TX-W32/28D4F Service Manual

Service Support

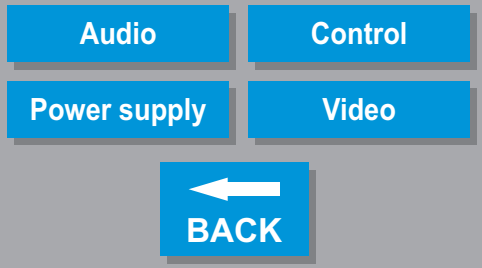
Service and repair of this product is supported by Panasonic's LUCI interface.

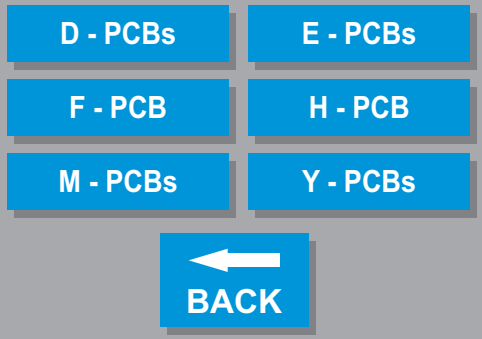
This interface provides a link between the TV and a standard PC to allow a number of diagnostic and control functions to be performed.

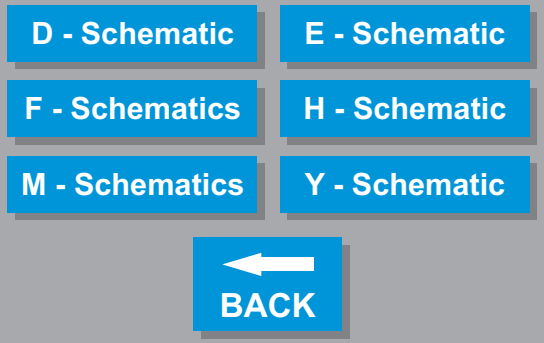
For more details contact your local Panasonic company.

BACK

EXIT


Audio
Control
Power supply
Video
BACK


D - PCBs
E - PCBs
F - PCB
H - PCB
M - PCBs
Y - PCBs
BACK


D - Schematic
E - Schematic
F - Schematics
H - Schematic
M - Schematics
Y - Schematic
BACK

ORDER No. SM-98080

Service Manual

Colour Television

TX-W32D4F
TX-W28D4F

EURO - 5 Chassis

SPECIFICATIONS

(Information in brackets { } refer to TX-W28D4F)

Power Source:	220-240V a.c., 50Hz	
Power Consumption:	145W {135W}	
Aerial Impedance:	75Ω unbalanced, Coaxial Type	
Standby Power Consumption:	1,9W	
Receiving System:	PAL-I, B/G, H, D/K, PAL-525/60 SECAM L/L', B/G, D/K M.NTSC 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	38,9MHz, 34MHz	
Sound	32,9MHz, 33,4MHz, 33,16MHz 32,4MHz, 40,4MHz, 33,05MHz 32,66MHz	
Colour	34,47MHz (PAL) 34,5MHz, 34,65MHz (SECAM)	
Video/Audio Terminals:		
AUDIO MONITOR OUT	Audio (RCAx2)	500mV rms1kΩ
AV1 IN	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 (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
	Selectable Output (21 pin)	
AV3 IN	S-Video IN (4-pin)	Y: 1V p-p 75Ω C: 0,3V p-p 75Ω
	Audio (RCAx2)	500mV rms10kΩ
	Video (RCAx1)	1V p-p 75Ω
AV4 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
AV4 OUT	Video (21 pin)	1V p-p 75Ω
	Audio (21 pin)	500mV rms 1kΩ
High Voltage:	31kV ±1kV	{30,5kV ±1kV}
Picture Tube:	W76LFC185X05	{W66EHK51X81}
Audio Output:	2 x 20W	Left/Right
(Music Power)	8Ω Impedance	
Headphones	8Ω Impedance	
Accessories supplied:	Remote Control 2 x R6 (UM3) Batteries	
Dimensions:		
Height:	555mm	{497mm}
Width:	862mm	{760mm}
Depth:	553mm	{518mm}
Net Weight:	47,5kg	{36,5kg}

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-5 technical guide.

TECHNISCHE DATEN

(Werte in klammern gelten { } nur fur TX- W28D4F)

Netzpannung:	220-240V a.c., 50Hz	
Leistungsaufnahme:	145W {135W}	
Antennenimpedanz:	75Ω asymmetrisch, Koaxial-Typ	
Standby Leistungsaufnahme:	1,9W	
Empfangssystem:	PAL-I, B/G, H, D/K, PAL-525/60 SECAM L/L', B/G, D/K M.NTSC NTSC (nur AV Eingang)	
Empfangsbereiche:		
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)		
Zwischenfrequenz:		
Video	38,9MHz, 34MHz	
Sound	32,9MHz, 33,4MHz, 33,16MHz 32,4MHz, 40,4MHz, 33,05MHz 32,66MHz	
Colour	34,47MHz (PAL) 34,5MHz, 34,65MHz (SECAM)	
Video/Audio Anschlüsse:		
AUDIO MONITOR OUT	Audio (RCAx2)	500mV rms1kΩ
AV1 EINGANG	Video (21 pin)	1V p-p 75Ω
	Audio (21 pin)	500mV rms 10kΩ
	RGB (21 pin)	
AV1 AUSGANG	Video (21 pin)	1V p-p 75Ω
	Audio (21 pin)	500mV rms 1kΩ
AV2 EINGANG	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 AUSGANG	Video (21 pin)	1V p-p 75Ω
	Audio (21 pin)	500mV rms 1kΩ
	Wählbarer Ausgang	
AV3 EINGANG	S-Video IN (4-pin)	Y: 1V p-p 75Ω C: 0,3V p-p 75Ω
	Audio (RCAx2)	500mV rms10kΩ
	Video (RCAx1)	1V p-p 75Ω
AV4 EINGANG	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
AV4 AUSGANG	Video (21 pin)	1V p-p 75Ω
	Audio (21 pin)	500mV rms 1kΩ
Hochspannung:	31kV ±1Kv	{30,5kV ±1kV}
Bildrohre:	W76LFC185X05	{W66EHK51X81}
Ton Ausgangsleistung:	2 x 20W	Links/Rechts
(Musikleistung)	8Ω Impedanz	
Kopfhörer:	8Ω Impedanz	
Mitgel. Zubehör:	Fernbedienung 2 x R6 (UM3) Batterien	
Abmessungen:		
Höhe:	555mm	{497mm}
Breite:	862mm	{760mm}
Tiefe:	553mm	{518mm}
Gewicht:	47,5kg	{36,5kg}

Änderungen der Technisichen Daten vorbehalten.
Gewichte und Abmessungen sind Näherungsangaben.
Hinweis: Bitte verwende Sie das Service Manual zusammen mit dem Technical Guide.

Panasonic

CONTENTS

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 which 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 {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.

INHALT

SICHERHEITSVORKEHRUNGEN

ALLGEMEINE RICHTLINIEN

1. Es ist empfehlenswert einen Trenntransformator in die Stromversorgung zu schalten, bevor Reparaturen an einem Gerät vorgenommen werden, dessen Chassis unter Spannung steht.
2. Bei der Durchführung von Servicearbeiten dürfen die ursprünglichen Kabelanschlüsse nicht vertauscht werden. Dies gilt insbesondere für die Anschlüsse im Hochspannungsteil. Hat sich ein Kurzschluß ereignet, dann sind alle Teile, an denen Spuren von Überhitzung sichtbar sind, auszuwechseln.
3. Nach Beenden der Servicearbeiten ist sicherzustellen, daß alle Sicherheitsvorrichtungen, wie Isolationsstege, Isolationspapiere, Abschirmungen und Isolations -R-C- Glieder wieder richtig eingesetzt sind.
4. Wenn der Fernseher während längerer Zeit nicht in Betrieb gesetzt wird, sollte der Netzstecker aus der Netzsteckdose gezogen werden.
5. Im Betrieb sind Spannungen bis zu 32kV {31,5kV} in diesem Gerät vorhanden. Die Inbetriebnahme des Fernsehers ohne aufgesetzte Rückwand bringt die Gefahr eines elektrischen Schlages von der Fernseher - Stromversorgung mit sich. Servicearbeiten solten daher auch nie durch Personen versucht werden, die nicht in vollem. Umfang mit den Sicherheitsvorkehrungen beim Umgang mit Hochspannungsgeräten vertraut sind. Vor der Handhabung mit der Bildröhre ist die Anode der Bildrohre immer an dem Empfängerchassis zu entladen.
6. Nach Beenden der Servicearbeiten sind die folgenden Kriechstrom-Prüfungen durchzuführen, um den Kunden vor der Gefahr eines elektrischen Schlages zu schützen.

MESSUNG DES ISOLATIONSWIDERSTANDES IM ABGESCHALTETEN ZUSTAND

1. Den Netsztecker aus der Netzsteckdose ziehen und die beiden Steckerstifte kurzschließen.

2. Den Geräteschalter des Fernsehgerätes einschalten.

3. Mit einem Ohmmeter den Widerstandswert zwischen dem überbrückten Netzkabelsteckerund jendem zugänglichen Metallteil am Gehäuse des Fernsehgerätes, wie Schraubenköpfe, Antennen, Achsen der Regler, Griffassungen usw.messen. Wenn ein zugängliches Metallteil keine Rückleitung zum Chassis hat, Muß die Anzeige unendlich betrgen.

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 above measurements.
6. The potential at any point should not exceed 1,4 V rms. 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.

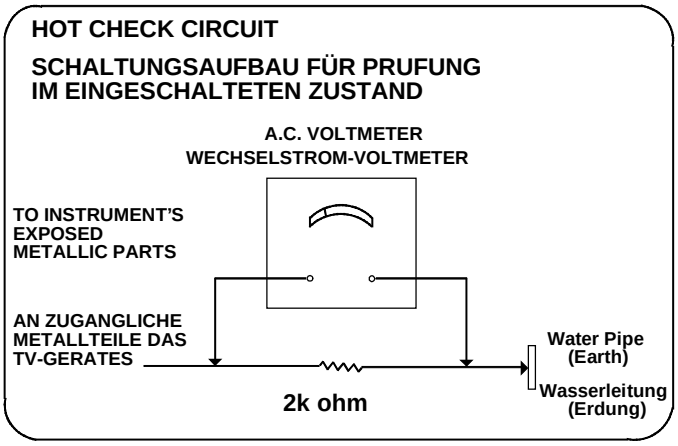


Fig.1.
Abb.1.

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 {31,5kV} 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 31kV ±1kV {30,5kV ±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.

MESSUNG DES KRIECHSTROMS IM EINGESCHALTETEN ZUSTAND

1. Den Netzstecker direkt in eine Netsteckdose stecken. Für diese Messung keinen Trenntransformator verwenden.
2. Einen 2kΩ / 10W-Widerstand in Serie mit einem von außen zugänglichen Metallteil am Fernsehgerät und einer guten, Erdung z.B Wasserleitung, anschließen.
3. Ein Wechselstrom-Voltmeter mit einem Meßbereich von 1000 Ohm.Volt oder größer verwenden, um die Spannung über den Widerstand zu messen.
4. Jedes zugängliche Metallteil prüfen, und an jedem Punkt dies Spannung messen.
5. Den Netztecker umgekehrt in die Steckdose stecken und jede der obigen Messungen wiederholen.
6. Die Spannung darf an keinem der Punkte 1,4V eff. überschreiten. Wird dieser Wert nicht eingehalten, besteht die Gefar eines elektrischen Schlages, und das Fernsehgerät sollte daher repariert und nachgeprüft werden, bevor es an den Kunden zurückgegeben wird.

RÖNTGENSTRAHLUNG ACHTUNG :

1. Potentielle Quellen von Röntgenstrahlung in Fernsehgeräten sind das Hochspannungsteil und die Bildröhre.
2. Bei Verwendung eines Bildröhren-Prüfgerätes für den Service ist sicherzustellen, daß es für die Belastung von 32kV {31,5kV} geeignet ist, ohne daß eine Röntgenstrahlung verursacht wird.

ANMERKUNG: Es ist wichtig, daß ein präzises, regelmäßig geprüftes Voltmeter verwendet wird.

1. Helligkeit auf Minimum stellen.
2. Die Hochspannung messen. Die Anzeige des Instrumentes sollte 31kV ±1kV {30,5kV ±1kV}. Falls die Anziege diese Toleranzgrenzen überschreitet, ist die sofortige Behebung nötig, um die Möglichkeit vorzeitigen Komponentenausfalls zu verhüten.
3. Um die Möglichkeit von Röntgenstrahlung zu begrenzen, ist es wichtig, daß nur die vorgeschriebene Bildröhre verwendet wird.

SERVICE HINTS

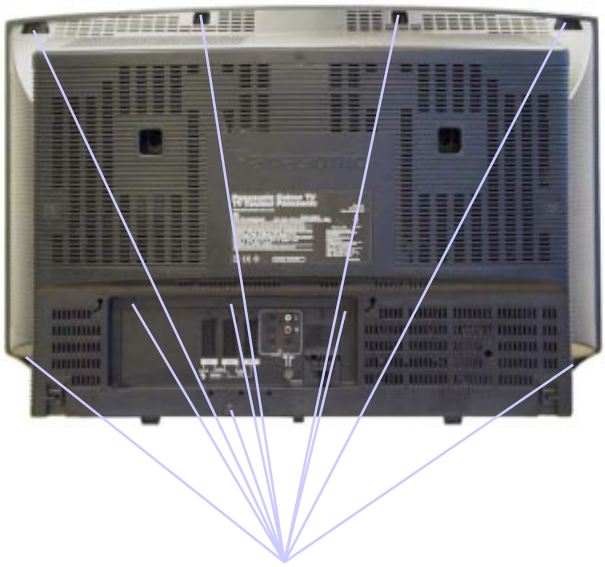
HOW TO REMOVE THE REAR COVER

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

SERVICE HINWEISE

ENTFERNEN DER GERÄTERÜCKWAND

1. Die 10 Schrauben entfernen, siehe **Abb.2.**



Screws
Schrauben
Fig.2.
Abb.2.

LOCATION OF CONTROLS

LAGE DER EINSTELLREGLER

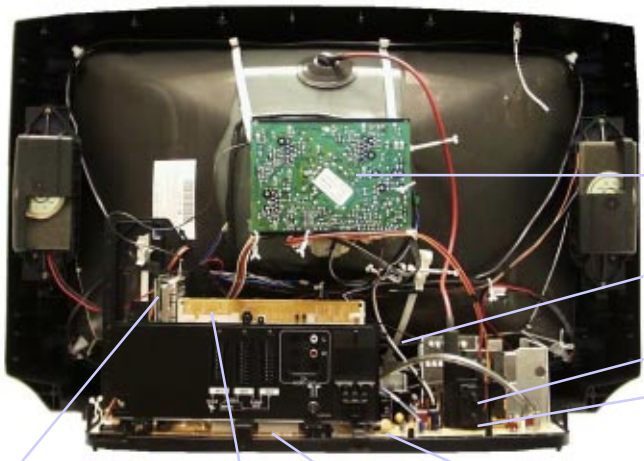


Fig.3.
Abb.3.

How to move the chassis into Service position

1. Hold and lift the rear of the chassis and gently pull the chassis toward you, as shown in **Fig.4**.
2. Release the respective wiring clips and rotate the chassis vertically through 90°, anti-clockwise.
3. Locate the base of the chassis frame into the hole **(B),** shown in **Fig.6**.
4. Clip the chassis frame onto the bead clamper **(A)**, as shown in **Fig.5**.
5. After servicing replace the bead clamper and ensure all wiring is returned to its original position before returning the receiver to the customer.

Serviceposition für das Chassis

1. Das Chassis am hinteren Ende leicht anheben und nach hinten herausziehen, wie in **Abbildung 4** dargestellt.
2. Die Kabelhalterungen lösen und das Chassis vertikal um 90° gegen den Uhrzeigersinn drehen.
3. Die Grundschiene des Chassisrahmens in die Führung **(B)** einschieben, wie in **Abbildung 6** dargestellt.
4. Mit dem Kunststoffhalteband **(A)** den Chassisrahmen am Gehäuseoberteil befestigen, wie in **Abbildung 5** dargestellt.
5. Nach erfolgter Reparatur sicherstellen, daß sich alle Kabelverbindungen in ihrer korrekten Position befinden und ordnungsgemäß befestigt sind, bevor das Gerät dem Kunden zurückgegeben wird.

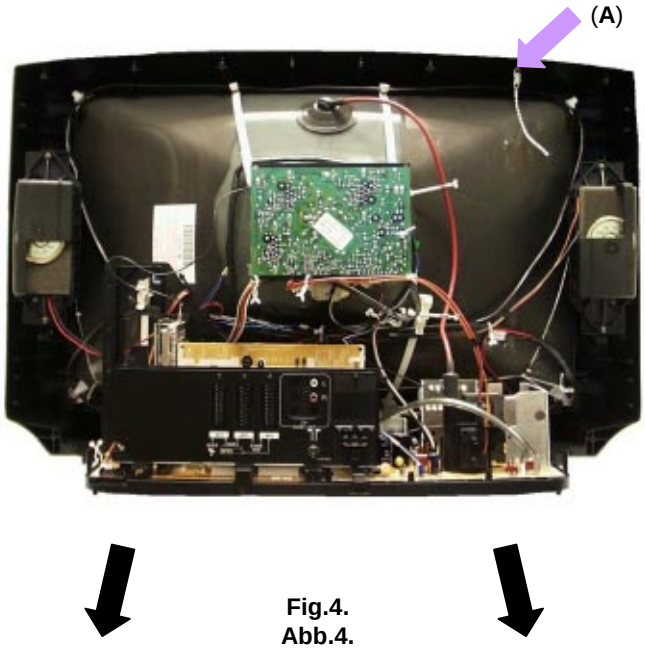


Fig.4.
Abb.4.

Fig.5.
Abb.5.

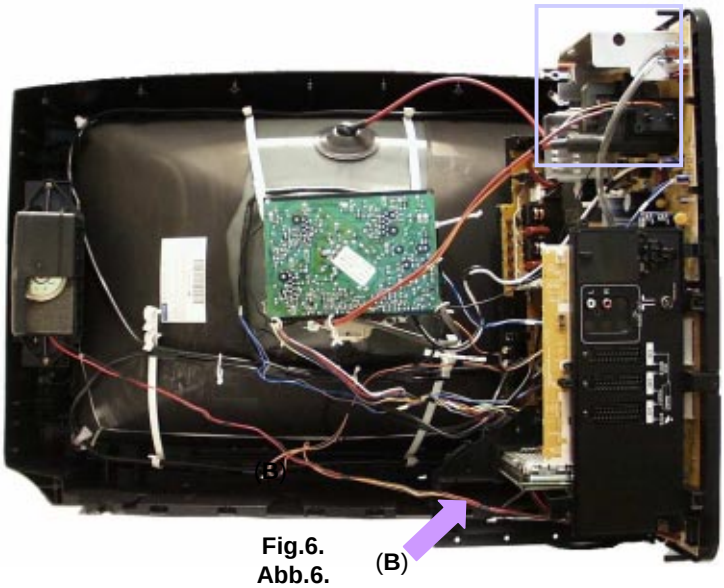


Fig.6.
Abb.6.

SELF CHECK

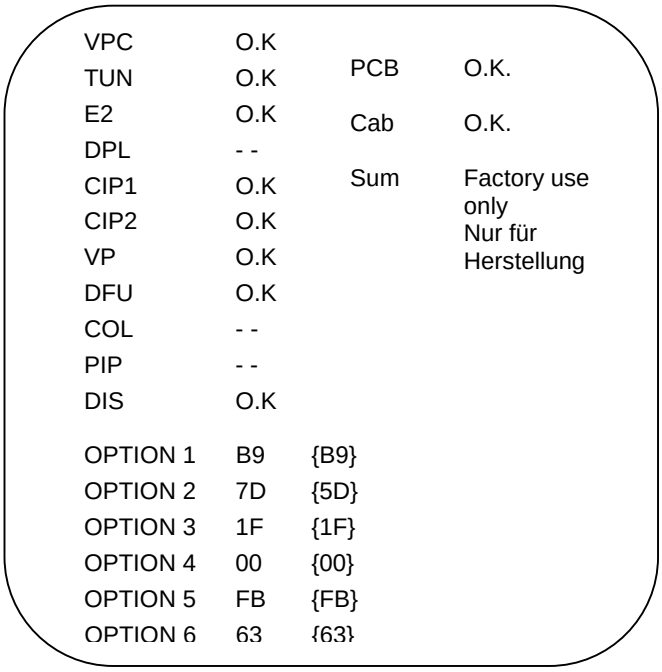
1. Self-check is used to automatically check the bus lines and hexadecimal code of the TV set.

2. To get into the Self-Check mode press the down **(-/v)** button on the customer controls at the front of the set,at the same time pressing the **STATUS** button on the remote control, and the screen will show :-

SELBSTDIAGNOSE

1. Die Selbstdiagnose dient zum automatischen Prüfen der Bus-Leitungen sowie des Hexadezimalcodes des FS-Geräts. Zum Umschalten auf Selbstdiagnose zunächst die Taste "**STATUS**" auf der Fernbedienung und gleichzeitig die-Taste am Bedienteil des FS-Gerätes drücken **(-/v)**, auf dem Bildschirm erscheint hierauf :-

2. Nach der Selbstdiagnose wird das Gerät automatisch auf sämtliche werksseitigen Standardeinstellungen zurückgesetzt :-



If the CCU ports have been checked and found to be incorrect or not located then " - - " will appear in place of "O.K.".
Wenn der Hauptprozesser (CCU) an den Anschlüssen einen Fehler erkennt, oder der entsprechende Anschluss nicht belegt ist, zeigt die entsprechende Position " - - " anstelle von OK an.

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
  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.

NOTE: This TV also has the option of using a Memory Pack which enables you to copy the preset TV channels into the Memory Pack and then download them onto this or any other EURO-5 TV set.

Service-Hilfen

Zur Unterstützung der Servicearbeiten stehen weitere Hilfsmittel zur Verfügung.

- **LUCI** interface kit (PC-unterstütztes Diagnosesystem)
  Bestell-Nr.: TZS6EZ002
  Es beinhaltet ein Interface, die Anschlusskabel zum FS-Gerät und die Diagnose-Software. Bei Einführung von neuen Modellen ist ein Update der Software jederzeit möglich.

- **VICI** (Interaktive CD-ROM) mit schnellem Zugiff auf Serviceinformationen.
  Bestell-Nr.:TZS7EZ006 & TZS7EZ005
  1. Service Manuals
  2. Bedienungsanleitungen
  3. Technical Information

- **TASMIN** (Technisch erweitertes System für interaktive Multimedia-Hinweise und Notizen)
  Genauso wie dieses Produkt einen ersten Schritt in Richtung erweitertes interaktives Training bereitstellt, ermöglicht es einen noch schnelleren Zugang zu technischen Informationen.

HINWEIS: Dieses FS-Gerät bietet auch die Möglichkeit eines Memory Pack, mit dem Sie die gewählten Fernsehkanäle abspeichern und auf jedes beliebige EURO-5 FS-Gerät umkopieren können.

ADJUSTMENT PROCEDURE

Item/Preparation	Adjustments
+B SET-UP 1. Receive a Greyscale signal. 2. Set the controls:- Brightness Minimum Contrast Minimum Volume Minimum	1. Confirm the following voltages. **D-Board** **E-Board** D3 PIN5 147V ± 3V U8A E19-PIN8 8V ± 0,5V D12 PIN5 5V ± 0,3V U9 IC3801-PIN3 9V ± 0,5V D13 PIN1 40V ± 4V U12 E22-PIN8 12V ± 0,5V D3 PIN4 230V ± 10V STD5V E26-PIN4 5V ± 0,5V D3 PIN4 205V ± 10V U15 E23-PIN8 15V ± 1V D3 PIN4 190V ± 10V U15 E23-PIN9 -15V ± 1V D3 PIN4 190V ± 10V U33 E22-PIN10 33V ± 4V D14 PIN5 5V ± 0,5V U40 E24-PIN1 40V ± 3V D12 PIN7 15V ± 2V U5B E19-PIN5 5V ± 0,5V D12 PIN9 15V ± 2V D11 PIN8 12V ± 2V D11 PIN10 33V ± 3V
Cut-Off 1. Receive a Greyscale signal. 2. Degauss the tube externally. 3. Set the TV into Service Mode 1. 4. Select Cutoff mode.	Adjust the screen VR until the display shows "O.K."

ABGLEICH

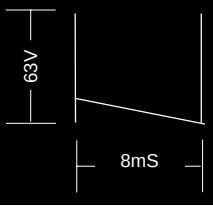
Vorbereitungen	Abgleich
+B - Abgleich 1. Testbild empfangen. Helligkeit auf Minimum Kontrast auf Minimum Lautstärke Minimum	1. Folgende Spannungen sind zu überprüfen. D3 PIN5 147V ± 3V U8A E19-PIN8 8V ± 0,5V D12 PIN5 5V ± 0,3V U9 IC3801-PIN3 9V ± 0,5V D13 PIN1 40V ± 4V U12 E22-PIN8 12V ± 0,5V D3 PIN4 230V ± 10V STD5V E26-PIN4 5V ± 0,5V D3 PIN4 205V ± 10V U15 E23-PIN8 15V ± 1V D3 PIN4 190V ± 10V U15 E23-PIN9 -15V ± 1V D3 PIN4 190V ± 10V U33 E22-PIN10 33V ± 4V D14 PIN5 5V ± 0,5V U40 E24-PIN1 40V ± 3V D12 PIN7 15V ± 2V U5B E19-PIN5 5V ± 0,5V D12 PIN9 15V ± 2V D11 PIN8 12V ± 2V D11 PIN10 33V ± 3V
Cut-Off 1. Testbild empfangen. 2. Bildröhre entmagnetisieren. 3. Service-Mode 1 anwählen. 4. Im Service-Mode den Abgleichpunkt Cutoff-Mode wählen .	Bis OK auf dem Bildschirm erscheint. Den Wert abspeichern.

WAVEFORM PATTERN TABLE SIGNAL TABELLE

NOTE: All waveforms have been taken using a standard colour bar pattern.
HINWEIS: Alle oszillogramme wurden unter Verwendung des Standard Farbbalken Testbildes aufgenommen.

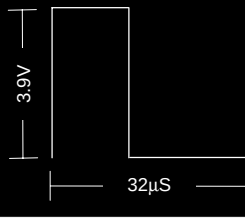
Vert Out
IC601 Pin 1

Vert Drive
IC451 Pin 2

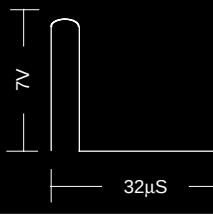


VFLB
IC451 Pin 5

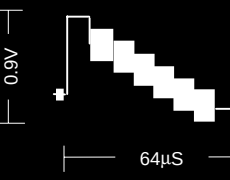
H - Out
IC601 Pin 8



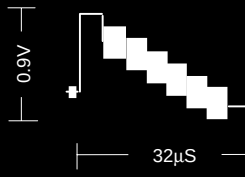
HFLB
IC601 Pin 13



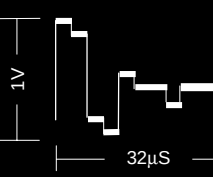
Video In
IC1101 Pin 68



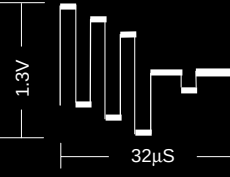
Luminance In
IC601 Pin 28



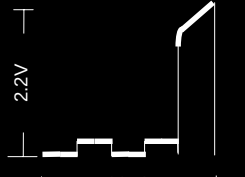
R - Y
IC601 Pin 26



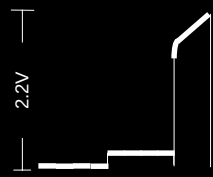
B - Y
IC601 Pin 27



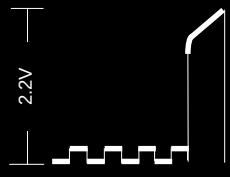
R - Out
IC601 Pin 40



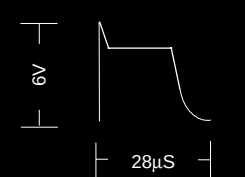
G - Out
IC601 Pin 41



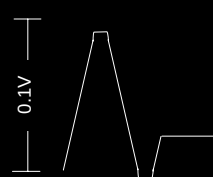
B - Out
IC601 Pin 42



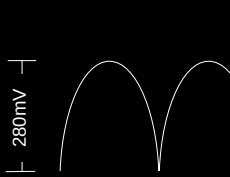
H - Out
IC3901 Pin 3



V - Out
IC3901 Pin 21



E/W - Out
IC601 Pin 3



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 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 +020	Optimum setting.
Vertical Position	V-Pos +024	Optimum setting.
Horizontal Amplitude	H-Amp +049	Optimum setting.
Vert. Amplitude	V-Amp +029	Optimum setting.
EW-amplitude	E/W-Amp1 +022	Optimum setting.
EW-amplitude	E/W-Amp2 +000	Optimum setting.
Trapezium-comp	Trapez-1 +033	Optimum setting.
Horizontal-Parallel	H-Parallel +032	Optimum setting.
Vertical Linearity	V-Lin +004	Optimum setting.
DVCO	DVCO 000	Receive a PAL Colour Bar Pattern. For DVCO alignment press **"Blue"** button, wait until the colours are stable and press **"STR".**
Cut-off DC	Cut-off O.K.	To adjust Cutoff adjust the screen VR until the display shows "O.K."
Highlight	High 0031 0031 0031	Contrast Maximum A.I. Off Optimum setting.
Sub-Brightness	Sub-Brightness 000	Optimum setting.

ABGLEICHTABELLE:

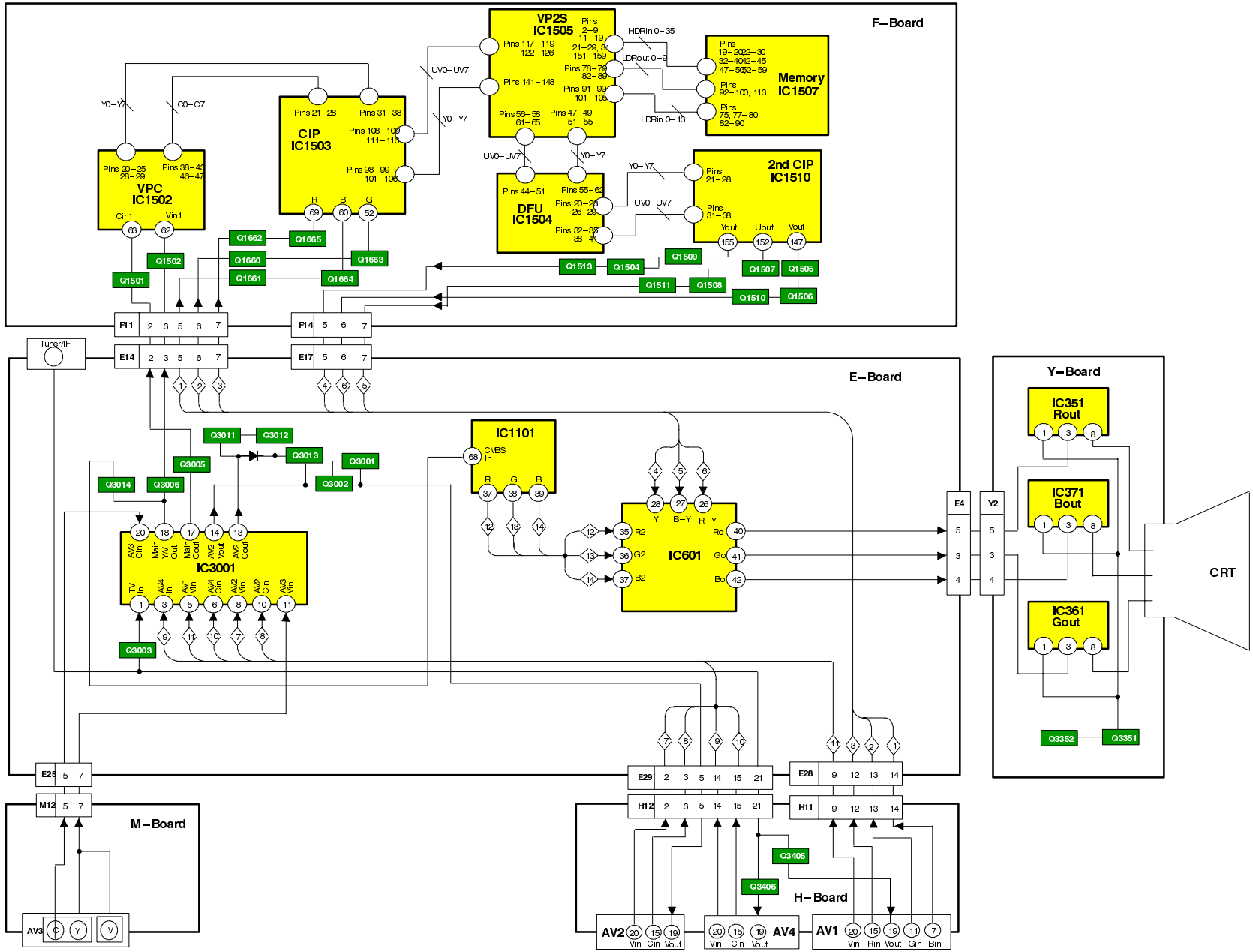
(Die angegebenen Werte sind Mittelwerte und Können individuell nach oben oder unten nach dem korrekten Abgleich abweichen.)

1. Um in den Service-Mode zu gelangen, gehen sie bitte wie folgt vor.
2. Stellen sie im Toneinstellungs-Menü die Bässe auf Maximum und die Höhen auf Minimum.
3. Halten sie die **INDEX**-Taste auf der Fernbedienung gedrückt und drücken zusätzlich die Taste **-/v** im Bedienteil des TV-Gerätes. Auf dem Bildschirm erscheint die entsprechende Anzeige für den Service-Mode.
4. Die einzelnen Funktionen mit Hilfe der **ROTEN** und **GRÜNEN** Taste anwählen.
5. Mit der **GELBEN** und **BLAUEN** Taste die Werte der einzelnen Funktionen ändern.
6. Nach jeder Einstellung die Taste **STR** auf der Fernbedienung drücken, um die geänderten Werte abzuspeichern.
7. Zum Verlassen des Service-Modus die "**N**" - Taste auf der Fernbedienung drücken.

Abgleichfunktion		**Einstellung / Besondere Merkmale**
Horizontal Position	H-Pos +020	Optimale Einstellung.
Vertikale Position	V-Pos +024	Optimale Einstellung.
Horizontale Amplitude	H-Amp +049	Optimale Einstellung.
Vertikale Amplitude	V-Amp +029	Optimale Einstellung.
OW-amplitude	E/W-Amp1 +022	Optimale Einstellung.
OW-amplitude	E/W-Amp2 +000	Optimale Einstellung.
Trapez-Kompensation	Trapez-1 +033	Optimale Einstellung.
Horizontale-Parallel	H-Parallel +032	Optimale Einstellung.
Vertikale linearität	V-Lin +004	Optimale Einstellung.
DVCO	DVCO 000	Ein Farbbalken-Testbild empfangen. Zum Abgleich des Farboszillators (DVCO) die **blau** Taste drücken. Nachdem ein leichtes Flackern in den Farbbalken zum Stillstand gekommen ist, die **STR**-Taste drücken.
Cut-off DC	Cut-off O.K.	Den Abgleichwert solange ändern, bis OK auf dem Bildschirm erscheint. Den Wert abspeichern.
Highlight	High 0031 0031 0031	Contrast Maximum A.I. Off Optimale Einstellung.
Sub-Brightness	Sub-Brightness 000	Optimale Einstellung.

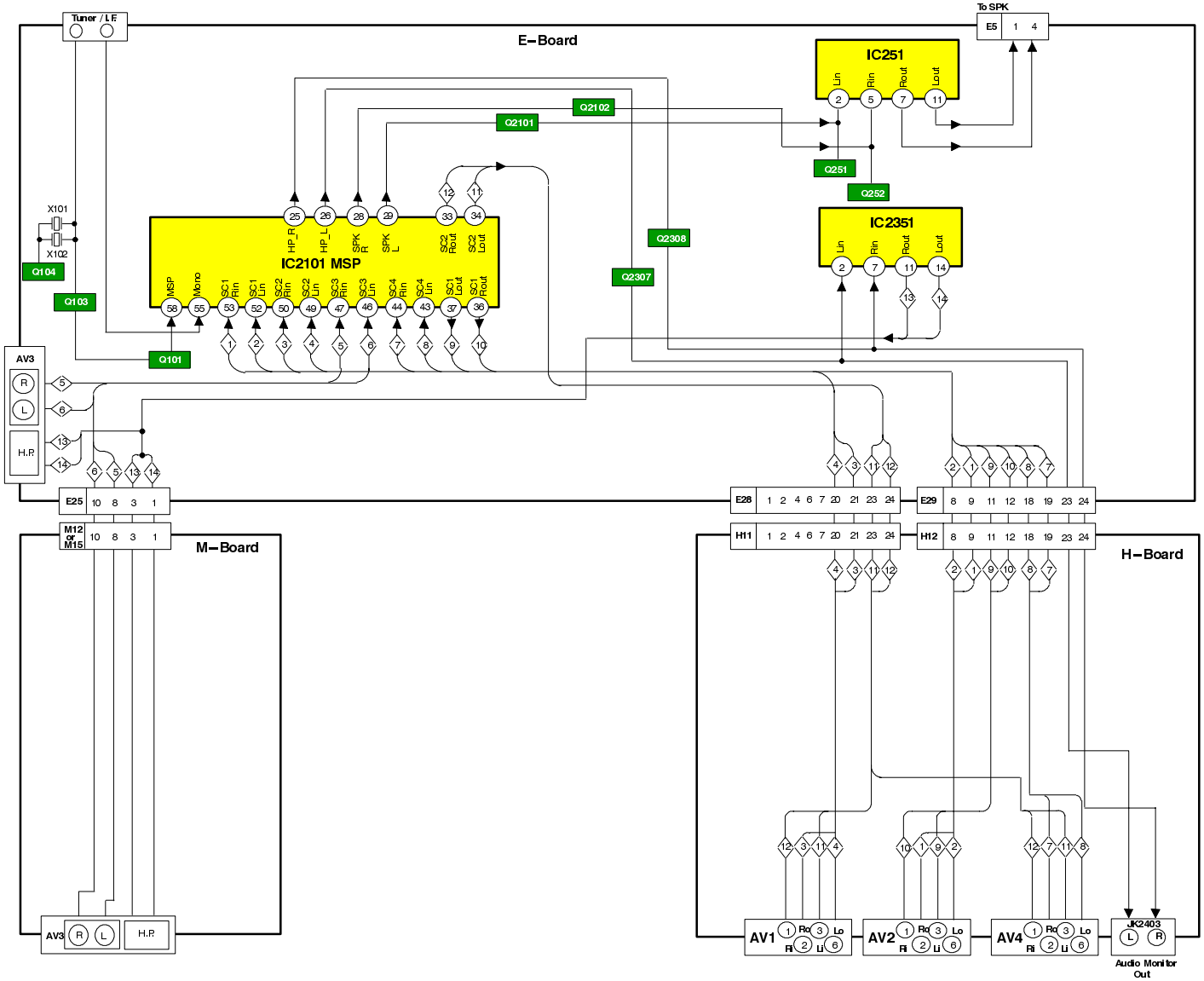
VIDEO BLOCK DIAGRAM

BILDSIGNAL BLOCKSCHEMA



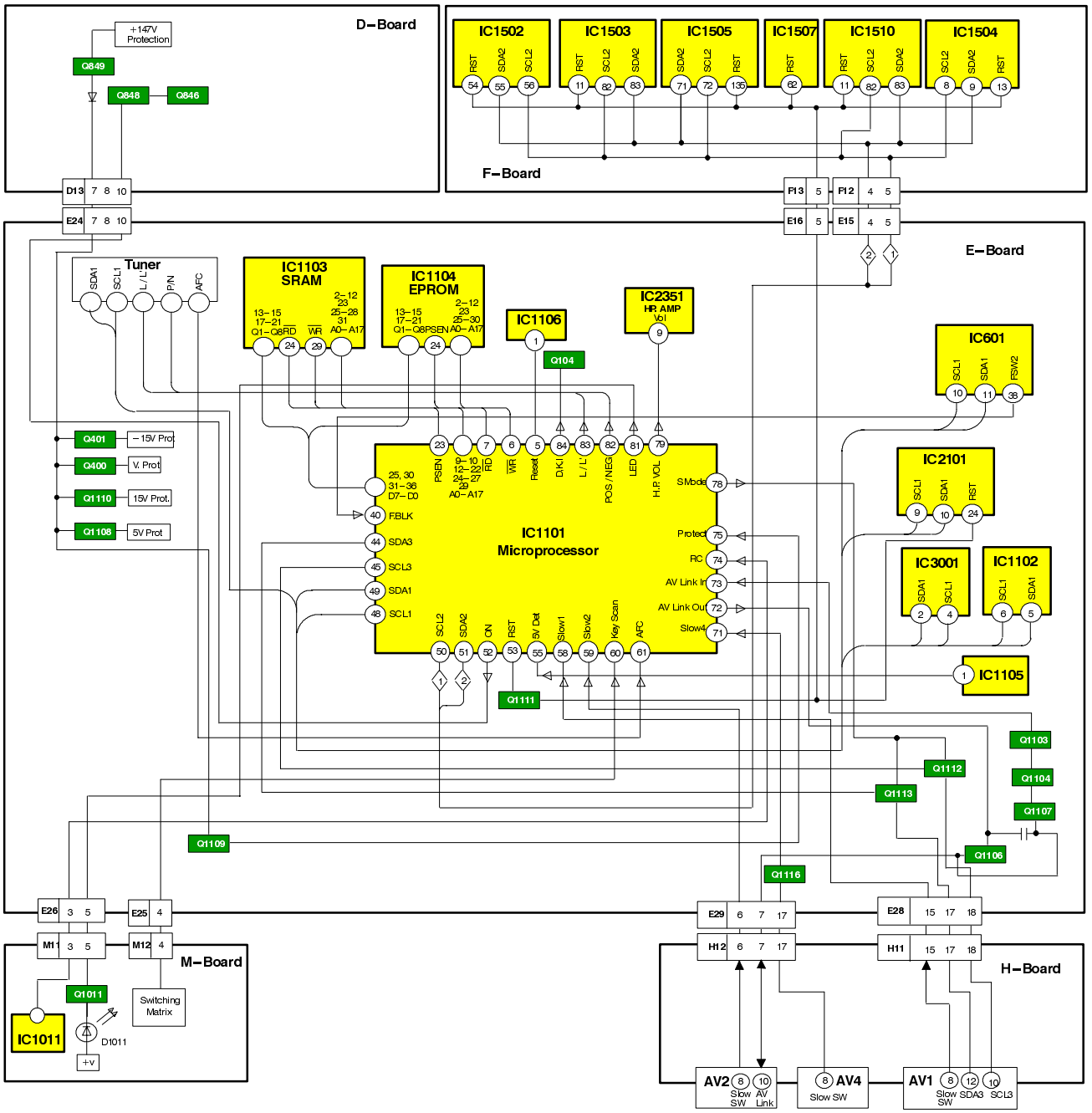
AUDIO BLOCK DIAGRAM

TONSIGNAL BLOCKSCHEMA



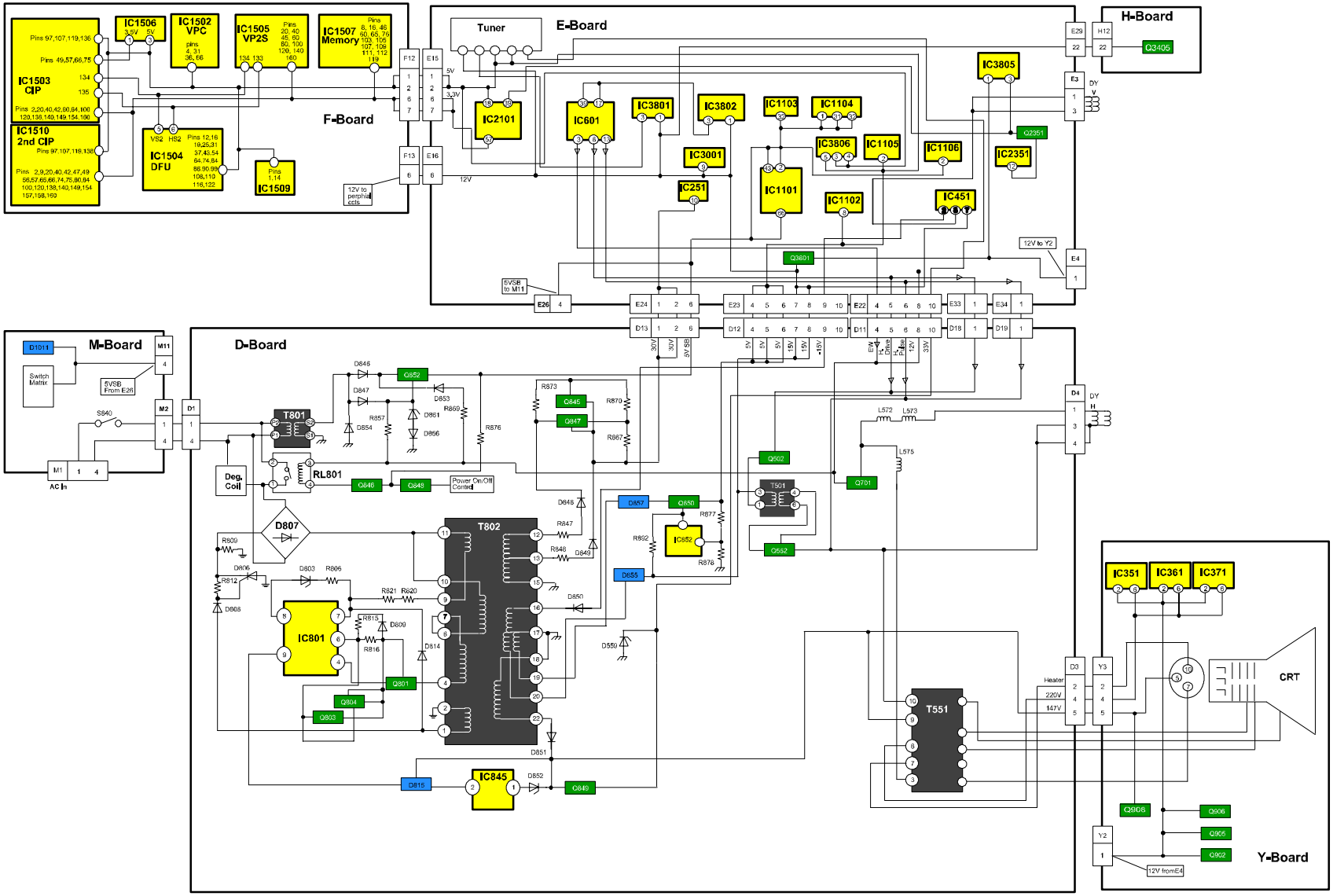
CONTROL BLOCK DIAGRAM

KONTROLL BLOCKSCHEMA



POWER SUPPLY & DEFLECTION BLOCK DIAGRAM

STROMVERSORGUNGS BLOCKSCHEMA

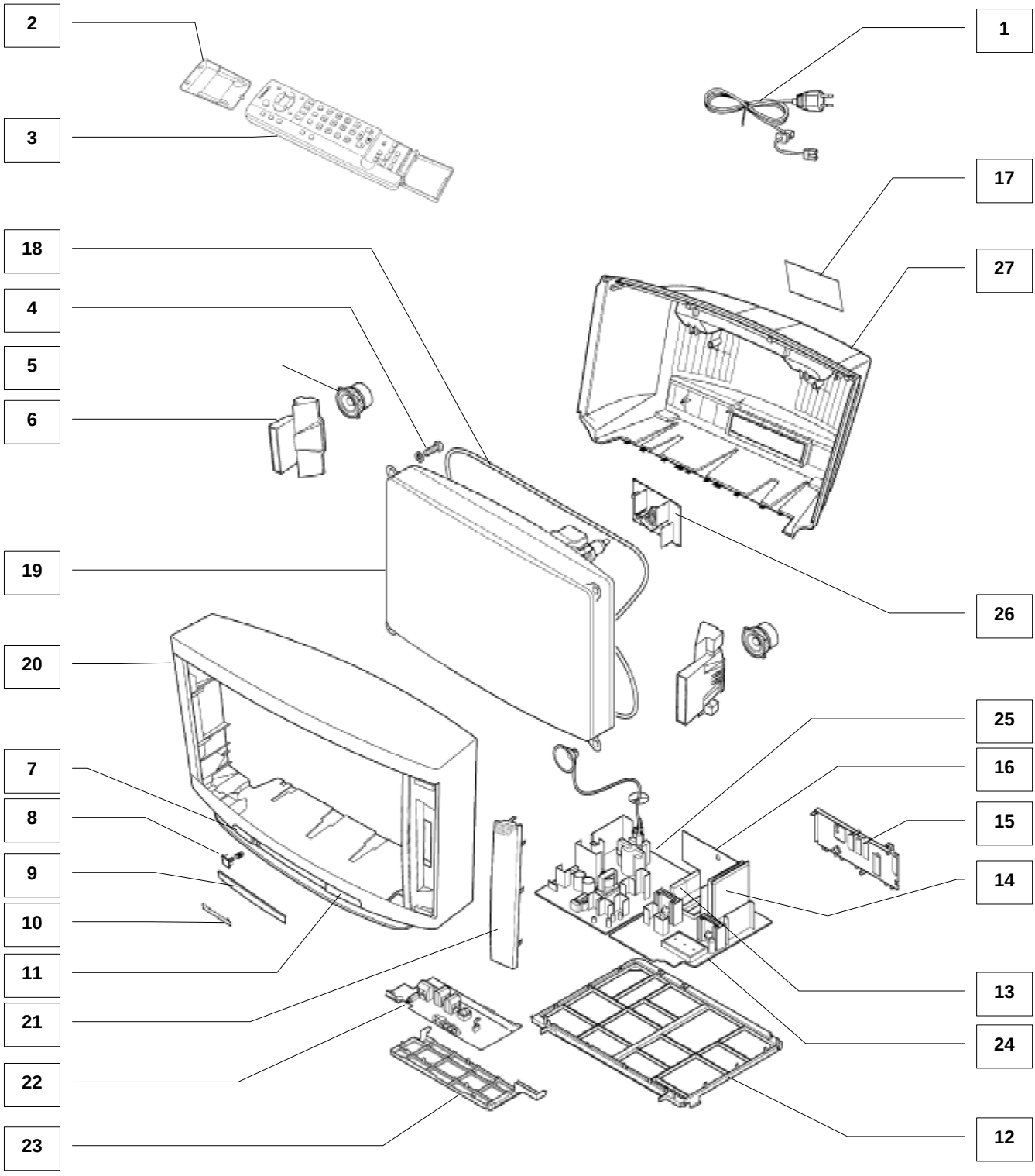


PARTS LOCATION

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

EXPLOSIONSZEICHNUNG

Anmerking:
Die Nummer auf den mechanischen Teilen Zeigt die Bezugsnummer der Ersatzteilliste an.



REPLACEMENT PARTS LIST

Important Safety Notice

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

ERSATZTEILLISTE

Wichtiger Sicherheitshinwels

Teile, die mit einen Hinweis ⚠ gekennzeichnet sind, wichtig für die Sicherhet. Solite ein Auswechsein erforderlich sein, sind unbdingt Originalteile einzusetzen.
Bei der Bestellung von Ersatzteilen, di mit * gekennzeichnet sind, geben Sie bitte unbedingt die vollständige Typenbezeicnung mit an.

COMMON PARTS FOR MODELS TX–W32D4F AND TX–W28D4F

Ref No.	Part No.	Description	
MECHANICAL PARTS			
1	TSX8E0027	POWER CORD	⚠
2	UR51EC904A	BATTERY COVER (REMOTE)	
3	EUR511211	REMOTE CONTROL	
4	THT1062	CRT FIXING SCREW	
5	EASG8P525A2	SPEAKER	
6	TKK8E026	SPEAKER REFLECTOR	
7	TKP8E1150	FRONT PANEL LEFT	
8	TBX8E033	POWER BUTTON	
9	TKP8E1149	DOOR LID	
10	TBM8E1728	PANASONIC BADGE	
11	TKP8E1250	FRONT PANEL RIGHT	
12	TMX8E028	CHASSIS FRAME	
13	ENG29505G	TUNER	
14	TNPA1068AC	F P.C.B.	⚠
15	TKP8E1253–3	REAR AV PANEL	
16	TNPA1047AC	H P.C.B.	⚠
MISCELLANEOUS COMPONENTS			
	TBM8E1532–2	PRESET PANEL	
	TBM8E1728	AV LABEL	
	TBM8E1863	REAR AV COVER LABEL	
	TEK6940	LID CATCHER	
	TMW8E017	L.E.D. HOLDER	
	TMX8E025	PCB HOLDER	
	UM–3DJ–2P	BATTERY SET	
	ZTBZAD550A	ANODE CABLE	
	832AG11D–ESL	I.C. SOCKET	
	PLCC–84–T	84 PIN I.C. SOCKET	
SOD1	31221212478	FIX CLIP	
SOD9	31221212478	FIX CLIP	
	ERC12GK825	SOLID 0.5W 10% 8M2Ω	
	ERD25TC0T	CARBON 0.25W 5% 0Ω	
INSTRUCTION BOOKS			
	TQB8E2671A–2	GERMAN	⚠
	TQB8E2671BD1	DUTCH/FRENCH	⚠
	TQB8E2671CE1	ITALIAN/SPANISH	⚠
	TQB8E2671FG1	SWEDISH/NORG.	⚠
	TQB8E2671HK1	SUOMI/DANISH	⚠
INTEGRATED CIRCUITS			
IC251	LA4282	AUDIO OUTPUT	
IC351	TDA6111Q–N4	RGB OUTPUT	
IC361	TDA6111Q–N4	RGB OUTPUT	
IC371	TDA6111Q–N4	RGB OUTPUT	
IC381	TL431ACLPM	REGULATOR	
IC451	LA7845N	VERTICAL OUTPUT	
IC601	TDA9330HN1G	VIDEO PROCESSOR	
IC801	AN8029	POWER SUPPLY	
IC845	SE140N	ERROR AMPLIFIER	
IC852	TL431ACLPM	REGULATOR	
IC1011	RPM–637CBRS1	LED RECEIVER	
IC1101	SDA5450C48–1	MICRO PROCESSOR	
IC1103	M5M51008BP	SRAM	
IC1104	27C2001–H08	EPROM *	
IC1105	MN1381–T(TA)	RESET	
IC1106	MN1381–R(TA)	RESET	
IC1502	VPC3215CB4TP	VPC	
IC1503	MB87F1720	CIP	
IC1504	FJB007S	DFU	
IC1505	MB87F2131	VP2S	
IC1506	AN77L035M–E1	3.5V REGULATOR	
IC1507	MB87H2010	MEMORY	
IC1509	TLC2932IPWL	CLOCK CONVERTOR	
IC1510	MB87F1720	CIP	
IC2101	MSP3410DPPB4	AUDIO PROCESSOR	
IC2351	AN7108	H.P. AMPLIFIER	
IC3001	TEA6415C	VIDEO SWITCH	
IC3801	AN7809FLB	9V REGULATOR	
IC3802	AN7708FLB	8V REGULATOR	
IC3805	AN7808LB	8V REGULATOR	
IC3806	SI–3033C	3.5V REGULATOR	
FUSES			
F840	XBA2C50TH15	FUSE	
F845	TR5–T3150	FUSE	⚠
F846	TR5–T1250	FUSE	⚠
F8401	EYF52BC	FUSE HOLDER	
F8402	EYF52BC	FUSE HOLDER	
DIODES			
D001	MA4020	DIODE	
D002	MA4020	DIODE	
D252	MA165TA5	DIODE	
D253	MA700TA5	DIODE	
D254	MA700TA5	DIODE	
D255	MA165TA5	DIODE	
D351	ERA15–04V3	DIODE	
D352	ERA15–04V3	DIODE	
D361	ERA15–04V3	DIODE	
D362	ERA15–04V3	DIODE	
D371	ERA15–04V3	DIODE	
D372	ERA15–04V3	DIODE	
D387	MA2160LFS	DIODE	
D400	MA4104	DIODE	
D401	MA165TA5	DIODE	
D402	MA165TA5	DIODE	
D404	EU02AV1	DIODE	
D405	MA165TA5	DIODE	
D408	MA165TA5	DIODE	
D502	1SS254T–77	DIODE	
D503	EU02	DIODE	
D504	EU02	DIODE	
D505	ERA81004V3	DIODE	
D556	AU02V0	DIODE	
D559	MTZJT–7736A	DIODE	
D560	1SS252T–77	DIODE	
D561	1SS254T–77	DIODE	
D563	RH3GLF102	DIODE	
D565	MTZJT–7736A	DIODE	
D566	MA165TA5	DIODE	
D571	FMV–3GULF730	DIODE	
D575	1SS252T–77	DIODE	
D601	MA29TA5	DIODE	
D603	MA4075	DIODE	
D605	MA4062	DIODE	

Ref No.	Part No.	Description
D607	MA165TA5	DIODE
D610	MA4043	DIODE
D611	MA165TA5	DIODE
D612	MA165TA5	DIODE
D615	MA165TA5	DIODE
D616	MA178TA5	DIODE
D617	MTZJT−779.1C	DIODE
D618	MTZJT−779.1C	DIODE
D620	MA165TA5	DIODE
D651	MA165TA5	DIODE
D701	AU02V0	DIODE
D803	MTZJT−7712C	DIODE
D806	TF361MALF3	DIODE
D807	RBV−608LF−B	DIODE
D808	MA165TA5	DIODE
D809	ERA22−02V3	DIODE
D810	MA2180BLFS	DIODE
D812	MTZJT−775.6B	DIODE
D813	MA700TA5	DIODE
D814	AU01ZV0	DIODE
D815	PC123FY2	DIODE
D817	D5L60F4015	DIODE
D818	TMPG10G3	DIODE
D819	ERA81004V3	DIODE
D820	MA4100	DIODE
D821	EU02AV0	DIODE
D845	MA165TA5	DIODE
D846	EK04V0	DIODE
D847	ERA15−01V3	DIODE
D848	EU02	DIODE
D849	FMGG26S	DIODE
D850	ERB32−02E	DIODE
D851	FMGG2CSLF116	DIODE
D852	MA4062	DIODE
D853	1N4150T−77	DIODE
D854	ERA15−01V3	DIODE
D855	D10SC6MRL	DIODE
D856	MA165TA5	DIODE
D857	FML22SLF610	DIODE
D860	1SS254T−77	DIODE
D861	MTZJT−775.1C	DIODE
D901	1SS254T−77	DIODE
D902	1SS254T−77	DIODE
D903	1SS254T−77	DIODE
D910	R2KNV	DIODE
D1011	LN81RPHL	DIODE
D1102	MA4051	DIODE
D1103	MA4051	DIODE
D1104	MA165TA5	DIODE
D1105	MA165TA5	DIODE
D1107	MA165TA5	DIODE
D1109	MA165TA5	DIODE
D1110	MA165TA5	DIODE
D1112	MA165TA5	DIODE
D1501	MA151ATX	DIODE
D2101	MTZJT−7712C	DIODE
D2102	MTZJT−7712C	DIODE
D2351	MTZJT−775.6B	DIODE
D3006	MA4100	DIODE
D3008	MA723TA5	DIODE
D3009	MA170	DIODE
D3011	MA858TA5	DIODE
D3351	1SS254T−77	DIODE
D3352	MA165TA5	DIODE
D3353	MA165TA5	DIODE
D3354	MA165TA5	DIODE
D3401	MTZJT−7712C	DIODE
D3402	MTZJT−7712C	DIODE
D3803	MA4043	DIODE
D3804	MTZJT−778.2A	DIODE
D3805	ERA81004V3	DIODE
D3990	MTZJT−7724D	DIODE

TRANSISTORS

Q101	BC847B	TRANSISTOR
Q103	BC847B	TRANSISTOR
Q104	BC847B	TRANSISTOR
Q251	2SD1328STX	TRANSISTOR
Q252	2SD1328STX	TRANSISTOR
Q253	BC847B	TRANSISTOR
Q254	BC857B	TRANSISTOR
Q400	BC847B	TRANSISTOR
Q401	BC847B	TRANSISTOR
Q502	2SC2925STA	TRANSISTOR
Q552	2SC5144LB230	TRANSISTOR
Q553	2SC1473−RN	TRANSISTOR
Q554	2SC1473−RN	TRANSISTOR
Q601	BC857B	TRANSISTOR
Q602	BC857B	TRANSISTOR
Q603	BC857B	TRANSISTOR
Q604	BC857B	TRANSISTOR
Q607	BC857B	TRANSISTOR
Q608	BC857B	TRANSISTOR
Q701	2SK2538000LB	TRANSISTOR
Q801	2SK1365LB106	TRANSISTOR
Q803	2SD965−R	TRANSISTOR
Q804	2SA719−TA	TRANSISTOR
Q845	2SA684R	TRANSISTOR
Q846	BC547B/126	TRANSISTOR
Q847	BC557B/126	TRANSISTOR
Q848	BC547B/126	TRANSISTOR
Q849	2SA1018QTA	TRANSISTOR
Q850	2SD1474PLB	TRANSISTOR
Q852	2SC1318−S	TRANSISTOR
Q853	BC557C/126	TRANSISTOR
Q854	BC557C/126	TRANSISTOR
Q902	BC847B	TRANSISTOR
Q903	BC847B	TRANSISTOR
Q904	BC857B	TRANSISTOR
Q905	BC847B	TRANSISTOR
Q906	BC847B	TRANSISTOR
Q907	BC857B	TRANSISTOR
Q908	2SA1535ARLB	TRANSISTOR
Q909	2SC3944ARLB	TRANSISTOR
Q1011	BC557B/126	TRANSISTOR
Q1103	BC847B	TRANSISTOR
Q1104	BC847B	TRANSISTOR
Q1105	BC847B	TRANSISTOR
Q1106	BC847B	TRANSISTOR
Q1107	BC847B	TRANSISTOR
Q1108	BC847B	TRANSISTOR
Q1109	BC847B	TRANSISTOR
Q1110	BC847B	TRANSISTOR
Q1111	BC847B	TRANSISTOR
Q1112	BC847B	TRANSISTOR
Q1113	BC847B	TRANSISTOR
Q1116	BC847B	TRANSISTOR
Q1118	BC857B	TRANSISTOR
Q1501	BC857B	TRANSISTOR
Q1502	BC857B	TRANSISTOR
Q1503	BC847B	TRANSISTOR
Q1504	BC847B	TRANSISTOR
Q1505	BC847B	TRANSISTOR
Q1506	BC847B	TRANSISTOR
Q1507	BC847B	TRANSISTOR
Q1508	BC847B	TRANSISTOR
Q1509	BC847B	TRANSISTOR
Q1510	BC847B	TRANSISTOR
Q1511	BC847B	TRANSISTOR
Q1513	BC857B	TRANSISTOR
Q1660	BC847B	TRANSISTOR
Q1661	BC847B	TRANSISTOR
Q1662	BC847B	TRANSISTOR
Q1663	BC847B	TRANSISTOR
Q1664	BC847B	TRANSISTOR
Q1665	BC847B	TRANSISTOR
Q1666	BC847B	TRANSISTOR
Q1667	BC847B	TRANSISTOR
Q2101	BC860B	TRANSISTOR
Q2102	BC860B	TRANSISTOR
Q2301	BC847B	TRANSISTOR
Q2302	BC847B	TRANSISTOR
Q2305	BC857B	TRANSISTOR
Q2307	BC860B	TRANSISTOR
Q2308	BC860B	TRANSISTOR
Q2351	BC847B	TRANSISTOR
Q2352	BC847B	TRANSISTOR

Ref No.	Part No.	Description
Q3001	BC857B	TRANSISTOR
Q3002	BC847B	TRANSISTOR
Q3003	BC847B	TRANSISTOR
Q3005	BC847B	TRANSISTOR
Q3006	BC847B	TRANSISTOR
Q3010	BC857B	TRANSISTOR
Q3011	BC857B	TRANSISTOR
Q3012	BC847B	TRANSISTOR
Q3013	BC847B	TRANSISTOR
Q3014	BC847B	TRANSISTOR
Q3351	BC847B	TRANSISTOR
Q3352	BC857B	TRANSISTOR
Q3401	BC847B	TRANSISTOR
Q3402	BC847B	TRANSISTOR
Q3403	BC847B	TRANSISTOR
Q3404	BC847B	TRANSISTOR
Q3405	BC847B	TRANSISTOR
Q3406	BC847B	TRANSISTOR
Q3801	2SD1474PLB	TRANSISTOR
Q3990	BC847B	TRANSISTOR

TRANSFORMERS

T501	ETH19Y187AY	TRANSFORMER	⚠
T551	ZTFM05001A	F.B.T.	⚠
T801	ETP35KAN619U	TRANSFORMER	⚠
T802	ETS49AH1W7AD	TRANSFORMER	⚠
T803	ETQ24K37AY	TRANSFORMER	⚠

COILS

L002	EXCELDR35V	COIL
L003	EXCELDR35V	COIL
L004	EXCELSA35T	COIL
L005	TLT100K991R	COIL
L007	EXCELDR35V	COIL
L008	ELJFC2R2KF	COIL
L009	ELJFC2R2KF	COIL
L251	EXCELSA35T	COIL
L252	EXCELSA35T	COIL
L253	EXCELSA35T	COIL
L254	EXCELSA35T	COIL
L381	TLT220K991R	COIL
L501	ELELN101KA	COIL
L554	EXCELDR35V	COIL
L556	EXCELDR35C	COIL
L572	ELHKLB025B	COIL
L575	ELC18B331E	COIL
L601	EXCELDR25V	COIL
L602	EXCELDR35V	COIL
L603	TLT033K991R	COIL
L604	ELEXT2R7KA	COIL
L605	ELEXT2R7KA	COIL
L606	ELEXT2R7KA	COIL
L607	ELEXT2R7KA	COIL
L701	ELC18B801L	COIL
L806	EXCELSA39V	COIL
L807	ELF18D850C	LINE FILTER
L808	EXCELSA39V	COIL
L809	EXCELDR35C	COIL
L810	EXCELSA39V	COIL
L811	EXCELSA39V	COIL
L812	EXCELDR35V	COIL
L813	EXCELDR35V	COIL
L817	EXCELDR35V	COIL
L819	EXCELSA39V	COIL
L842	ELF18D486D	COIL
L843	ELF18D486D	COIL
L845	EXCELSA35T	COIL
L847	EXCELSA35B	COIL
L849	EXCELSA35T	COIL
L854	ELEIE150KA	COIL
L859	EXCELSA35T	COIL
L860	EXCELSA35T	COIL
L861	EXCELSA35T	COIL
L910	EXCELSA35T	COIL
L911	EXCELSA35T	COIL
L912	EXCELSA35T	COIL

Ref No.	Part No.	Description
L1101	EXCELDR35V	COIL
L1103	TLT047K991R	COIL
L1104	EXCELDR35V	COIL
L1105	EXCELDR35V	COIL
L1106	TLT047K991R	COIL
L1507	TLT018K991R	COIL
L1508	TLT033K991R	COIL
L1509	EXCELDR35V	COIL
L1510	EXCELDR35V	COIL
L1511	TLT018K991R	COIL
L1516	EXCELDR35V	COIL
L1519	EXCEMT103DTM	COIL
L1523	EXCEMT103DTM	COIL
L1525	EXCEMT103DTM	COIL
L1527	EXCEMT103DTM	COIL
L1528	EXCELDR35V	COIL
L1529	EXCELDR35V	COIL
L1532	EXCELDR35V	COIL
L1533	EXCELDR35V	COIL
L1534	EXCELDR35V	COIL
L1535	EXCELDR35V	COIL
L1536	EXCELDR35V	COIL
L1537	TLT100K991R	COIL
L1538	TLT018K991R	COIL
L1539	TLT033K991R	COIL
L1540	TLT018K991R	COIL
L1541	TLT033K991R	COIL
L1542	TLT018K991R	COIL
L1543	TLT033K991R	COIL
L2101	TLT100K991R	COIL
L2102	TLT039K991R	COIL
L2103	TLT100K991R	COIL
L2104	EXCELDR35V	COIL
L2106	TLT068K991R	COIL
L2381	EXCELSA35T	COIL
L2382	EXCELSA35T	COIL
L2412	EXCELSA35T	COIL
L2413	EXCELSA35T	COIL
L3001	TLT100K991R	COIL
L3205	EXCELDR35V	COIL
L3281	EXCELSA35T	COIL
L3282	EXCELSA35T	COIL
L3401	TLT015K991R	COIL
L3402	TLT015K991R	COIL
L3403	TLT015K991R	COIL
L3404	TLT015K991R	COIL
L3405	TLT015K991R	COIL
L3406	TLT015K991R	COIL
L3407	TLT015K991R	COIL
L3408	TLT015K991R	COIL
L3409	TLT100K991R	COIL
L3410	TLT015K991R	COIL
L3411	TLT015K991R	COIL
L3412	TLT015K991R	COIL
L3413	TLT015K991R	COIL
L3801	EXCELDR35V	COIL

FILTERS

X101	EFCT6504BF	FILTER
X102	EFCT7004BF	CERAMIC FILTER
X601	TSSA010	CRYSTAL
X1101	TSSA121	CRYSTAL
X1501	TSS2169−B	CRYSTAL
X2101	4730007158	CRYSTAL

RESISTOR

RL801	TSE1885−1	RELAY				⚠
R001	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ	
R002	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R003	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39KΩ	
R101	ERJ6GEYJ561	S.M.CARB	0.1W	5%	560Ω	
R102	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R103	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56KΩ	
R104	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R105	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R106	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820Ω	
R107	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	

Ref No.	Part No.	Description				
R109	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R110	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R111	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330Ω	
R251	ERJ6GEYJ330	S.M.CARB	0.1W	5%	33Ω	
R252	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R253	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R254	ERJ6GEYJ330	S.M.CARB	0.1W	5%	33Ω	
R255	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R256	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω	
R257	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R258	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5Ω	
R259	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R260	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R261	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω	
R262	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R263	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R264	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ	
R265	ERDS1TJ2R2	CARBON	0.5W	5%	2R2Ω	
R266	ERDS1TJ2R2	CARBON	0.5W	5%	2R2Ω	
R269	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27KΩ	
R270	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27KΩ	
R271	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7Ω	
R272	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R273	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330Ω	
R274	ERJ6GEYJ330	S.M.CARB	0.1W	5%	33Ω	
R275	ERJ6GEYJ330	S.M.CARB	0.1W	5%	33Ω	
R350	ERQ12AJ151P	FUSIBLE	12W	5%	150Ω	⚠
R351	ERJ6GEYJ911	S.M.CARB	0.1W	5%	910Ω	
R352	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R354	ERO25CKF4122	METAL	25W	1%	41KΩ	⚠
R355	ERG2FG823H	METAL	2W	2%	82KΩ	⚠
R356	ERJ6GEYJ181	S.M.CARB	0.1W	5%	180Ω	
R357	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2Ω	
R358	ERC12GK821C	SOLID	12W	10%	820Ω	
R360	ERO50PKF8251	METAL	50W	1%	8K2Ω	⚠
R361	ERJ6GEYJ911	S.M.CARB	0.1W	5%	910Ω	
R362	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R364	ERO25CKF4122	METAL	25W	1%	41KΩ	⚠
R365	ERG2FG823H	METAL	2W	2%	82KΩ	⚠
R366	ERJ6GEYJ181	S.M.CARB	0.1W	5%	180Ω	
R367	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2Ω	
R368	ERC12GK821C	SOLID	12W	10%	820Ω	
R369	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R371	ERJ6GEYJ911	S.M.CARB	0.1W	5%	910Ω	
R372	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R374	ERO25CKF4122	METAL	25W	1%	41KΩ	⚠
R375	ERG2FG823H	METAL	2W	2%	82KΩ	⚠
R376	ERJ6GEYJ181	S.M.CARB	0.1W	5%	180Ω	
R377	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2Ω	
R378	ERC12GK821C	SOLID	12W	10%	820Ω	
R379	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R383	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R394	ERJ6ENF7500	S.M.CARB	0.125W	5%	50Ω	
R395	ERJ6ENF5900	S.M.CARB	0.125W	5%	90Ω	
R396	ERJ6ENF7500	S.M.CARB	0.125W	5%	50Ω	
R397	ERJ6ENF5900	S.M.CARB	0.125W	5%	90Ω	
R398	ERJ6ENF7500	S.M.CARB	0.125W	5%	50Ω	
R399	ERJ6ENF5900	S.M.CARB	0.125W	5%	90Ω	
R401	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7Ω	
R402	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω	
R403	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R404	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R416	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω	
R418	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω	
R420	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56KΩ	
R421	ERJ6GEYJ224	S.M.CARB	0.1W	5%	220KΩ	
R441	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39KΩ	
R442	ERJ6GEYJ123	S.M.CARB	0.1W	5%	12KΩ	
R451	ERDS1TJ3R3	CARBON	0.5W	5%	3R3Ω	
R453	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39KΩ	
R454	ERJ6GEYJ123	S.M.CARB	0.1W	5%	12KΩ	
R458	ERJ6GEYJ302	S.M.CARB	0.1W	5%	3K0Ω	
R470	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω	
R471	ERDS1FJ1R0	CARBON	0.5W	5%	1Ω	⚠
R504	ERD25TJ271	CARBON	0.25W	5%	270Ω	
R505	ERG3FJ390H	METAL	3W	5%	39Ω	⚠
R506	ERDS1TJ681	CARBON	0.5W	5%	680Ω	
R507	ERDS1TJ681	CARBON	0.5W	5%	680Ω	

Ref No.	Part No.	Description				
R557	ERDS1TJ683	CARBON	0.5W	5%	68KΩ	
R560	ERD25TJ123	CARBON	0.25W	5%	12KΩ	
R563	ERD25TJ223	CARBON	0.25W	5%	22KΩ	
R564	ERDS1TJ394	CARBON	0.5W	5%	390KΩ	
R567	ERG3FJ223	METAL	3W	5%	22KΩ	⚠
R569	ERDS1TJ120	CARBON	0.5W	5%	12Ω	
R570	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R572	ERG3FJ821	METAL	3W	5%	820Ω	⚠
R574	ERG3FJ151	METAL	3W	5%	150Ω	⚠
R579	ERD25TJ274	CARBON	0.25W	5%	270KΩ	
R580	ERD25TJ563	CARBON	0.25W	5%	56KΩ	
R581	ERD25TJ104	CARBON	0.25W	5%	100KΩ	
R582	ERD25TJ225	CARBON	0.25W	5%	2M2Ω	
R583	ERD25TJ225	CARBON	0.25W	5%	2M2Ω	
R588	ERD25TJ332	CARBON	0.25W	5%	3K3Ω	
R601	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R613	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R614	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R615	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R616	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R617	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R619	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R620	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R622	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39KΩ	
R623	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R626	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330Ω	
R627	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R628	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R630	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R631	ERJ6GEYJ105	S.M.CARB	0.1W	5%	1MΩ	
R632	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ	
R634	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R635	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R636	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R637	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R646	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820Ω	
R647	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R648	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R649	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R650	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R651	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R652	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R653	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R655	ERJ6GEYJ224	S.M.CARB	0.1W	5%	220KΩ	
R657	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω	
R658	ERJ6ENF2212	S.M.CARB	0.125W	5%	2K1Ω	
R663	ERJ6GEYJ334	S.M.CARB	0.1W	5%	330KΩ	
R666	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R674	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27KΩ	
R675	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R676	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R677	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27KΩ	
R678	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R679	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R681	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R682	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R683	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R684	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R685	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R686	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R688	ERJ6ENF3162	S.M.CARB	0.125W	5%	1K6Ω	
R701	ERX3FJ2R7H	RESISTOR	3W	5%	2R7Ω	
R702	ERDS1TJ683	CARBON	0.5W	5%	68KΩ	
R703	ERD25TJ393	CARBON	0.25W	5%	39KΩ	
R704	ERDS1TJ330	CARBON	0.5W	5%	33Ω	
R805	232266296706	THERMISTOR				
R806	ERD25TJ101	CARBON	0.25W	5%	100Ω	
R807	ERD25TJ104	CARBON	0.25W	5%	100KΩ	
R809	ERF10ZK4R7	WOUND	10W	5%	4R7Ω	⚠
R810	ERD25TJ223	CARBON	0.25W	5%	22KΩ	
R811	ERD25TJ391	CARBON	0.25W	5%	390Ω	
R812	ERD25TJ681	CARBON	0.25W	5%	680Ω	
R814	ERD25TJ392	CARBON	0.25W	5%	3K9Ω	
R815	ERD25TJ100	CARBON	0.25W	5%	10Ω	
R816	ERDS1TJ330	CARBON	0.5W	5%	33Ω	
R818	ERD25TJ511	CARBON	0.25W	5%	510Ω	
R820	ERG3FJ223	METAL	3W	5%	22KΩ	⚠
R821	ERG3FJ223	METAL	3W	5%	22KΩ	⚠

Ref No.	Part No.	Description				
R822	ERD25TJ391	CARBON	0.25W	5%	390Ω	
R823	ERX12SJR22	METAL	0.5W	5%	R22Ω	
R824	ERX12SJR22	METAL	0.5W	5%	R22Ω	
R825	ERX12SJR22	METAL	0.5W	5%	R22Ω	
R827	ERDS1FJ121	CARBON	0.5W	5%	120Ω	⚠
R828	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R829	ERD25TJ221	CARBON	0.25W	5%	220Ω	
R830	ERX12SJR22	METAL	0.5W	5%	R22Ω	
R831	ERD75TAJ825	CARBON	0.75W	5%	8M2Ω	⚠
R832	ERG3FJ331	METAL	3W	5%	330Ω	⚠
R835	ERD25TJ220	CARBON	0.25W	5%	22Ω	
R836	ERD25TJ100	CARBON	0.25W	5%	10Ω	
R837	ERD25TJ183	CARBON	0.25W	5%	18KΩ	
R838	ERD25TJ821	CARBON	0.25W	5%	820Ω	
R841	ERC12ZGK105D	SOLID	0.5W	10%	1MΩ	
R847	TSF19252	FS LINK				⚠
R848	TSF19402	FS LINK				⚠
R857	ERD25TJ221	CARBON	0.25W	5%	220Ω	
R862	ERD25TJ272	CARBON	0.25W	5%	2K7Ω	
R863	ERG3FJ680H	METAL	3W	5%	68Ω	⚠
R864	ERDS1TJ682	CARBON	0.5W	5%	6K8Ω	
R867	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R868	ERD25TJ151	CARBON	0.25W	5%	150Ω	
R869	ERD25TJ560	CARBON	0.25W	5%	56Ω	
R870	ERD25TJ101	CARBON	0.25W	5%	100Ω	
R873	ERQ2CJP2R4	FUSIBLE	2W	5%	2R4Ω	⚠
R876	ERD25TJ562	CARBON	0.25W	5%	5K6Ω	
R877	ERO25CKF1022	METAL	25W	1%	10KΩ	⚠
R878	ERO25CKF1002	METAL	0.25W	1%	10KΩ	⚠
R883	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R885	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R886	ERX3SJR56	RESISTOR	3W	5%	R56Ω	
R888	ERDS1TJ393	CARBON	0.5W	5%	39KΩ	
R889	ERD25TJ392	CARBON	0.25W	5%	3K9Ω	
R891	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R892	ERD25TJ222	CARBON	0.25W	5%	2K2Ω	
R897	ERD25TJ183	CARBON	0.25W	5%	18KΩ	
R901	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R902	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R903	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R904	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R908	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R911	ERD25TJ561	CARBON	0.25W	5%	560Ω	
R913	ERJ6GEYJ183	S.M.CARB	0.1W	5%	18KΩ	
R915	ERJ6GEYJ182	S.M.CARB	0.1W	5%	1K8Ω	
R916	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω	
R917	ERJ6GEYJ121	S.M.CARB	0.1W	5%	120Ω	
R919	ERQ14AJW390	FUSIBLE	14W	5%	39Ω	⚠
R920	ERQ14AJW390	FUSIBLE	14W	5%	39Ω	⚠
R922	ERD25TJ683	CARBON	0.25W	5%	68KΩ	
R923	ERD25TJ683	CARBON	0.25W	5%	68KΩ	
R925	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R926	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R927	ERD25TJ122	CARBON	0.25W	5%	1K2Ω	
R928	ERD25TJ5R6	CARBON	0.25W	5%	5R6Ω	
R929	ERDS1FYJ471	CARBON	0.5W	5%	470Ω	⚠
R931	ERDS1FYJ390	CARBON	0.5W	5%	39Ω	⚠
R935	ERQ14AJW3R9	FUSIBLE	14W	5%	3R9Ω	⚠
R936	ERQ1CJP102	METAL	1W	5%	1KΩ	⚠
R937	ERQ14AJW100	METAL	0.25W	5%	10Ω	⚠
R938	ERD25TJ122	CARBON	0.25W	5%	1K2Ω	
R941	ERD25TJ5R6	CARBON	0.25W	5%	5R6Ω	
R1011	ERD25TJ101	CARBON	0.25W	5%	100Ω	
R1012	ERD25TJ101	CARBON	0.25W	5%	100Ω	
R1013	ERD25TJ471	CARBON	0.25W	5%	470Ω	
R1015	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R1071	ERD25TJ103	CARBON	0.25W	5%	10KΩ	
R1072	ERD25TJ222	CARBON	0.25W	5%	2K2Ω	
R1073	ERD25TJ222	CARBON	0.25W	5%	2K2Ω	
R1074	ERD25TJ332	CARBON	0.25W	5%	3K3Ω	
R1075	ERD25TJ512	CARBON	0.25W	5%	5K1Ω	
R1076	ERD25TJ912	CARBON	0.25W	5%	9K1Ω	
R1101	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1103	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R1104	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1105	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R1106	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R1107	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	

Ref No.	Part No.	Description			
R1108	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1109	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1110	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1111	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1113	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1114	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1116	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1117	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω
R1118	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω
R1119	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω
R1120	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω
R1121	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1122	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1123	ERJ6GEYJ823	S.M.CARB	0.1W	55	82KΩ
R1124	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1125	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1126	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1127	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1128	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1129	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1130	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R1131	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1132	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1133	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1134	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1135	ERJ6GEYJ225	S.M.CARB	0.125W	5%	2M2Ω
R1138	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27KΩ
R1139	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1140	ERJ6GEYJ392	S.M.CARB	0.1W	5%	3K9Ω
R1141	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1142	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1143	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1144	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ
R1145	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1146	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1147	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ
R1148	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R1149	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R1150	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ
R1151	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1152	ERJ6GEYJ224	S.M.CARB	0.1W	5%	220KΩ
R1153	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27KΩ
R1154	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω
R1155	ERJ6GEYJ474	S.M.CARB	0.1W	5%	470KΩ
R1156	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1157	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω
R1158	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1160	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
R1161	ERJ6GEYJ392	S.M.CARB	0.1W	5%	3K9Ω
R1162	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ
R1163	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1164	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1165	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1166	ERJ6GEYJ683	S.M.CARB	0.1W	5%	68KΩ
R1167	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1168	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1169	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1170	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1171	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1172	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820Ω
R1173	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω
R1174	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω
R1175	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1176	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1177	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1178	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1179	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1180	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1181	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1182	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1183	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1184	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1186	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1187	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ
R1188	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1189	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω
R1190	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω
R1194	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω
R1195	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ

Ref No.	Part No.	Description		
R1200	ERJ6GEYJ472	S.M.CARB 0.1W	5%	4K7Ω
R1237	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
R1238	ERJ6GEYJ102	S.M.CARB 0.1W	5%	1KΩ
R1239	ERJ6GEYJ560	S.M.CARB 0.1W	5%	56Ω
R1501	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
R1502	ERJ6GEYJ151	S.M.CARB 0.1W	5%	150Ω
R1503	ERJ6GEYJ332	S.M.CARB 0.1W	5%	3K3Ω
R1504	ERJ6GEYJ151	S.M.CARB 0.1W	5%	150Ω
R1505	ERJ6GEYJ471	S.M.CARB 0.1W	5%	470Ω
R1506	ERJ6GEYJ271	S.M.CARB 0.1W	5%	270Ω
R1507	ERJ6GEYJ102	S.M.CARB 0.1W	5%	1KΩ
R1508	ERJ6GEYJ471	S.M.CARB 0.1W	5%	470Ω
R1509	ERJ6GEYJ471	S.M.CARB 0.1W	5%	470Ω
R1510	ERJ6GEYJ8R2	S.M.CARB0.125W	5%	8R2Ω
R1511	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1513	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1514	ERJ6GEYJ180	S.M.CARB 0.1W	5%	18Ω
R1515	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1517	ERJ6GEYJ180	S.M.CARB 0.1W	5%	18Ω
R1518	ERJ6GEYJ180	S.M.CARB 0.1W	5%	18Ω
R1519	ERJ6GEYJ561	S.M.CARB 0.1W	5%	560Ω
R1520	ERJ6GEYJ471	S.M.CARB 0.1W	5%	470Ω
R1521	ERJ6GEYJ820	S.M.CARB 0.1W	5%	82Ω
R1522	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1523	ERJ6GEYJ390	S.M.CARB 0.1W	5%	39Ω
R1524	ERJ6GEYJ560	S.M.CARB 0.1W	5%	56Ω
R1525	ERJ6GEYJ271	S.M.CARB 0.1W	5%	270Ω
R1526	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
R1527	ERJ6GEYJ100	S.M.CARB 0.1W	5%	10Ω
R1528	ERJ6GEYJ151	S.M.CARB 0.1W	5%	150Ω
R1530	ERJ6GEYJ560	S.M.CARB 0.1W	5%	56Ω
R1531	ERJ6GEYJ151	S.M.CARB 0.1W	5%	150Ω
R1532	ERJ6GEYJ151	S.M.CARB 0.1W	5%	150Ω
R1533	ERJ6GEYJ181	S.M.CARB 0.1W	5%	180Ω
R1534	ERJ6GEYJ272	S.M.CARB 0.1W	5%	2K7Ω
R1535	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1536	ERJ6GEYJ470	S.M.CARB 0.1W	5%	47Ω
R1537	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1538	ERJ6GEYJ181	S.M.CARB 0.1W	5%	180Ω
R1540	ERJ6GEYJ102	S.M.CARB 0.1W	5%	1KΩ
R1541	ERJ6GEYJ102	S.M.CARB 0.1W	5%	1KΩ
R1542	ERJ6GEYJ151	S.M.CARB 0.1W	5%	150Ω
R1543	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1544	ERJ6GEYJ561	S.M.CARB 0.1W	5%	560Ω
R1545	ERJ6ENF3600	S.M.CARB0.125W	5%	60Ω
R1546	ERJ6GEYJ561	S.M.CARB 0.1W	5%	560Ω
R1547	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1548	ERJ6GEYJ221	S.M.CARB 0.1W	5%	220Ω
R1550	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1551	ERJ6GEYJ271	S.M.CARB 0.1W	5%	270Ω
R1552	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1553	ERJ6GEYJ750	S.M.CARB 0.1W	5%	75Ω
R1554	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1555	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1556	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1559	ERJ6ENF2200	S.M.CARB0.125W	5%	20Ω
R1560	ERJ6GEYJ560	S.M.CARB 0.1W	5%	56Ω
R1561	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
R1562	ERJ6ENF4750	S.M.CARB0.125W	5%	75Ω
R1563	ERJ6GEYJ271	S.M.CARB 0.1W	5%	270Ω
R1564	ERJ6ENF2200	S.M.CARB0.125W	5%	20Ω
R1565	ERJ6GEYJ820	S.M.CARB 0.1W	5%	82Ω
R1566	ERJ6GEYJ331	S.M.CARB 0.1W	5%	330Ω
R1567	ERJ6ENF1500	S.M.CARB0.125W	5%	50Ω
R1568	ERJ6ENF1500	S.M.CARB0.125W	5%	50Ω
R1569	ERJ6ENF1500	S.M.CARB0.125W	5%	50Ω
R1570	ERJ6ENF2701	S.M.CARB0.125W	5%	700Ω
R1571	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1572	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1573	ERJ6ENF1500	S.M.CARB0.125W	5%	50Ω
R1574	ERJ6GEYJ560	S.M.CARB 0.1W	5%	56Ω
R1575	ERJ6GEYJ102	S.M.CARB 0.1W	5%	1KΩ
R1576	ERJ6GEYJ102	S.M.CARB 0.1W	5%	1KΩ
R1577	ERJ6GEYJ102	S.M.CARB 0.1W	5%	1KΩ
R1578	ERJ6GEYJ301	S.M.CARB0.125W	5%	300Ω
R1579	ERJ6GEYJ431	S.M.CARB 0.1W	5%	430Ω
R1580	ERJ6GEYJ511	S.M.CARB 0.1W	5%	510Ω
R1581	ERJ6GEYJ151	S.M.CARB 0.1W	5%	150Ω
R1582	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ

Ref No.	Part No.	Description		
R1583	ERJ6GEYJ561	S.M.CARB 0.1W	5%	560Ω
R1584	ERJ6GEYJ561	S.M.CARB 0.1W	5%	560Ω
R1585	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1586	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
R1587	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
R1588	ERJ6GEYJ221	S.M.CARB 0.1W	5%	220Ω
R1589	ERJ6GEYJ152	S.M.CARB 0.1W	5%	1K5Ω
R1590	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1591	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1592	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1593	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1594	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1595	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1598	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1599	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1600	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1603	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1604	ERJ6GEYJ820	S.M.CARB 0.1W	5%	82Ω
R1605	ERJ6GEYJ183	S.M.CARB 0.1W	5%	18KΩ
R1606	ERJ6GEYJ273	S.M.CARB 0.1W	5%	27KΩ
R1607	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1609	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1610	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1611	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1613	ERJ6GEYJ102	S.M.CARB 0.1W	5%	1KΩ
R1614	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
R1615	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
R1616	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1617	ERJ6ENF1100	S.M.CARB0.125W	5%	10Ω
R1618	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1619	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1620	ERJ6GEYJ331	S.M.CARB 0.1W	5%	330Ω
R1621	ERJ6GEYJ471	S.M.CARB 0.1W	5%	470Ω
R1622	ERJ6GEYJ102	S.M.CARB 0.1W	5%	1KΩ
R1623	ERJ6GEYJ471	S.M.CARB 0.1W	5%	470Ω
R1624	ERJ6GEYJ333	S.M.CARB 0.1W	5%	33KΩ
R1625	ERJ6GEYJ221	S.M.CARB 0.1W	5%	220Ω
R1626	ERJ6GEYJ332	S.M.CARB 0.1W	5%	3K3Ω
R1627	ERJ6GEYJ100	S.M.CARB 0.1W	5%	10Ω
R1628	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
R1629	ERJ6GEYJ121	S.M.CARB 0.1W	5%	120Ω
R1630	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1631	ERJ6ENF1500	S.M.CARB0.125W	5%	50Ω
R1632	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
R1633	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
R1634	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1635	ERJ6GEYJ271	S.M.CARB 0.1W	5%	270Ω
R1636	ERJ6GEYJ101	S.M.CARB 0.1W	5%	100Ω
R1637	ERJ6GEYJ271	S.M.CARB 0.1W	5%	270Ω
R1639	ERJ6GEYJ331	S.M.CARB 0.1W	5%	330Ω
R1640	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
R1641	ERJ6GEYJ473	S.M.CARB 0.1W	5%	47KΩ
R1642	ERJ6GEYJ183	S.M.CARB 0.1W	5%	18KΩ
R1643	ERJ6GEYJ473	S.M.CARB 0.1W	5%	47KΩ
R1644	ERJ6GEYJ183	S.M.CARB 0.1W	5%	18KΩ
R1645	ERJ6GEYJ473	S.M.CARB 0.1W	5%	47KΩ
R1646	ERJ6GEYJ183	S.M.CARB 0.1W	5%	18KΩ
R1660	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1661	ERJ6GEYJ471	S.M.CARB 0.1W	5%	470Ω
R1662	ERJ6GEYJ223	S.M.CARB 0.1W	5%	22KΩ
R1663	ERJ6GEYJ331	S.M.CARB 0.1W	5%	330Ω
R1664	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1665	ERJ6GEYJ471	S.M.CARB 0.1W	5%	470Ω
R1666	ERJ6GEYJ223	S.M.CARB 0.1W	5%	22KΩ
R1667	ERJ6GEYJ331	S.M.CARB 0.1W	5%	330Ω
R1668	ERJ6GEYJ103	S.M.CARB 0.1W	5%	10KΩ
R1669	ERJ6GEYJ471	S.M.CARB 0.1W	5%	470Ω
R1670	ERJ6GEYJ223	S.M.CARB 0.1W	5%	22KΩ
R1671	ERJ6GEYJ331	S.M.CARB 0.1W	5%	330Ω
R1672	ERJ6GEYJ471	S.M.CARB 0.1W	5%	470Ω
R1673	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
R1674	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
R1675	ERJ6GEY0R00	S.M.CARB 0.1W	5%	0Ω
R1676	ERJ6GEYJ560	S.M.CARB 0.1W	5%	56Ω
R1677	ERJ6ENF6800	S.M.CARB0.125W	5%	80Ω
R1678	ERJ6ENF1500	S.M.CARB0.125W	5%	50Ω
R1679	ERJ6ENF1500	S.M.CARB0.125W	5%	50Ω
R1680	ERJ6GEYJ271	S.M.CARB 0.1W	5%	270Ω
R1681	ERJ6GEYJ271	S.M.CARB 0.1W	5%	270Ω

Ref No.	Part No.	Description				
R1682	ERJ6GEYJ271	S.M.CARB	0.1W	5%	270Ω	
R1683	ERJ6GEYJ271	S.M.CARB	0.1W	5%	270Ω	
R1684	ERJ6GEYJ271	S.M.CARB	0.1W	5%	270Ω	
R1685	ERQ14AJ100	METAL	0.25W	5%	10Ω	⚠
R1686	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R1687	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R1688	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330Ω	
R1690	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω	
R1691	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω	
R1692	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω	
R2101	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R2102	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R2103	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R2104	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R2105	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R2106	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R2107	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R2108	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R2109	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R2110	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R2111	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R2112	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R2114	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R2117	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R2118	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R2120	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R2121	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R2125	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R2301	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R2302	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R2303	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R2304	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R2307	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R2308	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R2312	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7Ω	
R2314	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R2315	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R2316	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R2318	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330Ω	
R2319	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R2320	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R2321	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R2351	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R2352	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R2353	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R2354	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R2355	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R2356	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R2357	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R2358	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R2359	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39KΩ	
R2361	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22KΩ	
R2362	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R2363	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R2364	ERD25TJ101	CARBON	0.25W	5%	100Ω	
R2365	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R2368	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R2369	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R2370	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R2371	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R2372	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R2373	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R2376	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R2377	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R2459	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R2460	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R2474	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R2475	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3004	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω	
R3005	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R3006	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω	
R3007	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R3008	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω	
R3009	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω	
R3010	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R3011	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R3012	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R3013	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3014	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	

Ref No.	Part No.	Description				
R3015	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω	
R3016	ERJ6GEYJ121	S.M.CARB	0.1W	5%	120Ω	
R3017	ERJ6GEYJ390	S.M.CARB	0.1W	5%	39Ω	
R3018	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3019	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3020	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3021	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω	
R3022	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68Ω	
R3023	ERQ14AJ390	FUSIBLE	0.25W	5%	39Ω	⚠
R3024	ERJ6GEYJ683	S.M.CARB	0.1W	5%	68KΩ	
R3025	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R3026	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω	
R3027	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3028	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω	
R3029	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3030	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R3031	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R3033	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3034	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3035	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3036	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3037	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3038	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3039	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3040	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3043	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3045	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R3046	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3047	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R3048	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3053	ERJ6GEYJ220	S.M.CARB	0.1W	5%	22Ω	
R3057	ERJ6GEYJ151	S.M.CARB	0.1W	5%	150Ω	
R3058	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R3059	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3060	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3061	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R3062	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6Ω	
R3063	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω	
R3064	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7Ω	
R3065	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33KΩ	
R3066	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470Ω	
R3067	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3068	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56KΩ	
R3069	ERJ6GEYJ183	S.M.CARB	0.1W	5%	18KΩ	
R3070	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3071	ERJ6GEYJ621	S.M.CARB	0.125W	5%	620Ω	
R3072	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3073	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39KΩ	
R3074	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ	
R3075	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R3076	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330Ω	
R3077	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3078	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω	
R3079	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3080	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3081	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3082	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3087	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω	
R3113	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3114	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3125	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω	
R3126	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680Ω	
R3281	ERD25TJ750	CARBON	0.25W	5%	75Ω	
R3282	ERD25TJ750	CARBON	0.25W	5%	75Ω	
R3284	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3285	ERD25TJ102	CARBON	0.25W	5%	1KΩ	
R3351	ERJ6GEYJ220	S.M.CARB	0.1W	5%	22Ω	
R3352	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R3353	ERJ6GEYJ474	S.M.CARB	0.1W	5%	470KΩ	
R3354	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3355	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390Ω	
R3356	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω	
R3357	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω	
R3358	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω	
R3360	ERDS1TJ471	CARBON	0.5W	5%	470Ω	
R3361	ERO50PKF1133	METAL	50W	1%	113KΩ	⚠
R3401	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3402	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3403	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33KΩ	

Ref No.	Part No.	Description				
R3404	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33KΩ	
R3405	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3406	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3407	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R3408	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3409	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3410	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R3412	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3413	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3414	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω	
R3415	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R3416	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33KΩ	
R3417	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R3418	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100KΩ	
R3419	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33KΩ	
R3420	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω	
R3421	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω	
R3422	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R3423	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω	
R3424	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3425	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω	
R3426	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68Ω	
R3427	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3428	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68Ω	
R3429	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10Ω	
R3430	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3431	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3432	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω	
R3433	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3Ω	
R3434	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33KΩ	
R3435	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68Ω	
R3436	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3437	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3438	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3439	ERJ6GEYJ333	S.M.CARB	0.1W	5%	33KΩ	
R3440	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3441	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ	
R3443	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω	
R3444	ERJ6GEYJ470	S.M.CARB	0.1W	5%	47Ω	
R3445	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75Ω	
R3446	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3447	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ	
R3452	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3453	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3454	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3455	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3801	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω	
R3802	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω	
R3803	ERG3FJ100	METAL	3W	5%	10Ω	⚠
R3990	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω	
R3991	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3992	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3993	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	
R3994	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ	

CAPACITORS

C002	ECA1HMR33GB	ELECT	50V	0.33μF
C003	ECUV1H104ZFX	S.M.CAP	50V	100nF
C004	ECUV1H104ZFX	S.M.CAP	50V	100nF
C005	ECA1CM221GB	ELECT	16V	220pF
C006	ECUV1H104ZFX	S.M.CAP	50V	100nF
C007	ECUV1H104ZFX	S.M.CAP	50V	100nF
C008	ECUV1H561JCX	S.M.CAP	50V	560pF
C009	ECA1CM221GB	ELECT	16V	220pF
C010	ECA1HM4R7GB	ELECT	50V	4.7μF
C011	ECUV1H100DCX	S.M.CAP	50V	10pF
C012	ECUV1H100DCX	S.M.CAP	50V	10pF
C013	ECA1CM470GB	ELECT	16V	47μF
C014	ECUV1H104ZFX	S.M.CAP	50V	100nF
C015	ECUV1H104ZFX	S.M.CAP	50V	100nF
C017	ECUV1H100DCX	S.M.CAP	50V	10pF
C018	ECJ2VF1H104Z	ELECT	350V	0.10μF
C019	ECJ2VF1H104Z	ELECT	350V	0.10μF
C103	ECUV1H104ZFX	S.M.CAP	50V	100nF
C104	ECJ2VF1H103Z	ELECT	350V	10nF
C107	ECUV1H104ZFX	S.M.CAP	50V	100nF
C108	ECUV1H104ZFX	S.M.CAP	50V	100nF
C109	ECUV1C184KBX	S.M.CAP	16V	0.18μF

Ref No.	Part No.	Description			
C110	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C111	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C251	ECA1HM101GB	ELECT	50V	100pF	
C252	ECUV1H183KBX	S.M.CAP	50V	18nF	
C253	ECA1HM4R7GB	ELECT	50V	4.7μF	
C254	ECQM1H334J	FILM	50V	330nF	
C255	ECA1EHG101B	ELECT	25V	100pF	
C256	ECUV1H183KBX	S.M.CAP	50V	18nF	
C257	ECA1HM4R7GB	ELECT	50V	4.7μF	
C258	ECA1HM101GB	ELECT	50V	100pF	
C259	ECQM1H334J	FILM	50V	330nF	
C260	ECA1VM102GB	ELECT	35V	1nF	
C261	ECA1VM102GB	ELECT	35V	1nF	
C262	ECA1HM2R2GB	ELECT	50V	2.2μF	
C263	ECA1HM100GB	ELECT	50V	10pF	
C264	ECA1HM222E	ELECT	50V	2.2nF	
C265	ECA1HM2R2GB	ELECT	50V	2.2μF	
C266	ECA1HM100GB	ELECT	50V	10pF	
C267	ECQM1H224J	FILM	50V	220nF	
C268	ECQM1H224J	FILM	50V	220nF	
C269	ECA1HM470GB	ELECT	50V	47μF	
C270	ECQM1H224J	FILM	50V	220nF	
C271	ECQM1H224J	FILM	50V	220nF	
C277	ECUV1H102JCX	S.M.CAP	50V	1nF	
C278	ECUV1H102JCX	S.M.CAP	50V	1nF	
C352	ECUV1H224ZFX	S.M.CAP	50V	0.22μF	
C353	ECUV1H104KBX	S.M.CAP	50V	100nF	
C354	ECQM2104KZ	FILM	250V	100nF	
C355	ECKC2H102J	CERAMIC	500V	1nF	⚠
C362	ECUV1H224ZFX	S.M.CAP	50V	0.22μF	
C363	ECUV1H104KBX	S.M.CAP	50V	100nF	
C364	ECQM2104KZ	FILM	250V	100nF	
C365	ECKC2H102J	CERAMIC	500V	1nF	⚠
C372	ECUV1H224ZFX	S.M.CAP	50V	0.22μF	
C373	ECUV1H104KBX	S.M.CAP	50V	100nF	
C374	ECQM2104KZ	FILM	250V	100nF	
C375	ECKC2H102J	CERAMIC	500V	1nF	⚠
C381	ECA1HM101GB	ELECT	50V	100pF	
C382	ECA1CM471GB	ELECT	16V	470pF	
C383	ECUV1H103KBX	S.M.CAP	50V	10nF	
C384	ECQM2104KZ	FILM	250V	100nF	
C385	ECA2EM220B	ELECT	250V	22pF	
C386	ECKC3D152J	CERAMIC	2KV	1.5nF	⚠
C387	ECUV1H681JCX	S.M.CAP	50V	680pF	
C395	ECQM1H104J	FILM	50V	100nF	
C396	ECJ2VF1H104Z	ELECT	350V	0.10μF	
C400	ECA1VM102GB	ELECT	35V	1nF	
C402	ECA1HM010GB	ELECT	50V	1pF	
C404	ECEA1HU471	ELECT	50V	470μF	
C405	ECA1EM102GB	ELECT	25V	1nF	
C407	ECQB1224KFW	FILM	100V	0.22μF	
C411	ECUV1H102KBX	S.M.CAP	50V	1nF	
C501	ECQM1H224J	FILM	50V	220nF	
C502	ECQM2104KZ	FILM	250V	100nF	
C503	ECKC2H102J	CERAMIC	500V	1nF	⚠
C504	ECQB1H223K	FILM	50V	22nF	
C506	ECKC2H102J	CERAMIC	500V	1nF	⚠
C507	ECA1EM332E	ELECT	25V	3.3nF	
C552	ECWH20102JVY	FILM	200V	1nF	
C553	ECQP1223JZW	FILM	100V	22nF	
C554	ECQB1H152K	FILM	50V	1.5nF	
C555	ECWH20622JVB	FILM	200V	6.2nF	
C556	ECEA2CNR47SB	ELECT	160V	R47μF	
C557	ECKC2H331J	CERAMIC	500V	330pF	⚠
C558	ECA2EM330B	ELECT	250V	33pF	
C559	ECKC2H103J	CERAMIC	50V	10nF	⚠
C563	ECWF2564JBB	FILM	200V	0.56μF	
C564	ECKC1H103JB	CERAMIC	50V	10nF	
C565	ECQP1223JZW	FILM	100V	22nF	
C572	ECWH20622JVB	FILM	200V	6.2nF	
C573	ECQF4153JZH	FILM	400V	15nF	
C575	ECWF4564JBB	FILM	400V	0.56μF	
C581	ECQF4123JZH	FILM	400V	12nF	
C584	ECKC3D391J	CERAMIC	2KV	390pF	⚠
C602	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C603	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C604	ECUV1H470JCX	S.M.CAP	50V	47pF	
C605	ECA1CM221GB	ELECT	16V	220pF	

Ref No.	Part No.	Description			
C606	ECA1AM332E	ELECT	10V	3.3nF	
C607	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C608	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C609	ECA1HM3R3GB	ELECT	50V	3.3μF	
C610	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C611	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C612	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C613	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C614	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C615	ECJ2VB1C104K	ELECT	350V	0.10μF	
C616	ECQM1H104J	FILM	50V	100nF	
C617	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C618	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C620	ECUV1H100DCX	S.M.CAP	50V	10pF	
C622	ECUV1H470JCX	S.M.CAP	50V	47pF	
C623	ECUV1H470JCX	S.M.CAP	50V	47pF	
C624	ECUV1H820JCX	S.M.CAP	50V	82pF	
C625	ECUV1H470JCX	S.M.CAP	50V	47pF	
C626	ECUV1H470JCX	S.M.CAP	50V	47pF	
C627	ECUV1H470JCX	S.M.CAP	50V	47pF	
C628	ECUV1H470JCX	S.M.CAP	50V	47pF	
C632	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C633	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C634	ECUV1H222KBX	S.M.CAP	50V	2.2nF	
C635	ECA1EM101GB	ELECT	25V	1μF	
C636	ECUV1H103ZFX	S.M.CAP	50V	10nF	
C637	ECUV1H470JCX	S.M.CAP	50V	47pF	
C638	ECUV1H270JCX	S.M.CAP	50V	27pF	
C639	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C641	ECUV1H101JCX	S.M.CAP	50V	100pF	
C643	ECUV1H102KBX	S.M.CAP	50V	1nF	
C644	ECQM1H104J	FILM	50V	100nF	
C645	ECQM1H104J	FILM	50V	100nF	
C646	ECUV1H103KBX	S.M.CAP	50V	10nF	
C651	ECUV1C224KBX	S.M.CAP	16V	220nF	
C701	ECQV1H105JZ	FILM	50V	1μF	
C702	ECKC2H102J	CERAMIC	500V	1nF	⚠
C806	ECQE6104K	FILM	600V	100nF	⚠
C807	ECQB1H473K	FILM	50V	47nF	
C808	ECQM1H334J	FILM	50V	330nF	
C809	ECQE2A474MWB	FILM	100V	0.47μF	
C811	ECQB1H104J	FILM	50V	100nF	
C812	ECQB1H562K	FILM	50V	5.6nF	
C813	ECKC2H472J	CERAMIC	500V	4.7nF	⚠
C814	ECKC2H472J	CERAMIC	500V	4.7nF	⚠
C815	ECA1CM331B	ELECT	16V	330pF	
C816	ECQB1H122J	FILM	50V	1.2nF	
C817	ECKC2H472J	CERAMIC	500V	4.7nF	⚠
C818	ECKC2H472J	CERAMIC	500V	4.7nF	⚠
C819	ECOS2WB221DB	ELECT	200V	220pF	
C820	ECOS2WB221DB	ELECT	200V	220pF	
C821	ECQB1H222J	FILM	50V	2200pF	
C822	ECKC3D471JB	CERAMIC	2KV	470pF	⚠
C823	EEUFA1V221B	CERAMIC	35V	220μF	
C824	ECQB1H221KF3	FILM	50V	220μF	
C826	ECQB1H473K	FILM	50V	47nF	
C827	ECKCNS332J	CERAMIC	1.2KV	3.3nF	⚠
C830	ECQE6105JFW	FILM	600V	1.0μF	
C831	ECKC3D471JB	CERAMIC	2KV	470pF	⚠
C833	ECQB1H682K	FILM	50V	6.8nF	
C835	ECQB1H332K	FILM	50V	3.3nF	
C842	222233510154	FILM	50V	0.15μF	
C843	ECQE2A474MWB	FILM	100V	0.47μF	
C847	ECEA1EN101UB	ELECT	25V	100μF	
C848	ECKC2H331J	CERAMIC	500V	330pF	⚠
C849	ECKC2H391J	CERAMIC	500V	390pF	
C852	ECKC3D222JB	CERAMIC	2KV	2200pF	⚠
C853	ECEA1CU332	ELECT	16V	3300μF	
C854	ECA1EM221GB	ELECT	25V	220pF	
C855	ECEA1HU102	ELECT	50V	1000μF	
C856	ECA1EM332E	ELECT	25V	3.3nF	
C857	ECA1EM471GB	ELECT	25V	470pF	
C858	ECOS2EA271BB	ELECT	250V	270pF	
C859	ECKC2H471J	CERAMIC	500V	470pF	⚠
C861	ECOS2EA221AB	ELECT	250V	220μF	
C863	ECA1EM332E	ELECT	25V	3.3nF	
C864	ECA0JM102GB	ELECT	6.3V	1nF	
C866	ECA1HM101GB	ELECT	50V	100pF	

Ref No.	Part No.	Description			
C867	ECA1CM222E	ELECT	16V	2.2nF	
C868	ECA1CM100GB	ELECT	16V	10pF	
C869	ECA1HM101GB	ELECT	50V	100pF	
C871	ECA0JM102GB	ELECT	6.3V	1nF	
C872	ECA1CM222E	ELECT	16V	2.2nF	
C901	ECUV1H030CCX	S.M.CAP	50V	30pF	
C902	ECA1VM101GB	ELECT	35V	100pF	
C904	ECJ2VF1H103Z	ELECT	350V	10nF	
C906	ECUV1H681JCX	S.M.CAP	50V	680pF	
C907	ECUV1H121JCX	S.M.CAP	50V	120pF	
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	ECA2EM220B	ELECT	250V	22pF	
C913	ECA1HM101GB	ELECT	50V	100pF	
C914	ECA1HM101GB	ELECT	50V	100pF	
C916	ECA2EM220B	ELECT	250V	22pF	
C917	ECA1HM100GB	ELECT	50V	10pF	
C918	ECJ2VF1H103Z	ELECT	350V	10nF	
C1011	ECKC1H101J	CERAMIC	50V	100pF	
C1012	ECA1VM470B	ELECT	35V	47pF	
C1013	ECKC1H103JB	CERAMIC	50V	10nF	
C1014	ECA1HM101GB	ELECT	50V	100pF	
C1101	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1102	ECUV1H101JCX	S.M.CAP	50V	100pF	
C1103	ECUV1H220JCX	S.M.CAP	50V	22pF	
C1104	ECUV1H220JCX	S.M.CAP	50V	22pF	
C1107	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1108	ECUV1C104KBX	S.M.CAP	16V	0.10μF	
C1109	ECUV1C104KBX	S.M.CAP	16V	0.10μF	
C1113	ECUV1C104KBX	S.M.CAP	16V	0.10μF	
C1114	ECA1HM101GB	ELECT	50V	100pF	
C1116	ECUV1H560JCX	S.M.CAP	50V	56pF	
C1117	ECUV1H221JCX	S.M.CAP	50V	220pF	
C1118	ECJ3VB1C474K	ELECT	350V	0.47μF	
C1120	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1121	ECUV1H472KBX	S.M.CAP	50V	4.7nF	
C1122	ECA1HM010GB	ELECT	50V	1pF	
C1123	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1124	ECUV1H101JCX	S.M.CAP	50V	100pF	
C1125	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1126	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1127	ECA1HM101GB	ELECT	50V	100pF	
C1128	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1129	ECA1HM101GB	ELECT	50V	100pF	
C1130	ECUV1H103KBX	S.M.CAP	50V	10nF	
C1131	ECUV1H221JCX	S.M.CAP	50V	220pF	
C1138	ECUV1H224ZFX	S.M.CAP	50V	0.22μF	
C1145	ECJ2VB1H333K	ELECT	350V	33nF	
C1147	ECA1CM331B	ELECT	16V	330pF	
C1148	ECUV1C224KBX	S.M.CAP	16V	220nF	
C1501	ECUV1H330JCX	S.M.CAP	50V	33pF	
C1502	ECUV1H471JCX	S.M.CAP	50V	470pF	
C1503	ECUV1H390JCX	S.M.CAP	50V	39pF	
C1504	ECUV1H680JCX	S.M.CAP	50V	68pF	
C1505	ECUV1H820JCX	S.M.CAP	50V	82pF	
C1506	ECUV1H331JCX	S.M.CAP	50V	330pF	
C1507	ECUV1H102KBX	S.M.CAP	50V	1nF	
C1508	ECEA1HN010UB	ELECT	50V	1μF	
C1509	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1510	ECA1HM101GB	ELECT	50V	100pF	
C1511	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1512	ECUV1H030CCX	S.M.CAP	50V	30pF	
C1513	ECA1HM100GB	ELECT	50V	10pF	
C1514	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1515	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1516	ECUV1H030CCX	S.M.CAP	50V	30pF	
C1517	ECUV1H473ZFX	S.M.CAP	50V	47nF	
C1518	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1519	ECA1HM101GB	ELECT	50V	100pF	
C1521	ECA1HM101GB	ELECT	50V	100pF	
C1522	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1523	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1524	ECA1VM470B	ELECT	35V	47pF	
C1525	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1527	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C1528	ECUV1H104ZFX	S.M.CAP	50V	100nF	

Ref No.	Part No.	Description		
C1529	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1530	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1532	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1533	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1534	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1535	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1536	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1537	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1538	EEUNA1E220B	S.M.CAP	25V	22pF
C1539	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1540	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1541	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1542	ECA1CM471GB	ELECT	16V	470pF
C1543	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1544	EEUNA1E220B	S.M.CAP	25V	22pF
C1545	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1546	ECA1HM101GB	ELECT	50V	100pF
C1547	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1548	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1549	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1550	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1551	EEUNA1E220B	S.M.CAP	25V	22pF
C1552	ECA1HM101GB	ELECT	50V	100pF
C1553	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1554	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1555	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1556	ECA1HM101GB	ELECT	50V	100pF
C1557	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1558	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1559	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1560	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1561	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1562	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1563	ECA1HM101GB	ELECT	50V	100pF
C1564	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1565	ECUV1H270JCX	S.M.CAP	50V	27pF
C1567	ECA1HM101GB	ELECT	50V	100pF
C1568	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1569	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1570	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1571	ECA1CM471GB	ELECT	16V	470pF
C1572	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1573	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1574	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1575	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1576	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1577	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1578	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1579	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1580	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1581	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1582	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1583	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1584	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1585	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1586	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1587	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1588	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1589	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1590	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1591	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1592	ECA1CM221GB	ELECT	16V	220pF
C1593	ECA1CM221GB	ELECT	16V	220pF
C1594	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1595	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1596	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1597	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1598	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1599	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1600	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1601	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1602	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1603	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1604	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1605	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1606	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1607	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1608	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1609	ECUV1H104ZFX	S.M.CAP	50V	100nF

Ref No.	Part No.	Description		
C1610	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1611	ECA1CM471GB	ELECT	16V	470pF
C1612	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1614	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1615	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1616	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1617	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1618	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1619	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1620	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1621	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1622	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1623	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1624	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1625	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1626	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1627	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1628	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1629	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1630	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1631	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1632	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1633	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1636	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1637	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1638	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1639	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1642	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1643	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1644	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1645	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1647	ECUV1H470JCX	S.M.CAP	50V	47pF
C1648	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1649	ECA1HM101GB	ELECT	50V	100pF
C1650	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1651	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1652	ECA1HM101GB	ELECT	50V	100pF
C1653	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1654	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1655	ECA1VM470B	ELECT	35V	47pF
C1656	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1658	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1659	ECA1VM470B	ELECT	35V	47pF
C1660	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1661	ECA1HM101GB	ELECT	50V	100pF
C1662	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1663	ECUV1H560JCX	S.M.CAP	50V	56pF
C1664	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1666	ECUV1H390JCX	S.M.CAP	50V	39pF
C1667	ECUV1H820JCX	S.M.CAP	50V	82pF
C1668	ECUV1H680JCX	S.M.CAP	50V	68pF
C1669	ECUV1H271JCX	S.M.CAP	50V	270pF
C1670	ECUV1H391JCX	S.M.CAP	50V	390pF
C1671	ECUV1H390JCX	S.M.CAP	50V	39pF
C1672	ECUV1H820JCX	S.M.CAP	50V	82pF
C1673	ECUV1H680JCX	S.M.CAP	50V	68pF
C1674	ECUV1H271JCX	S.M.CAP	50V	270pF
C1675	ECUV1H391JCX	S.M.CAP	50V	390pF
C1676	ECUV1H390JCX	S.M.CAP	50V	39pF
C1677	ECUV1H820JCX	S.M.CAP	50V	82pF
C1678	ECUV1H680JCX	S.M.CAP	50V	68pF
C1679	ECUV1H271JCX	S.M.CAP	50V	270pF
C1680	ECUV1H391JCX	S.M.CAP	50V	390pF
C1681	ECUV1H820JCX	S.M.CAP	50V	82pF
C1682	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1683	ECUV1H101JCX	S.M.CAP	50V	100pF
C1685	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1686	ECUV1H101JCX	S.M.CAP	50V	100pF
C1688	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1689	ECUV1H104ZFX	S.M.CAP	50V	100nF
C1690	ECJ2VF1C105Z	ELECT	350V	1.0μF
C1691	ECJ2VF1C105Z	ELECT	350V	1.0μF
C1692	EEUNA1E220B	S.M.CAP	25V	22pF
C1693	ECA1HM101GB	ELECT	50V	100pF
C1695	ECUV1H221JCX	S.M.CAP	50V	220pF
C1696	EEUNA1E220B	S.M.CAP	25V	22pF
C1697	EEUNA1E220B	S.M.CAP	25V	22pF
C1698	EEUNA1E220B	S.M.CAP	25V	22pF
C2103	ECUV1H391KBX	S.M.CAP	50V	390pF

Ref No.	Part No.	Description		
C2104	ECUV1H102KBX	S.M.CAP	50V	1nF
C2105	ECUV1H102KBX	S.M.CAP	50V	1nF
C2106	ECUV1H102KBX	S.M.CAP	50V	1nF
C2107	ECUV1H102KBX	S.M.CAP	50V	1nF
C2108	ECUV1H102KBX	S.M.CAP	50V	1nF
C2109	ECUV1H102KBX	S.M.CAP	50V	1nF
C2110	ECUV1H102KBX	S.M.CAP	50V	1nF
C2111	ECA1CM100GB	ELECT	16V	10pF
C2112	ECUV1H104ZFX	S.M.CAP	50V	100nF
C2113	ECA1CM100GB	ELECT	16V	10pF
C2114	ECA1HM101GB	ELECT	50V	100pF
C2115	ECUV1H104ZFX	S.M.CAP	50V	100nF
C2116	ECUV1H102KBX	S.M.CAP	50V	1nF
C2117	ECUV1H471KBX	S.M.CAP	50V	470pF
C2118	ECA1HM3R3GB	ELECT	50V	3.3μF
C2119	ECUV1H471KBX	S.M.CAP	50V	470pF
C2120	ECUV1H104ZFX	S.M.CAP	50V	100nF
C2121	ECUV1H221JCX	S.M.CAP	50V	220pF
C2122	ECUV1H221JCX	S.M.CAP	50V	220pF
C2123	ECUV1H221JCX	S.M.CAP	50V	220pF
C2124	ECUV1H104ZFX	S.M.CAP	50V	100nF
C2125	ECA1CM100GB	ELECT	16V	10pF
C2126	ECUV1H221JCX	S.M.CAP	50V	220pF
C2127	ECUV1H104ZFX	S.M.CAP	50V	100nF
C2128	ECUV1H221JCX	S.M.CAP	50V	220pF
C2129	ECA1CM100GB	ELECT	16V	10pF
C2130	ECUV1H221JCX	S.M.CAP	50V	220pF
C2131	ECQM1H334J	FILM	50V	330nF
C2132	ECA1CM100GB	ELECT	16V	10pF
C2133	ECUV1H470JCX	S.M.CAP	50V	47pF
C2134	ECUV1H470JCX	S.M.CAP	50V	47pF
C2135	ECUV1H070DCX	S.M.CAP	50V	7pF
C2137	ECUV1H104ZFX	S.M.CAP	50V	100nF
C2138	ECUV1H010CCX	S.M.CAP	50V	1pF
C2139	ECUV1H010CCX	S.M.CAP	50V	1pF
C2141	ECUV1H560JCX	S.M.CAP	50V	56pF
C2142	ECA1CM100GB	ELECT	16V	10pF
C2144	ECUV1H560JCX	S.M.CAP	50V	56pF
C2146	ECA1CM100GB	ELECT	16V	10pF
C2147	ECUV1H103KBX	S.M.CAP	50V	10nF
C2148	ECUV1H103KBX	S.M.CAP	50V	10nF
C2301	ECA1CM470GB	ELECT	16V	47μF
C2302	ECA1CM470GB	ELECT	16V	47μF
C2307	ECUV1H103KBX	S.M.CAP	50V	10nF
C2308	ECUV1H103KBX	S.M.CAP	50V	10nF
C2353	ECA1CM471GB	ELECT	16V	470pF
C2356	ECA1HM4R7GB	ELECT	50V	4.7μF
C2357	ECUV1H151JCX	S.M.CAP	50V	150pF
C2358	ECUV1H151JCX	S.M.CAP	50V	150pF
C2359	ECA1HM4R7GB	ELECT	50V	4.7μF
C2361	ECA1CM470GB	ELECT	16V	47μF
C2362	ECA1HM101GB	ELECT	50V	100pF
C2363	ECEA1HU221	ELECT	50V	220μF
C2364	ECEA1HU221	ELECT	50V	220μF
C2365	ECA1HM101GB	ELECT	50V	100pF
C2366	ECA0JM222GB	ELECT	6.3V	2.2nF
C2367	ECUV1H104ZFX	S.M.CAP	50V	100nF
C2370	ECA1HM100GB	ELECT	50V	10pF
C2371	ECUV1H472KBX	S.M.CAP	50V	4.7nF
C2372	ECUV1H472KBX	S.M.CAP	50V	4.7nF
C2375	ECUV1H104ZFX	S.M.CAP	50V	100nF
C2377	ECKC1H102J	CERAMIC	50V	1000pF
C2378	ECKC1H102J	CERAMIC	50V	1000pF
C2381	ECKC1H103JB	CERAMIC	50V	10nF
C2382	ECKC1H103JB	CERAMIC	50V	10nF
C2430	ECUV1H561JCX	S.M.CAP	50V	560pF
C2431	ECUV1H561JCX	S.M.CAP	50V	560pF
C2437	ECUV1H561JCX	S.M.CAP	50V	560pF
C2438	ECUV1H561JCX	S.M.CAP	50V	560pF
C3001	ECJ2VF1H103Z	ELECT	350V	10nF
C3002	ECA1CM470GB	ELECT	16V	47μF
C3003	ECUV1H102ZFX	S.M.CAP	50V	1nF
C3004	ECUV1H104ZFX	S.M.CAP	50V	100nF
C3005	ECUV1H104ZFX	S.M.CAP	50V	100nF
C3006	ECA1HM4R7GB	ELECT	50V	4.7μF
C3007	ECA1HM4R7GB	ELECT	50V	4.7μF
C3008	ECUV1H104ZFX	S.M.CAP	50V	100nF
C3009	ECUV1H473ZFX	S.M.CAP	50V	47nF
C3010	ECUV1H680JCX	S.M.CAP	50V	68pF

Ref No.	Part No.	Description		
C3011	ECA1CM221GB	ELECT	16V	220pF
C3012	ECA1CM470GB	ELECT	16V	47μF
C3013	ECA1CM470GB	ELECT	16V	47μF
C3014	EEUNA1A470B	S.M.CAP	10V	47pF
C3015	ECUV1H104ZFX	S.M.CAP	50V	100nF
C3016	ECA1CM470GB	ELECT	16V	47μF
C3017	ECUV1H104ZFX	S.M.CAP	50V	100nF
C3018	ECUV1H104ZFX	S.M.CAP	50V	100nF
C3021	ECA1CM331B	ELECT	16V	330pF
C3022	ECA1CM102B	ELECT	16V	1.0nF
C3023	ECA1HM100GB	ELECT	50V	10pF
C3024	ECA1HM2R2GB	ELECT	50V	2.2μF
C3025	ECA1CM470GB	ELECT	16V	47μF
C3027	ECJ2VF1H104Z	ELECT	350V	0.10μF
C3028	ECUV1H470JRX	S.M.CAP	50V	47pF
C3120	ECUV1H103KBX	S.M.CAP	50V	10nF
C3122	ECUV1H102KBX	S.M.CAP	50V	1nF
C3123	ECUV1H103KBX	S.M.CAP	50V	10nF
C3124	ECUV1H102KBX	S.M.CAP	50V	1nF
C3255	ECA1HM4R7GB	ELECT	50V	4.7μF
C3256	ECA1HM4R7GB	ELECT	50V	4.7μF
C3282	ECKC1H561J	CERAMIC	50V	560pF
C3284	ECKC1H561J	CERAMIC	50V	560pF
C3351	ECA1CM221GB	ELECT	16V	220pF
C3401	ECEA1HKA100	ELECT	50V	10pF
C3402	ECUV1H561JCX	S.M.CAP	50V	560pF
C3403	ECUV1H561JCX	S.M.CAP	50V	560pF
C3404	ECUV1H561JCX	S.M.CAP	50V	560pF
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	ECEA1HKA4R7	ELECT	50V	4.7μF
C3410	ECEA1HKA100	ELECT	50V	10pF
C3411	ECUV1H561JCX	S.M.CAP	50V	560pF
C3412	ECEA1HKA4R7	ELECT	50V	4.7μF
C3413	ECUV1H102JCX	S.M.CAP	50V	1nF
C3414	ECEA1HKA100	ELECT	50V	10pF
C3415	ECEA1HKA100	ELECT	50V	10pF
C3416	ECEA1HKA4R7	ELECT	50V	4.7μF
C3417	ECEA1HKA100	ELECT	50V	10pF
C3418	ECEA1HKA100	ELECT	50V	10pF
C3419	ECUV1H561JCX	S.M.CAP	50V	560pF
C3420	ECUV1H561JCX	S.M.CAP	50V	560pF
C3421	ECUV1H561JCX	S.M.CAP	50V	560pF
C3422	ECUV1H561JCX	S.M.CAP	50V	560pF
C3423	ECUV1H561JCX	S.M.CAP	50V	560pF
C3424	ECUV1H561JCX	S.M.CAP	50V	560pF
C3425	ECUV1H561JCX	S.M.CAP	50V	560pF
C3426	ECUV1H561JCX	S.M.CAP	50V	560pF
C3427	ECUV1H102JCX	S.M.CAP	50V	1nF
C3428	ECEA1HKA4R7	ELECT	50V	4.7μF
C3429	ECEA1CKA220	ELECT	16V	22μF
C3430	ECEA1HKA4R7	ELECT	50V	4.7μF
C3431	ECEA1CN470	ELECT	16V	47μF
C3432	ECUV1H104ZFX	S.M.CAP	50V	100nF
C3433	ECA1CM221GB	ELECT	16V	220pF
C3434	ECUV1H561JCX	S.M.CAP	50V	560pF
C3435	ECEA1HKA100	ELECT	50V	10pF
C3436	ECUV1H561JCX	S.M.CAP	50V	560pF
C3437	ECUV1H561JCX	S.M.CAP	50V	560pF
C3438	ECEA1HKA4R7	ELECT	50V	4.7μF
C3439	ECUV1H561JCX	S.M.CAP	50V	560pF
C3440	ECUV1H561JCX	S.M.CAP	50V	560pF
C3441	ECEA1HKA100	ELECT	50V	10pF
C3442	ECUV1H561JCX	S.M.CAP	50V	560pF
C3443	ECUV1H561JCX	S.M.CAP	50V	560pF
C3444	ECEA1HKA4R7	ELECT	50V	4.7μF
C3445	ECUV1H102JCX	S.M.CAP	50V	1nF
C3446	ECEA1HKA4R7	ELECT	50V	4.7μF
C3447	ECUV1H561JCX	S.M.CAP	50V	560pF
C3460	ECUV1H561JCX	S.M.CAP	50V	560pF
C3461	ECUV1H561JCX	S.M.CAP	50V	560pF
C3496	ECUV1H561JCX	S.M.CAP	50V	560pF
C3497	ECUV1H561JCX	S.M.CAP	50V	560pF
C3498	ECUV1H561JCX	S.M.CAP	50V	560pF
C3802	ECA1CM100GB	ELECT	16V	10pF
C3803	ECA1EM100GB	ELECT	25V	0.1μF
C3804	ECUV1H104ZFX	S.M.CAP	50V	100nF

Ref No.	Part No.	Description			
C3805	ECUV1H224ZFX	S.M.CAP	50V	0.22μF	
C3806	ECA1HM101GB	ELECT	50V	100pF	
C3807	ECA1HM100GB	ELECT	50V	10pF	
C3808	ECA1CM470GB	ELECT	16V	47μF	
C3814	ECA1HM010GB	ELECT	50V	1pF	
C3816	ECA1CM471GB	ELECT	16V	470pF	
C3817	ECA1CM221GB	ELECT	16V	220pF	
C3818	ECUV1H103KBX	S.M.CAP	50V	10nF	
C3819	ECA1HM010GB	ELECT	50V	1pF	
C3821	ECA1HM010GB	ELECT	50V	1pF	
C3823	ECUV1H104ZFX	S.M.CAP	50V	100nF	
C3824	ECUV1H103KBX	S.M.CAP	50V	10nF	
C3825	ECJ2VB1C224K	ELECT	350V	0.22μF	
C3826	ECUV1H103KBX	S.M.CAP	50V	10nF	
C3827	ECUV1H224ZFX	S.M.CAP	50V	0.22μF	

TERMINALS AND LINKS

JA1	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA1	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JA11	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA12	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA13	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JA14	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JA15	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JA16	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JA18	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA19	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA2	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA2	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JA20	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JA21	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA23	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA24	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA26	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA27	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA29	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA3	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA3	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JA30	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA31	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA33	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA35	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JA36	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA37	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA4	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JA4	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JA5	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JA6	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JA7	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JA8	ERJ8GEY0R00	S.M.CAR	.125W	5%	0Ω
JA9	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JK2403	TJB8E014	RCA TERMINAL (2P)			
JK3281	TJB16656	A.V. TERMINAL			
JK3401	1364−21−21	SCART SOCKET			
JK3402	1364−21−21	SCART SOCKET			
JK3403	1364−21−21	SCART SOCKET			
JSE004	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSE009	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSE011	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSE025	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSE026	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSE044	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSE045	ERD25TJ2R2	CARBON	0.25W	5%	2R2Ω
JSF001	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF005	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF006	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF007	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF009	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF010	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF013	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF015	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF017	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF018	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF019	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF020	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF021	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF022	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF023	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω

Ref No.	Part No.	Description			
JSF024	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF025	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF026	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF027	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF028	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF029	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF032	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF034	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF037	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF039	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF041	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF042	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSF043	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSH002	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSH010	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSY03	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω
JSY04	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω

SWITCHES

S840	ESB92S11B	SWITCH	⚠
S1071	EVQ23405R	SWITCH	
S1072	EVQ23405R	SWITCH	
S1073	EVQ23405R	SWITCH	
S1074	EVQ23405R	SWITCH	
S1075	EVQ23405R	SWITCH	

DIFFERENCES FOR MODEL TX--W28D4F

Ref No.	Part No.	Description					
MECHANICAL PARTS							
17	TQF8E2744-1	MODEL LABEL					⚠
18	TXFLK01DAG	DEGAUSS COIL					⚠
19	W66EHK51X81	C.R.T.					
20	TKY8E120	CABINET					⚠
21	TKP8E1152	SPEAKER NET					
22	TNP8EM014AA	M P.C.B.					⚠
23	TMW8E024-5	CONTROL BRACKET					
24	TNPH0176AP	E P.C.B.					⚠
25	TNPA1014AG	D P.C.B.					⚠
26	TNPA1353AB	Y P.C.B.					⚠
27	TKU8E00300	BACK COVER					⚠
MISCELLANEOUS COMPONENTS							
	TPC8E4676	OUTER CARTON					
	TPD8E623	CUSHION TOP					
	TPD8E624	CUSHION BOTTOM					
INTEGRATED CIRCUITS							
IC1102	X24CWH0503KD	EAROM *					
COILS							
L351	TAXK0036	DELAY LINE					
L353	TLT120K991R	COIL					
L361	TAXK0036	DELAY LINE					
L363	TLT082K991R	COIL					
L371	TAXK0036	DELAY LINE					
L373	TLT120K991R	COIL					
L573	ELHKLB026B	COIL					
RESISTOR							
R276	ERDS1TJ2R2	CARBON	0.5W	5%	2R2Ω		
R370	ERQ1CKPR68	FUSIBLE	1W	5%	R68Ω		⚠
R419	ERG3FJ331	METAL	3W	5%	330Ω		⚠
R452	ERDS1TJ2R7	CARBON	0.5W	5%	2R7Ω		
R457	ERJ6GEYJ622	S.M.CARB	0.125W	5%	6K2Ω		
R556	ERDS1TJ333	CARBON	0.5W	5%	33KΩ		
R558	ERDS1TJ393	CARBON	0.5W	5%	39KΩ		
R561	ERD25TJ123	CARBON	0.25W	5%	12KΩ		
R562	ERD25TJ223	CARBON	0.25W	5%	22KΩ		
R664	ERJ6GEYJ912	S.M.CARB	0.125W	5%	9K1Ω		
R665	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω		
R667	ERJ6GEYJ683	S.M.CARB	0.1W	5%	68KΩ		
R680	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47KΩ		
R906	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56KΩ		
R907	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2Ω		
R909	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1KΩ		
R910	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220Ω		
R914	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω		
R924	ERDS1FYJ390	CARBON	0.5W	5%	39Ω		⚠
CAPACITORS							
C505	ECA1EM332E	ELECT	25V	3.3nF			
C574	ECWF4105JBB	FILM	400V	1μF			

DIFFERENCES FOR MODEL TX--W32D4F

Ref No.	Part No.	Description					
MECHANICAL PARTS							
17	TQF8E2750	MODEL LABEL					⚠
18	TLK8E05123	DEGAUSS COIL					⚠
19	W76LFC185X05	C.R.T.					
20	TKY8E110	CABINET					⚠
21	TKP8E1148	SPEAKER NET					
22	TNP8EM016AA	M P.C.B.					⚠
23	TMW8E023	CONTROL BRACKET					
24	TNPH0176AQ	E P.C.B.					⚠
25	TNPA1014AH	D P.C.B.					⚠
26	TNPA1353AE	Y P.C.B.					⚠
27	TKU8E00290	BACK COVER					⚠
MISCELLANEOUS COMPONENTS							
	TLK8E05124	GEOMAGNETIC COIL					⚠
	TPC8E4729	OUTER CARTON					
	TPD8E621	CUSHION TOP					
	TPD8E622	CUSHION BOTTOM					
INTEGRATED CIRCUITS							
IC1102	X24CWH0503LD	EAROM *					
IC1901	LA6515	EARTH CORRECTION					
COILS							
L351	SDL5000	DELAY LINE					
L353	TLT150K991R	COIL					
L361	SDL5000	DELAY LINE					
L363	TLT100K991R	COIL					
L371	SDL5000	DELAY LINE					
L373	TLT150K991R	COIL					
L573	ELHKLB028B	COIL					
L1901	EXCELDR25V	COIL					
TRANSISTORS							
Q1901	BC847B	TRANSISTOR					
RESISTOR							
R370	ERQ1CJP1R0	FUSIBLE	1W	5%	1R0Ω		⚠
R419	ERG3FJ471	METAL	3W	5%	470Ω		⚠
R452	ERDS1TJ3R3	CARBON	0.5W	5%	3R3Ω		
R457	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω		
R556	ERDS1TJ273	CARBON	0.5W	5%	27KΩ		
R558	ERDS1TJ273	CARBON	0.5W	5%	27KΩ		
R561	ERD25TJ333	CARBON	0.25W	5%	33KΩ		
R562	ERD25TJ393	CARBON	0.25W	5%	39KΩ		
R664	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8Ω		
R665	ERJ6GEYJ392	S.M.CARB	0.1W	5%	3K9Ω		
R667	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39KΩ		
R680	ERJ6GEYJ303	S.M.CARB	0.125W	5%	30KΩ		
R906	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15KΩ		
R907	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω		
R909	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω		
R910	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100Ω		
R914	ERJ6GEYJ202	S.M.CARB	0.125W	5%	2KΩ		
R924	ERDS1FYJ330	CARBON	0.5W	5%	33Ω		
R1112	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ		
R1901	ERDS1TJ100	CARBON	0.5W	5%	10Ω		
R1902	ERDS1TJ100	CARBON	0.5W	5%	10Ω		
R1903	ERJ6GEYJ683	S.M.CARB	0.1W	5%	68KΩ		
R1904	ERJ6GEYJ334	S.M.CARB	0.1W	5%	330KΩ		
R1905	ERJ6GEYJ683	S.M.CARB	0.1W	5%	68KΩ		
R1906	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56KΩ		
R1907	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω		
R1908	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7Ω		
R1909	ERJ6GEYJ362	S.M.CARB	0.125W	5%	3K6Ω		
R1910	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω		
R1911	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0Ω		
R1912	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10KΩ		
R1913	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2Ω		
R1914	TSF19161	FS LINK					⚠

Ref No.	Part No.	Description		
CAPACITORS				
C505	ECA1EM222GB	ELECT	25V	2.2nF
C574	ECWF4684JBB	FILM	400V	0.68μF
C1901	ECQM1H474J	FILM	50V	470nF
C1902	ECQM1H474J	FILM	50V	470nF
C1903	ECA1EM470GB	ELECT	25V	47pF
C1904	ECJ2VF1H103Z	ELECT	350V	10nF
C1905	ECUV1C224KBX	S.M.CAP	16V	220nF

Ref No.	Part No.	Description

SCHEMATIC DIAGRAMS FOR MODELS

TX-W32D4F
TX-W28D4F

(EURO-5 CHASSIS)

IMPORTANT SAFETY NOTICE

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

NOTES

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. Components marked "L" on the schematic diagram shows leadless parts.
5. TEST POINT
   Test Point Position

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

7. 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

8. 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

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. Take the following precautions :-

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 simutaneously 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.

ZEICHENERKLÄRUNG FÜR MODELL

TX-W32D4F
TX-W28D4F

(EURO-5 CHASSIS)

WICHTIGER SICHERHEITSHINWEIS

Teile, die mit einen Hinweis ⚠ gekennzeichnet sind, sind wichtig für die Sicherheit, Sollte ein Auswechsein erforderlich sein, sind unbedingt Originalteile einzusetzen.

ANMERKUNG

1. WIDERSTÄNDE
   Alle ¼W Widerstände sind Kohlewiderstände, Abweichungen sind folgt gekennzeichnet.
   Die Maßeinheit ist OHM (Ω) (k=1,000, M=1,000,000)

2. KONDENSATOREN
   Alle Kondensatoren sind Keramikausführungen. Spannungsfestigkeit 50V. Abweichungen sind wie folgt gekennzeichnet. Die Maßeinheit ist μF, wenne keine anderen Bezeichnungen gennant sind.
3. SPULEN
   Die Maßeinheit ist μH, Abweichungen sind gekennzeichnet.
4. Mit "L" gekennzeichnete Teile sind ohne Anschlußdrähte.
5. TESTPUNKTE
   Kennzeichnung der Testpunktposition

6. MASSE SYMBOL
   Erdung am Chassis Erdung an Masse-Leitung

7. SPANNUNGSMESSUNG
   Spannungsmessungen sind mit einem d.c.-Voltmeter durchzuführen. Die Meßbedingungen sind folgende:

Netzspannung	a.c. 220V-240V, 50Hz
Wiedregabe Signal	Farbbalken-Testbild
Wiedergabesignal	Farbbalken-Testbild (HF)

8. Videosignalweg
   Audiosignalweg

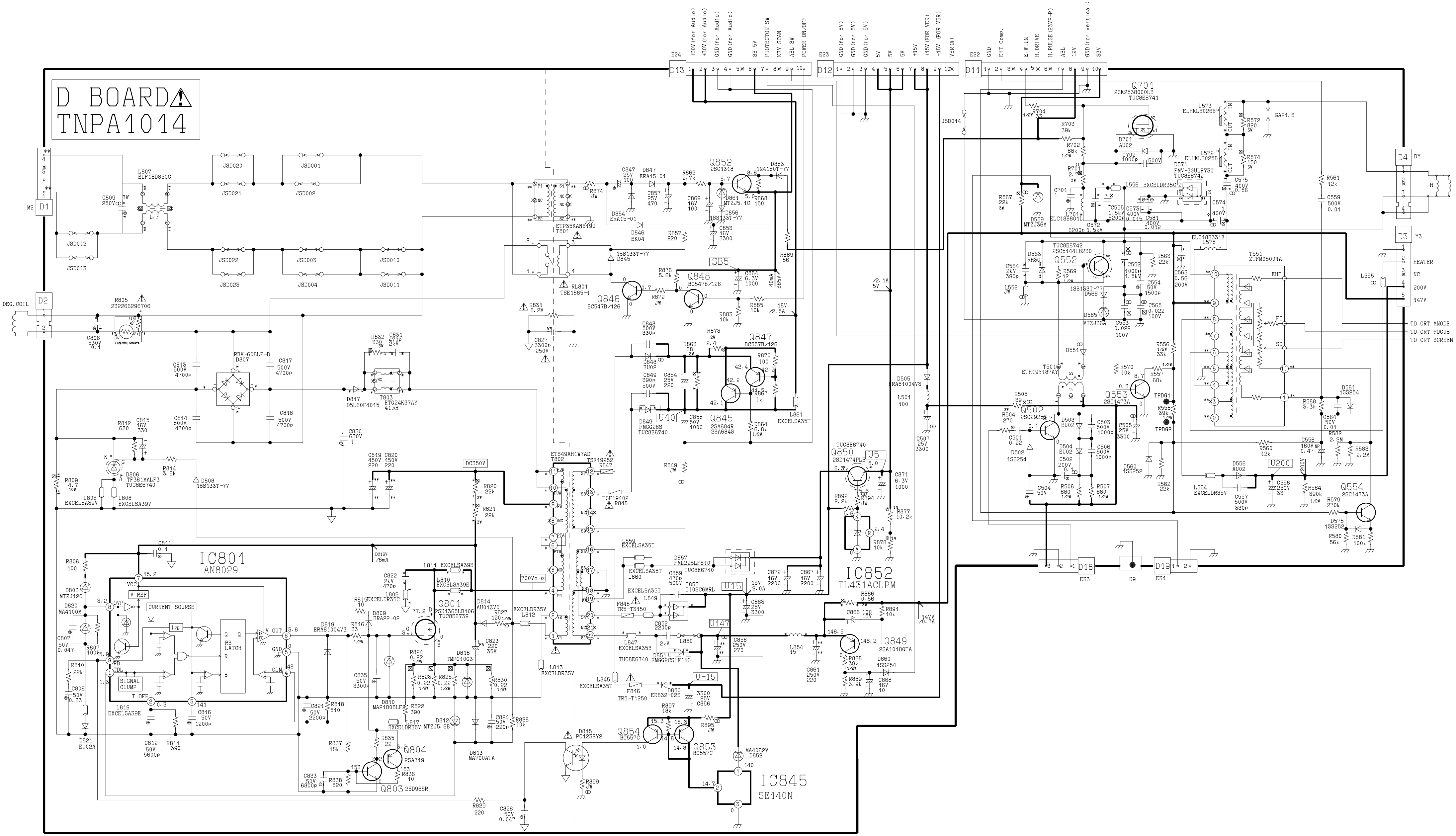
Änderungen im Laufe der Fertigung sind möglich.

BEMERKUNGEN

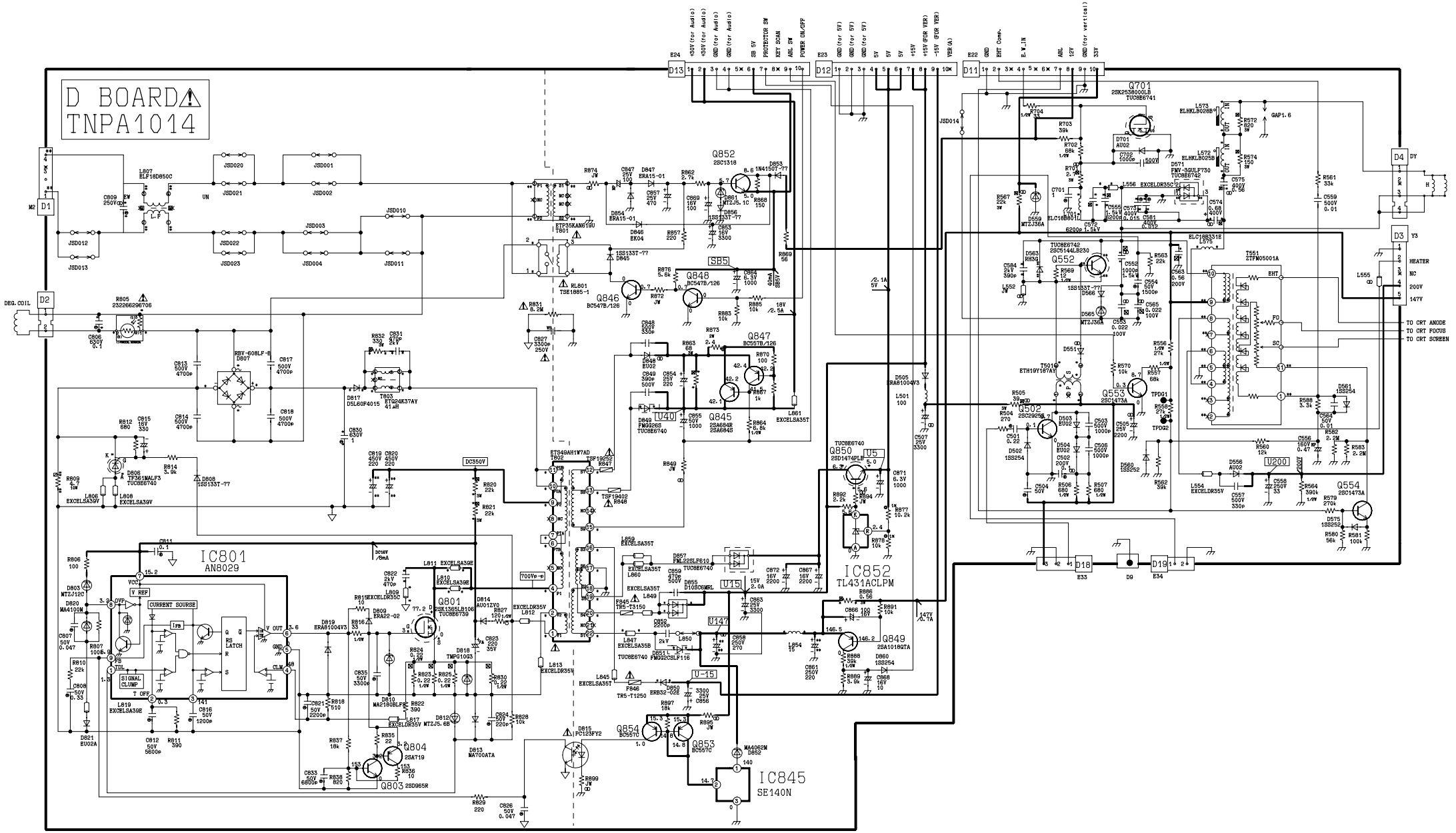
1. Das Schaltnetzteil enthält Bereiche, die direkt mit dem Netz verbunden sind. Diese Bereiche sind im Schaltplan mit HOT gekennzeichnet. Alle anderen Schaltungen sind mit COLD gekennzeichnet und haben keine direkte Verbindung mit den Netz :-

a. Weder die Leitungen im heißen noch Leitungen im heißen und im kalten Bereich gleichzeitig berühren. Es besteht die Gefahr eines elektrischen Schlages.
b. Keinesfalls die Leitungen im heißen Bereich mit denen im kalten Bereich verbinden oder kurzschliessen. Dies kann zur Zerstörung von Bauteilen oder Sicherungen führen. Außerdem ist die elektrische Betriebssicherheit des Gerätes nicht mehr gegeben.
c. Keine Messinstrumente gleichzeitig an Leitungen im heissen und kalten Bereich anschliessen. Sicherungen könnten zerstört werden. Die Erde des Messinstrumentes immer mit der des zu prüfenden Schaltkreises verbinden.
d. Vor Ausbau des Chassis, Stecker aus der Netzsteckdose ziehen.

TX-W28D4F


D BOARD
TNPA1014
IC801
AN8029
IC852
TL431ACLPM
IC845
SE140N
TO CRT ANODE
TO CRT FOCUS
TO CRT SCREEN
DEG. COIL

TX-W32D4F


D BOARD
TNPA1014
IC801
AN8029
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TL431ACLPM
IC845
SE140N
Q804
2SA719
Q803
2SD965R
Q801
2SK1365LB10B
Q852
2SC1318
Q848
BC547B/126
Q846
BC547B/126
Q847
BC557B/126
Q845
2SA684R
2SA684S
Q850
2SD1474PLP
Q849
2SA1018GTA
Q853
BC557C
Q854
BC557C
Q701
2SK2538000LB
Q552
2SC5144LB230
Q553
2SC1473A
Q502
2SC2925
Q554
2SC1473A
U40
U5
U15
U-15
U147
U200
SB5
D1
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D13
D18
D19
E24
E33
E34
DEG. COIL
HEATER
NC
200V
147V
DY
Y3
H
TO CRT ANODE
TO CRT FOCUS
TO CRT SCREEN
DC350V
700Vp-p
147V 0.7A
2.1A 5V
CURRENT SOURSE
V REF
SIGNAL CLUMP
RS LATCH
V OUT
OVP
IFB
IDL
T OFF
SB 5V
PROTECTOR SW
KEY SCAN
ABL SW
POWER ON/OFF
GND (for 5V)
5V
+15V (FOR VER)
-15V (FOR VER)
VER (A)
GND
EHT Comp.
E_W_IN
ABL
12V
GND (for vertical)
33V
+30V (for Audio)
GND (for Audio)
JSD020
JSD001
JSD021
JSD002
JSD010
JSD003
JSD012
JSD022
JSD023
JSD004
JSD011
JSD013
L.F
RL801
TSE1885-1
ETP35KAN619U
T801
ETS49AH1W7AD
T602
T603
RTG24K37AY
RBV-606LF-E
D807
T5010
ETH19Y187AY
T551
2TFM05001A
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L556
EXCELDR35C
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EXCELDR35V
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EXCELDR35C
L557
ELC18B331E
L573
ELHKLB0268
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ELHKLB025B
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FMV-30ULF730
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L947
L948
L949
L950
L951
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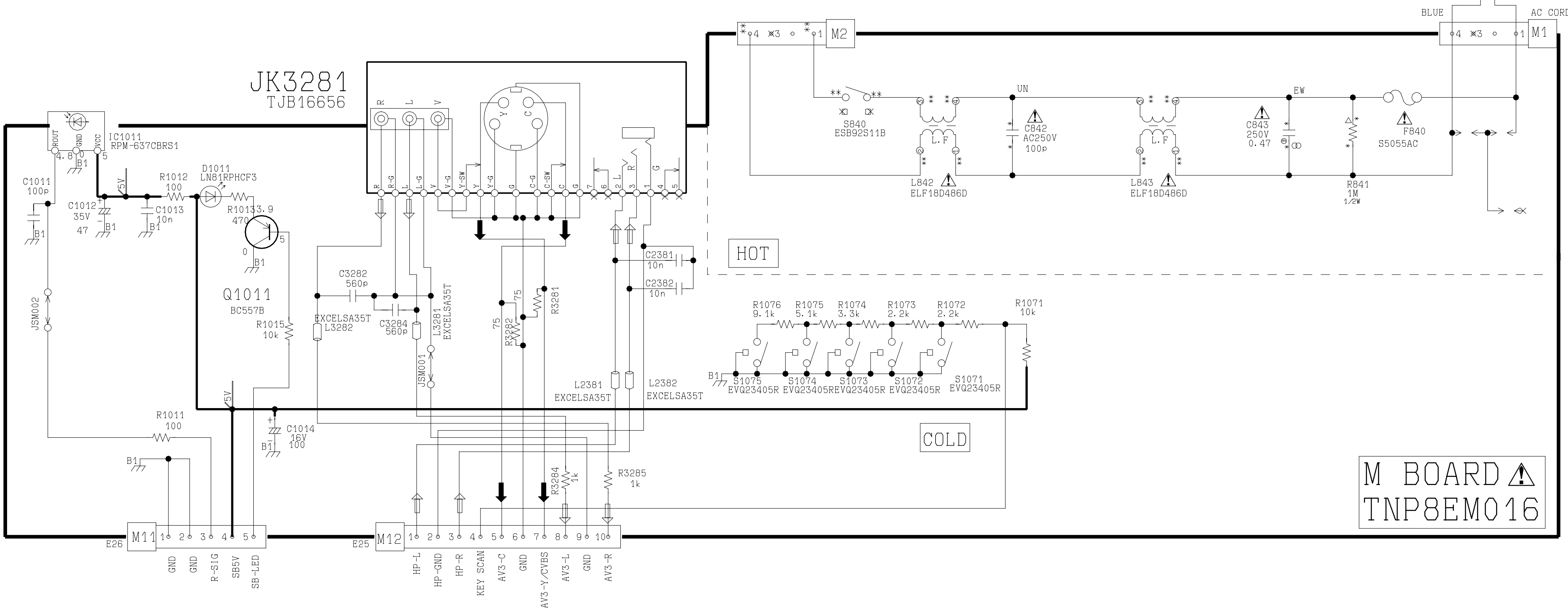
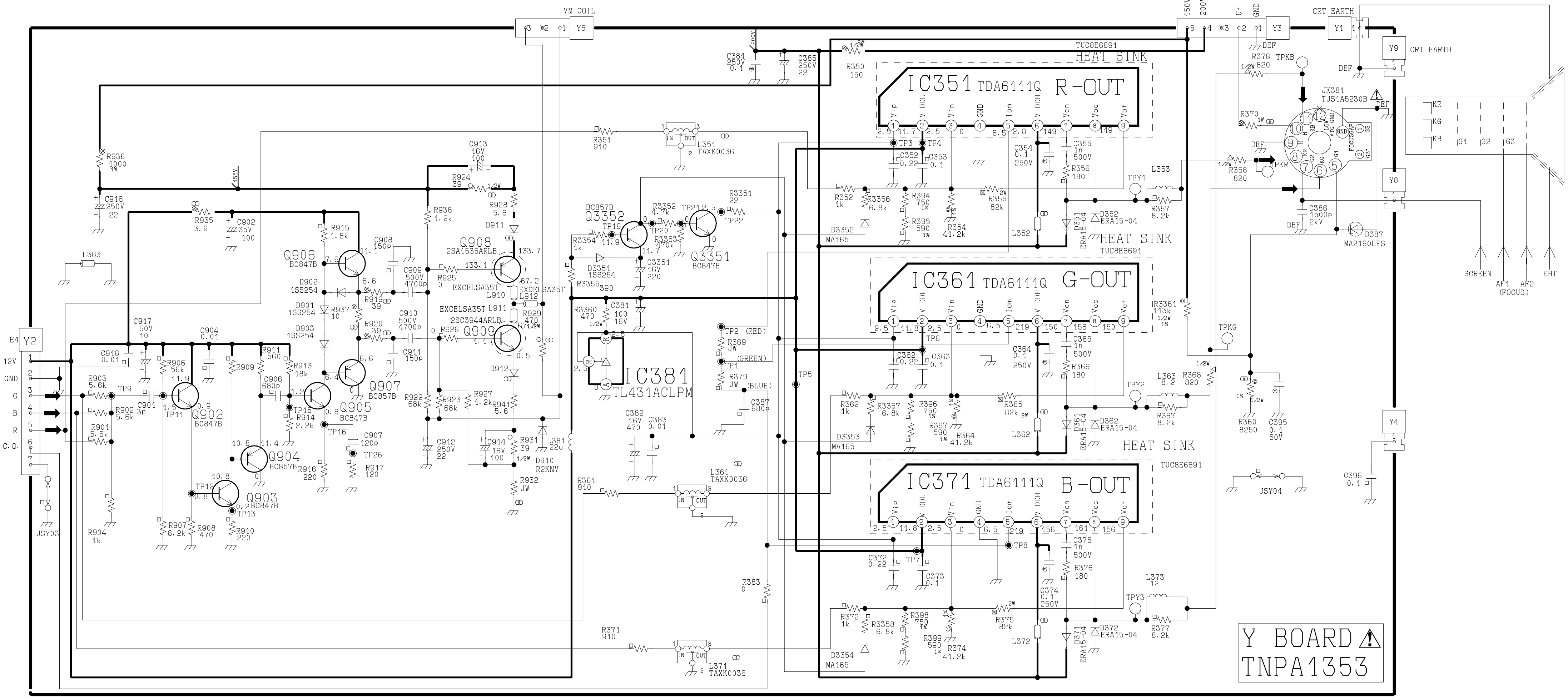
L1000

TX-W32D4F

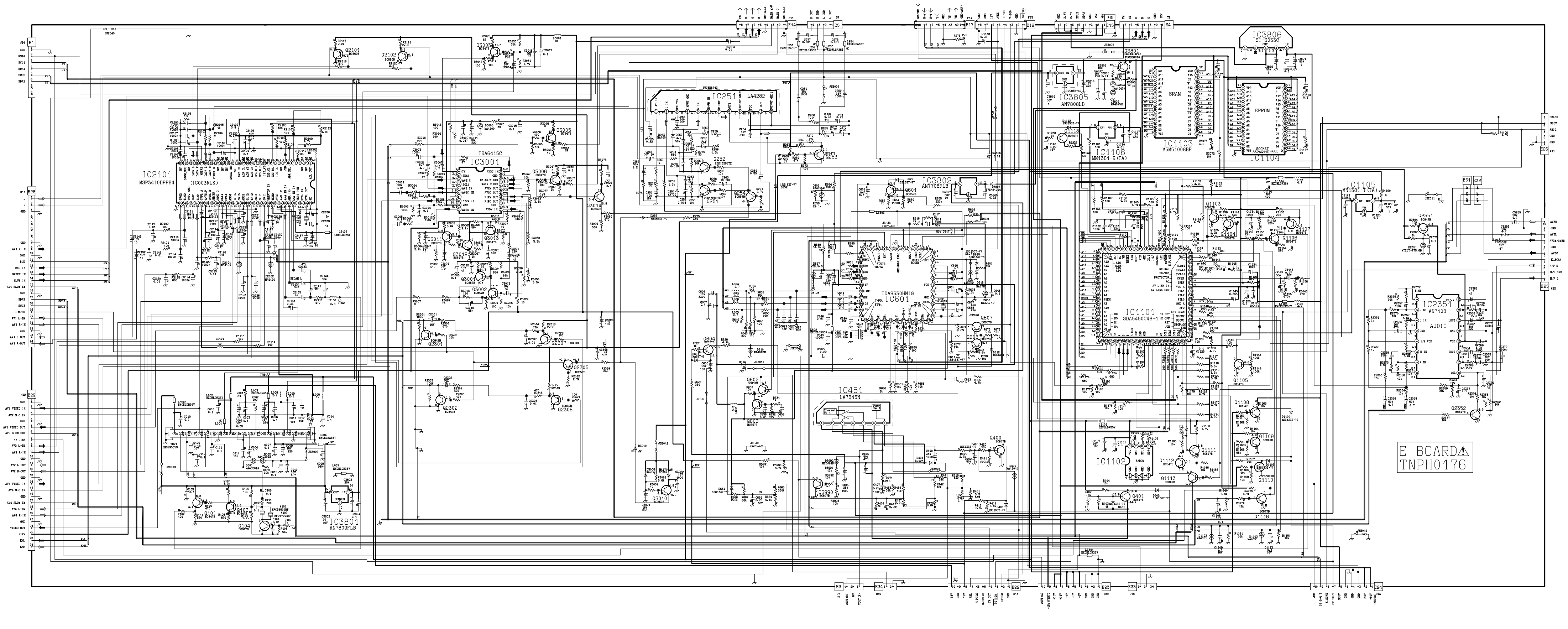

JK3281
TJB16656
IC1011
RPM-637CBRS1
D1011
LN81RPHCF3
Q1011
BC557B
M2
M1
AC CORD
BLUE
BROWN
S840
ESB92S11B
L842
ELF18D486D
L843
ELF18D486D
C842
AC250V
100p
C843
250V
0.47
R841
1M
F840
S5055AC
HOT
COLD
R1076 9.1k
R1075 5.1k
R1074 3.3k
R1073 2.2k
R1072 2.2k
R1071 10k
S1075 EVQ23405R
S1074 EVQ23405R
S1073 EVQ23405R
S1072 EVQ23405R
S1071 EVQ23405R
L2381 EXCELSA35T
L2382 EXCELSA35T
L3282 EXCELSA35T
L3281 EXCELSA35T
C3282 560p
C3284 560p
C2381 10n
C2382 10n
R3281
R3282
R3284 1k
R3285 1k
R1011 100
R1012 100
R1013 3.9 470
R1015 10k
C1011 100p
C1012 35V 47
C1013 10n
C1014 16V 100
JSM001
JSM002
M11
E26
GND GND R-SIG SB5V SB-LED
M12
E25
HP-L HP-GND HP-R KEY SCAN AV3-C GND AV3-Y/CVBS AV3-L GND AV3-R
M BOARD
TNP8EM016

TX-W28D4F



VM COIL
CRT EARTH
HEAT SINK
IC351 TDA6111Q R-OUT
IC361 TDA6111Q G-OUT
IC371 TDA6111Q B-OUT
IC381 TL431ACLPM
JK381 TJS1A5230B
SCREEN
AF1 (FOCUS)
AF2
EHT
Y BOARD
TNPA1353

TX-W28D4F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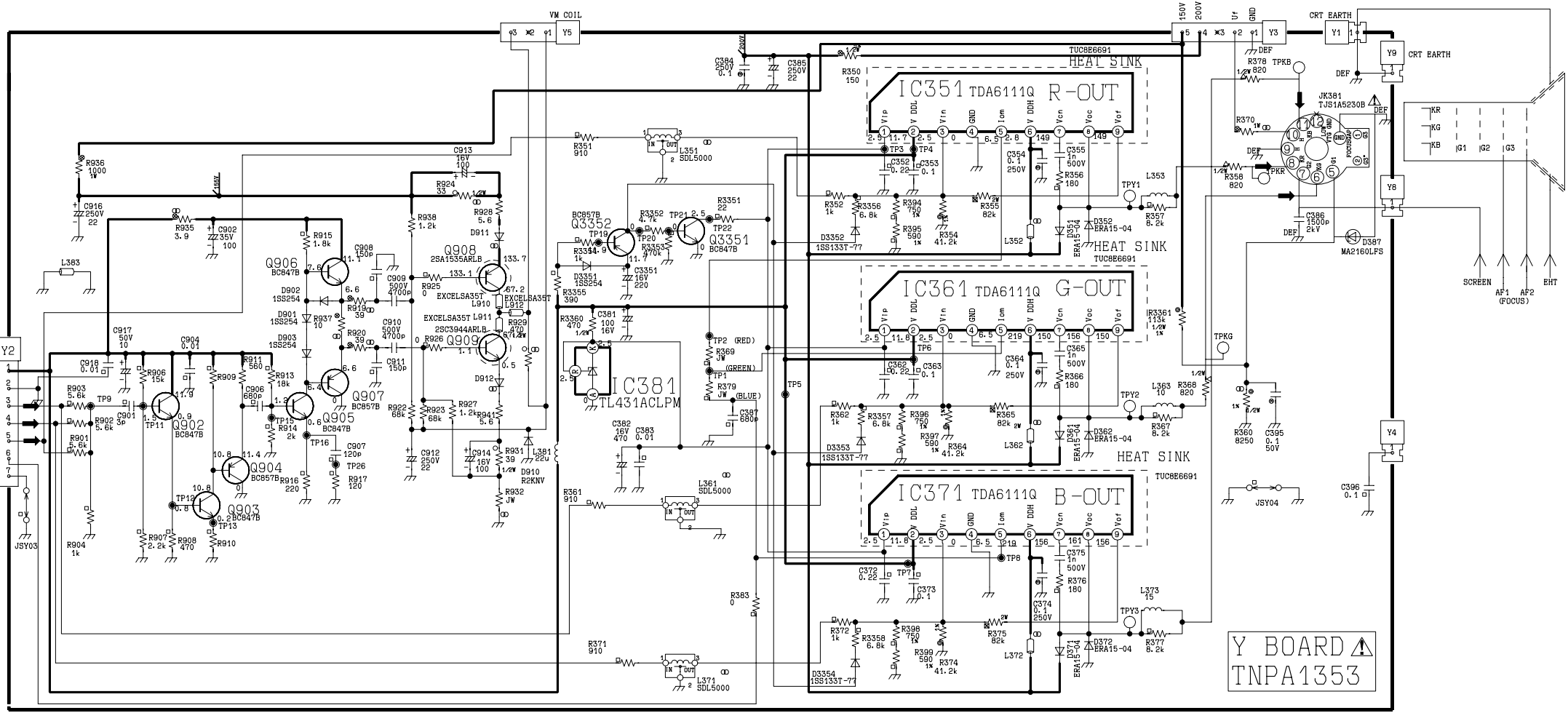
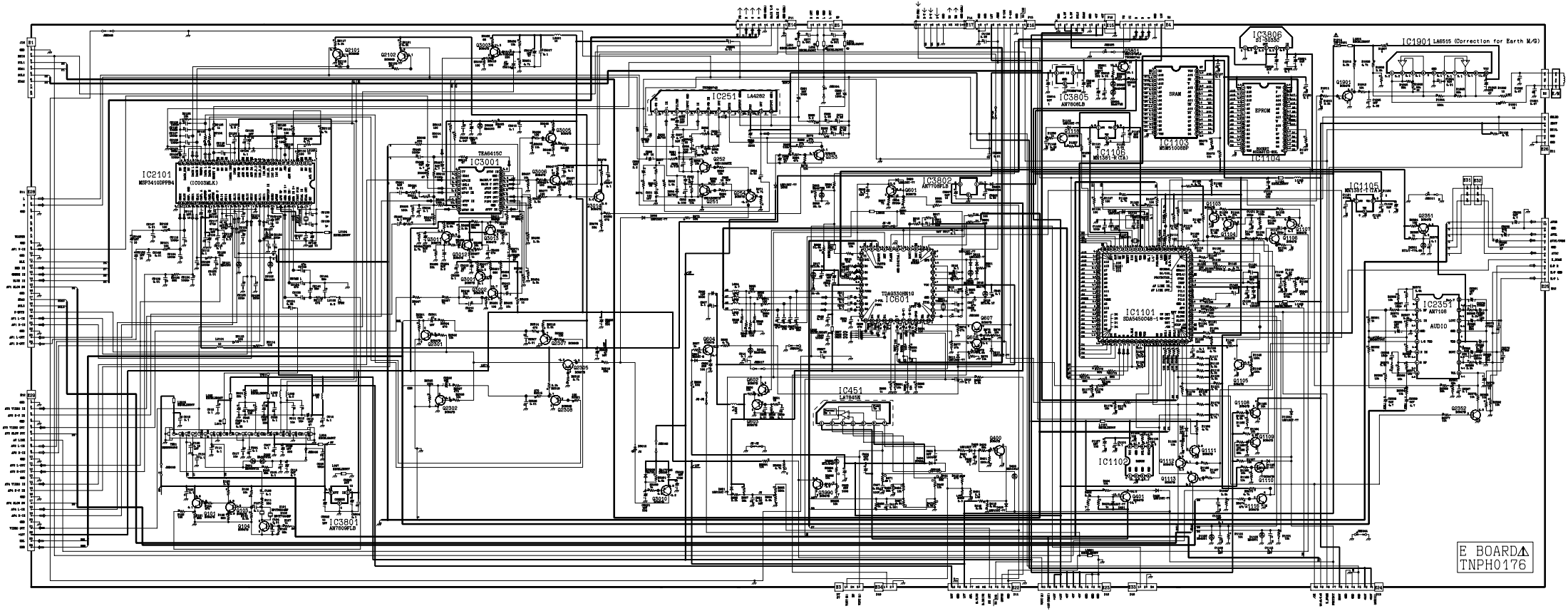
MSP3410DPPB4
IC3001
TEA6415C
IC251
LA4282
IC3805
AN7808LB
IC1106
MN1381-R(TA)
IC1103
M5M51008BP
SRAM
EPROM
IC1104
IC3806
SI-3033C
IC3802
AN7708FLB
IC1105
MN1381-T(TA)
IC601
TDA9330HN1G
IC1101
SDA5450C48-1
IC2351
AN7108
AUDIO
IC451
LA7845N
IC1102
IC3801
AN7809FLB
E BOARD
TNPH0176

TX-W32D4F


IC351 TDA6111Q R-OUT
IC361 TDA6111Q G-OUT
IC371 TDA6111Q B-OUT
IC381 TL431ACLPM
HEAT SINK
HEAT SINK
HEAT SINK
TUC8E6691
TUC8E6691
TUC8E6691
Y BOARD
TNPA1353
VM COIL
CRT EARTH
CRT EARTH
SCREEN
AF1
AF2 (FOCUS)
EHT
JSY03
JSY04
Q902 BC847B
Q903 BC847B
Q904 BC857B
Q905 BC847B
Q906 BC847B
Q907 BC857B
Q908 2SA1535ARLB
Q909 2SC3944ARLB
Q3351 BC847B
Q3352 BC857B
D3351 1SS254
D3352 1SS133T-77
D3353 1SS133T-77
D3354 1SS133T-77
MA2160LFS

TX-W32D4F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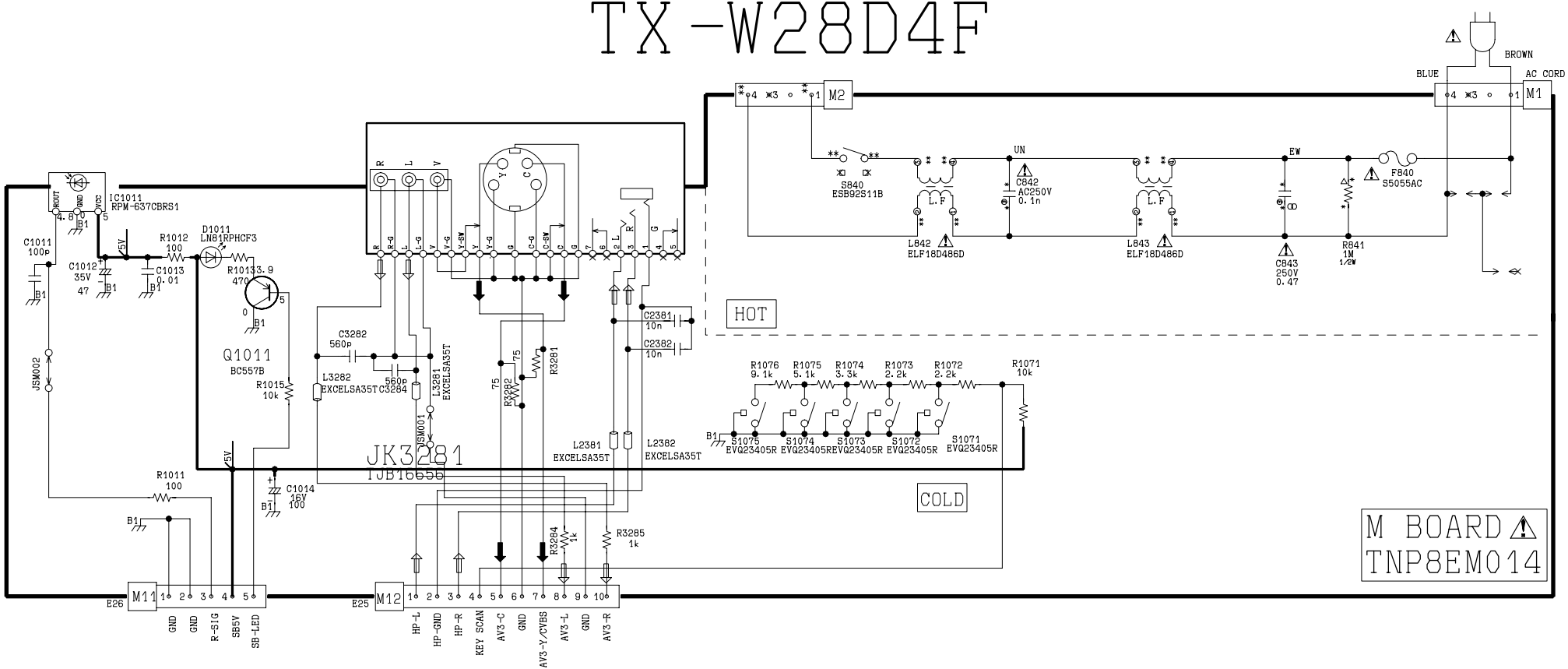
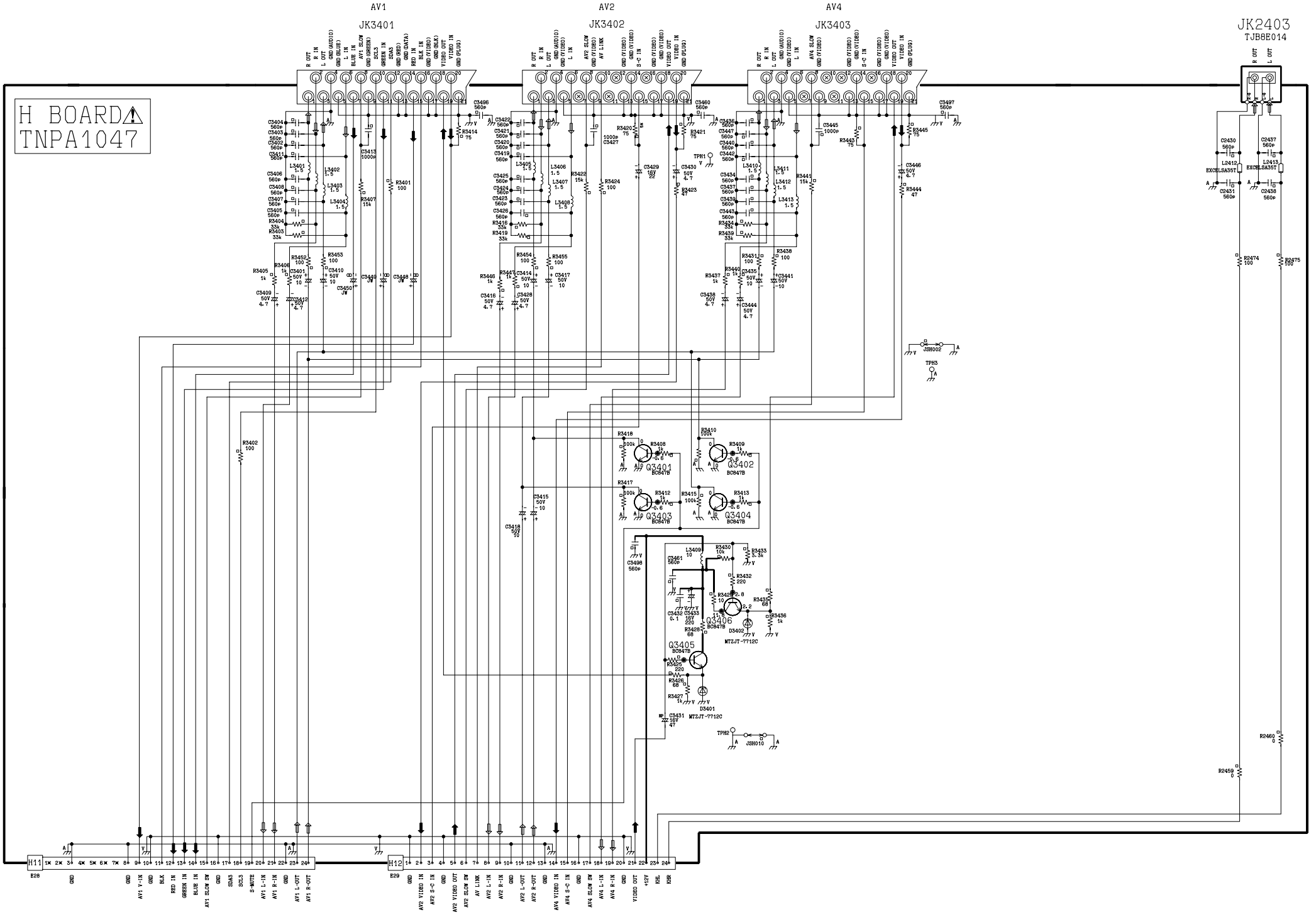
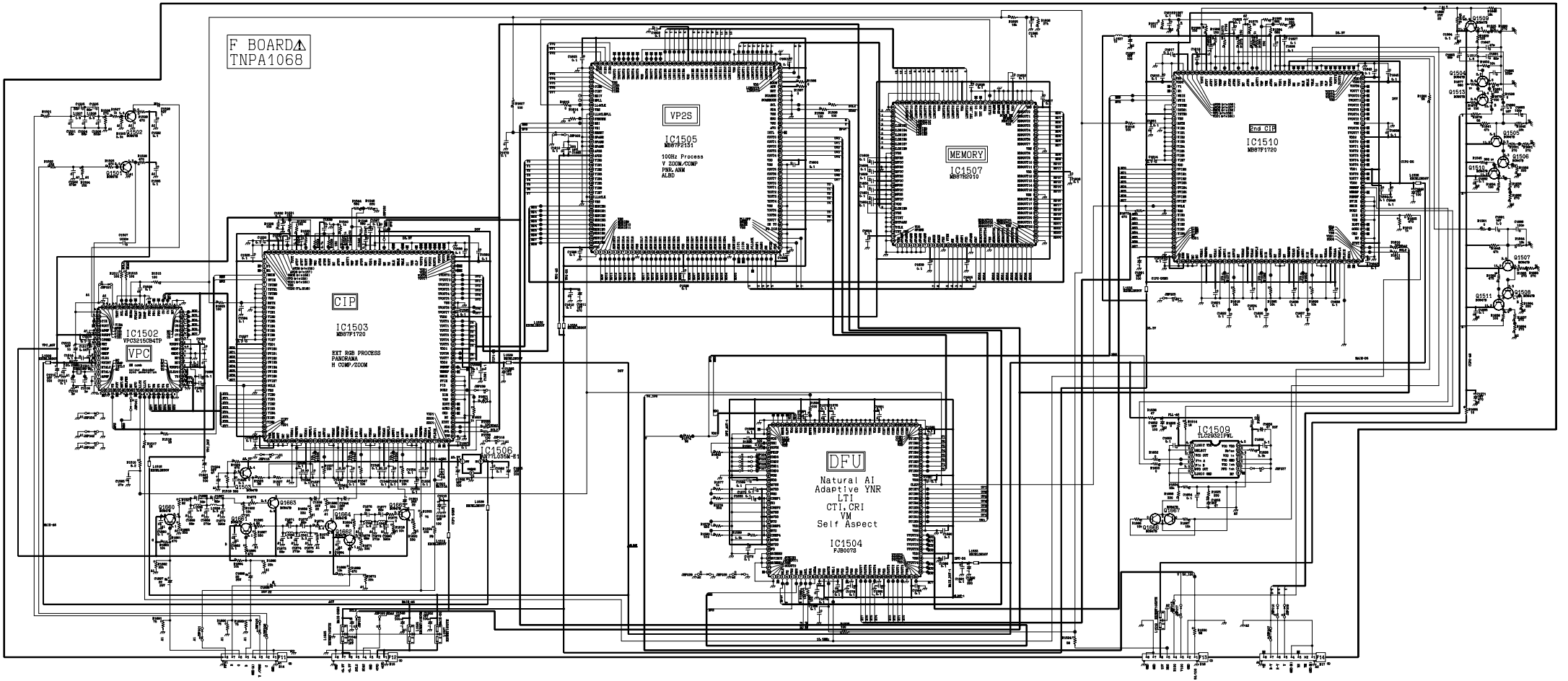
MSP5410DPPB4
(IC005MLK)
IC3001
TEA6415D
IC251
LA4282
IC3806
IC3805
AN7808LB
IC1103
IC1104
IC1901 LA6515 (Correction for Earth M/G)
IC1105
IC3809
AN7705LF
IC601
TDA9320H/10
IC1101
SDA5450048-1
IC451
LA78458
IC1102
IC2351
AN7108
AUDIO
IC3801
AN7809FLD
E BOARD⚠
TNPH0176

TX-W28D4F

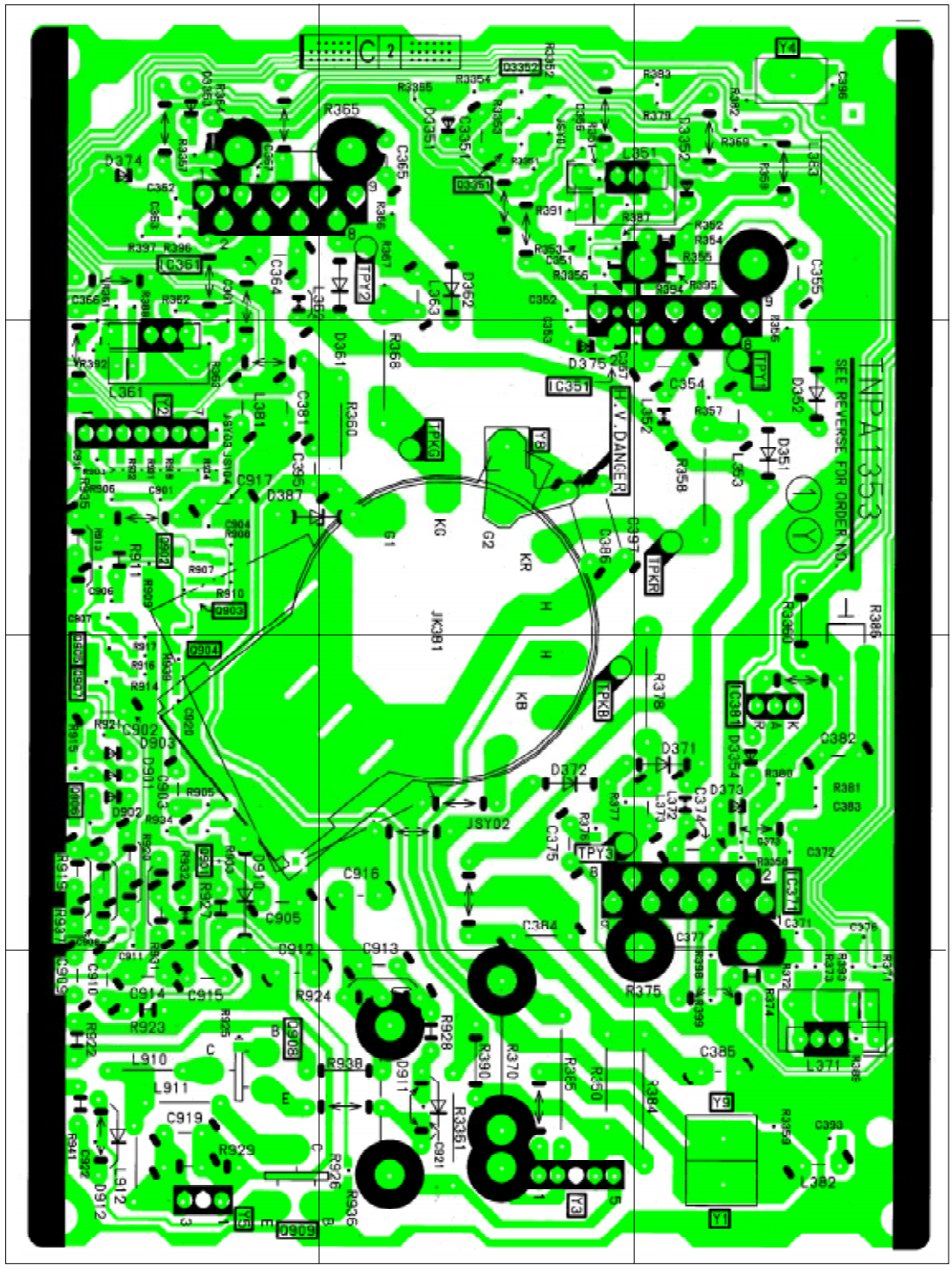

BROWN
BLUE
AC CORD
M1
M2
S840
ESB92S11B
L.F
UN
C842
AC250V
0.1n
L842
ELF18D486D
L843
ELF18D486D
EW
C843
250V
0.47
R841
1M
1/2W
F840
S5055AC
HOT
COLD
IC1011
RPM-637CBRS1
C1011
100p
C1012
35V
47
C1013
0.01
R1012
100
D1011
LN81RPHCF3
R1013
470
3.9
Q1011
BC557B
R1015
10k
C3282
560p
L3282
EXCELSA35T
C3284
560p
L3281
EXCELSA35T
JSM001
JK3281
TJB16656
R3281
75
R3282
75
C2381
10n
C2382
10n
L2381
EXCELSA35T
L2382
EXCELSA35T
R1076
9.1k
R1075
5.1k
R1074
3.3k
R1073
2.2k
R1072
2.2k
R1071
10k
S1075
EVQ23405R
S1074
EVQ23405R
S1073
EVQ23405R
S1072
EVQ23405R
S1071
EVQ23405R
R1011
100
C1014
16V
100
R3284
1k
R3285
1k
M11
E26
GND
GND
R-SIG
SB5V
SB-LED
M12
E25
HP-L
HP-GND
HP-R
KEY SCAN
AV3-C
GND
AV3-Y/CVBS
AV3-L
GND
AV3-R
M BOARD ⚠
TNP8EM014


H BOARD
TNPA1047
AV1
JK3401
AV2
JK3402
AV4
JK3403
JK2403
TJB8E014
Q3401
BC847B
Q3402
BC847B
Q3403
BC847B
Q3404
BC847B
Q3405
BC847B
Q3406
BC847B
D3401
MTZJT-7712C
D3402
MTZJT-7712C
H11
H12
E28
E29


F BOARD⚠
TNPA1068
VP2S
IC1505
MB87P2131
100Hz Process
Y ZOOM/COMP
PWD,ANM
ALBD
MEMORY
IC1507
MB87M2010
End CIP
IC1510
MB87F1720
CIP
IC1503
MB87F1720
EXT RGB PROCESS
PANORAMA
H COMP/ZOOM
VPC
IC1502
VPC3215C84TP
IC1506
MN7L035M-E1
DFU
Natural AI
Adaptive YNR
LTI
CTI,CRI
VM
Self Aspect
IC1504
PJB0075
IC1509
TLC2933IPWL

Y - BOARD TNPA1353

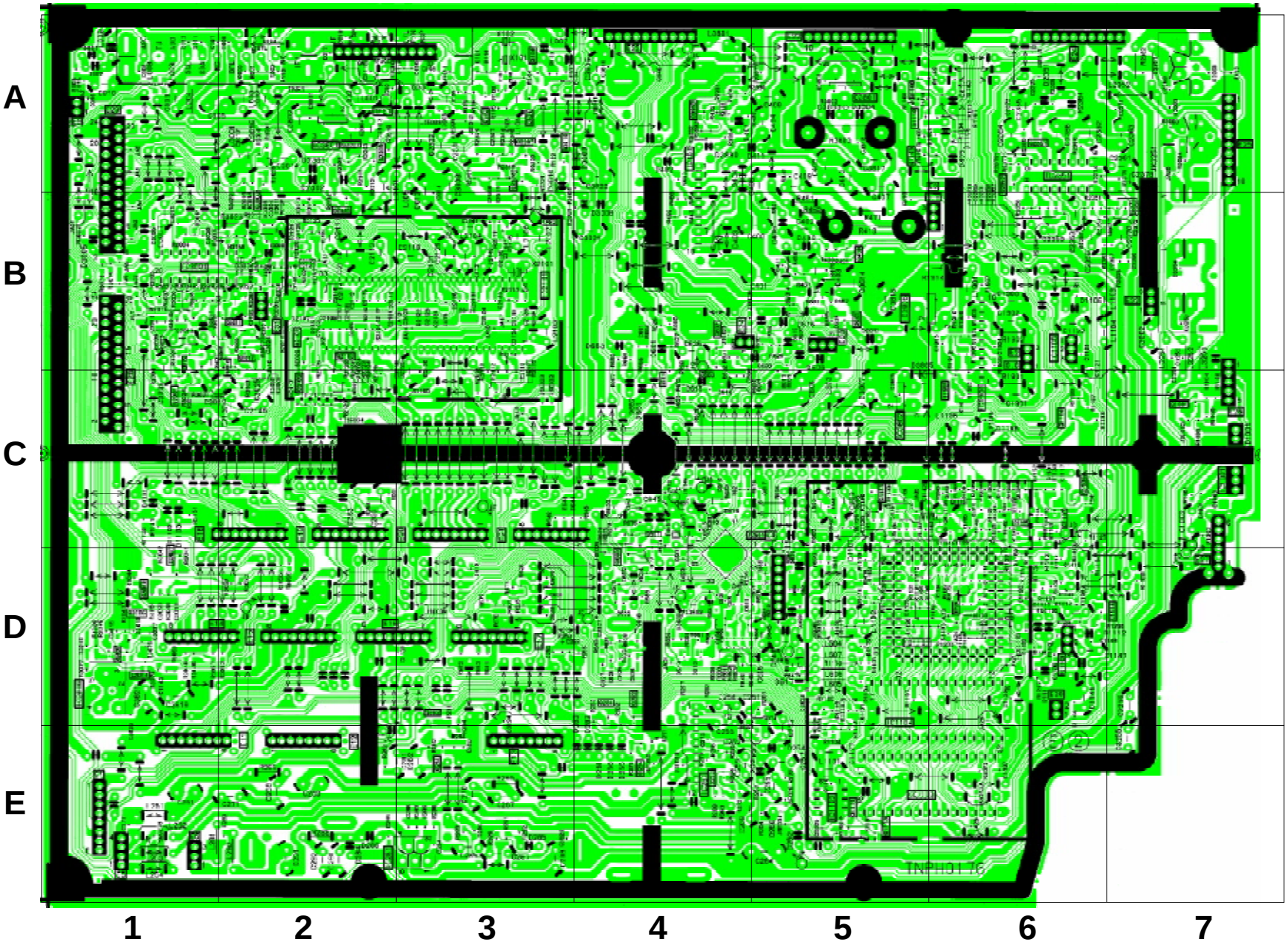
TRAN'S	
Q901	C1
Q902	B1
Q903	B1
Q904	C1
Q906	C1
Q908	D1
Q909	D1
Q3351	A2
Q3352	A2
DIODE'S	
D351	B3
D352	B3
D361	A2
D362	A2
D371	C3
D372	C2
D373	C3
D374	A1
D375	B2
D387	B1
D901	C1
D902	C1
D903	C1
D910	C1
D911	D2
D3351	A2
D3352	A3
D3353	A1
D3354	C3
T.P.'S	
TPY1	B3
TPY2	A2
TPY3	C2
TPKR	B3
TPKG	B2
TPKB	C2
I.C.'S	
IC351	B2
IC361	A1
IC371	C3
IC381	C3



CONDUCTOR VIEWS ANSICHT DER LEITERBAHNEN

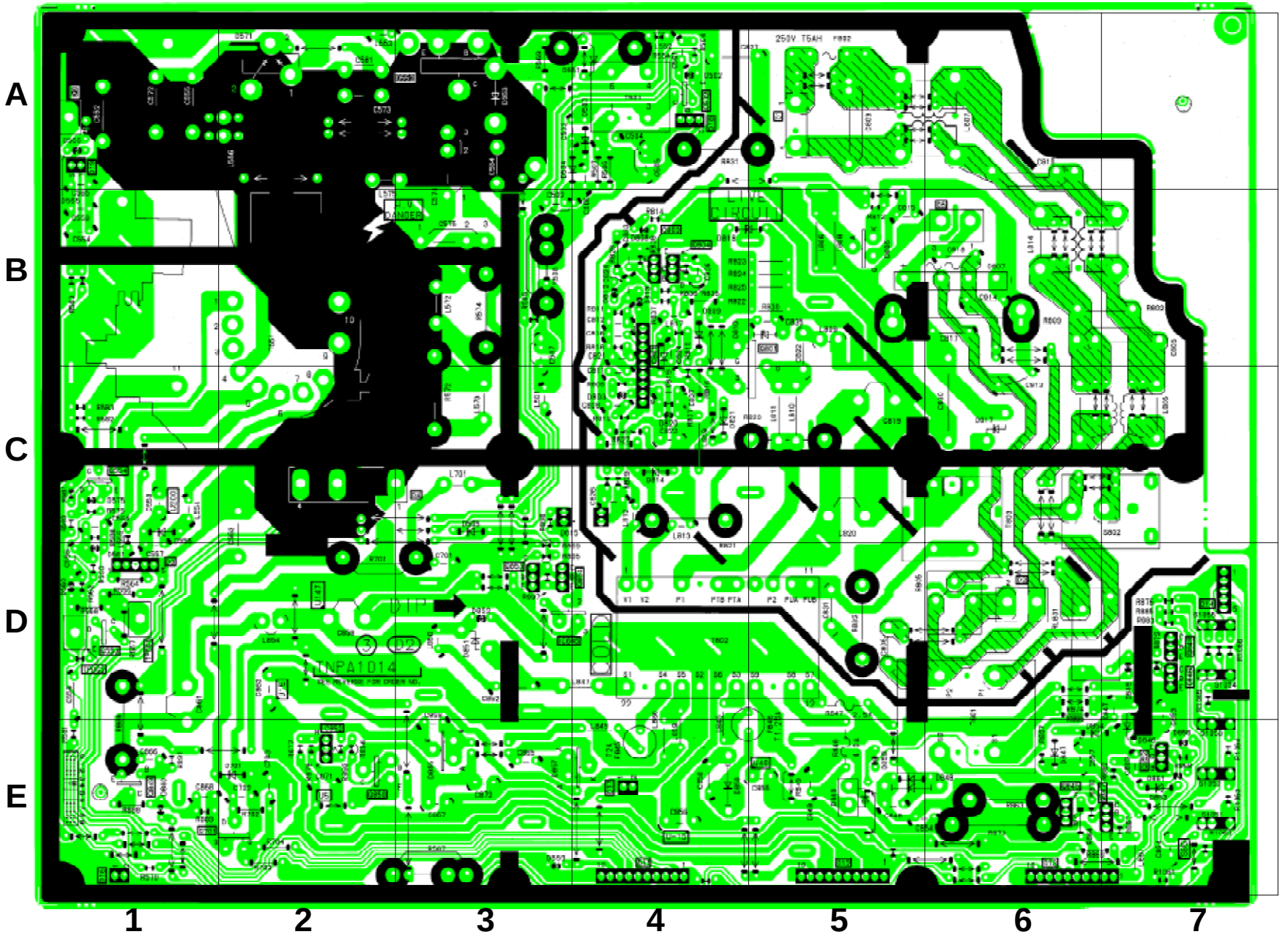
E - BOARD TNPH0176

TRAN'S		DIODE'S			
Q101	A3	D001	A1	D2364	A6
Q103	A3	D002	A1	D3005	B1
Q104	A3	D252	E5	D3006	B2
Q251	D4	D253	E5	D3008	B4
Q252	D4	D254	E5	D3009	A3
Q253	E4	D255	E4	D3010	A3
Q254	E4	D256	E4	D3011	B1
Q281	E3	D281	E4	D3803	A5
Q282	D3	D282	E4	D3804	A5
Q400	B5	D283	E4	D3805	C5
Q401	A4	D284	E2	D3990	A4
Q601	B5	D285	E3		
Q602	B4	D286	E2	I.C.'S	
Q603	C4	D400	B5	IC251	E4
Q604	C4	D401	A4	IC281	E2
Q607	C4	D402	A4	IC451	A4
Q608	D4	D403	B4	IC601	C4
Q1001	C7	D404	A4	IC1001	C7
Q1105	C6	D405	A6	IC1101	D5
Q1106	C6	D408	B5	IC1102	E5
Q1107	C6	D411	A4	IC1103	E5
Q1108	A5	D601	B4	IC1104	D5
Q1109	A5	D603	D5	IC1105	B6
Q1110	A5	D605	B5	IC1106	D6
Q1111	C5	D607	B5	IC1901	C6
Q1112	E5	D609	B5	IC2101	B3
Q1113	E5	D610	C4	IC2351	A6
Q1114	C6	D611	C4	IC3001	B1
Q1116	C6	D612	C4	IC3801	A2
Q1118	D6	D615	B5	IC3802	C5
Q1901	C6	D616	B5	IC3805	B5
Q2101	B2	D617	D5	IC3806	D1
Q2102	C2	D618	C4		
Q2103	B2	D620	B5	T.P.'S	
Q2301	B2	D651	C4	TPE1	A2
Q2302	A2	D652	C4	TPE2	B3
Q2305	A2	D653	B4	TPE23	D6
Q2307	A3	D1001	C7		
Q2308	A3	D1101	C1		
Q2351	A6	D1102	C1		
Q2352	A6	D1103	C1		
Q3001	C1	D1104	A6		
Q3002	B1	D1105	A6		
Q3003	B2	D1106	B6		
Q3005	D1	D1107	C5		
Q3006	D1	D1108	C6		
Q3007	D1	D1109	D6		
Q3008	D1	D1110	D6		
Q3010	A3	D1111	D6		
Q3011	B2	D1112	D6		
Q3012	B2	D2101	B2		
Q3013	B2	D2102	B2		
Q3014	D1	D2301	A2		
Q3801	A5	D2302	A2		
Q3990	A4	D2351	A6		



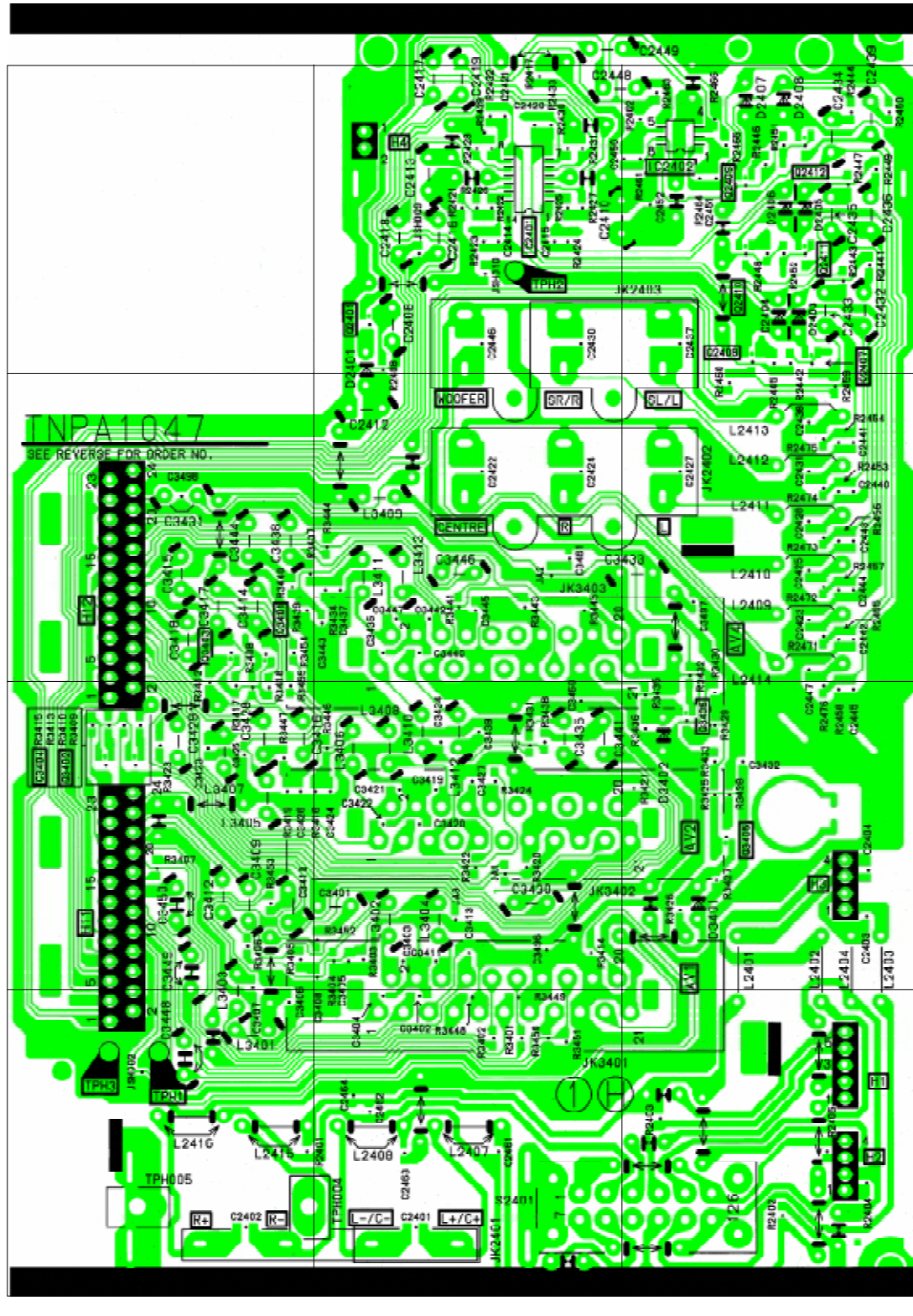
D - BOARD TNPA1014

DIODE'S		TRAN'S	
D503	A4	Q502	A4
D504	A3	Q552	A3
D505	C3	Q553	D1
D551	A4	Q554	C1
D556	C1	Q701	E1
D559	E3	Q801	B5
D560	D1	Q803	B4
D561	D1	Q804	B4
D563	A3	Q845	E6
D565	A1	Q846	D7
D566	A1	Q847	E6
D571	A2	Q848	D7
D575	C1	Q849	E1
D701	E2	Q850	E2
D803	C4	Q852	E7
D807	B6	Q853	D3
D808	B4	Q854	D3
D809	B4		
D810	B4	I.C.'S	
D812	B4	IC801	B4
D813	B4	IC845	D3
D814	C4	IC852	E2
D815	C3		
D817	C6	T.P.'S	
D818	B4	TPDG1	D1
D819	B4	TPDG2	D1
D820	C4		
D821	C4		
D845	D7		
D846	D7		
D847	E6		
D848	E5		
D849	E5		
D850	E4		
D851	D3		
D852	D3		
D853	E7		
D854	E6		
D855	E3		
D856	E7		
D857	E3		
D858	E5		
D860	E1		
D861	E7		



H - BOARD TNPA1047

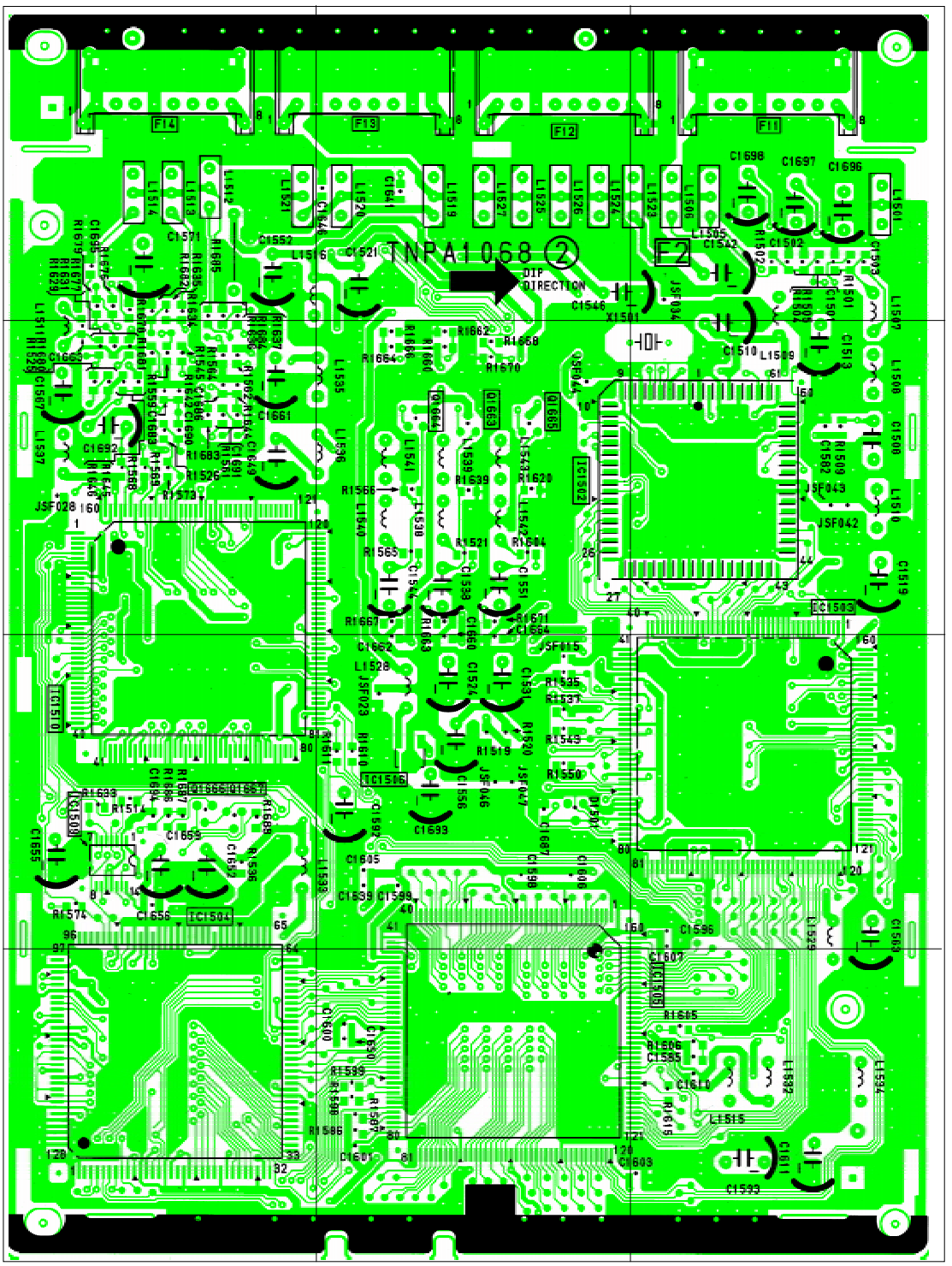
TRAN'S	
Q2401	A2
Q2407	A3
Q2408	A3
Q2409	A3
Q2410	A3
Q2411	A3
Q2412	A3
Q3401	B1
Q3402	C1
Q3403	B1
Q3404	C1
Q3405	C3
Q3406	C3
DIODE'S	
D2401	A2
D2403	A3
D2404	A3
D2405	A3
D2406	A3
D2407	A3
D2408	A3
D3401	C3
D3402	C3
T.P.'S	
TPH1	D1
TPH2	A2
TPH3	D1
TPH004	D1
TPH005	D1
I.C.'S	
IC2401	A2
IC2402	A3



F - BOARD TNPA1068

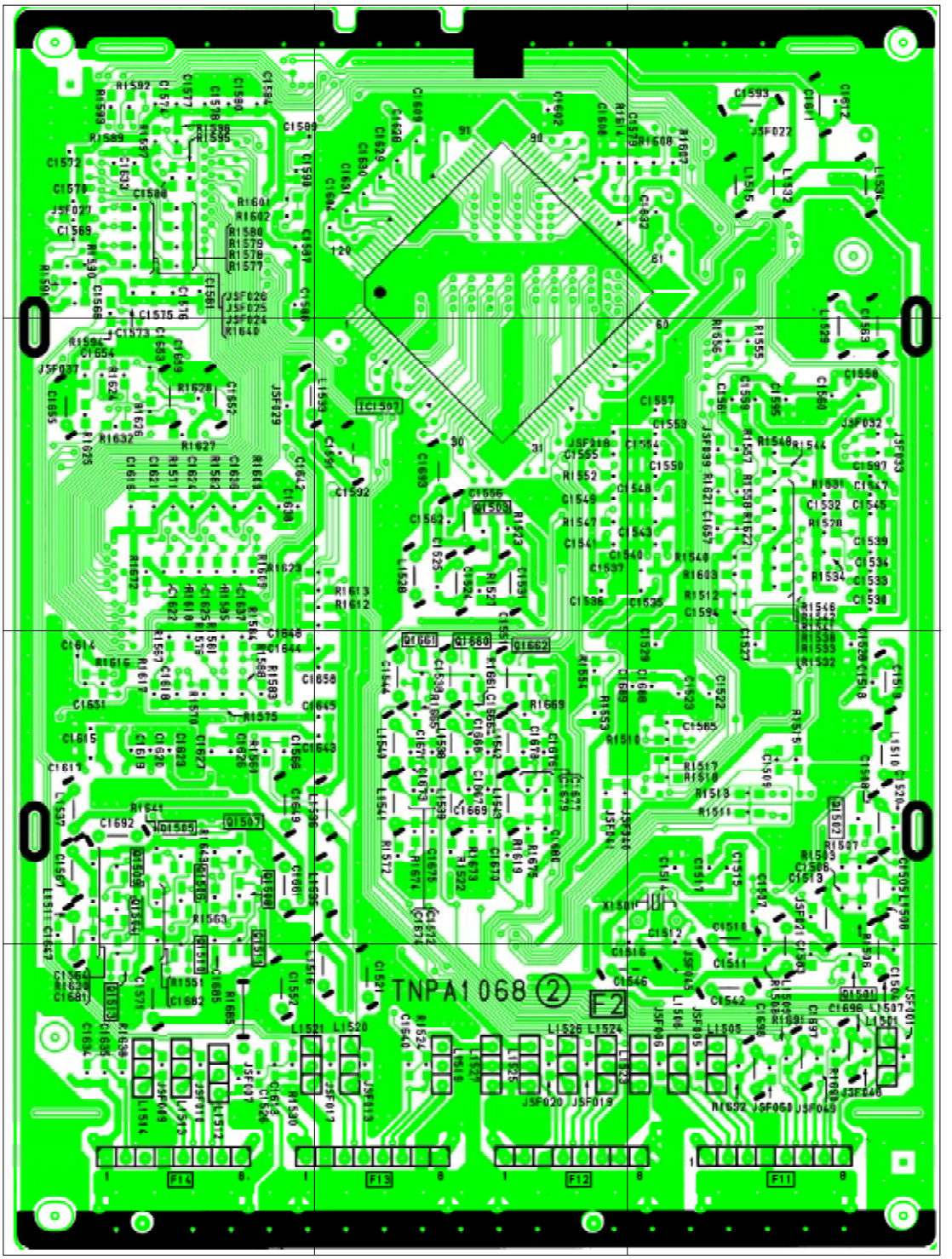
TRAN'S	
Q1663	B2
Q1664	B2
Q1665	B2
Q1666	C1
Q1667	C1

I.C.'S	
IC1502	B3
IC1503	C3
IC1504	D1
IC1505	D2
IC1506	C2
IC1509	C1
IC1510	C1



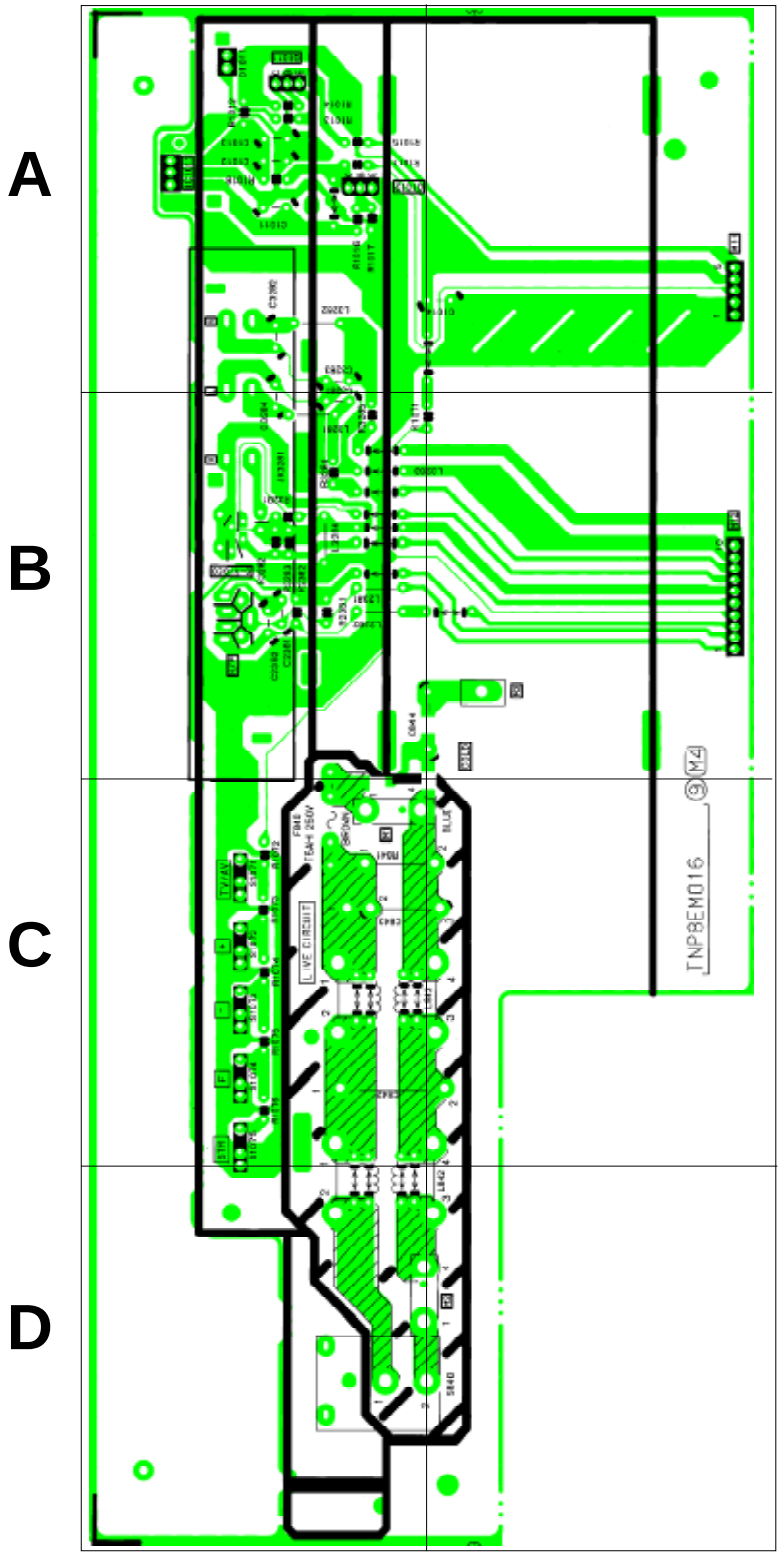
F - BOARD TNPA1068

TRAN'S	
Q1501	D3
Q1502	C3
Q1503	B2
Q1504	C1
Q1505	C1
Q1506	C1
Q1507	C1
Q1508	C1
Q1509	C1
Q1510	D1
Q1511	D1
Q1519	D1
Q1660	C2
Q1661	C2
Q1662	C2
I.C.'S	
IC1507	B2



M - BOARD TNP8E016

TRAN'S
Q1011 A1
Q1012 A1
DIODE'S
D1011 A1
I.C.'S
IC1011 A1



M - BOARD TNP8E014

TRAN'S	
Q1011	A1
Q1012	A2
DIODE'S	
D1011	A1
I.C.'S	
IC1011	A1