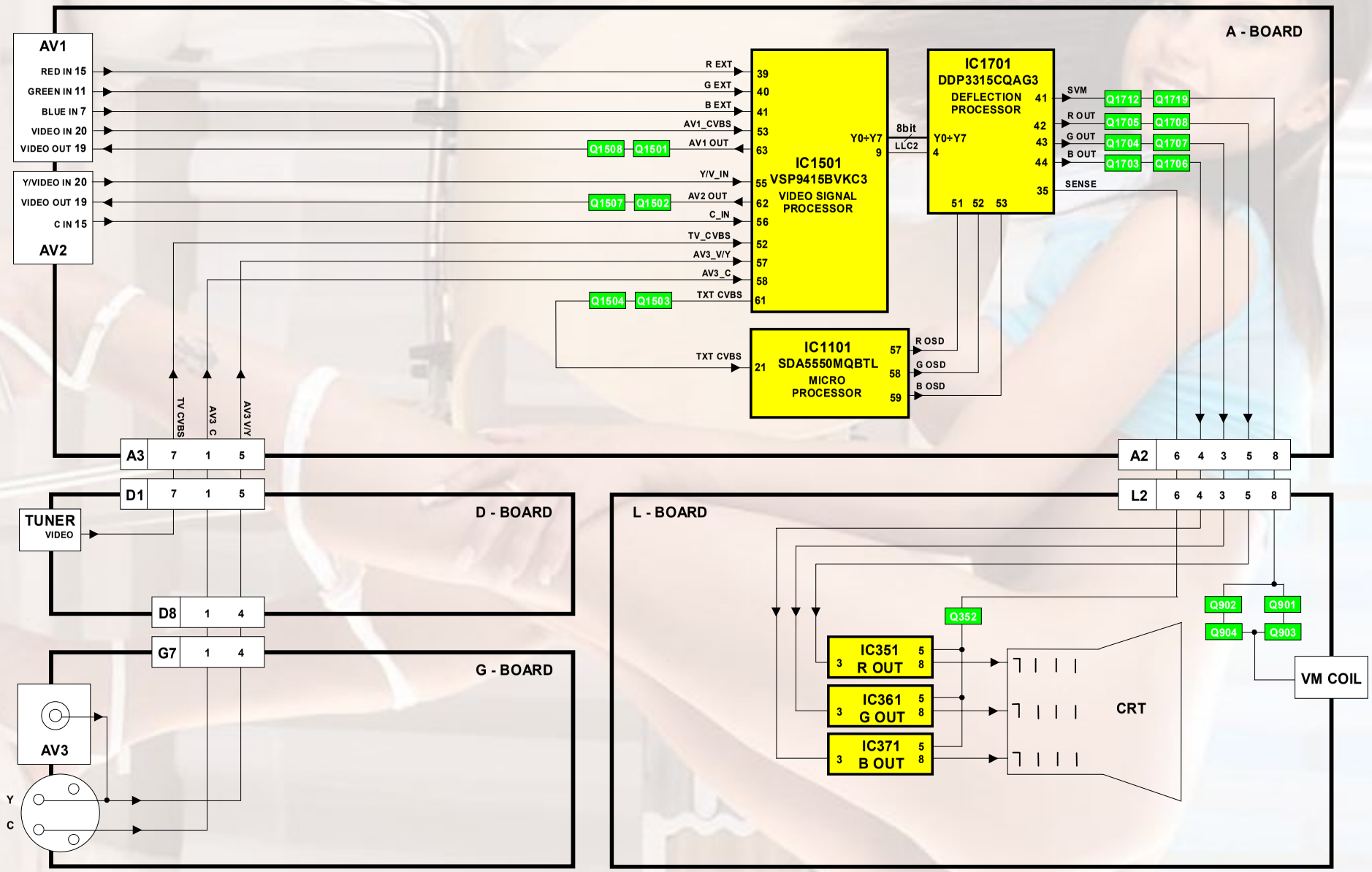
ALIGNMENT SETTINGS

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

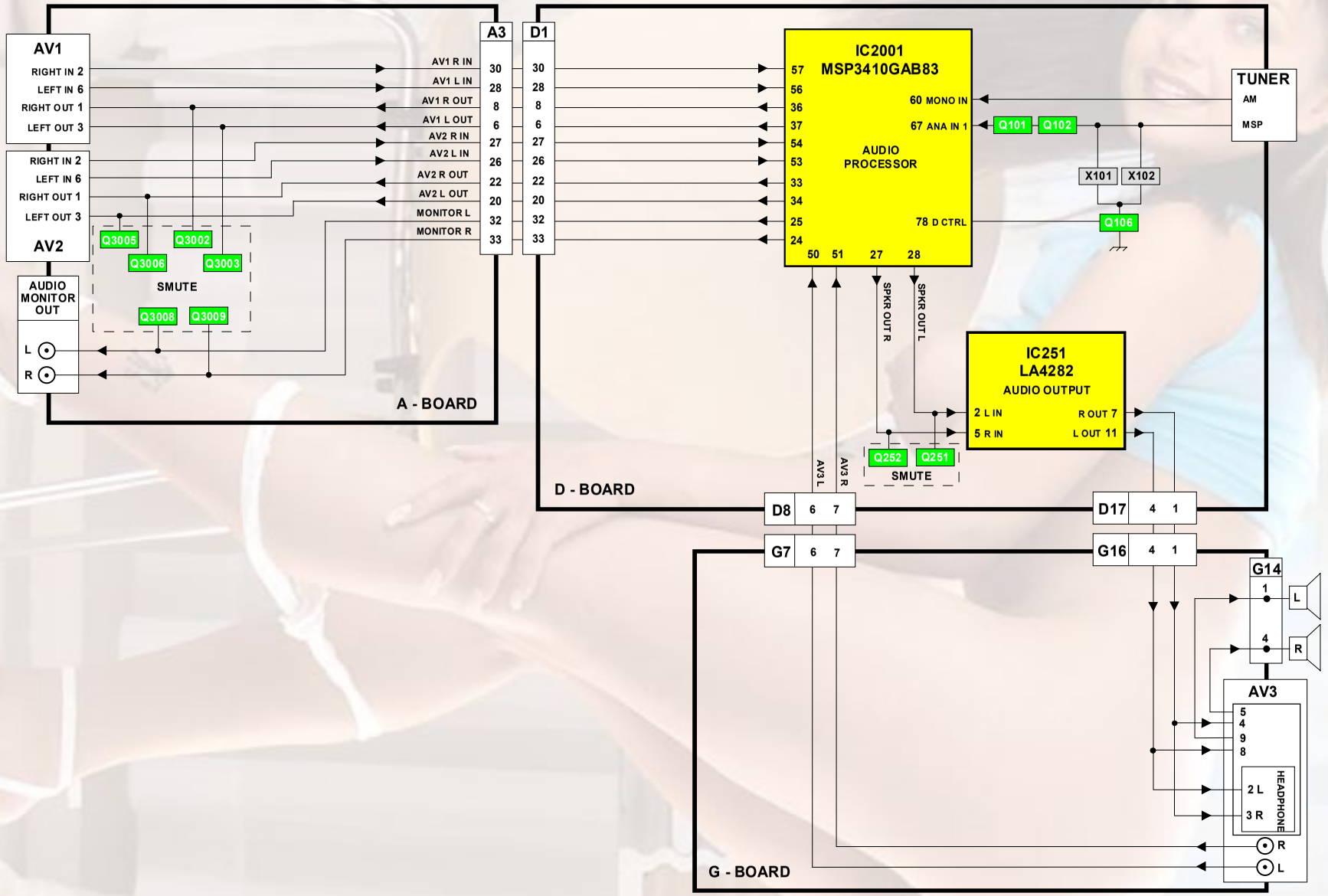
1. Set the Bass to maximum position, set the Treble to minimum position, set the Volume to minimum then press the down button (**-/v**) on the customer controls at the front of the TV and at the same time press the **INDEX** button on the remote control, this will place the TV into the Service Mode 1.
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 **OK** button after each adjustment has been made to store the required values.
5. To exit the Service Mode, press the "**N**" button.

Alignment Function	**Setting indication** **Note**: All setting values are approximate	**Settings / Special features**
Horizontal Position	H-Pos 40	Optimum setting.
Vertical Position	V-Pos 30	Optimum setting.
Horizontal Amplitude	H-Amp 2	Optimum setting.
Vert. Amplitude	V-Amp -33	Optimum setting.
EW-amplitude	EW-Amp 1 - 36	Optimum setting.
Lower Corner	Lower Corner 1	Optimum setting.
Trapezium-comp	Trapez 1 -5	Optimum setting.
Upper Corner	Upper Corner 1	Optimum setting.
Vertical Linearity	V-Lin -5	Optimum setting.
Vertical Symmetry	V-Sym 38	Optimum setting.
Angle	Angle 0	Optimum setting.
Bow	Bow 0	Optimum setting.
DVCO	DVCO 0	Receive a PAL Colour Bar Pattern. For DVCO alignment press "**Blue**" button, wait until the figure colour is changed from red to black colour.
Highlight Lowlight	High 0403 0318 0350 Low 0130 0150 0160	Optimum setting.
Sub-Brightness	Sub-Brightness 13	Optimum setting.

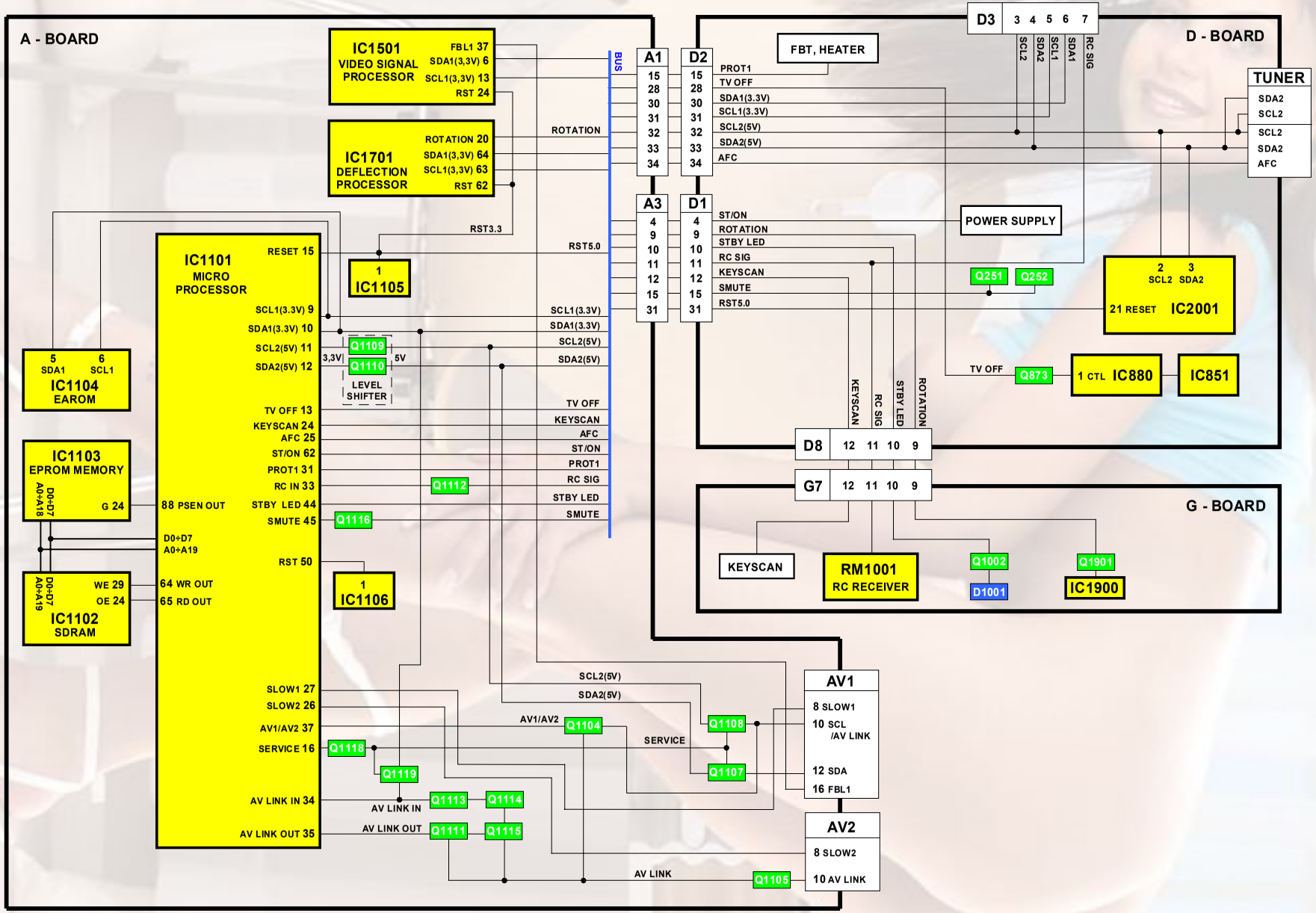
VIDEO BLOCK DIAGRAM



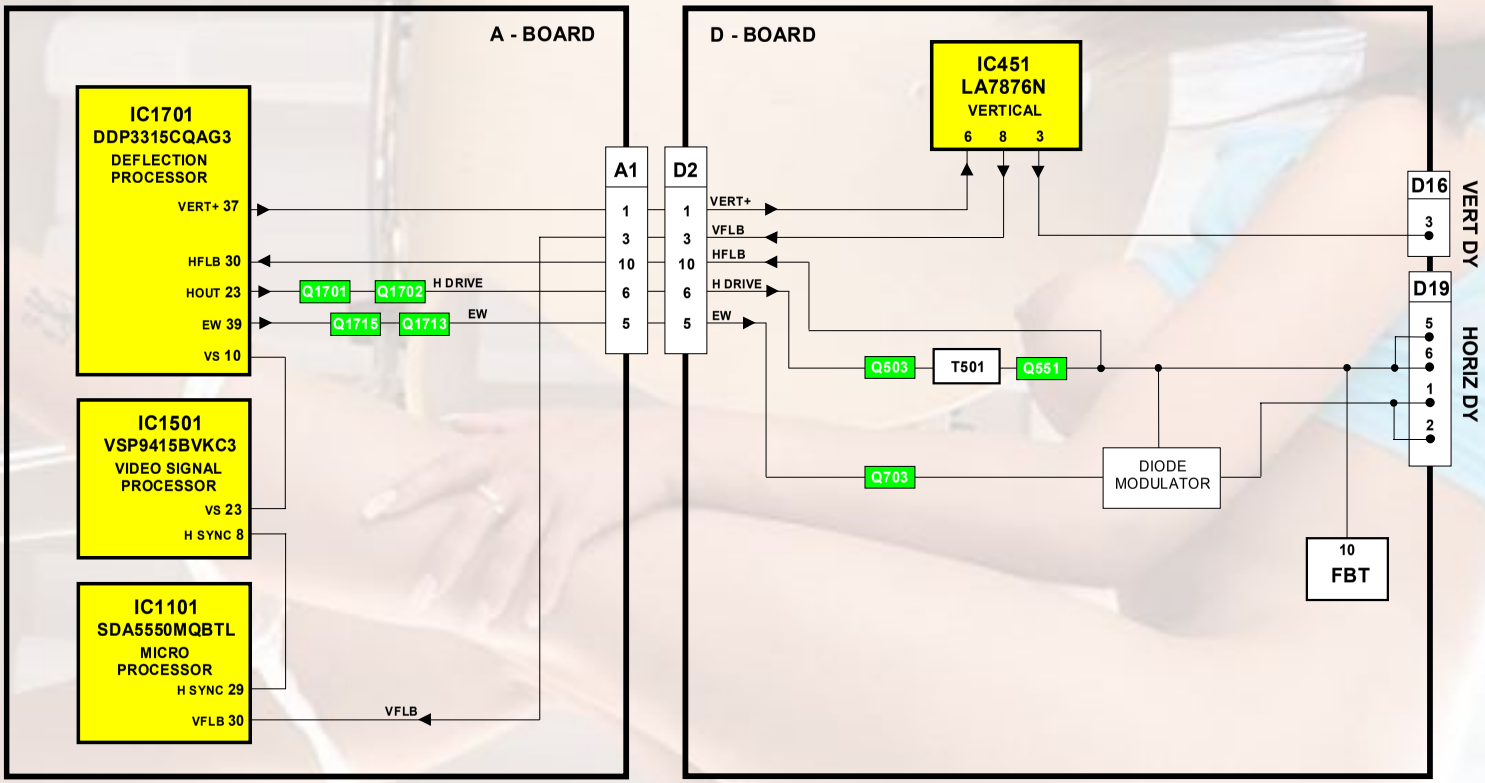
AUDIO BLOCK DIAGRAM



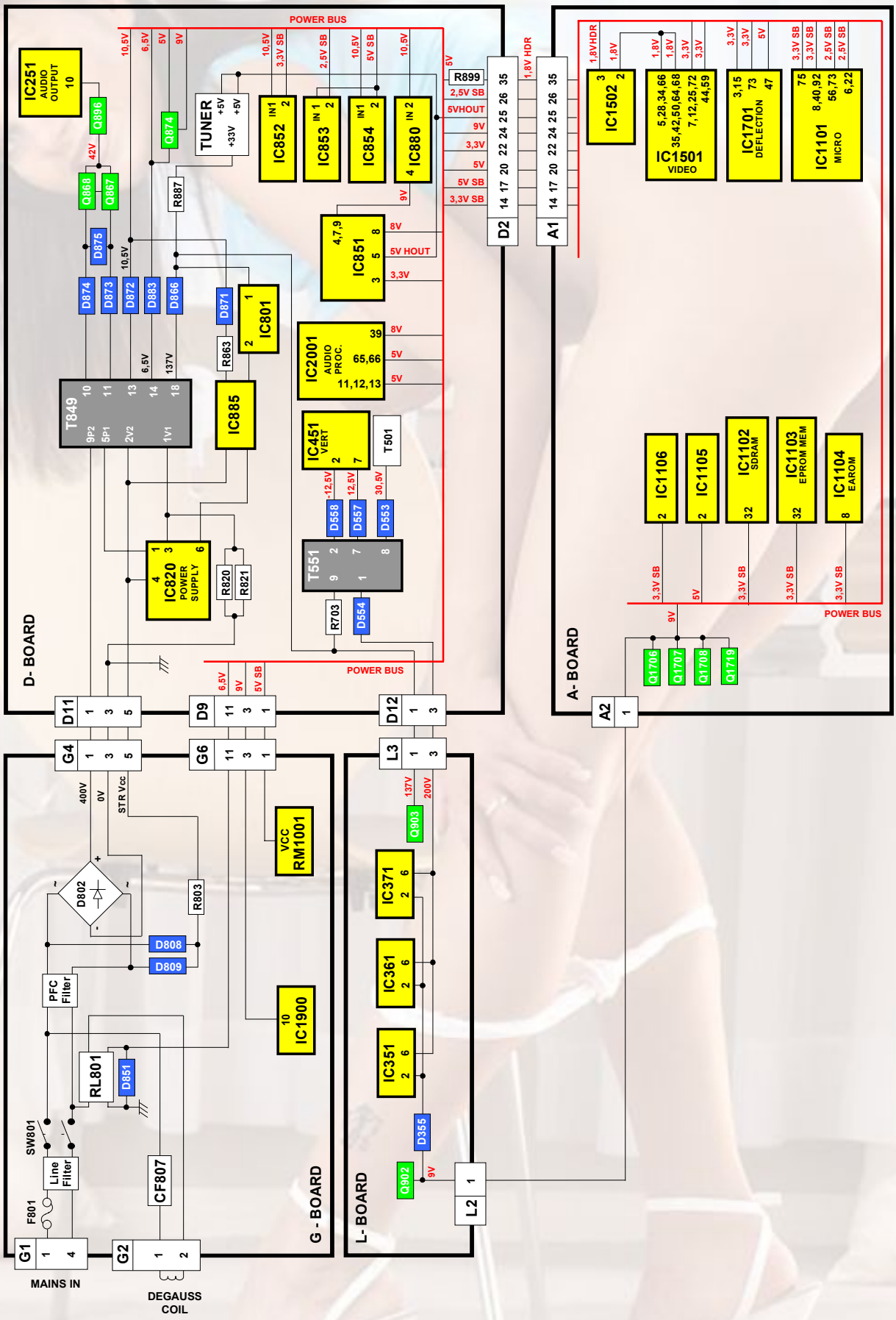
CONTROL BLOCK DIAGRAM



DEFLECTION BLOCK DIAGRAM

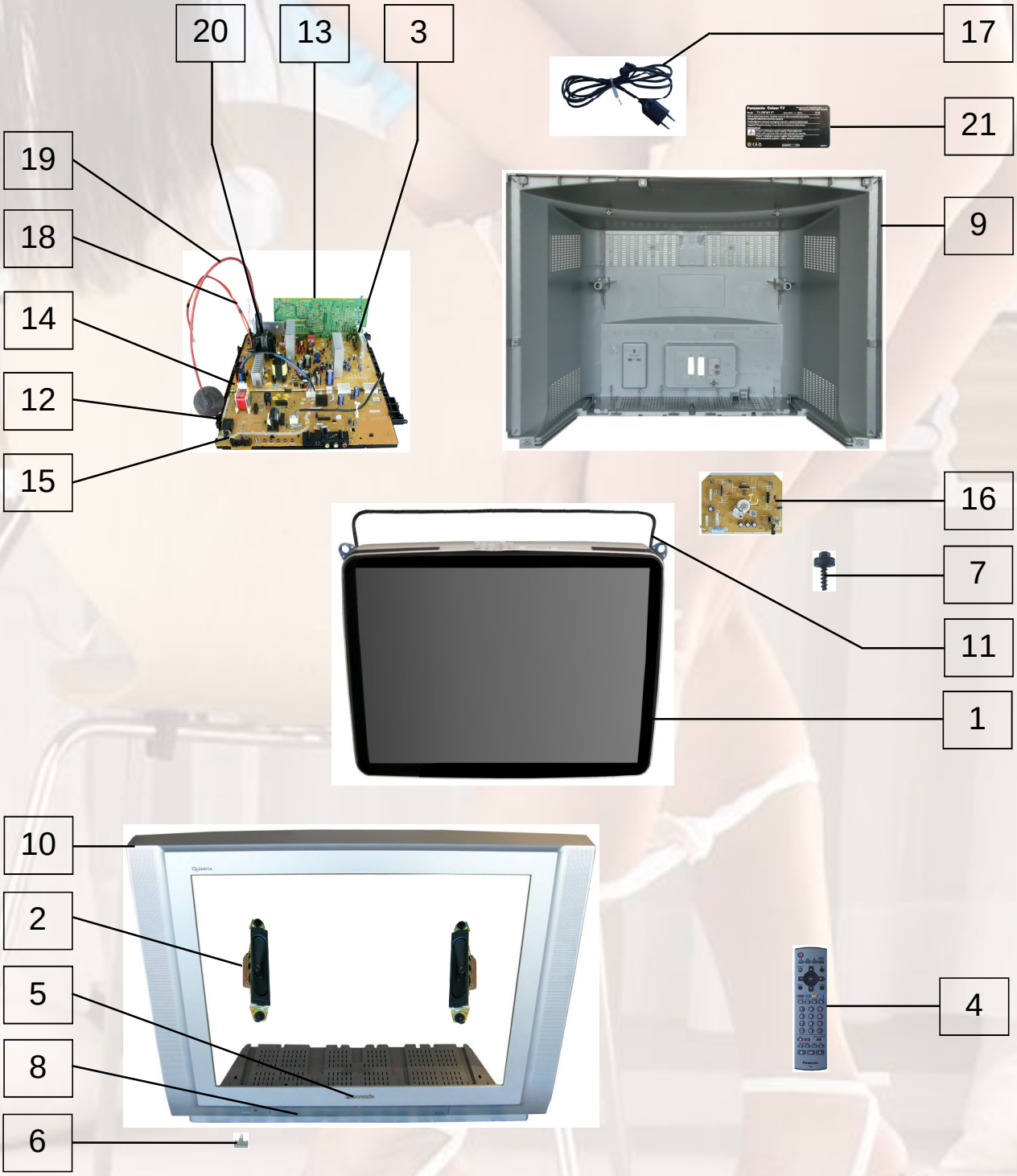


POWER SUPPLY BLOCK DIAGRAM



PARTS LOCATION

NOTE:
The numbers on the exploded view below refer to the exploded view 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			
EXPLODED VIEW			
1	A68EPD10X70	CRT	⚠
2	EASG16S503F2	SPEAKER	
3	ENG29525G	TUNER	
4	EUR7628010	REMOTE CONTROL	
5	TBM0E0101	PANASONIC BADGE	
6	TBX0E80800	POWER BUTTON	
7	THT1062	CRT FIXING SCREW	
8	TKP0E12001	DOOR LID	
9	TKU0E0133	BACK COVER	⚠
10	TKY0E0138	CABINET	
11	TLK8E05210	DEGAUSS COIL	⚠
12	TMX8E069	CHASSIS FRAME	
13	TNP8EA021AN	A P.C.B.	⚠
14	TNP8ED020BB	D P.C.B.	⚠
15	TNP8EG022AB	G P.C.B.	⚠
16	TNP8EL021AU	L P.C.B.	⚠
17	TXASX01EFFG	AC CORD ASSY	⚠
18	TXJ/FC0DEG1	FOCUS LEAD ASSY	⚠
19	ZTBZAD550A	ANODE LEAD	⚠
20	ZTFN65013A	F.B.T.	⚠
MISCELLANEOUS COMPONENTS			
.	R6RC/2P	BATTERY	
.	TBL8E014	SET FOOT (FRONT)	
.	TBLG3020	SET FOOT (REAR)	
.	TBM0E0232	PRESET LABEL L	
.	TEK6935	LID SWITCH	
.	TKK0E9507	CRT SUPPORT BRACKET R	
.	TKK0E9508	CRT SUPPORT BRACKET L	
.	TKP0E12101	IR WINDOW	
.	TLK8E05190	ROTATION COIL	
.	TMW8E050-2	LED HOLDER	
.	TPC0E43701	CARTON	
.	TPD0E0036	TOP CUSHION	
.	TPD0E0037	BOTTOM CUSHION	
CKN2	TMM8E18027	SPACER	
I.C.s			
IC251	LA4282	AUDIO OUTPUT	
IC351	TDA6101Q/N3	RGB OUTPUT	
IC361	TDA6101Q/N3	RGB OUTPUT	
IC371	TDA6101Q/N3	RGB OUTPUT	
IC451	LA7876N	VERTICAL OUTPUT	
IC801	SE130N	ERROR AMPLIFIER	
IC820	STRW6754LF06	POWER SUPPLY	

Cct Ref	Parts Number	Description	
IC851	C0DAFKE00001	REGULATOR	
IC852	TA48M033FS	VOLTAGE REGULATOR	
IC853	TA48025F	REGULATOR	
IC854	TA4805SLBS1	REGULATOR	
IC880	BA09ST-V5	REGULATOR	
IC885	B3PAA0000267	PHOTO COUPLER	⚠
IC1101	SDA5550MQBTL	MICRO PROCESSOR	
IC1102	K6X4008T1FV7	SRAM	
IC1103	15E0/090/0E	4MEG EPROM M27W401-80B	
IC1105	MN1381TU	RESET	
IC1106	MN1381JU	RESET	
IC1501	VSP9415BVKC3	VIDEO PROCESSOR	
IC1502	LD1117S18TR	REGULATOR	
IC1701	DDP3315CQAG3	DEFLECTION PROCESSOR	
IC1900	LA6515	EARTH CORRECTION	
IC2001	MSP3410GAB83	AUDIO PROCESSOR	
RM1001	RPM-6937	LED RECEIVER	
FUSES			
F801-L	EYF52BC	FUSE HOLDER	
F801-R	EYF52BC	FUSE HOLDER	
F801	S5055AC	FUSE	⚠
F870	TSF19252	FS LINK	⚠
F871	TSF19632	FS LINK	⚠
DIODES			
CF807	59890T60B110	THERMISTOR	⚠
D101	MA3020TX	DIODE	
D102	MA3020TX	DIODE	
D251	MA700ATA	DIODE	
D252	MA700ATA	DIODE	
D351	1SS355TE-17	DIODE	
D354	1SS355TE-17	DIODE	
D355	MA2C72300F	DIODE	
D361	1SS355TE-17	DIODE	
D371	1SS355TE-17	DIODE	
D454	EU02V0	DIODE	
D456	MTZJT-775.6C	DIODE	
D457	1SS133T-77	DIODE	
D458	EU02V0	DIODE	
D501	1SS133T-77	DIODE	
D502	EU02V0	DIODE	
D503	1SS133T-77	DIODE	
D504	1SS133T-77	DIODE	
D505	MTZJT-7710D	DIODE	
D506	MTZJT-773.9A	DIODE	
D553	EU02V0	DIODE	
D554	EU02V0	DIODE	
D555	1SS133T-77	DIODE	
D556	UDZSTE-1722B	DIODE	
D557	ERB93-02E	DIODE	
D558	ERB93-02E	DIODE	
D559	1SS133T-77	DIODE	

Cct Ref	Parts Number	Description
D560	RH3GLF102	DIODE
D563	EU02V0	DIODE
D565	EU02V0	DIODE
D566	EU02V0	DIODE
D575	MTZJT-775.1C	DIODE
D576	EU02V0	DIODE
D580	FMV-3GULF730	DIODE
D706	EU02V0	DIODE
D707	EU02V0	DIODE
D710	MTZJT-7716C	DIODE
D711	MA4056MTA	DIODE
D712	1SS133T-77	DIODE
D713	MA4130MTA	DIODE
D714	MTZJT-775.6A	DIODE
D717	MA4020LTA	DIODE
D802	RBV-408LF-B	DIODE
D803	BZX79B75A26A	DIODE
D804	BZX79B75A26A	DIODE
D808	AU02AV0	DIODE
D809	AU02AV0	DIODE
D820	MTZJT-776.8B	DIODE
D822	SARS01V1	DIODE
D823	1SR124-4AT82	DIODE
D824	1SR124-4AT82	DIODE
D825	1SS133T-77	DIODE
D851	1SS133T-77	DIODE
D865	RU2BLFC4	DIODE
D866	RU4BLF-L1	DIODE
D867	1SR124-4AT82	DIODE
D868	MAZ40330HF	DIODE
D869	MTZJT-775.1B	DIODE
D870	1SS133T-77	DIODE
D871	1SR124-4AT82	DIODE
D872	RK46LF-M1	DIODE
D873	FMGG26S	DIODE
D874	1SR124-4AT82	DIODE
D875	MTZJT-7727A	DIODE
D877	1SS133T-77	DIODE
D878	1SS133T-77	DIODE
D880	1SS133T-77	DIODE
D881	MTZJT-7736A	DIODE
D883	RK46LF-M1	DIODE
D887	1SR124-4AT82	DIODE
D888	1SS133T-77	DIODE
D889	1SR124-4AT82	DIODE
D890	1SS133T-77	DIODE
D891	1SS133T-77	DIODE
D892	1SS133T-77	DIODE
D893	BZX79B75A26A	DIODE
D894	MTZJT-7722C	DIODE
D895	MTZJT-775.1B	DIODE
D896	1SS133T-77	DIODE
D898	MTZJT-7720B	DIODE
D1001	LNH201RFCF6	L.E.D.
D1004	MTZJT-778.2C	DIODE
D1102	1SS355TE-17	DIODE
D1104	1SS355TE-17	DIODE
D1105	1SS355TE-17	DIODE
D1701	DAN217T146	DIODE
D1702	DAN217T146	DIODE
D1703	1SS355TE-17	DIODE
D1705	1SR124-4AT82	DIODE
D2005	1SS133T-77	DIODE
D2006	1SS133T-77	DIODE
D2007	1SS133T-77	DIODE
D2008	1SS133T-77	DIODE
D2009	1SS133T-77	DIODE
D2010	MTZJT-774.7C	DIODE
D3201	MTZJT-778.2C	DIODE
D3202	MTZJT-778.2C	DIODE
D3203	MTZJT-778.2C	DIODE
D3204	UDZSTE-1716B	DIODE
TRANSISTORS		
Q101	BC847B	TRANSISTOR
Q102	BC847B	TRANSISTOR
Q106	BC847B	TRANSISTOR
Q251	BC847B	TRANSISTOR
Q252	BC847B	TRANSISTOR
Q351	BC857B	TRANSISTOR
Q352	BC857B	TRANSISTOR
Q503	2SD1223TE16L	TRANSISTOR
Q551	2SC5905000RK	TRANSISTOR
Q552	2SC1473ATA	TRANSISTOR
Q556	BC847B	TRANSISTOR
Q701	BC847B	TRANSISTOR
Q702	BC847B	TRANSISTOR
Q703	2SK2231TE16L	TRANSISTOR
Q704	BC847B	TRANSISTOR
Q705	BC547B/126	TRANSISTOR
Q706	BC847B	TRANSISTOR
Q707	2SA1018QTA	TRANSISTOR
Q850	BC847B	TRANSISTOR
Q852	BC847B	TRANSISTOR
Q865	2SA1668LF603	TRANSISTOR
Q866	MPSA42/RA	TRANSISTOR
Q867	2SA1534A-RTA	TRANSISTOR
Q868	BC557B/126	TRANSISTOR
Q870	BC847B	TRANSISTOR
Q871	BC857B	TRANSISTOR
Q873	BC847B	TRANSISTOR
Q874	2SD2396/K	TRANSISTOR
Q896	2SK2231TE16L	TRANSISTOR
Q898	BC847B	TRANSISTOR
Q901	BC857B	TRANSISTOR
Q902	BC847B	TRANSISTOR
Q903	2SA1535AR0LB	TRANSISTOR
Q904	2SC3944AR0LB	TRANSISTOR
Q1002	BC847B	TRANSISTOR
Q1103	BC847B	TRANSISTOR
Q1104	BC847B	TRANSISTOR
Q1105	BC847B	TRANSISTOR
Q1106	BC847B	TRANSISTOR
Q1107	BC847B	TRANSISTOR
Q1108	BC847B	TRANSISTOR
Q1109	2N7002	TRANSISTOR
Q1110	2N7002	TRANSISTOR
Q1111	BC847B	TRANSISTOR
Q1112	BC847B	TRANSISTOR
Q1113	BC847B	TRANSISTOR
Q1114	BC847B	TRANSISTOR
Q1115	BC847B	TRANSISTOR
Q1116	BC857B	TRANSISTOR
Q1117	BC847B	TRANSISTOR
Q1118	BC847B	TRANSISTOR
Q1119	BC847B	TRANSISTOR
Q1501	BC847B	TRANSISTOR
Q1502	BC847B	TRANSISTOR
Q1503	BC847B	TRANSISTOR
Q1504	BC857B	TRANSISTOR
Q1507	BC857B	TRANSISTOR
Q1508	BC857B	TRANSISTOR
Q1701	BC847B	TRANSISTOR

Cct Ref	Parts Number	Description
Q1702	BC847B	TRANSISTOR
Q1703	BC847B	TRANSISTOR
Q1704	BC847B	TRANSISTOR
Q1705	BC847B	TRANSISTOR
Q1706	FMY4AT148	TRANSISTOR
Q1707	FMY4AT148	TRANSISTOR
Q1708	FMY4AT148	TRANSISTOR
Q1711	BC847B	TRANSISTOR
Q1712	BC847B	TRANSISTOR
Q1713	BC847B	TRANSISTOR
Q1715	BC847B	TRANSISTOR
Q1719	BC847B	TRANSISTOR
Q1901	BC847B	TRANSISTOR
Q2006	BC857B	TRANSISTOR
Q3002	BC847B	TRANSISTOR
Q3003	BC847B	TRANSISTOR
Q3005	BC847B	TRANSISTOR
Q3006	BC847B	TRANSISTOR
Q3008	BC847B	TRANSISTOR
Q3009	BC847B	TRANSISTOR
TRANSFORMERS		
T501	ETH19Y212AZ	TRANSFORMER
T849	45T-2029	TRANSFORMER ⚠
COILS		
L103	EXCELSA35T	COIL
L104	EXCELDR35V	COIL
L107	TALV35VB100K	COIL
L109	ELJFC4R7KF	COIL
L116	ELESN6R8KA	COIL
L582	ELC18B221G	COIL
L584	ELH5L7745	COIL
L701	ELC18B181F	COIL
L704	ELC18B182F	COIL
L804	R39264	PFC COIL
L865	EXCELSA35T	COIL
L866	EXCELSA35T	COIL
L867	ELEKE470KA	COIL
L870	EXCELSA35T	COIL
L871	EXCELSA35T	COIL
L872	EXCELSA35T	COIL
L873	EXCELSA35T	COIL
L874	EXCELSA35T	COIL
L1061	TLT331K991R	COIL
L1101	TALV35VB8R2K	COIL
L1103	ELESN4R7KA	COIL
L1104	ELESN4R7KA	COIL
L1501	ELESN4R7KA	COIL
L1502	ELESN4R7KA	COIL
L1503	ELJFC2R2KF	COIL
L1701	EXC3BB221H	COIL
L2001	TALV35VB100K	COIL
L2004	ELESN101KA	COIL
L2005	TALV35VB100K	COIL
L2006	ELJFC4R7KF	COIL
L2007	ELJFC4R7KF	COIL
L2008	EXCELSA35T	COIL
L2351	EXCELDR35V	COIL
L2352	EXCELDR35V	COIL
L3201	ELESN6R8KA	COIL
L3202	ELESN6R8KA	COIL
L3204	ELESN6R8KA	COIL
L3205	ELESN6R8KA	COIL
L3206	EXCELSA35T	COIL
LF801	45T-3023	COIL ⚠

Cct Ref	Parts Number	Description			
FILTERS					
DL1510	ELKE103FA	FILTER			
DL1511	ELKE103FA	FILTER			
DL1512	ELKE103FA	FILTER			
DL1513	ELKE103FA	FILTER			
DL1705	ELKE103FA	FILTER			
DL1706	ELKE103FA	FILTER			
DL1713	TLK212T256AL	FILTER			
X101	EFCT6504BN	FILTER			
X102	EFCT7004BN	CERAMIC FILTER			
CRYSTALS					
X1101	AI060006AD	CRYSTAL			
X1501	AI202504E	CRYSTAL			
X1701	4730007823	CRYSTAL			
X2001	4730007158	CRYSTAL			
RESISTORS					
JA1	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
JA1	ERJ8GEY0R00V	S.M.CARB	.125W	-	0 Ω
JA2	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
JA7	ERJ8GEY0R00V	S.M.CARB	.125W	-	0 Ω
JA14	ERJ8GEY0R00V	S.M.CARB	.125W	-	0 Ω
JA15	ERJ8GEY0R00V	S.M.CARB	.125W	-	0 Ω
JA20	ERJ8GEY0R00V	S.M.CARB	.125W	-	0 Ω
JA27	ERJ8GEY0R00V	S.M.CARB	.125W	-	0 Ω
JA32	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R111	ERJ6GEYJ393V	S.M.CARB	0.1W	5%	39K Ω
R112	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R113	ERJ6GEYJ223V	S.M.CARB	0.1W	5%	22K Ω
R114	ERJ6GEYJ471V	S.M.CARB	0.1W	5%	470 Ω
R115	ERJ6GEYJ102Z	SMD	0.125	5%	1K Ω
R116	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R117	ERJ6GEYJ332V	S.M.CARB	0.1W	5%	3K3 Ω
R118	ERJ6GEYJ681V	S.M.CARB	0.1W	5%	680 Ω
R120	ERJ6GEYJ222V	S.M.CARB	0.1W	5%	2K2 Ω
R121	ERJ6GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R122	ERJ6GEYJ331V	S.M.CARB	0.1W	5%	330 Ω
R129	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R133	ERJ6GEYJ222V	S.M.CARB	0.1W	5%	2K2 Ω
R134	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R135	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R137	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R139	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R140	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R142	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R143	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R147	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R148	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R250	ERJ6GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R251	ERJ6GEYJ471V	S.M.CARB	0.1W	5%	470 Ω
R252	ERJ6GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R253	ERJ6GEYJ471V	S.M.CARB	0.1W	5%	470 Ω
R254	ERJ6GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R255	ERJ6GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R256	ERJ6GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R257	ERJ6GEYJ150V	S.M.CARB	.125W	5%	15 Ω
R258	ERJ6GEYJ150V	S.M.CARB	.125W	5%	15 Ω
R259	ERJ6GEYJ121V	S.M.CARB	0.1W	5%	120 Ω
R260	ERJ6GEYJ121V	S.M.CARB	0.1W	5%	120 Ω
R261	ERJ6GEYJ152V	S.M.CARB	0.1W	5%	1K5 Ω
R262	ERJ6GEYJ152V	S.M.CARB	0.1W	5%	1K5 Ω
R263	ERDS2TJ2R2T	CARBON	0.25W	5%	2R2 Ω
R264	ERDS2TJ2R2T	CARBON	0.25W	5%	2R2 Ω
R269	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R350	ERQ12AJ151P	FUSIBLE	0.5W	5%	150 Ω
R352	ERJ6GEYJ202V	S.M.CARB	0.1W	5%	2K Ω

Cct Ref	Parts Number	Description			
R353	ERJ6GEYJ821V	S.M.CARB	0.1W	5%	820 Ω
R354	ERJ6GEYJ102Z	SMD	0.125	5%	1K Ω
R355	ERG1SJ823P	METAL	1W	5%	82K Ω
R356	ERJ6GEYJ560V	S.M.CARB	0.1W	5%	56 Ω
R357	ERJ6GEYJ271V	S.M.CARB	0.1W	5%	270 Ω
R358	ERDS1TJ821V	CARBON	0.5W	5%	820 Ω
R359	ERJ6GEYJ391V	S.M.CARB	0.1W	5%	390 Ω
R360	ERJ6GEYJ102Z	SMD	0.125	5%	1K Ω
R362	ERJ6GEYJ202V	S.M.CARB	0.1W	5%	2K Ω
R363	ERJ6GEYJ821V	S.M.CARB	0.1W	5%	820 Ω
R364	ERJ6GEYJ102Z	SMD	0.125	5%	1K Ω
R365	ERG1SJ823P	METAL	1W	5%	82K Ω
R366	ERJ6GEYJ560V	S.M.CARB	0.1W	5%	56 Ω
R368	ERDS1TJ821V	CARBON	0.5W	5%	820 Ω
R370	ERQ1CJP1R2S	FUSIBLE	1W	5%	1.2 Ω
R372	ERJ6GEYJ202V	S.M.CARB	0.1W	5%	2K Ω
R373	ERJ6GEYJ821V	S.M.CARB	0.1W	5%	820 Ω
R375	ERG1SJ823P	METAL	1W	5%	82K Ω
R376	ERJ6GEYJ560V	S.M.CARB	0.1W	5%	56 Ω
R378	ERDS1TJ821V	CARBON	0.5W	5%	820 Ω
R380	ERJ6GEYJ392V	S.M.CARB	0.1W	5%	3K9 Ω
R381	ERJ6GEYJ102Z	SMD	0.125	5%	1K Ω
R451	ERJ6GEYJ223V	S.M.CARB	0.1W	5%	22K Ω
R454	ERJ6GEYJ273V	S.M.CARB	0.1W	5%	27K Ω
R455	ERDS2TJ223T	CARBON	0.25W	5%	22K Ω
R458	ERDS1TJ270T	CARBON	0.5W	5%	27 Ω
R460	ERG3SJS271H	METAL	3W	5%	270 Ω
R461	ERX2SJS1R0H	METAL	2W	5%	1 Ω
R463	ERJ6GEYJ621V	S.M.CARB	.125W	5%	620 Ω
R464	ERJ6GEYJ512V	S.M.CARB	0.1W	5%	5K1 Ω
R465	ERJ6GEYJ821V	S.M.CARB	0.1W	5%	820 Ω
R467	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R501	ERJ6GEYJ392V	S.M.CARB	0.1W	5%	3K9 Ω
R503	ERJ6GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R507	ERG3FJ121H	METAL	3W	5%	120 Ω
R509	ERG1SJ222E	METAL	0.5W	5%	2K2 Ω
R510	ERG1SJ222E	METAL	0.5W	5%	2K2 Ω
R553	ERX3SJSR68H	METAL	3W	5%	R68 Ω
R554	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R555	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R556	ERJ6GEYJ124V	S.M.CARB	0.1W	5%	120K Ω
R557	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R558	ERDS1TJ124T	CARBON	0.5W	5%	120K Ω
R559	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R560	ERJ6GEYJ274V	S.M.CARB	0.1W	5%	270K Ω
R561	ERJ6GEYJ223V	S.M.CARB	0.1W	5%	22K Ω
R562	ERJ6GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R563	ERJ6GEYJ564V	S.M.CARB	0.1W	5%	560K Ω
R564	ERJ6GEYJ563V	S.M.CARB	0.1W	5%	56K Ω
R566	ERJ6GEYJ102Z	SMD	0.125	5%	1K Ω
R567	ERJ6GEYJ124V	S.M.CARB	0.1W	5%	120K Ω
R568	ERDS1TJ120T	CARBON	0.5W	5%	12 Ω
R569	ERJ6GEYJ102Z	SMD	0.125	5%	1K Ω
R576	ERQ12HKR39P	FUSIBLE	0.5W	10%	R39 Ω
R581	ERG3FJ561H	METAL	3W	5%	560 Ω
R701	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R702	ERX3FJ1R0H	METAL	3W	5%	1 Ω
R703	343-23R3AY	METAL	10W	5%	3R3 Ω
R704	ERDS1FJ472V	CARBON	0.5W	5%	4K7 Ω
R705	ERG3FJ201H	METAL	3W	5%	200 Ω
R706	ERG3FJ201H	METAL	3W	5%	200 Ω
R707	ERJ6GEYJ272V	S.M.CARB	0.1W	5%	2K7 Ω
R708	ERJ6GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R709	ERJ6GEYJ473V	S.M.CARB	0.1W	5%	47K Ω
R710	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R711	ERG2SJS123H	METAL	2W	5%	12K Ω

Cct Ref	Parts Number	Description			
R712	ERJ6GEYJ203V	S.M.CARB	0.1W	5%	20K Ω
R713	ERDS2TJ301T	CARBON	0.25W	5%	300 Ω
R715	ERDS2TJ272T	CARBON	0.25W	5%	2K7 Ω
R716	ERQ12AJ680P	METAL	0.5W	5%	68 Ω
R717	ERJ6GEYJ242V	S.M.CARB	0.1W	5%	2K4 Ω
R718	ERJ6GEYJ203V	S.M.CARB	0.1W	5%	20K Ω
R720	ERJ6GEYJ302V	S.M.CARB	0.1W	5%	3K Ω
R721	ERJ6GEYJ202V	S.M.CARB	0.1W	5%	2K Ω
R722	ERJ6GEYJ242V	S.M.CARB	0.1W	5%	2K4 Ω
R723	ERJ6GEYJ473V	S.M.CARB	0.1W	5%	47K Ω
R724	ERG2FJ820H	METAL	2W	5%	82 Ω
R725	ERG1FJ202P	METAL	1W	5%	2K Ω
R801	ERC12ZGK105C	SOLID	0.5W	10%	1M Ω ⚠
R803	ERDS1TJ683T	CARBON	0.5W	5%	68K Ω
R820	D0D2R27KA003	WOUND	2W	10%	R27 Ω
R821	D0D2R27KA003	WOUND	2W	10%	R27 Ω
R823	ERDS1TJ221T	CARBON	0.5W	5%	220 Ω
R825	ERDS1TJ102T	CARBON	0.5W	5%	1K Ω
R827	ERDS1TJ272T	CARBON	0.5W	5%	2K7 Ω
R828	ERDS1TJ100T	CARBON	0.5W	5%	10 Ω
R829	ERG2FJ470H	METAL	2W	5%	47 Ω
R830	ERDS1TJ684T	CARBON	0.5W	5%	680K Ω
R831	ERD75TAJ825	CARBON	1W	5%	8M2 Ω ⚠
R852	ERG12SJ470P	METAL	0.5W	5%	47 Ω
R853	ERJ6GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R854	ERJ6GEYJ203V	S.M.CARB	0.1W	5%	20K Ω
R860	ERJ6GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R860	ERJ6GEYJ473V	S.M.CARB	0.1W	5%	47K Ω
R861	ERDS2TJ123T	CARBON	0.25W	5%	12K Ω
R862	ERDS2TJ182T	CARBON	0.25W	5%	1K8 Ω
R863	ERDS2TJ102T	CARBON	0.25W	5%	1K Ω
R864	ERDS2TJ472T	CARBON	0.25W	5%	4K7 Ω
R865	ERQ12HJ180P	FUSIBLE	0.5W	5%	18 Ω ⚠
R867	ERJ6GEYJ682V	S.M.CARB	0.1W	5%	6K8 Ω
R868	ERDS2TJ271T	CARBON	0.25W	5%	270 Ω
R869	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R871	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R873	ERG3FJ151H	METAL	3W	5%	150 Ω
R874	ERG3FJ151H	METAL	3W	5%	150 Ω
R875	ERDS1TJ2R2T	CARBON	0.5W	5%	2R2 Ω
R876	ERDS2TJ101T	CARBON	0.25W	5%	100 Ω
R877	ERDS2TJ202T	CARBON	0.25W	5%	2K Ω
R878	ERDS1TJ103T	CARBON	0.5W	5%	10K Ω
R882	ERJ6GEYJ153V	S.M.CARB	0.1W	5%	15K Ω
R883	ERJ6GEYJ473V	S.M.CARB	0.1W	5%	47K Ω
R884	ERJ6GEYJ753V	S.M.CARB	0.1W	5%	75K Ω
R885	ERDS2TJ752T	CARBON	0.25W	5%	7K5 Ω
R886	ERJ6GEYJ752V	S.M.CARB	0.1W	5%	7K5 Ω
R887	ERDS1TJ683T	CARBON	0.5W	5%	68K Ω
R889	ERJ6GEYJ752V	S.M.CARB	0.1W	5%	7K5 Ω
R892	ERDS1TJ751T	CARBON	0.5W	5%	750 Ω
R893	ERJ6ENF3002V	S.M.CARB	0.1W	5%	30K Ω
R894	ERJ6ENF1002V	S.M.CARB	0.1W	1%	10K Ω
R896	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R897	ERDS2TJ622T	CARBON	0.25W	5%	6K2 Ω
R898	ERDS2TJ273T	CARBON	0.25W	5%	27K Ω
R899	ERX2FJ3R9H	METAL	2W	5%	3.9 Ω
R901	ERJ6GEYJ271V	S.M.CARB	0.1W	5%	270 Ω
R902	ERDS2TJ122T	CARBON	0.25W	5%	1K2 Ω
R903	ERDS2TJ100T	CARBON	0.25W	5%	10 Ω
R904	ERG5FJ152H	METAL	5W	5%	1K5 Ω
R905	ERJ6GEYJ271V	S.M.CARB	0.1W	5%	270 Ω
R906	ERDS2TJ122T	CARBON	0.25W	5%	1K2 Ω
R907	ERDS2TJ124T	CARBON	0.25W	5%	120K Ω
R908	ERDS2TJ124T	CARBON	0.25W	5%	120K Ω
R909	ERDS2TJ100T	CARBON	0.25W	5%	10 Ω

Cct Ref	Parts Number	Description			
R910	ERG2SJ181E	METAL	2W	5%	180 Ω
R914	ERJ6GEYJ331V	S.M.CARB	0.1W	5%	330 Ω
R1005	ERJ6GEYJ332V	S.M.CARB	0.1W	5%	3K3 Ω
R1007	ERJ6GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1017	ERJ6GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1043	ERJ6GEYJ682V	S.M.CARB	0.1W	5%	6K8 Ω
R1044	ERJ6GEYJ123V	S.M.CARB	0.1W	5%	12K Ω
R1045	ERJ6GEYJ223V	S.M.CARB	0.1W	5%	22K Ω
R1046	ERJ6GEYJ683V	S.M.CARB	0.1W	5%	68K Ω
R1047	ERDS2TJ102T	CARBON	0.25W	5%	1K Ω
R1101	ERJ3GEYJ472V	S.M.CARB	0.1W	5%	4K7 Ω
R1102	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1103	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1104	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1105	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1106	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1107	ERJ3GEYJ562V	S.M.CARB	0.1W	5%	5K6 Ω
R1108	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1109	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1110	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1111	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1114	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1115	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1116	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1117	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1118	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1120	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1123	ERJ3GEYJ473V	S.M.CARB	0.1W	5%	47K Ω
R1125	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1126	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1127	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1128	ERJ3GEYJ683V	S.M.CARB	0.1W	5%	68K Ω
R1129	ERJ3GEYJ562V	S.M.CARB	0.1W	5%	5K6 Ω
R1130	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1131	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1132	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1133	ERJ3GEYJ273V	S.M.CARB	0.1W	5%	27K Ω
R1134	ERJ3GEYJ471V	S.M.CARB	0.1W	5%	470 Ω
R1135	ERJ3GEYJ201V	SMD	0.1W	5%	200 Ω
R1136	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1137	ERJ3GEYJ822V	S.M.CARB	0.1W	5%	8K2 Ω
R1138	ERJ3GEYJ153V	S.M.CARB	0.1W	5%	15K Ω
R1139	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1140	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1141	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1142	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1143	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1144	ERJ3GEYJ473V	S.M.CARB	0.1W	5%	47K Ω
R1145	ERJ3GEYJ473V	S.M.CARB	0.1W	5%	47K Ω
R1147	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1150	ERJ3GEYJ331V	S.M.CARB	0.1W	5%	330 Ω
R1151	ERJ3GEYJ683V	S.M.CARB	0.1W	5%	68K Ω
R1152	ERJ3GEYJ332V	S.M.CARB	0.1W	5%	3K3 Ω
R1153	ERJ3GEYJ472V	S.M.CARB	0.1W	5%	4K7 Ω
R1154	ERJ3GEYJ472V	S.M.CARB	0.1W	5%	4K7 Ω
R1155	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1156	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1157	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1158	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1159	ERJ3GEYJ472V	S.M.CARB	0.1W	5%	4K7 Ω
R1160	ERJ3GEYJ472V	S.M.CARB	0.1W	5%	4K7 Ω
R1161	ERJ3GEYJ102V	S.M.CARB	0.1W	5%	1K Ω
R1162	ERJ3GEYJ102V	S.M.CARB	0.1W	5%	1K Ω
R1163	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1164	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1165	ERJ3GEYJ273V	S.M.CARB	0.1W	5%	27K Ω

Cct Ref	Parts Number	Description			
R1166	ERJ3GEYJ224V	S.M.CARB	0.1W	5%	220K Ω
R1167	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R1168	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R1169	ERJ3GEYJ473V	S.M.CARB	0.1W	5%	47K Ω
R1170	ERJ3GEYJ472V	S.M.CARB	0.1W	5%	4K7 Ω
R1171	ERJ3GEYJ225V	S.M.CARB	0.1W	5%	2M2 Ω
R1172	ERJ3GEYJ221V	S.M.CARB	0.1W	5%	220 Ω
R1173	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1174	ERJ3GEYJ223V	S.M.CARB	0.1W	5%	22K Ω
R1175	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1176	ERJ3GEYJ102V	S.M.CARB	0.1W	5%	1K Ω
R1177	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1178	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1179	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1180	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1184	ERJ3GEYJ680V	S.M.CARB	0.1W	5%	68 Ω
R1185	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1186	ERJ3GEYJ473V	S.M.CARB	0.1W	5%	47K Ω
R1188	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1189	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1190	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1191	ERJ3GEYJ223V	S.M.CARB	0.1W	5%	22K Ω
R1192	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1193	ERJ3GEYJ472V	S.M.CARB	0.1W	5%	4K7 Ω
R1194	ERJ3GEYJ472V	S.M.CARB	0.1W	5%	4K7 Ω
R1198	ERJ3GEYJ680V	S.M.CARB	0.1W	5%	68 Ω
R1199	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1200	ERJ3GEYJ222V	S.M.CARB	0.1W	5%	2K2 Ω
R1204	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1206	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1207	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1208	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1209	EXB38V680JV	S.M.RES	0.063	5%	68 Ω
R1210	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1211	D1HG6808A002	CHIP RES	0.25W	5%	68 Ω
R1212	D1HG6808A002	CHIP RES	0.25W	5%	68 Ω
R1213	ERJ3GEYJ680V	S.M.CARB	0.1W	5%	68 Ω
R1214	EXB38V680JV	S.M.RES	0.063	5%	68 Ω
R1215	ERJ3GEYJ680V	S.M.CARB	0.1W	5%	68 Ω
R1216	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1217	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1218	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1251	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R1502	ERJ3GEYJ152V	S.M.CARB	0.1W	5%	1K5 Ω
R1503	ERJ3GEYJ152V	S.M.CARB	0.1W	5%	1K5 Ω
R1504	ERJ6GEYJ750V	S.M.CARB	0.1W	5%	75 Ω
R1510	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1511	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1512	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1513	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1514	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1515	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1516	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1519	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1520	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1521	ERJ6GEYJ750V	S.M.CARB	0.1W	5%	75 Ω
R1523	ERJ6GEYJ750V	S.M.CARB	0.1W	5%	75 Ω
R1524	ERJ6GEYJ750V	S.M.CARB	0.1W	5%	75 Ω
R1525	ERJ3GEYJ152V	S.M.CARB	0.1W	5%	1K5 Ω
R1526	ERJ3GEYJ221V	S.M.CARB	0.1W	5%	220 Ω
R1540	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1547	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1548	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1549	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R1551	ERJ3GEYJ221V	S.M.CARB	0.1W	5%	220 Ω
R1552	ERJ3GEYJ221V	S.M.CARB	0.1W	5%	220 Ω

Cct Ref	Parts Number	Description			
R1553	ERJ3GEYJ331V	S.M.CARB	0.1W	5%	330 Ω
R1556	ERJ6GEYJ750V	S.M.CARB	0.1W	5%	75 Ω
R1561	ERJ3GEYJ221V	S.M.CARB	0.1W	5%	220 Ω
R1562	ERJ3GEYJ221V	S.M.CARB	0.1W	5%	220 Ω
R1701	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1704	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1705	ERJ3GEYJ122V	S.M.CARB	0.1W	5%	1K2 Ω
R1706	ERJ3GEYJ272V	S.M.CARB	0.1W	5%	2K7 Ω
R1707	ERJ3GEYJ102V	S.M.CARB	0.1W	5%	1K Ω
R1708	ERJ3GEYJ473V	S.M.CARB	0.1W	5%	47K Ω
R1709	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1710	ERJ3GEYJ563V	S.M.CARB	0.1W	5%	56K Ω
R1712	ERJ3GEYJ102V	S.M.CARB	0.1W	5%	1K Ω
R1714	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1716	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1717	ERJ3GEYJ271V	S.M.CARB	0.1W	5%	270 Ω
R1719	ERJ3GEYJ223V	S.M.CARB	0.1W	5%	22K Ω
R1720	ERJ3GEYJ822V	S.M.CARB	0.1W	5%	8K2 Ω
R1721	ERJ3GEYJ682V	S.M.CARB	0.1W	5%	6K8 Ω
R1723	ERJ3GEYJ561V	S.M.CARB	0.1W	5%	560 Ω
R1724	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1725	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1726	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1727	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1728	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1730	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R1732	ERJ3GEYJ151V	S.M.CARB	0.1W	5%	150 Ω
R1733	ERJ3GEYJ151V	S.M.CARB	0.1W	5%	150 Ω
R1734	ERJ3GEYJ151V	S.M.CARB	0.1W	5%	150 Ω
R1735	ERJ3GEYJ821V	S.M.CARB	0.1W	5%	820 Ω
R1736	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1737	ERJ3GEYJ560V	S.M.CARB	0.1W	5%	56 Ω
R1738	ERJ6GEYJ561V	S.M.CARB	0.1W	5%	560 Ω
R1739	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1740	ERJ3GEYJ560V	S.M.CARB	0.1W	5%	56 Ω
R1741	ERJ6GEYJ561V	S.M.CARB	0.1W	5%	560 Ω
R1742	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1743	ERJ3GEYJ560V	S.M.CARB	0.1W	5%	56 Ω
R1744	ERJ6GEYJ561V	S.M.CARB	0.1W	5%	560 Ω
R1745	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1746	ERJ3GEYJ472V	S.M.CARB	0.1W	5%	4K7 Ω
R1750	ERJ3GEYJ821V	S.M.CARB	0.1W	5%	820 Ω
R1751	ERJ3GEYJ244V	S.M.CARB	0.1W	5%	240K Ω
R1752	ERJ3GEYJ560V	S.M.CARB	0.1W	5%	56 Ω
R1755	ERJ6GEYJ471V	S.M.CARB	0.1W	5%	470 Ω
R1759	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1780	ERJ3GEYJ331V	S.M.CARB	0.1W	5%	330 Ω
R1781	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R1782	ERJ3GEYJ102V	S.M.CARB	0.1W	5%	1K Ω
R1783	ERJ3GEYJ271V	S.M.CARB	0.1W	5%	270 Ω
R1784	ERJ3GEYJ472V	S.M.CARB	0.1W	5%	4K7 Ω
R1901	ERJ6GEYJ472V	S.M.CARB	0.1W	5%	4K7 Ω
R1902	ERJ6GEYJ392V	S.M.CARB	0.1W	5%	3K9 Ω
R1903	ERJ6GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R1904	ERDS1TJ2R2T	CARBON	0.5W	5%	2R2 Ω
R1905	ERJ6GEYJ273V	S.M.CARB	0.1W	5%	27K Ω
R1906	ERJ6GEYJ273V	S.M.CARB	0.1W	5%	27K Ω
R1907	ERJ6GEYJ273V	S.M.CARB	0.1W	5%	27K Ω
R1908	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R1909	ERDS1TJ2R2T	CARBON	0.5W	5%	2R2 Ω
R1911	ERDS1TJ6R8T	CARBON	0.5W	5%	6R8 Ω
R1912	ERDS2TJ102T	CARBON	0.25W	5%	1K Ω
R1913	ERJ6GEYJ222V	S.M.CARB	0.1W	5%	2K2 Ω
R1926	ERJ6GEYJ102Z	SMD	0.125	5%	1K Ω
R2011	ERJ6GEYJ183V	S.M.CARB	0.1W	5%	18K Ω
R2013	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω

Cct Ref	Parts Number	Description			
R2014	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R2015	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R2016	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R2017	ERJ6GEYJ471V	S.M.CARB	0.1W	5%	470 Ω
R2020	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R2021	ERJ6GEYJ562V	S.M.CARB	0.1W	5%	5K6 Ω
R2022	ERJ6GEYJ221V	S.M.CARB	0.1W	5%	220 Ω
R2024	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R2029	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R2032	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R2033	ERJ6GEYJ471V	S.M.CARB	0.1W	5%	470 Ω
R2036	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R2037	ERJ6GEYJ102Z	SMD	0.125	5%	1K Ω
R2038	ERJ6GEYJ562V	S.M.CARB	0.1W	5%	5K6 Ω
R2039	ERJ6GEYJ221V	S.M.CARB	0.1W	5%	220 Ω
R2040	ERJ6GEYJ222V	S.M.CARB	0.1W	5%	2K2 Ω
R2041	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R2042	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R2043	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R2044	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R2045	ERJ6GEY0R00Z	S.M.CARB	-	-	0 Ω
R3001	ERJ3GEYJ183V	S.M.CARB	0.1W	5%	18K Ω
R3002	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R3003	ERJ3GEYJ183V	S.M.CARB	0.1W	5%	18K Ω
R3004	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R3005	ERJ6GEYJ123V	S.M.CARB	0.1W	5%	12K Ω
R3006	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R3007	ERJ3GEYJ272V	S.M.CARB	0.1W	5%	2K7 Ω
R3008	ERJ6GEYJ750V	S.M.CARB	0.1W	5%	75 Ω
R3009	ERJ3GEYJ183V	S.M.CARB	0.1W	5%	18K Ω
R3010	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R3011	ERJ3GEYJ183V	S.M.CARB	0.1W	5%	18K Ω
R3012	ERJ3GEYJ101V	S.M.CARB	0.1W	5%	100 Ω
R3013	ERJ3GEYJ272V	S.M.CARB	0.1W	5%	2K7 Ω
R3014	ERJ3GEYJ123V	S.M.CARB	0.1W	5%	12K Ω
R3015	ERJ6GEYJ750V	S.M.CARB	0.1W	5%	75 Ω
R3016	ERJ6GEYJ750V	S.M.CARB	0.1W	5%	75 Ω
R3017	ERJ6GEYJ750V	S.M.CARB	0.1W	5%	75 Ω
R3018	ERJ6GEYJ750V	S.M.CARB	0.1W	5%	75 Ω
R3019	ERJ6GEYJ750V	S.M.CARB	0.1W	5%	75 Ω
R3020	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R3021	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R3022	ERJ3GEYJ391V	S.M.CARB	0.1W	5%	390 Ω
R3023	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R3024	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R3025	ERJ3GEYJ391V	S.M.CARB	0.1W	5%	390 Ω
R3026	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R3027	ERJ3GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R3029	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3030	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3031	ERJ3GEYJ391V	S.M.CARB	0.1W	5%	390 Ω
R3032	ERJ3GEYJ391V	S.M.CARB	0.1W	5%	390 Ω
R3033	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3034	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3037	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3038	ERJ3GEYJ104V	S.M.CARB	0.1W	5%	100K Ω
R3039	ERJ6GEYJ680V	S.M.CARB	0.1W	5%	68 Ω
R3040	ERJ6GEYJ680V	S.M.CARB	0.1W	5%	68 Ω
R3043	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R3049	ERJ3GEYJ391V	S.M.CARB	0.1W	5%	390 Ω
R3050	ERJ3GEYJ391V	S.M.CARB	0.1W	5%	390 Ω
R3056	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R3057	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R3058	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R3059	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R3060	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω

Cct Ref	Parts Number	Description			
R3061	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R3062	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R3063	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R3064	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R3065	ERJ3GEY0R00V	S.M.CARB	0.1W	-	0 Ω
R3201	ERJ6GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R3202	ERJ6GEYJ103V	S.M.CARB	0.1W	5%	10K Ω
R3203	ERG2SJS151H	METAL	2W	5%	150 Ω
R3205	ERDS1TJ151T	CARBON	0.5W	5%	150 Ω
R3208	ERG2SJS151H	METAL	2W	5%	150 Ω
R3212	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R3213	ERJ6GEYJ101Z	SMD	.125W	5%	100 Ω
R3214	ERJ6GEYJ153V	S.M.CARB	0.1W	5%	15K Ω
R3215	ERJ6GEYJ153V	S.M.CARB	0.1W	5%	15K Ω
R3217	ERDS1TJ151T	CARBON	0.5W	5%	150 Ω
CAPACITORS					
C107	ECJ2VF1H104Z	S.M.CAP	50V		100nF
C108	ECA1CM470B	ELECT	16V		47µF
C109	ECJ2VB1H472K	S.M.CAP	50V		4.7nF
C110	ECJ2VB1H103K	S.M.CAP	50V		10nF
C111	ECA1HMR33B	ELECT	50V		330nF
C117	ECJ2VB1H103K	S.M.CAP	50V		10nF
C118	ECJ2VF1H104Z	S.M.CAP	50V		100nF
C119	ECA1CM221B	ELECT	16V		220µF
C122	ECJ2FB1H104K	S.M.CAP	50V		100nF
C130	ECJ2VB1H103K	S.M.CAP	50V		10nF
C131	ECJ2VB1C104K	S.M.CAP	16V		100nF
C136	ECJ2FB1H104K	S.M.CAP	50V		100nF
C137	ECJ2VC1H560J	S.M.CAP	50V		56pF
C138	ECJ2VC1H220J	S.M.CAP	50V		22pF
C141	ECJ2VB1H103K	S.M.CAP	50V		10nF
C142	ECJ2FB1H104K	S.M.CAP	50V		100nF
C251	ECA1HM010B	ELECT	50V		1µF
C252	ECA1HHG010B	ELECT	50V		1µF
C253	ECA1HM4R7B	ELECT	50V		4.7µF
C254	ECJ2VB1H102K	S.M.CAP	50V		1nF
C255	ECA1HM4R7B	ELECT	50V		4.7µF
C256	ECJ2VB1H102K	S.M.CAP	50V		1nF
C259	ECQV1H684JL3	FILM	50V		680nF
C260	ECQV1H684JL3	FILM	50V		680nF
C261	ECA1HM100B	ELECT	50V		10µF
C262	ECA1HM100B	ELECT	50V		10µF
C263	ECA1HM101B	ELECT	50V		100µF
C264	ECQV1H154JL3	FILM	50V		150nF
C265	ECQV1H154JL3	FILM	50V		150nF
C266	ECJ2FB1H104K	S.M.CAP	50V		100nF
C267	ECJ2FB1H104K	S.M.CAP	50V		100nF
C269	ECA1HM332E	ELECT	50V		3300µF
C352	ECJ2VF1H104Z	S.M.CAP	50V		100nF
C353	ECJ2FB1H104K	S.M.CAP	50V		100nF
C354	ECQE2104KF3	FILM	250V		100nF
C355	ECKR2H102KB5	CERAMIC	500V		1nF
C358	ECJ2VF1H104Z	S.M.CAP	50V		100nF
C359	ECJ2VC1H150J	S.M.CAP	50V		15pF
C360	ECJ2VF1E104Z	S.M.CAP	25V		100nF
C362	ECJ2VF1H104Z	S.M.CAP	50V		100nF
C363	ECJ2FB1H104K	S.M.CAP	50V		100nF
C364	ECQE2104KF3	FILM	250V		100nF
C365	ECKR2H102KB5	CERAMIC	500V		1nF
C366	SMG1CV101MT5	ELECT	16V		100µF
C368	ECA1CM221B	ELECT	16V		220µF
C372	ECJ2VF1H104Z	S.M.CAP	50V		100nF
C373	ECJ2FB1H104K	S.M.CAP	50V		100nF
C374	ECQE2104KF3	FILM	250V		100nF
C375	ECKR2H102KB5	CERAMIC	500V		1nF
C379	ECJ2VC1H150J	S.M.CAP	50V		15pF

Cct Ref	Parts Number	Description			
C382	ECA1HM100B	ELECT	50V		10µF
C385	ECA2EM100B	ELECT	250V		10µF
C386	ECKW3D152JBR	CERAMIC	2KV		1.5nF
C451	ECJ2VB1H102K	S.M.CAP	50V		1nF
C453	ECJ2FB1H104K	S.M.CAP	50V		100nF
C454	ECJ2FB1H104K	S.M.CAP	50V		100nF
C456	ECA1HM221B	ELECT	50V		220µF
C459	ECWF2684JBB	FILM	250V		680nF
C463	ECA1HM221B	ELECT	50V		220µF
C501	ECA1EM101B	ELECT	25V		100µF
C508	ECQB1H392JF3	FILM	50V		3.9nF
C509	ECA1HM470B	ELECT	50V		47µF
C551	ECKW3D471JBR	CERAMIC	2KV		470pF
C552	ECWH20102JVY	FILM	2kV		1nF
C557	ECKR2H471KB5	CERAMIC	500V		470pF
C558	ECA1HHG101B	ELECT	50V		100µF
C559	ECJ2FB1H104K	S.M.CAP	50V		100nF
C560	ECQE2393KFW	FILM	250V		39nF
C561	ECA1EM222E	ELECT	25V		2200µF
C562	ECKR2H101KB5	CERAMIC	500V		100pF
C563	ECA2EM100B	ELECT	250V		10µF
C564	ECEA2AN2R2SB	ELECT	100V		2.2µF
C565	ECQB1H273JF3	FILM	50V		27nF
C566	ECKR2H471KB5	CERAMIC	500V		470pF
C567	ECA1EM222E	ELECT	25V		2200µF
C568	ECKR2H471KB5	CERAMIC	500V		470pF
C572	ECJ2VB2A102K	S.M.CAP	100V		1nF
C573	ECJ2VC1H221J	S.M.CAP	50V		220pF
C574	ECJ2VC1H221J	S.M.CAP	50V		220pF
C581	ECWF4684JBB	FILM	400V		680nF
C582	ECWF4564JBB	FILM	400V		560nF
C583	ECWH20562JVB	FILM	2KV		5.6nF
C584	ECWH20562JVB	FILM	2KV		5.6nF
C587	ECQF4333JZH	FILM	400V		33nF
C588	ECWF4684JBB	FILM	400V		680nF
C701	ECKR2H152KB5	CERAMIC	500V		1.5nF
C702	ECQE1335KFB	FILM	100V		3.3µF
C703	ECJ2VB1H333K	S.M.CAP	50V		33nF
C704	ECQV1H474JL3	FILM	50V		470nF
C706	ECKR2H471KB5	CERAMIC	500V		470pF
C707	ECJ2VB1H471K	S.M.CAP	50V		470pF
C708	ECJ2VB1H333K	S.M.CAP	50V		33nF
C709	ECJ2VB1H333K	S.M.CAP	50V		33nF
C710	ECA1HM010B	ELECT	50V		1µF
C801	ECQU2A224MLA	FILM	275V		220nF ⚠
C804	ECQU2A154MLA	FILM	275V		150nF ⚠
C805	ECKWBE472ZER	CERAMIC	250V		4.7nF
C806	ECKWBE472ZER	CERAMIC	250V		4.7nF
C807	ECKWBE472ZER	CERAMIC	250V		4.7nF
C808	ECKWBE472ZER	CERAMIC	250V		4.7nF
C809	ECQE6823KFB	FILM	630V		82nF
C811	ECKWNA101MB	CERAMIC	400V		100pF ⚠
C820	43303S9227M5	ELECT	400V		220µF
C821	ECA1HM010B	ELECT	50V		1µF
C822	ECJ2VB1H103K	S.M.CAP	50V		10nF
C823	ECA1HM100B	ELECT	50V		10µF
C824	ECJ2VB1H221K	S.M.CAP	50V		220pF
C825	ECJ2VB1H471K	S.M.CAP	50V		470pF
C826	ECKW3D681KBP	CERAMIC	2KV		680pF
C827	ECQM4103KZB	FILM	400V		10nF
C830	ECKCWS332MEB	CERAMIC	250V		3.3nF ⚠
C860	ECJ2VF1H103Z	S.M.CAP	50V		10nF
C861	ECA1CHG101B	ELECT	16V		100µF
C862	ECA1CHG101B	ELECT	16V		100µF
C864	ECA1EHG471B	ELECT	25V		470µF
C865	ECA2CM100B	ELECT	160V		10µF

Cct Ref	Parts Number	Description		
C866	ECKW3D471KBP	CERAMIC	2KV	470pF
C867	EEUEB2D101E	ELECT	200V	100µF
C868	ECA2DHG221E	ELECT	200V	220µF
C870	EEUFC1C471B	ELECT	16V	470µF
C871	ECKR2H471KB5	CERAMIC	500V	470pF
C872	ECA1CHG472E	ELECT	16V	4700µF
C873	ECKR2H471KB5	CERAMIC	500V	470pF
C875	ECA1HHG102E	ELECT	50V	1nF
C878	ECA1CM100B	ELECT	16V	10µF
C879	ECA1VHG331B	ELECT	35V	330pF
C880	ECKR2H471KB5	CERAMIC	500V	470pF
C882	ECA1HHG100B	ELECT	50V	10µF
C883	ECA1CHG101B	ELECT	16V	100µF
C884	ECA1HHG100B	ELECT	50V	10µF
C886	ECA1HHG100B	ELECT	50V	10µF
C888	ECJ2FB1H104K	S.M.CAP	50V	100nF
C889	ECA1CHG101B	ELECT	16V	100µF
C890	ECJ2FB1H104K	S.M.CAP	50V	100nF
C891	ECA1CHG101B	ELECT	16V	100µF
C892	ECJ2FB1H104K	S.M.CAP	50V	100nF
C893	ECA1CHG101B	ELECT	16V	100µF
C894	ECJ2FB1H104K	S.M.CAP	50V	100nF
C895	ECA1CHG101B	ELECT	16V	100µF
C896	ECJ2FB1H104K	S.M.CAP	50V	100nF
C901	SMG1CV101MT5	ELECT	16V	100µF
C902	ECJ2VF1H103Z	S.M.CAP	50V	10nF
C903	ECKR2H472MD5	CERAMIC	500V	4.7nF
C904	ECJ2VB1H472K	S.M.CAP	50V	4.7nF
C905	ECA2CM220B	ELECT	160V	22µF
C906	ECA2CM220B	ELECT	160V	22µF
C907	ECA2CM220B	ELECT	160V	22µF
C1002	SMG1CV101MT5	ELECT	16V	100µF
C1003	ECJ2FB1H104K	S.M.CAP	50V	100nF
C1004	ECJ2VB1H103K	S.M.CAP	50V	10nF
C1005	SMG1CV101MT5	ELECT	16V	100µF
C1007	ECJ2VC1H270J	S.M.CAP	50V	27pF
C1101	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1102	ECA1CM101B	ELECT	16V	100µF
C1103	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1104	ECA1CM101B	ELECT	16V	100µF
C1105	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1107	ECJ1VC1H330J	S.M.CAP	50V	33pF
C1108	ECJ1VC1H330J	S.M.CAP	50V	33pF
C1109	ECJ1VB1H103K	S.M.CAP	50V	10nF
C1111	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1112	ECJ1VC1H151J	S.M.CAP	50V	150pF
C1116	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1117	ECJ1VC1H221J	S.M.CAP	50V	220pF
C1118	ECJ1VC1H221J	S.M.CAP	50V	220pF
C1119	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1120	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1121	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1122	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1123	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1124	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1125	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1126	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1127	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1501	ECJ1VC1H220J	S.M.CAP	50V	22pF
C1502	ECJ1VC1H220J	S.M.CAP	50V	22pF
C1503	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1505	ECJ2FB1H104K	S.M.CAP	50V	100nF
C1506	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1507	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1508	ECJ2FB1H104K	S.M.CAP	50V	100nF
C1509	ECJ1VB1H103K	S.M.CAP	50V	10nF

Cct Ref	Parts Number	Description		
C1510	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1511	ECJ2FB1H104K	S.M.CAP	50V	100nF
C1512	ECJ2FB1H104K	S.M.CAP	50V	100nF
C1514	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1515	ECA1CM100B	ELECT	16V	10µF
C1516	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1517	ECJ1VC1H271J	S.M.CAP	50V	270pF
C1518	ECJ1VC1H271J	S.M.CAP	50V	270pF
C1519	ECA1CM100B	ELECT	16V	10µF
C1520	ECJ1VB1H103K	S.M.CAP	50V	10nF
C1522	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1524	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1525	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1526	ECJ1VC1H271J	S.M.CAP	50V	270pF
C1527	ECJ1VC1H331J	S.M.CAP	50V	330pF
C1528	ECJ1VC1H331J	S.M.CAP	50V	330pF
C1530	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1532	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1533	ECJ1VB1H103K	S.M.CAP	50V	10nF
C1535	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1537	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1543	ECJ2FB1H104K	S.M.CAP	50V	100nF
C1544	ECJ2FB1H104K	S.M.CAP	50V	100nF
C1545	ECA1CM221B	ELECT	16V	220µF
C1548	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1549	ECEA1CKA470B	ELECT	16V	47µF
C1550	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1551	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1560	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1561	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1563	SMG1HV220MT5	ELECT	50V	22µF
C1565	ECJ2FB1H104K	S.M.CAP	50V	100nF
C1573	ECJ1VB1C473K	S.M.CAP	16V	47nF
C1574	ECJ1VB1C473K	S.M.CAP	16V	47nF
C1575	ECJ1VB1C473K	S.M.CAP	16V	47nF
C1580	ECA1HM100B	ELECT	50V	10µF
C1581	ECA1HM100B	ELECT	50V	10µF
C1701	ECJ1VC1H270J	S.M.CAP	50V	27pF
C1702	ECJ1VC1H270J	S.M.CAP	50V	27pF
C1703	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1704	ECEA1AKA221Q	ELECT	10V	220µF
C1705	ECJ1VB1H222K	S.M.CAP	50V	2.2nF
C1706	ECA1CM100B	ELECT	16V	10µF
C1707	ECJ1VC1H270J	S.M.CAP	50V	27pF
C1708	ECA0JHG102B	ELECT	6.3V	1nF
C1709	ECJ1VB1H102K	S.M.CAP	50V	1nF
C1710	ECJ1VB1H153K	S.M.CAP	50V	15nF
C1711	ECJ1VB1H153K	S.M.CAP	50V	15nF
C1713	ECA1CM100B	ELECT	16V	10µF
C1714	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1716	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1719	ECJ1VB1H103K	S.M.CAP	50V	10nF
C1720	ECJ1VB1H103K	S.M.CAP	50V	10nF
C1721	ECJ1VB1H103K	S.M.CAP	50V	10nF
C1722	ECJ1VB1H103K	S.M.CAP	50V	10nF
C1723	ECA1CM101B	ELECT	16V	100µF
C1724	ECJ1VB1H222K	S.M.CAP	50V	2.2nF
C1725	ECA1CM100B	ELECT	16V	10µF
C1726	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1727	ECA1CM470B	ELECT	16V	47µF
C1728	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1731	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1732	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1733	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1734	ECJ1VC1H391J	S.M.CAP	50V	390pF
C1735	ECJ1VC1H391J	S.M.CAP	50V	390pF

Cct Ref	Parts Number	Description		
C1736	ECJ1VC1H391J	S.M.CAP	50V	390pF
C1737	ECJ2VB1C224K	S.M.CAP	16V	220nF
C1739	ECA1CM101B	ELECT	16V	100µF
C1740	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1742	ECJ1VB1H472K	S.M.CAP	50V	4.7nF
C1743	ECA1HM3R3B	ELECT	50V	3.3µF
C1744	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1745	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1746	ECJ1VF1E104Z	S.M.CAP	25V	100nF
C1752	ECJ1VB1H471K	S.M.CAP	50V	470pF
C1783	ECJ1VC1H151J	S.M.CAP	50V	150pF
C1901	ECJ2VB1H103K	S.M.CAP	50V	10nF
C1902	ECJ2FB1H104K	S.M.CAP	50V	100nF
C1905	ECA1CM470B	ELECT	16V	47µF
C1906	ECJ2VB1H103K	S.M.CAP	50V	10nF
C1908	ECJ2FB1H104K	S.M.CAP	50V	100nF
C1909	ECJ2FB1H104K	S.M.CAP	50V	100nF
C2001	ECA1CM100B	ELECT	16V	10µF
C2002	ECJ2VB1H152K	S.M.CAP	50V	1.5nF
C2003	ECJ2VC1H471J	S.M.CAP	50V	470pF
C2004	ECJ2VC1H221J	S.M.CAP	50V	220pF
C2005	ECJ2FB1H104K	S.M.CAP	50V	100nF
C2006	ECJ2VB1H102K	S.M.CAP	50V	1nF
C2007	ECJ2VB1H102K	S.M.CAP	50V	1nF
C2009	ECJ2VB1H102K	S.M.CAP	50V	1nF
C2010	ECJ2VB1H102K	S.M.CAP	50V	1nF
C2011	ECJ2VB1H102K	S.M.CAP	50V	1nF
C2012	ECA1CM100B	ELECT	16V	10µF
C2013	ECA1CM100B	ELECT	16V	10µF
C2014	ECJ2VC1H471J	S.M.CAP	50V	470pF
C2015	ECJ2VB1H152K	S.M.CAP	50V	1.5nF
C2016	ECA1HM100B	ELECT	50V	10µF
C2017	ECJ2VB1H102K	S.M.CAP	50V	1nF
C2018	ECJ2VB1H102K	S.M.CAP	50V	1nF
C2019	ECJ2VB1H102K	S.M.CAP	50V	1nF
C2020	ECJ2VB1H102K	S.M.CAP	50V	1nF
C2021	ECA1HM3R3B	ELECT	50V	3.3µF
C2022	ECJ2FB1H104K	S.M.CAP	50V	100nF
C2023	ECJ2VC1H221J	S.M.CAP	50V	220pF
C2024	ECJ2VC1H221J	S.M.CAP	50V	220pF
C2025	ECA1CM100B	ELECT	16V	10µF
C2026	ECJ2FB1H104K	S.M.CAP	50V	100nF
C2027	ECJ2VC1H221J	S.M.CAP	50V	220pF
C2028	ECA1CM100B	ELECT	16V	10µF
C2029	ECJ2VB1H152K	S.M.CAP	50V	1.5nF
C2030	ECJ2VC1H471J	S.M.CAP	50V	470pF
C2031	ECJ2VC1H070D	S.M.CAP	50V	7pF
C2032	ECJ2VC1H470J	S.M.CAP	50V	47pF
C2034	ECJ2VC1H010C	S.M.CAP	50V	1pF
C2035	ECJ2VC1H010C	S.M.CAP	50V	1pF
C2041	ECJ2VF1C334Z	S.M.CAP	16V	330nF
C2042	ECJ2VF1C334Z	S.M.CAP	16V	330nF
C2043	ECJ2VB1H103K	S.M.CAP	50V	10nF
C2044	ECA1CM331B	ELECT	16V	330µF
C2046	ECA1CM470B	ELECT	16V	47µF
C2047	ECA1CM470B	ELECT	16V	47µF
C2048	ECJ2VF1C334Z	S.M.CAP	16V	330nF
C2049	ECJ2VF1C334Z	S.M.CAP	16V	330nF
C2050	ECJ2VF1C334Z	S.M.CAP	16V	330nF
C2051	ECJ2VF1C334Z	S.M.CAP	16V	330nF
C2052	ECJ2VC1H221J	S.M.CAP	50V	220pF
C2053	ECJ2VC1H221J	S.M.CAP	50V	220pF
C2054	ECJ2VC1H221J	S.M.CAP	50V	220pF
C2055	ECJ2VC1H221J	S.M.CAP	50V	220pF
C2056	ECA1CM470B	ELECT	16V	47µF
C2057	ECA1CM470B	ELECT	16V	47µF

Cct Ref	Parts Number	Description		
C2058	ECA1CM470B	ELECT	16V	47µF
C2059	ECA1CM470B	ELECT	16V	47µF
C2060	ECJ2VF1C334Z	S.M.CAP	16V	330nF
C2061	ECJ2VF1C334Z	S.M.CAP	16V	330nF
C2062	ECJ2VC1H221J	S.M.CAP	50V	220pF
C2063	ECJ2VC1H221J	S.M.CAP	50V	220pF
C2361	ECA1VM102B	ELECT	35V	1000µF
C2362	ECA1VM102B	ELECT	35V	1000µF
C2363	ECJ2VC1H102J	S.M.CAP	50V	1nF
C2364	ECJ2VC1H102J	S.M.CAP	50V	1nF
C3001	ECJ1VC1H561J	S.M.CAP	50V	560pF
C3002	ECJ1VC1H561J	S.M.CAP	50V	560pF
C3003	ECJ1VC1H561J	S.M.CAP	50V	560pF
C3006	ECJ1VC1H561J	S.M.CAP	50V	560pF
C3007	ECJ1VC1H561J	S.M.CAP	50V	560pF
C3008	ECJ1VC1H561J	S.M.CAP	50V	560pF
C3010	ECJ1VC1H561J	S.M.CAP	50V	560pF
C3011	ECJ1VC1H561J	S.M.CAP	50V	560pF
C3013	ECJ1VC1H561J	S.M.CAP	50V	560pF
C3014	ECJ1VC1H561J	S.M.CAP	50V	560pF
C3015	ECJ1VC1H561J	S.M.CAP	50V	560pF
C3016	ECJ1VC1H561J	S.M.CAP	50V	560pF
C3018	ECJ1VC1H561J	S.M.CAP	50V	560pF
C3019	ECJ1VC1H561J	S.M.CAP	50V	560pF
C3038	ECA1CM100B	ELECT	16V	10µF
C3039	ECA1CM100B	ELECT	16V	10µF
C3040	ECA1CM100B	ELECT	16V	10µF
C3041	ECA1CM100B	ELECT	16V	10µF
C3044	ECA1CM100B	ELECT	16V	10µF
C3045	ECA1CM100B	ELECT	16V	10µF
C3201	ECJ2VB1H103K	S.M.CAP	50V	10nF
C3202	ECJ2VB1H103K	S.M.CAP	50V	10nF
C3203	ECJ2VC1H561J	S.M.CAP	50V	560pF
C3204	ECJ2VC1H561J	S.M.CAP	50V	560pF
C3207	ECJ2VC1H271J	S.M.CAP	50V	270pF
C3213	ECJ2VC1H561J	S.M.CAP	50V	560pF
C3214	ECJ2VC1H561J	S.M.CAP	50V	560pF
C3215	SMG1HV470MT5	ELECT	50V	47µF
C3216	SMG1HV470MT5	ELECT	50V	47µF
C3217	ECJ2VC1H561J	S.M.CAP	50V	560pF
C3218	ECJ2VC1H561J	S.M.CAP	50V	560pF

TERMINALS AND LINKS

JK3001	350536400	SCART SOCKET	
JK3002	350536400	SCART SOCKET	
JK3004	YKC21-5861N	RCA SOCKET	
JK3201	TJB8E026	AV TERMINAL	
SC381	330550049	CRT SOCKET	⚠

SWITCHES

SW801	ESB92DA1B	SWITCH	⚠
SW1003	EVQ21405R	SWITCH	
SW1004	EVQ21405R	SWITCH	
SW1005	EVQ21405R	SWITCH	
SW1006	EVQ21405R	SWITCH	
SW1007	EVQ21405R	SWITCH	

RELAYS

RL801	8-1419125-3	RELAY	⚠

DIFFERENCES FOR MODEL TX--29PM11D

EXPLODED VIEW

21	TBM0E0274	MODEL LABEL

INSTRUCTION BOOKS

.	TQB0E0048A-M	GERMAN
.	TQB0E0048C-M	ITALIAN

Cct Ref	Parts Number	Description
.	TQB0E0048D-M	FRENCH
I.C.s		
IC1104	1500/1JD	32K EAROM 24C32A10PI27

DIFFERENCES FOR MODEL TX--29PM11F

EXPLODED VIEW		
21	TBM0E0275	MODEL LABEL
INSTRUCTION BOOKS		
.	TQB0E0049A-M	GERMAN
.	TQB0E0049B-M	DUTCH
.	TQB0E0049D-M	FRENCH
.	TQB0E0049E-M	SPANISH
.	TQB0E0049F-M	SWEDISH
.	TQB0E0049G-M	NORWEGIAN
.	TQB0E0049H-M	FINNISH
.	TQB0E0049K-M	DANISH
I.C.s		
IC1104	1500/1JF	32K EAROM 24C32A10PI27

DIFFERENCES FOR MODEL TX--29PM11P

EXPLODED VIEW		
21	TBM0E0276	MODEL LABEL
INSTRUCTION BOOKS		
.	TQB0E0050M-M	BULGARIAN
.	TQB0E0050N-M	ROMANIAN
.	TQB0E0050P-M	POLISH
.	TQB0E0050Q-M	HUNGARIAN
.	TQB0E0050R-M	CZECH
.	TQB0E0050U-M	ENGLISH
.	TQB0E0050W-M	SLOVAKIAN
I.C.s		
IC1104	1500/1JP	32K EAROM 24C32A10PI27

SCHEMATIC DIAGRAMS FOR MODELS TX-29PM11D, TX-29PM11F, TX-29PM11P (GP2 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 ¼W 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 μF unless otherwise stated.
3. COIL
   Unit of inductance is μH, 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

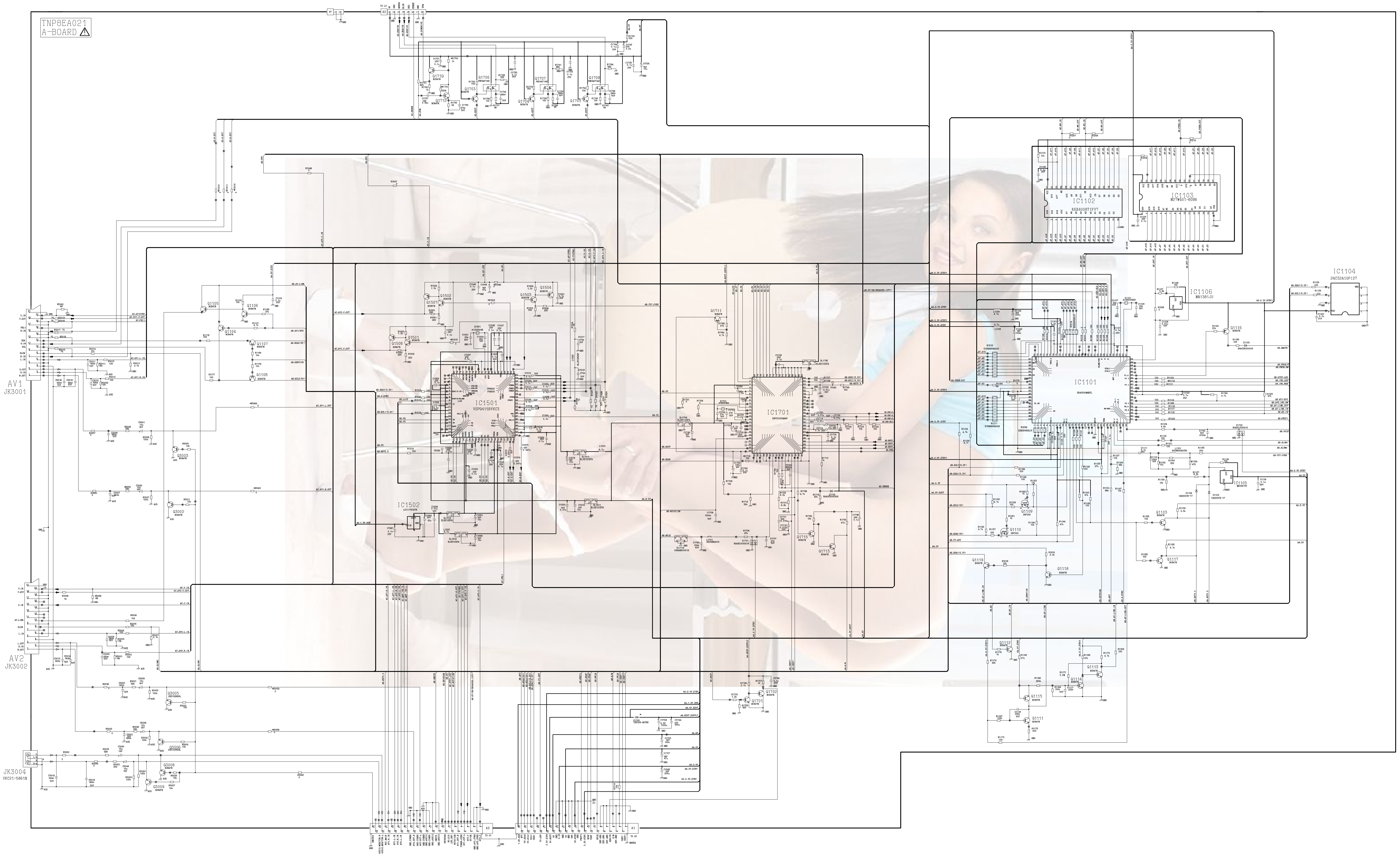
These schematic diagrams are the latest at time of printing and are subject to change without notice.

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.


TNP8EA021
A-BOARD
AV1
JK3001
AV2
JK3002
JK3004
IC1501
IC1502
IC1701
IC1101
IC1102
IC1103
IC1104
IC1105
IC1106

TNP8ED020
D-BOARD

SERVICE

COLD

HOT

IC451
C1AA00000658

IC851
C0DAFKE00001

IC880
BA09GT-V5

IC820
STRW6754LF06

IC801
OZ130N

IC2001
M3P34109ABR5

IC251
C1BA00000269

IC852
TA48M033F

IC853

*IC854

Q551

Q552

Q703

Q702

Q705

Q704

Q707

Q706

Q550

Q771

Q772

Q774

Q251

Q252

Q101

Q102

Q2006

*Q106

*Q865

*Q866

*Q868

*Q869

*Q870

*Q871

*Q872

*Q873

*Q874

*Q875

*Q876

*Q877

*Q878

*Q879

*Q880

*Q881

*Q882

*Q883

*Q884

*Q885

*Q886

*Q887

*Q888

*Q889

*Q890

*Q891

*Q892

*Q893

*Q894

*Q895

*Q896

*Q897

*Q898

*Q899

*Q900

*Q901

*Q902

*Q903

*Q904

*Q905

*Q906

*Q907

*Q908

*Q909

*Q910

*Q911

*Q912

*Q913

*Q914

*Q915

*Q916

*Q917

*Q918

*Q919

*Q920

*Q921

*Q922

*Q923

*Q924

*Q925

*Q926

*Q927

*Q928

*Q929

*Q930

*Q931

*Q932

*Q933

*Q934

*Q935

*Q936

*Q937

*Q938

*Q939

*Q940

*Q941

*Q942

*Q943

*Q944

*Q945

*Q946

*Q947

*Q948

*Q949

*Q950

*Q951

*Q952

*Q953

*Q954

*Q955

*Q956

*Q957

*Q958

*Q959

*Q960

*Q961

*Q962

*Q963

*Q964

*Q965

*Q966

*Q967

*Q968

*Q969

*Q970

*Q971

*Q972

*Q973

*Q974

*Q975

*Q976

*Q977

*Q978

*Q979

*Q980

*Q981

*Q982

*Q983

*Q984

*Q985

*Q986

*Q987

*Q988

*Q989

*Q990

*Q991

*Q992

*Q993

*Q994

*Q995

*Q996

*Q997

*Q998

*Q999

*Q1000

*Q1001

*Q1002

*Q1003

*Q1004

*Q1005

*Q1006

*Q1007

*Q1008

*Q1009

*Q1010

*Q1011

*Q1012

*Q1013

*Q1014

*Q1015

*Q1016

*Q1017

*Q1018

*Q1019

*Q1020

*Q1021

*Q1022

*Q1023

*Q1024

*Q1025

*Q1026

*Q1027

*Q1028

*Q1029

*Q1030

*Q1031

*Q1032

*Q1033

*Q1034

*Q1035

*Q1036

*Q1037

*Q1038

*Q1039

*Q1040

*Q1041

*Q1042

*Q1043

*Q1044

*Q1045

*Q1046

*Q1047

*Q1048

*Q1049

*Q1050

*Q1051

*Q1052

*Q1053

*Q1054

*Q1055

*Q1056

*Q1057

*Q1058

*Q1059

*Q1060

*Q1061

*Q1062

*Q1063

*Q1064

*Q1065

*Q1066

*Q1067

*Q1068

*Q1069

*Q1070

*Q1071

*Q1072

*Q1073

*Q1074

*Q1075

*Q1076

*Q1077

*Q1078

*Q1079

*Q1080

*Q1081

*Q1082

*Q1083

*Q1084

*Q1085

*Q1086

*Q1087

*Q1088

*Q1089

*Q1090

*Q1091

*Q1092

*Q1093

*Q1094

*Q1095

*Q1096

*Q1097

*Q1098

*Q1099

*Q1100

*Q1101

*Q1102

*Q1103

*Q1104

*Q1105

*Q1106

*Q1107

*Q1108

*Q1109

*Q1110

*Q1111

*Q1112

*Q1113

*Q1114

*Q1115

*Q1116

*Q1117

*Q1118

*Q1119

*Q1120

*Q1121

*Q1122

*Q1123

*Q1124

*Q1125

*Q1126

*Q1127

*Q1128

*Q1129

*Q1130

*Q1131

*Q1132

*Q1133

*Q1134

*Q1135

*Q1136

*Q1137

*Q1138

*Q1139

*Q1140

*Q1141

*Q1142

*Q1143

*Q1144

*Q1145

*Q1146

*Q1147

*Q1148

*Q1149

*Q1150

*Q1151

*Q1152

*Q1153

*Q1154

*Q1155

*Q1156

*Q1157

*Q1158

*Q1159

*Q1160

*Q1161

*Q1162

*Q1163

*Q1164

*Q1165

*Q1166

*Q1167

*Q1168

*Q1169

*Q1170

*Q1171

*Q1172

*Q1173

*Q1174

*Q1175

*Q1176

*Q1177

*Q1178

*Q1179

*Q1180

*Q1181

*Q1182

*Q1183

*Q1184

*Q1185

*Q1186

*Q1187

*Q1188

*Q1189

*Q1190

*Q1191

*Q1192

*Q1193

*Q1194

*Q1195

*Q1196

*Q1197

*Q1198

*Q1199

*Q1200

*Q1201

*Q1202

*Q1203

*Q1204

*Q1205

*Q1206

*Q1207

*Q1208

*Q1209

*Q1210

*Q1211

*Q1212

*Q1213

*Q1214

*Q1215

*Q1216

*Q1217

*Q1218

*Q1219

*Q1220

*Q1221

*Q1222

*Q1223

*Q1224

*Q1225

*Q1226

*Q1227

*Q1228

*Q1229

*Q1230

*Q1231

*Q1232

*Q1233

*Q1234

*Q1235

*Q1236

*Q1237

*Q1238

*Q1239

*Q1240

*Q1241

*Q1242

*Q1243

*Q1244

*Q1245

*Q1246

*Q1247

*Q1248

*Q1249

*Q1250

*Q1251

*Q1252

*Q1253

*Q1254

*Q1255

*Q1256

*Q1257

*Q1258

*Q1259

*Q1260

*Q1261

*Q1262

*Q1263

*Q1264

*Q1265

*Q1266

*Q1267

*Q1268

*Q1269

*Q1270

*Q1271

*Q1272

*Q1273

*Q1274

*Q1275

*Q1276

*Q1277

*Q1278

*Q1279

*Q1280

*Q1281

*Q1282

*Q1283

*Q1284

*Q1285

*Q1286

*Q1287

*Q1288

*Q1289

*Q1290

*Q1291

*Q1292

*Q1293

*Q1294

*Q1295

*Q1296

*Q1297

*Q1298

*Q1299

*Q1300

*Q1301

*Q1302

*Q1303

*Q1304

*Q1305

*Q1306

*Q1307

*Q1308

*Q1309

*Q1310

*Q1311

*Q1312

*Q1313

*Q1314

*Q1315

*Q1316

*Q1317

*Q1318

*Q1319

*Q1320

*Q1321

*Q1322

*Q1323

*Q1324

*Q1325

*Q1326

*Q1327

*Q1328

*Q1329

*Q1330

*Q1331

*Q1332

*Q1333

*Q1334

*Q1335

*Q1336

*Q1337

*Q1338

*Q1339

*Q1340

*Q1341

*Q1342

*Q1343

*Q1344

*Q1345

*Q1346

*Q1347

*Q1348

*Q1349

*Q1350

*Q1351

*Q1352

*Q1353

*Q1354

*Q1355

*Q1356

*Q1357

*Q1358

*Q1359

*Q1360

*Q1361

*Q1362

*Q1363

*Q1364

*Q1365

*Q1366

*Q1367

*Q1368

*Q1369

*Q1370

*Q1371

*Q1372

*Q1373

*Q1374

*Q1375

*Q1376

*Q1377

*Q1378

*Q1379

*Q1380

*Q1381

*Q1382

*Q1383

*Q1384

*Q1385

*Q1386

*Q1387

*Q1388

*Q1389

*Q1390

*Q1391

*Q1392

*Q1393

*Q1394

*Q1395

*Q1396

*Q1397

*Q1398

*Q1399

*Q1400

*Q1401

*Q1402

*Q1403

*Q1404

*Q1405

*Q1406

*Q1407

*Q1408

*Q1409

*Q1410

*Q1411

*Q1412

*Q1413

*Q1414

*Q1415

*Q1416

*Q1417

*Q1418

*Q1419

*Q1420

*Q1421

*Q1422

*Q1423

*Q1424

*Q1425

*Q1426

*Q1427

*Q1428

*Q1429

*Q1430

*Q1431

*Q1432

*Q1433

*Q1434

*Q1435

*Q1436

*Q1437

*Q1438

*Q1439

*Q1440

*Q1441

*Q1442

*Q1443

*Q1444

*Q1445

*Q1446

*Q1447

*Q1448

*Q1449

*Q1450

*Q1451

*Q1452

*Q1453

*Q1454

*Q1455

*Q1456

*Q1457

*Q1458

*Q1459

*Q1460

*Q1461

*Q1462

*Q1463

*Q1464

*Q1465

*Q1466

*Q1467

*Q1468

*Q1469

*Q1470

*Q1471

*Q1472

*Q1473

*Q1474

*Q1475

*Q1476

*Q1477

*Q1478

*Q1479

*Q1480

*Q1481

*Q1482

*Q1483

*Q1484

*Q1485

*Q1486

*Q1487

*Q1488

*Q1489

*Q1490

*Q1491

*Q1492

*Q1493

*Q1494

*Q1495

*Q1496

*Q1497

*Q1498

*Q1499

*Q1500

*Q1501

*Q1502

*Q1503

*Q1504

*Q1505

*Q1506

*Q1507

*Q1508

*Q1509

*Q1510

*Q1511

*Q1512

*Q1513

*Q1514

*Q1515

*Q1516

*Q1517

*Q1518

*Q1519

*Q1520

*Q1521

*Q1522

*Q1523

*Q1524

*Q1525

*Q1526

*Q1527

*Q1528

*Q1529

*Q1530

*Q1531

*Q1532

*Q1533

*Q1534

*Q1535

*Q1536

*Q1537

*Q1538

*Q1539

*Q1540

*Q1541

*Q1542

*Q1543

*Q1544

*Q1545

*Q1546

*Q1547

*Q1548

*Q1549

*Q1550

*Q1551

*Q1552

*Q1553

*Q1554

*Q1555

*Q1556

*Q1557

*Q1558

*Q1559

*Q1560

*Q1561

*Q1562

*Q1563

*Q1564

*Q1565

*Q1566

*Q1567

*Q1568

*Q1569

*Q1570

*Q1571

*Q1572

*Q1573

*Q1574

*Q1575

*Q1576

*Q1577

*Q1578

*Q1579

*Q1580

*Q1581

*Q1582

*Q1583

*Q1584

*Q1585

*Q1586

*Q1587

*Q1588

*Q1589

*Q1590

*Q1591

*Q1592

*Q1593

*Q1594

*Q1595

*Q1596

*Q1597

*Q1598

*Q1599

*Q1600

*Q1601

*Q1602

*Q1603

*Q1604

*Q1605

*Q1606

*Q1607

*Q1608

*Q1609

*Q1610

*Q1611

*Q1612

*Q1613

*Q1614

*Q1615

*Q1616

*Q1617

*Q1618

*Q1619

*Q1620

*Q1621

*Q1622

*Q1623

*Q1624

*Q1625

*Q1626

*Q1627

*Q1628

*Q1629

*Q1630

*Q1631

*Q1632

*Q1633

*Q1634

*Q1635

*Q1636

*Q1637

*Q1638

*Q1639

*Q1640

*Q1641

*Q1642

*Q1643

*Q1644

*Q1645

*Q1646

*Q1647

*Q1648

*Q1649

*Q1650

*Q1651

*Q1652

*Q1653

*Q1654

*Q1655

*Q1656

*Q1657

*Q1658

*Q1659

*Q1660

*Q1661

*Q1662

*Q1663

*Q1664

*Q1665

*Q1666

*Q1667

*Q1668

*Q1669

*Q1670

*Q1671

*Q1672

*Q1673

*Q1674

*Q1675

*Q1676

*Q1677

*Q1678

*Q1679

*Q1680

*Q1681

*Q1682

*Q1683

*Q1684

*Q1685

*Q1686

*Q1687

*Q1688

*Q1689

*Q1690

*Q1691

*Q1692

*Q1693

*Q1694

*Q1695

*Q1696

*Q1697

*Q1698

*Q1699

*Q1700

*Q1701

*Q1702

*Q1703

*Q1704

*Q1705

*Q1706

*Q1707

*Q1708

*Q1709

*Q1710

*Q1711

*Q1712

*Q1713

*Q1714

*Q1715

*Q1716

*Q1717

*Q1718

*Q1719

*Q1720

*Q1721

*Q1722

*Q1723

*Q1724

*Q1725

*Q1726

*Q1727

*Q1728

*Q1729

*Q1730

*Q1731

*Q1732

*Q1733

*Q1734

*Q1735

*Q1736

*Q1737

*Q1738

*Q1739

*Q1740

*Q1741

*Q1742

*Q1743

*Q1744

*Q1745

*Q1746

*Q1747

*Q1748

*Q1749

*Q1750

*Q1751

*Q1752

*Q1753

*Q1754

*Q1755

*Q1756

*Q1757

*Q1758

*Q1759

*Q1760

*Q1761

*Q1762

*Q1763

*Q1764

*Q1765

*Q1766

*Q1767

*Q1768

*Q1769

*Q1770

*Q1771

*Q1772

*Q1773

*Q1774

*Q1775

*Q1776

*Q1777

*Q1778

*Q1779

*Q1780

*Q1781

*Q1782

*Q1783

*Q1784

*Q1785

*Q1786

*Q1787

*Q1788

*Q1789

*Q1790

*Q1791

*Q1792

*Q1793

*Q1794

*Q1795

*Q1796

*Q1797

*Q1798

*Q1799

*Q1800

*Q1801

*Q1802

*Q1803

*Q1804

*Q1805

*Q1806

*Q1807

*Q1808

*Q1809

*Q1810

*Q1811

*Q1812

*Q1813

*Q1814

*Q1815

*Q1816

*Q1817

*Q1818

*Q1819

*Q1820

*Q1821

*Q1822

*Q1823

*Q1824

*Q1825

*Q1826

*Q1827

*Q1828

*Q1829

*Q1830

*Q1831

*Q1832

*Q1833

*Q1834

*Q1835

*Q1836

*Q1837

*Q1838

*Q1839

*Q1840

*Q1841

*Q1842

*Q1843

*Q1844

*Q1845

*Q1846

*Q1847

*Q1848

*Q1849

*Q1850

*Q1851

*Q1852

*Q1853

*Q1854

*Q1855

*Q1856

*Q1857

*Q1858

*Q1859

*Q1860

*Q1861

*Q1862

*Q1863

*Q1864

*Q1865

*Q1866

*Q1867

*Q1868

*Q1869

*Q1870

*Q1871

*Q1872

*Q1873

*Q1874

*Q1875

*Q1876

*Q1877

*Q1878

*Q1879

*Q1880

*Q1881

*Q1882

*Q1883

*Q1884

*Q1885

*Q1886

*Q1887

*Q1888

*Q1889

*Q1890

*Q1891

*Q1892

*Q1893

*Q1894

*Q1895

*Q1896

*Q1897

*Q1898

*Q1899

*Q1900

*Q1901

*Q1902

*Q1903

*Q1904

*Q1905

*Q1906

*Q1907

*Q1908

*Q1909

*Q1910

*Q1911

*Q1912

*Q1913

*Q1914

*Q1915

*Q1916

*Q1917

*Q1918

*Q1919

*Q1920

*Q1921

*Q1922

*Q1923

*Q1924

*Q1925

*Q1926

*Q1927

*Q1928

*Q1929

*Q1930

*Q1931

*Q1932

*Q1933

*Q1934

*Q1935

*Q1936

*Q1937

*Q1938

*Q1939

*Q1940

*Q1941

*Q1942

*Q1943

*Q1944

*Q1945

*Q1946

*Q1947

*Q1948

*Q1949

*Q1950

*Q1951

*Q1952

*Q1953

*Q1954

*Q1955

*Q1956

*Q1957

*Q1958

*Q1959

*Q1960

*Q1961

*Q1962

*Q1963

*Q1964

*Q1965

*Q1966

*Q1967

*Q1968

*Q1969

*Q1970

*Q1971

*Q1972

*Q1973

*Q1974

*Q1975

*Q1976

*Q1977

*Q1978

*Q1979

*Q1980

*Q1981

*Q1982

*Q1983

*Q1984

*Q1985

*Q1986

*Q1987

*Q1988

*Q1989

*Q1990

*Q1991

*Q1992

*Q1993

*Q1994

*Q1995

*Q1996

*Q1997

*Q1998

*Q1999

*Q2000

*Q2001

*Q2002

*Q2003

*Q2004

*Q2005

*Q2006

*Q2007

*Q2008

*Q2009

*Q2010

*Q2011

*Q2012

*Q2013

*Q2014

*Q2015

*Q2016

*Q2017

*Q2018

*Q2019

*Q2020

*Q2021

*Q2022

*Q2023

*Q2024

*Q2025

*Q2026

*Q2027

*Q2028

*Q2029

*Q2030

*Q2031

*Q2032

*Q2033

*Q2034

*Q2035

*Q2036

*Q2037

*Q2038

*Q2039

*Q2040

*Q2041

*Q2042

*Q2043

*Q2044

*Q2045

*Q2046

*Q2047

*Q2048

*Q2049

*Q2050

*Q2051

*Q2052

*Q2053

*Q2054

*Q2055

*Q2056

*Q2057

*Q2058

*Q2059

*Q2060

*Q2061

*Q2062

*Q2063

*Q2064

*Q2065

*Q2066

*Q2067

*Q2068

*Q2069

*Q2070

*Q2071

*Q2072

*Q2073

*Q2074

*Q2075

*Q2076

*Q2077

*Q2078

*Q2079

*Q2080

*Q2081

*Q2082

*Q2083

*Q2084

*Q2085

*Q2086

*Q2087

*Q2088

*Q2089

*Q2090

*Q2091

*Q2092

*Q2093

*Q2094

*Q2095

*Q2096

*Q2097

*Q2098

*Q2099

*Q2100

*Q2101

*Q2102

*Q2103

*Q2104

*Q2105

*Q2106

*Q2107

*Q2108

*Q2109

*Q2110

*Q2111

*Q2112

*Q2113

*Q2114

*Q2115

*Q2116

*Q2117

*Q2118

*Q2119

*Q2120

*Q2121

*Q2122

*Q2123

*Q2124

*Q2125

*Q2126

*Q2127

*Q2128

*Q2129

*Q2130

*Q2131

*Q2132

*Q2133

*Q2134

*Q2135

*Q2136

*Q2137

*Q2138

*Q2139

*Q2140

*Q2141

*Q2142

*Q2143

*Q2144

*Q2145

*Q2146

*Q2147

*Q2148

*Q2149

*Q2150

*Q2151

*Q2152

*Q2153

*Q2154

*Q2155

*Q2156

*Q2157

*Q2158

*Q2159

*Q2160

*Q2161

*Q2162

*Q2163

*Q2164

*Q2165

*Q2166

*Q2167

*Q2168

*Q2169

*Q2170

*Q2171

*Q2172

*Q2173

*Q2174

*Q2175

*Q2176

*Q2177

*Q2178

*Q2179

*Q2180

*Q2181

*Q2182

*Q2183

*Q2184

*Q2185

*Q2186

*Q2187

*Q2188

*Q2189

*Q2190

*Q2191

*Q2192

*Q2193

*Q2194

*Q2195

*Q2196

*Q2197

*Q2198

*Q2199

*Q2200

*Q2201

*Q2202

*Q2203

*Q2204

*Q2205

*Q2206

*Q2207

*Q2208

*Q2209

*Q2210

*Q2211

*Q2212

*Q2213

*Q2214

*Q2215

*Q2216

*Q2217

*Q2218

*Q2219

*Q2220

*Q2221

*Q2222

*Q2223

*Q2224

*Q2225

*Q2226

*Q2227

*Q2228

*Q2229

*Q2230

*Q2231

*Q2232

*Q2233

*Q2234

*Q2235

*Q2236

*Q2237

*Q2238

*Q2239

*Q2240

*Q2241

*Q2242

*Q2243

*Q2244

*Q2245

*Q2246

*Q2247

*Q2248

*Q2249

*Q2250

*Q2251

*Q2252

*Q2253

*Q2254

*Q2255

*Q2256

*Q2257

*Q2258

*Q2259

*Q2260

*Q2261

*Q2262

*Q2263

*Q2264

*Q2265

*Q2266

*Q2267

*Q2268

*Q2269

*Q2270

*Q2271

*Q2272

*Q2273

*Q2274

*Q2275

*Q2276

*Q2277

*Q2278

*Q2279

*Q2280

*Q2281

*Q2282

*Q2283

*Q2284

*Q2285

*Q2286

*Q2287

*Q2288

*Q2289

*Q2290

*Q2291

*Q2292

*Q2293

*Q2294

*Q2295

*Q2296

*Q2297

*Q2298

*Q2299

*Q2300

*Q2301

*Q2302

*Q2303

*Q2304

*Q2305

*Q2306

*Q2307

*Q2308

*Q2309

*Q2310

*Q2311

*Q2312

*Q2313

*Q2314

*Q2315

*Q2316

*Q2317

*Q2318

*Q2319

*Q2320

*Q2321

*Q2322

*Q2323

*Q2324

*Q2325

*Q2326

*Q2327

*Q2328

*Q2329

*Q2330

*Q2331

*Q2332

*Q2333

*Q2334

*Q2335

*Q2336

*Q2337

*Q2338

*Q2339

*Q2340

*Q2341

*Q2342

*Q2343

*Q2344

*Q2345

*Q2346

*Q2347

*Q2348

*Q2349

*Q2350

*Q2351

*Q2352

*Q2353

*Q2354

*Q2355

*Q2356

*Q2357

*Q2358

*Q2359

*Q2360

*Q2361

*Q2362

*Q2363

*Q2364

*Q2365

*Q2366

*Q2367

*Q2368

*Q2369

*Q2370

*Q2371

*Q2372

*Q2373

*Q2374

*Q2375

*Q2376

*Q2377

*Q2378

*Q2379

*Q2380

*Q2381

*Q2382

*Q2383

*Q2384

*Q2385

*Q2386

*Q2387

*Q2388

*Q2389

*Q2390

*Q2391

*Q2392

*Q2393

*Q2394

*Q2395

*Q2396

*Q2397

*Q2398

*Q2399

*Q2400

*Q2401

*Q2402

*Q2403

*Q2404

*Q2405

*Q2406

*Q2407

*Q2408

*Q2409

*Q2410

*Q2411

*Q2412

*Q2413

*Q2414

*Q2415

*Q2416

*Q2417

*Q2418

*Q2419

*Q2420

*Q2421

*Q2422

*Q2423

*Q2424

*Q2425

*Q2426

*Q2427

*Q2428

*Q2429

*Q2430

*Q2431

*Q2432

*Q2433

*Q2434

*Q2435

*Q2436

*Q2437

*Q2438

*Q2439

*Q2440

*Q2441

*Q2442

*Q2443

*Q2444

*Q2445

*Q2446

*Q2447

*Q2448

*Q2449

*Q2450

*Q2451

*Q2452

*Q2453

*Q2454

*Q2455

*Q2456

*Q2457

*Q2458

*Q2459

*Q2460

*Q2461

*Q2462

*Q2463

*Q2464

*Q2465

*Q2466

*Q2467

*Q2468

*Q2469

*Q2470

*Q2471

*Q2472

*Q2473

*Q2474

*Q2475

*Q2476

*Q2477

*Q2478

*Q2479

*Q2480

*Q2481

*Q2482

*Q2483

*Q2484

*Q2485

*Q2486

*Q2487

*Q2488

*Q2489

*Q2490

*Q2491

*Q2492

*Q2493

*Q2494

*Q2495

*Q2496

*Q2497

*Q2498

*Q2499

*Q2500

*Q2501

*Q2502

*Q2503

*Q2504

*Q2505

*Q2506

*Q2507

*Q2508

*Q2509

*Q2510

*Q2511

*Q2512

*Q2513

*Q2514

*Q2515

*Q2516

*Q2517

*Q2518

*Q2519

*Q2520

*Q2521

*Q2522

*Q2523

*Q2524

*Q2525

*Q2526

*Q2527

*Q2528

*Q2529

*Q2530

*Q2531

*Q2532

*Q2533

*Q2534

*Q2535

*Q2536

*Q2537

*Q2538

*Q2539

*Q2540

*Q2541

*Q2542

*Q2543

*Q2544

*Q2545

*Q2546

*Q2547

*Q2548

*Q2549

*Q2550

*Q2551

*Q2552

*Q2553

*Q2554

*Q2555

*Q2556

*Q2557

*Q2558

*Q2559

*Q2560

*Q2561

*Q2562

*Q2563

*Q2564

*Q2565

*Q2566

*Q2567

*Q2568

*Q2569

*Q2570

*Q2571

*Q2572

*Q2573

*Q2574

*Q2575

*Q2576

*Q2577

*Q2578

*Q2579

*Q2580

*Q2581

*Q2582

*Q2583

*Q2584

*Q2585

*Q2586

*Q2587

*Q2588

*Q2589

*Q2590

*Q2591

*Q2592

*Q2593

*Q2594

*Q2595

*Q2596

*Q2597

*Q2598

*Q2599

*Q2600

*Q2601

*Q2602

*Q2603

*Q2604

*Q2605

*Q2606

*Q2607

*Q2608

*Q2609

*Q2610

*Q2611

*Q2612

*Q2613

*Q2614

*Q2615

*Q2616

*Q2617

*Q2618

*Q2619

*Q2620

*Q2621

*Q2622

*Q2623

*Q2624

*Q2625

*Q2626

*Q2627

*Q2628

*Q2629

*Q2630

*Q2631

*Q2632

*Q2633

*Q2634

*Q2635

*Q2636

*Q2637

*Q2638

*Q2639

*Q2640

*Q2641

*Q2642

*Q2643

*Q2644

*Q2645

*Q2646

*Q2647

*Q2648

*Q2649

*Q2650

*Q2651

*Q2652

*Q2653

*Q2654

*Q2655

*Q2656

*Q2657

*Q2658

*Q2659

*Q2660

*Q2661

*Q2662

*Q2663

*Q2664

*Q2665

*Q2666

*Q2667

*Q2668

*Q2669

*Q2670

*Q2671

*Q2672

*Q2673

*Q2674

*Q2675

*Q2676

*Q2677

*Q2678

*Q2679

*Q2680

*Q2681

*Q2682

*Q2683

*Q2684

*Q2685

*Q2686

*Q2687

*Q2688

*Q2689

*Q2690

*Q2691

*Q2692

*Q2693

*Q2694

*Q2695

*Q2696

*Q2697

*Q2698

*Q2699

*Q2700

*Q2701

*Q2702

*Q2703

*Q2704

*Q2705

*Q2706

*Q2707

*Q2708

*Q2709

*Q2710

*Q2711

*Q2712

*Q2713

*Q2714

*Q2715

*Q2716

*Q2717

*Q2718

*Q2719

*Q2720

*Q2721

*Q2722

*Q2723

*Q2724

*Q2725

*Q2726

*Q2727

*Q2728

*Q2729

*Q2730

*Q2731

*Q2732

*Q2733

*Q2734

*Q2735

*Q2736

*Q2737

*Q2738

*Q2739

*Q2740

*Q2741

*Q2742

*Q2743

*Q2744

*Q2745

*Q2746

*Q2747

*Q2748

*Q2749

*Q2750

*Q2751

*Q2752

*Q2753

*Q2754

*Q2755

*Q2756

*Q2757

*Q2758

*Q2759

*Q2760

*Q2761

*Q2762

*Q2763

*Q2764

*Q2765

*Q2766

*Q2767

*Q2768

*Q2769

*Q2770

*Q2771

*Q2772

*Q2773

*Q2774

*Q2775

*Q2776

*Q2777

*Q2778

*Q2779

*Q2780

*Q2781

*Q2782

*Q2783

*Q2784

*Q2785

*Q2786

*Q2787

*Q2788

*Q2789

*Q2790

*Q2791

*Q2792

*Q2793

*Q2794

*Q2795

*Q2796

*Q2797

*Q2798

*Q2799

*Q2800

*Q2801

*Q2802

*Q2803

*Q2804

*Q2805

*Q2806

*Q2807

*Q2808

*Q2809

*Q2810

*Q2811

*Q2812

*Q2813

*Q2814

*Q2815

*Q2816

*Q2817

*Q2818

*Q2819

*Q2820

*Q2821

*Q2822

*Q2823

*Q2824

*Q2825

*Q2826

*Q2827

*Q2828

*Q2829

*Q2830

*Q2831

*Q2832

*Q2833

*Q2834

*Q2835

*Q2836

*Q2837

*Q2838

*Q2839

*Q2840

*Q2841

*Q2842

*Q2843

*Q2844

*Q2845

*Q2846

*Q2847

*Q2848

*Q2849

*Q2850

*Q2851

*Q2852

*Q2853

*Q2854

*Q2855

*Q2856

*Q2857

*Q2858

*Q2859

*Q2860

*Q2861

*Q2862

*Q2863

*Q2864

*Q2865

*Q2866

*Q2867

*Q2868

*Q2869

*Q2870

*Q2871

*Q2872

*Q2873

*Q2874

*Q2875

*Q2876

*Q2877

*Q2878

*Q2879

*Q2880

*Q2881

*Q2882

*Q2883

*Q2884

*Q2885

*Q2886

*Q2887

*Q2888

*Q2889

*Q2890

*Q2891

*Q2892

*Q2893

*Q2894

*Q2895

*Q2896

*Q2897

*Q2898

*Q2899

*Q2900

*Q2901

*Q2902

*Q2903

*Q2904

*Q2905

*Q2906

*Q2907

*Q2908

*Q2909

*Q2910

*Q2911

*Q2912

*Q2913

*Q2914

*Q2915

*Q2916

*Q2917

*Q2918

*Q2919

*Q2920

*Q2921

*Q2922

*Q2923

*Q2924

*Q2925

*Q2926

*Q2927

*Q2928

*Q2929

*Q2930

*Q2931

*Q2932

*Q2933

*Q2934

*Q2935

*Q2936

*Q2937

*Q2938

*Q2939

*Q2940

*Q2941

*Q2942

*Q2943

*Q2944

*Q2945

*Q2946

*Q2947

*Q2948

*Q2949

*Q2950

*Q2951

*Q2952

*Q2953

*Q2954

*Q2955

*Q2956

*Q2957

*Q2958

*Q2959

*Q2960

*Q2961

*Q2962

*Q2963

*Q2964

*Q2965

*Q2966

*Q2967

*Q2968

*Q2969

*Q2970

*Q2971

*Q2972

*Q2973

*Q2974

*Q2975

*Q2976

*Q2977

*Q2978

*Q2979

*Q2980

*Q2981

*Q2982

*Q2983

*Q2984

*Q2985

*Q2986

*Q2987

*Q2988

*Q2989

*Q2990

*Q2991

*Q2992

*Q2993

*Q2994

*Q2995

*Q2996

*Q2997

*Q2998

*Q2999

*Q3000

TNP8EG022
G-BOARD ⚠

HOT

COLD

HOT

COLD

TJSF20016

TJBBE026
JK3201

IC1900
COAABB000108

Q850
Q852
Q1901
Q1002
RM1001

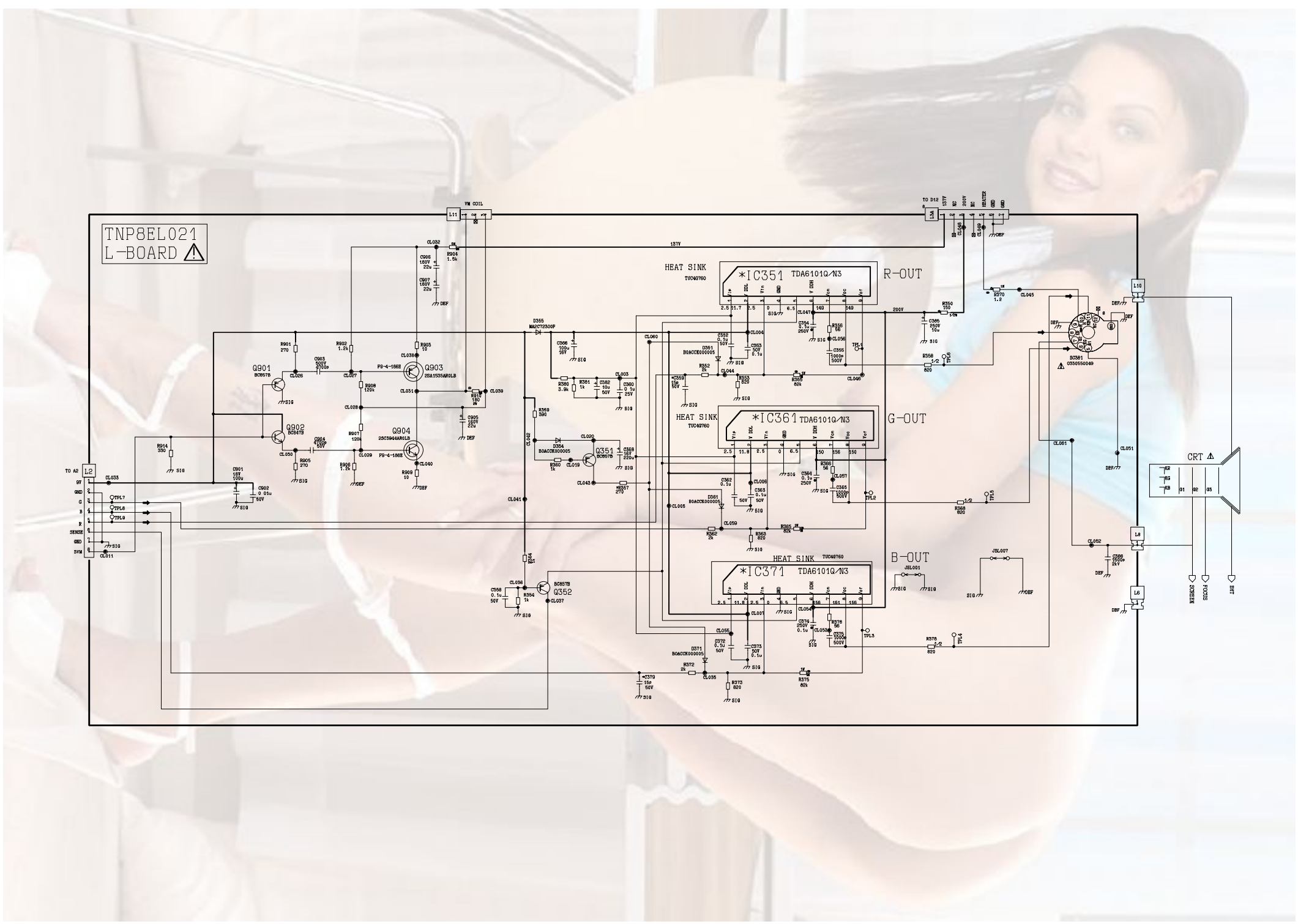
SW1003
SW1004
SW1005
SW1006
SW1007

TV-AV
+
−
POWER ON
ATM

5V-STBY

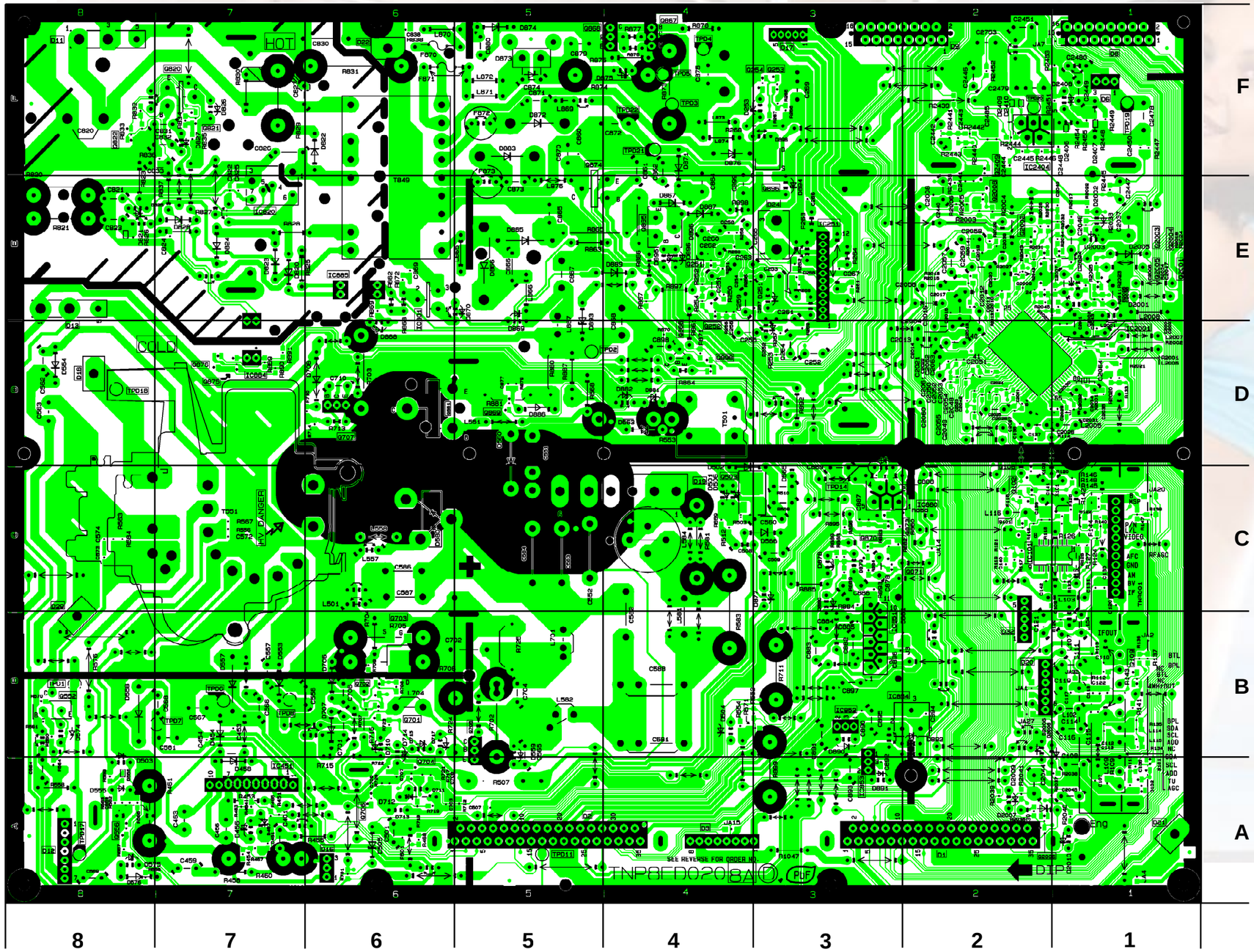
LPG

AC CORD


TNP8EL021
L-BOARD
HEAT SINK
*IC351 TDA6101Q/N3
R-OUT
HEAT SINK
*IC361 TDA6101Q/N3
G-OUT
HEAT SINK
*IC371 TDA6101Q/N3
B-OUT
CRT
137V
200V
Q901
Q902
Q903
Q904
Q351
Q352
D355
D354
D351
D361
D371
L11
L2
L10
L8
L6
L5A

CONDUCTOR VIEWS FOR MODELS
TX-29PM11D, TX-29PM11F, TX-29PM11P

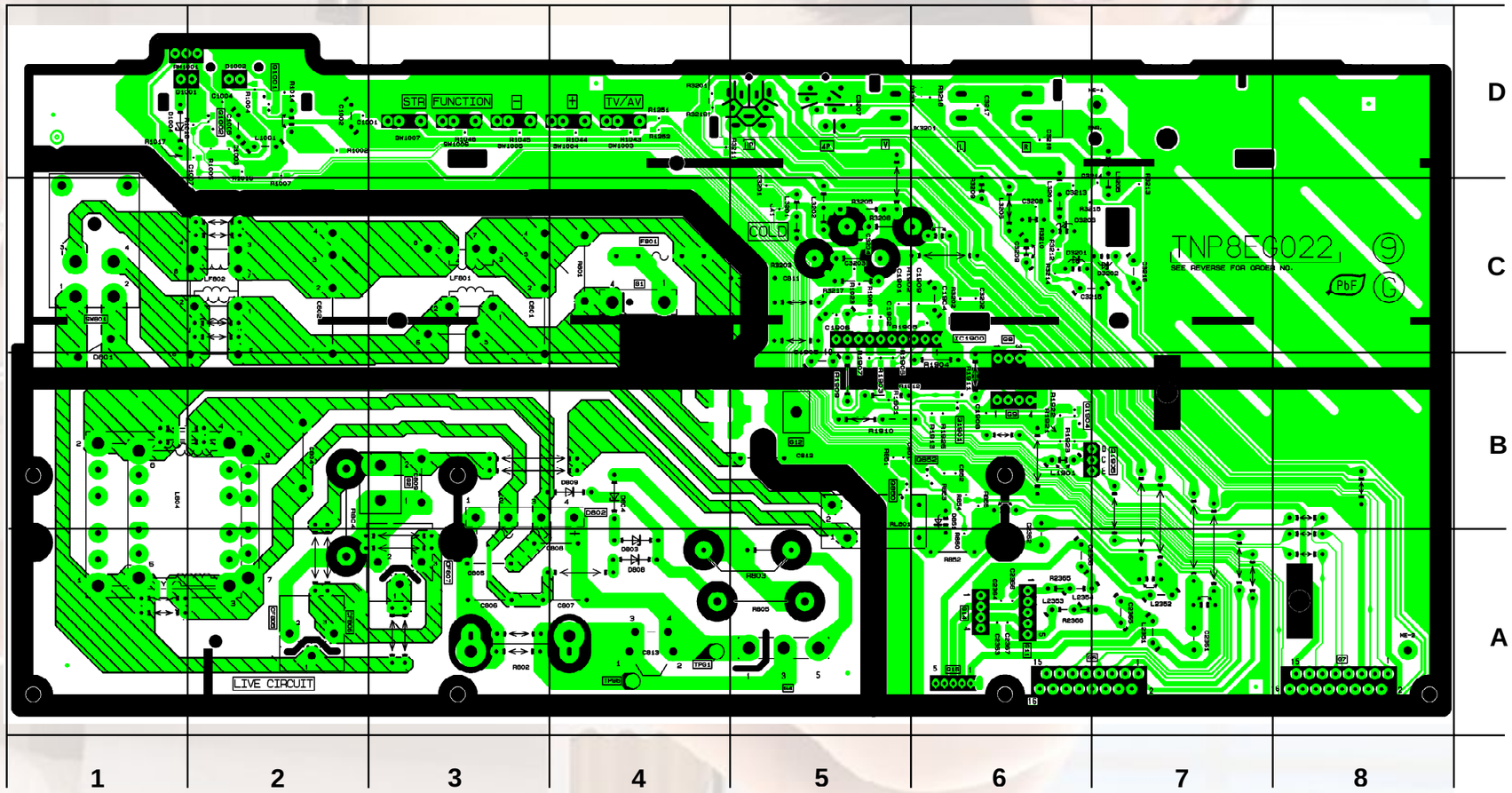
D - BOARD TNP8ED020



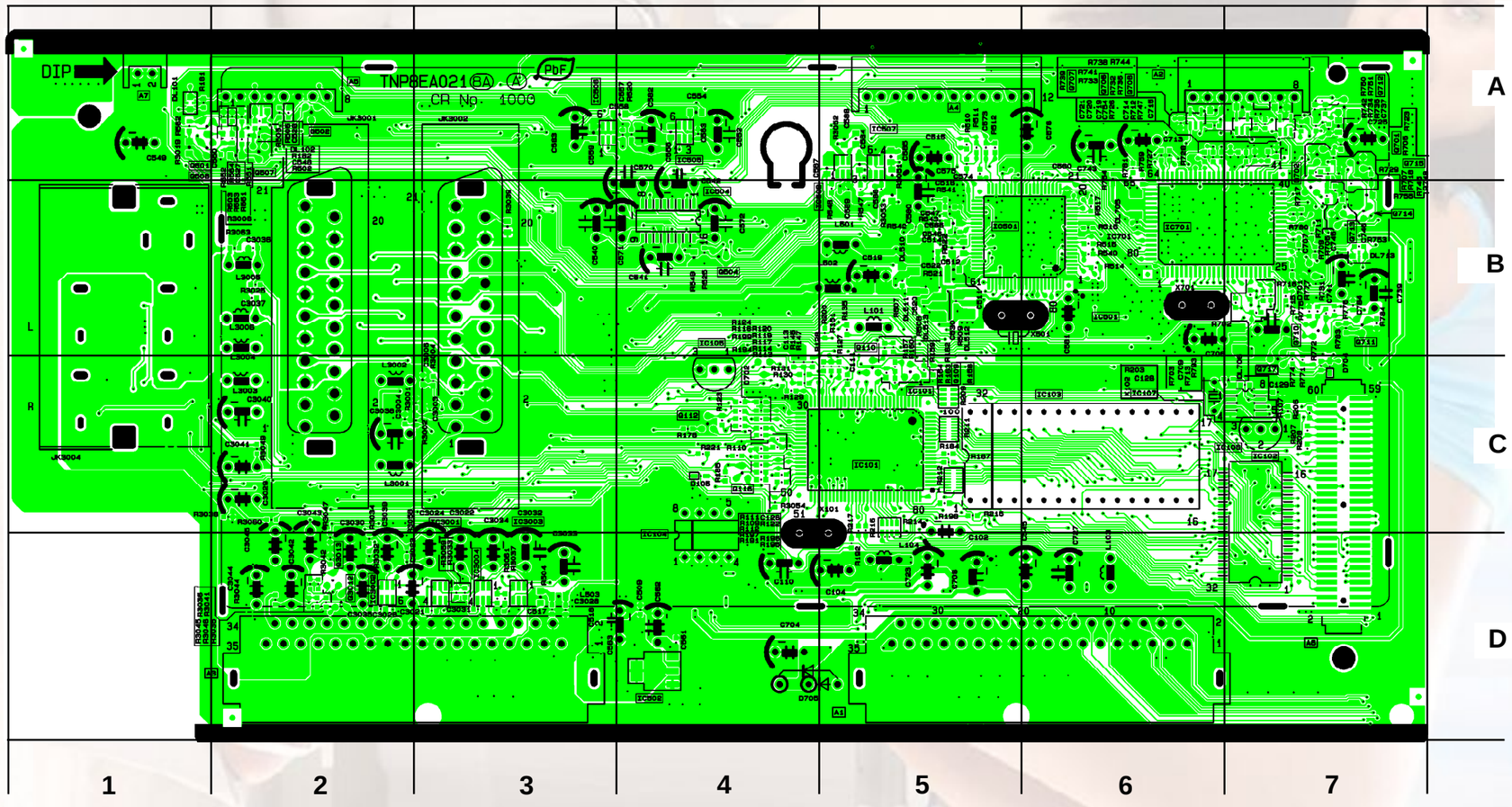
TRAN'S		D502	C4	D880	C3
Q101	C2	D503	A8	D881	D4
Q102	C2	D504	B4	D883	F5
Q106	C2	D505	A6	D887	E4
Q2006	A2	D506	C4	D888	C2
Q251	E4	D553	B7	D889	E4
Q252	E4	D554	D8	D890	B3
Q503	C4	D555	A8	D891	A3
Q551	D6	D556	A8	D892	B2
Q552	B8	D557	B7	D893	D5
Q556	A8	D558	B8	D894	E3
Q701	B6	D559	B5	D895	E4
Q702	B6	D560	D5	D896	E4
Q703	B6	D563	D4	D898	F3
Q704	A6	D565	C4		
Q705	B5	D566	C4	IC'S	
Q706	A6	D575	A8	IC2001	D2
Q707	D6	D576	A8	IC251	E3
Q865	E4	D580	C6	IC451	A7
Q866	D4	D706	B6	IC801	E6
Q867	F4	D707	B6	IC820	E7
Q868	F4	D710	B6	IC851	B3
Q870	C3	D711	A6	IC852	B3
Q871	C3	D712	A6	IC853	A3
Q873	C3	D713	A6	IC854	B2
Q874	E5	D714	B6	IC880	C3
Q896	F3	D717	B6	IC885	E6
Q898	D4	D820	E7		
		D822	F6	TP'S	
DIODES		D823	E7	TPD1	B8
D101	A1	D824	E7	TPD11	A5
D102	A1	D825	E8	TPD14	C3
D2005	E1	D865	E5	TPD17	A8
D2006	B2	D866	E5	TPD18	D8
D2007	A2	D867	E4	TPD19	F1
D2008	B1	D868	D6	TPD2	D5
D2009	A2	D869	D5	TPD20	F2
D2010	A1	D870	E5	TPD21	F4
D251	E3	D871	F4	TPD22	F4
D252	D3	D872	F5	TPD3	F4
D454	B7	D873	F5	TPD4	F4
D456	A7	D874	F5	TPD5	F4
D457	A7	D875	F4	TPD6	B7
D458	A7	D877	C3	TPD7	B7
D501	C4	D878	C3	TPD8	B7

G - BOARD TNP8EG022

TRAN'S		D803	A4
Q1002	D2	D804	B4
Q1901	B6	D808	A4
Q850	B5	D809	B4
Q852	B6	D851	B6
DIODE		**IC'S**	
D1001	D2	IC1900	C5
D1004	D1	RM1001	D2
D3201	C6		
D3202	C7	**TP'S**	
D3203	C6	TPG1	A4
D3204	D6	TPG6	A4
D802	B3		



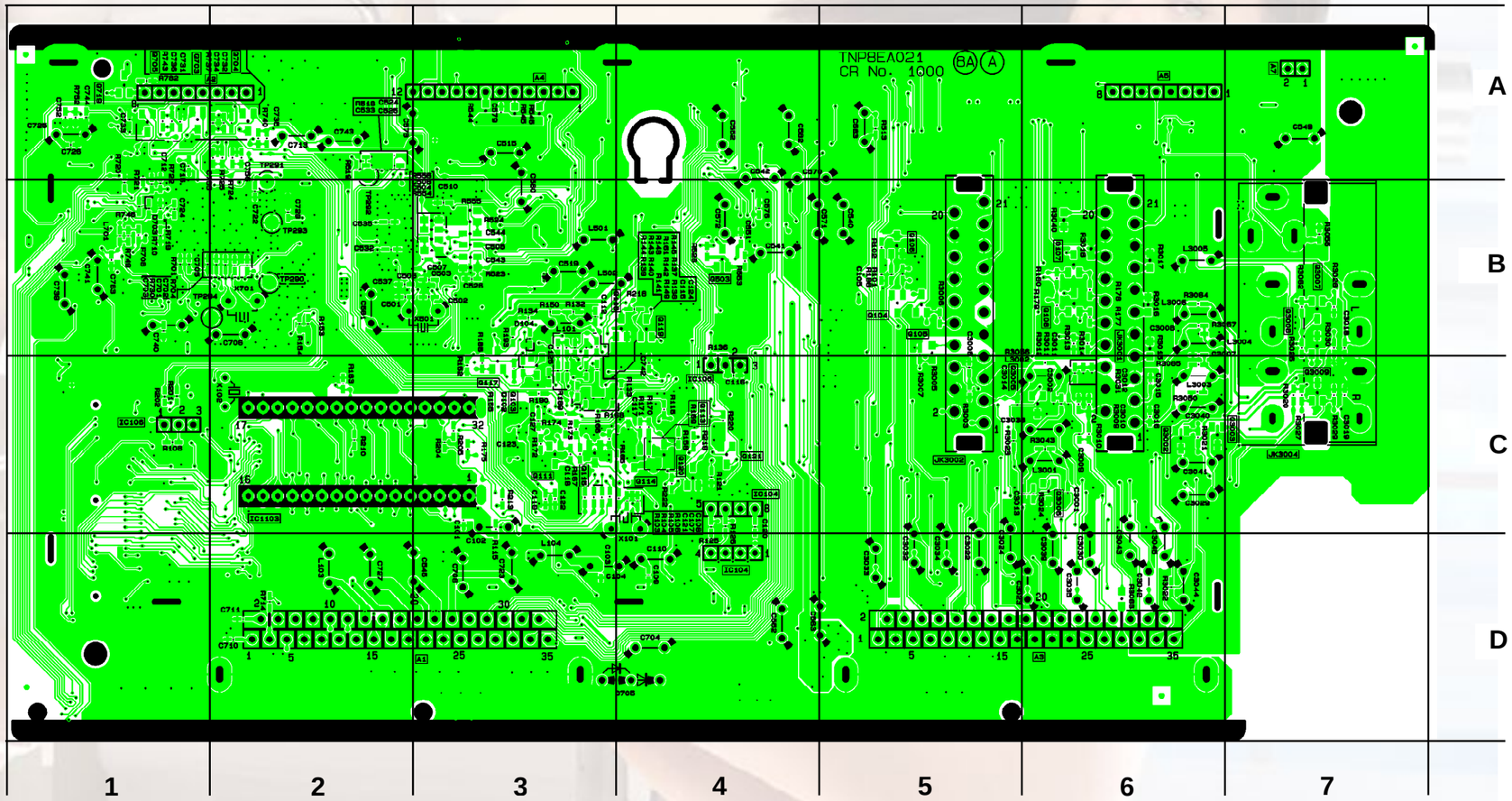
A - BOARD TNP8EA021 - TOP



TRAN'S		DIODE	
Q1109	C5	D1105	C4
Q1110	C5	D1701	B7
Q1112	C4	D1702	C4
Q1116	C4	D1705	D4
Q1501	A1		
Q1502	A2	IC'S	
Q1504	B4	IC1101	C5
Q1507	A2	IC1102	C7
Q1508	A1	IC1103	C6
Q1701	A7	IC1104	D4
Q1702	A7	IC1105	C4
Q1706	A7	IC1106	C7
Q1707	A6	IC1501	B6
Q1708	A7	IC1502	D4
Q1711	C7	IC1701	B6
Q1712	A7		
Q1713	B7		
Q1715	A7		

A - BOARD TNP8EA021 - BOTTOM

TRAN'S		Q1703	A1
Q1103	C3	Q1704	A2
Q1104	B5	Q1705	A1
Q1105	B5	Q1719	A1
Q1106	B5	Q3002	C6
Q1107	B6	Q3003	C7
Q1108	B6	Q3005	C6
Q1111	C3	Q3006	C6
Q1113	C4	Q3008	B7
Q1114	C4	Q3009	C7
Q1115	C3		
Q1117	C3	**DIODE**	
Q1118	B4	D1102	C3
Q1119	B4	D1104	B3
Q1503	B4	D1703	B1



NOTES

L - BOARD TNP8EL021

TRAN'S		DIODE		IC'S		TP'S	
Q351	D4	D351	D3	IC351	D3	TPL1	D2
Q352	C1	D354	D4	IC361	C4	TPL2	C4
Q901	B4	D355	D1	IC371	C1	TPL3	C1
Q902	B4	D361	C3			TPL4	C2
Q903	A4	D371	D2			TPL5	B3
Q904	B4					TPL6	C3
						TPL7	C1
						TPL8	C1
						TPL9	C1