APEX

Rear Projection TV

SERVICE MANUAL

PU–3 CHASSIS

GB43HD09
GB51HD09
GB55HD09W
GB65HD09W

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⚠ Warning

This service literature is designed for experienced repair technicians. It does not contain warnings or cautions to advise non–technical individuals of potentials dangers in attempting to service a product. Any attempt to service or repair the product or products dealt with in this service literature by anyone else could result in serious injury or death.

Specifications

Power Source: AC 120V, 50/60Hz
Power Consumption: 280W (max)
RF Input: 75 unbalanced, coaxial type
Tuning System: frequency synthesizer
Air: 2–69 channel
Cable: 1–125 channel
Receiving Picture System: NTSC M (USA)
Receiving Sound System: BTSC stereo
Projection Tube:
R: P16LSG03RJA
G: P16LSG03HKA
B: P16LSG03BMB
High Voltage: 31.5±1.0KV
Video/Audio Input: AV1, AV2, FAV
Video: .1.0Vp–p 75Ω
S–video: Y:1.0Vp–p 75Ω
C:0.3Vp–p 75Ω
Picture Component Input: YPbPr1、2
Y:1.0Vp–p 75Ω
Pb:0.7Vp–p 75Ω
Pr:0.7Vp–p 75Ω
Audio Output Power:
18W (9W+9W)
(7%THD)
Monitor Output:
Video: 1.0Vp–p 75Ω
Audio: fixed: 500mVrms 1KΩ
Variable: 0–500 mVrms 1KΩ

Safety Precautions

1.It is advisable to insert an isolation transformer in the AC supply before servicing a hot chassis.

2. When servicing, observe the original lead dress, especially the lead dress in the high voltage circuits.

3. If a short circuit is found or the fuse breaks off or component is damaged, do not turn the set on before troubleshooting.

4. Board ground wires may have to be disconnected or disassemble some boards. All ground wires must reconnected using jumper leads if necessary before power is applied to the set for service.

5. Potential, as high as 31.5KV, is present when this monitor is in operation. And it can't drop to the safety limits immediately even if turning it off. Always discharge the anode of the projection tube to the ground before handling the tube.

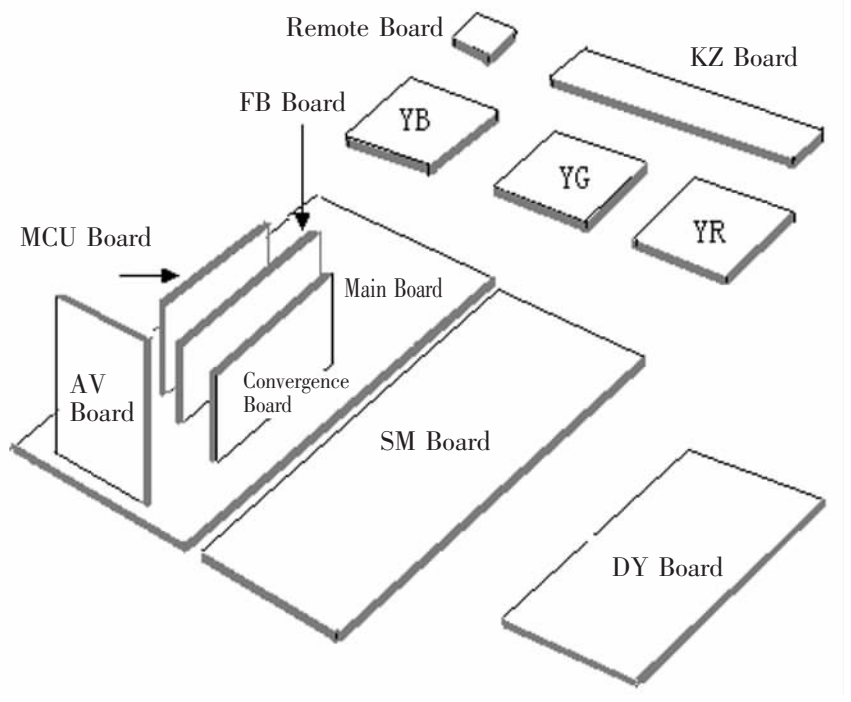
6.Electrical components having special safety–related characteristics are identified by " ⚠ " printing on the schematic diagram. Always be certain that the specified replacement parts on the schematic diagram are used.

7. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers, shields, and isolation R–C combinations are properly installed.

8. Excessive voltage may cause X–ray radiation. In order to avoid such hazard, high voltage shall not be more than the specified value. The nominal E.H.T for this set is 31.5KV at nominal circumstance operating at 120VAC. The maximum E.H.T voltage permissible in any operating circumstances must not exceed 32.5KV.

Chassis Board Layout

The following figure shows the locations of circuit boards on the chassis board. The following Table shows descriptions and functions of circuit boards.



Descriptions	Functions
Main board	Main signal processing
SM board	Scan, convergence amplifying and high voltage
DY board	Power supply to the set
AV board	Audio and video switching
Convergence board	Convergence processing
FB board	Digital frequency changing
Y–B,Y–R,Y–G board	CRT drive
KZ board,Remote board	Button, front AV and remote receiving
MCU board	The set controlling

(This is a basic circuit boards deseription, Some other auxiliary boards may be used due to different RPTV.)

Service Mode and Self–check

1. To enter service mode

1) Decrease the volume to 0 by pressing VOL– on the remote control.

2) Press MENU on the front panel while pressing and holding MUTE on the remote control to display "S" on the upper left corner of the screen.

2. Function of service mode

MCU controls the operation of ICs via IIC bus. In the service mode, items are adjusted by the remote control.

In the service mode:

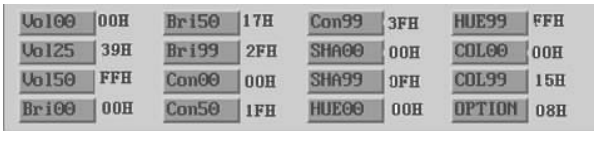
Press "PIP CH+" repeatedly to scan through the following menus.

Press CH+/– to select an item, and press VOL+/– to adjust.

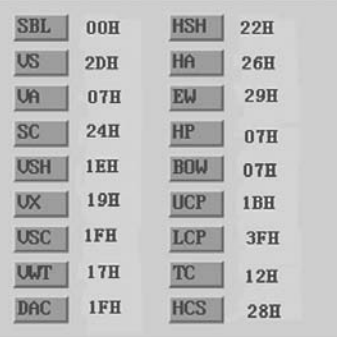
Menu 1

Note: You don't need to adjust this menu since it has been adjusted in its optimum state at the factory. Any adjustment to this menu may cause the projection TV to work improperly.

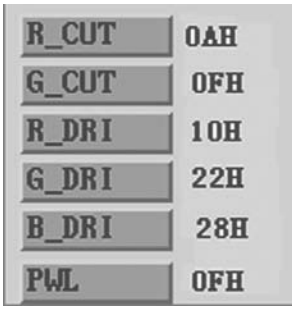
Menu 2



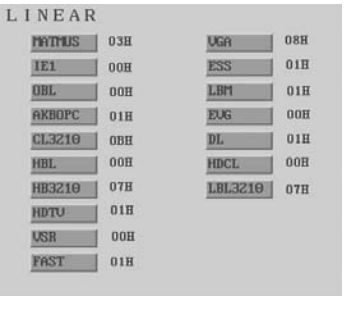
Menu 3



Menu 4



Menu 5



Note: The values in menu2 to menu5 are averages or definite values at the factory. Only adjust the values you are allowed to adjust in this manual, and do not change those you are not allowed to do so. Otherwise it will cause the projection TV to run improperly.

3. Self–check

Self–check is used to check ICs and function modules of the projection TV.
Press "PIP CH+" to display the following menu when in the service mode.

Note: "ERROR", instead of "OK" displays when something is wrong with ICs.

Displays	Position No.	IC Funcitons	Circuit Boards
TDA9332	N005	RGB processing, H/V activating	main chassis
TEA6425	NV04	Video switching	AV board
TEA6420	NV02	Audio switching	AV board
TUNERM	N002	Main tuner	main chassis
MSP3440	NV01	BTSC sound processing	AV board
TUNERP	N001	Sub–tuner	main chassis
VPX3226	U14	PIP decoding	FB board
EEPROM	U3	Main memory	MCU board
EXTRAM	U7	External RAM for MCU	MCU board
SPI	––	Convergence module	convergence board

Focus and Cut–off Voltage Adjustment

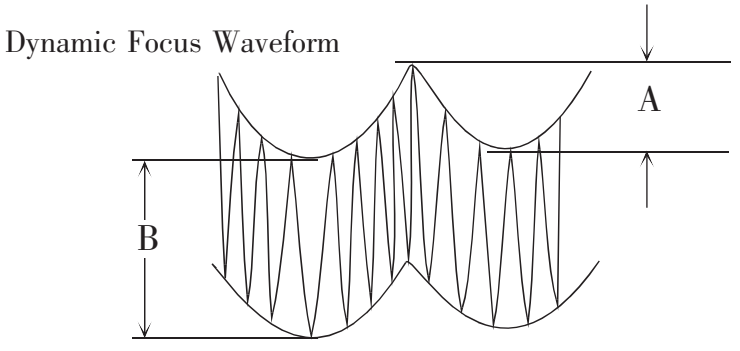
1. Dynamic Focus Adjustment

1) Focus adjustments should be performed after 1 hour of aging.

2) Use oscilloscopes with 100: 1 probe.

3) Apply Philips pattern.

4)Connect the scope probe to DF–IN of XP807 on SM board. Scope set at 20V/DIV and 5mS/DIV.



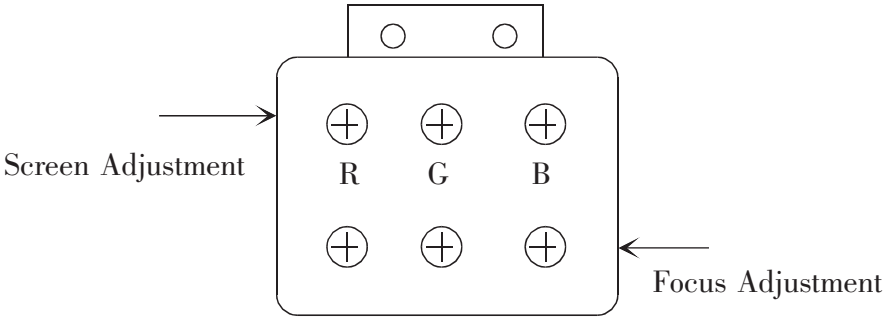
5) Adjust L452 on SM board so that waveform (B) is 650±50Vpp.

6) Adjust V2DAC2 of convergence adjustment so that waveform (A) is 400±20Vpp.

7) Proceed with focus adjustment.

2. Focus–Electrical Adjustment

Focus of projection tube can be adjusted by rotating the knobs on the focus potentiometer shown as the following figure.



1) Receive a crosshatch pattern.

2) Cover the Red and Blue CRT, projecting Green only. Adjust the Green Focus VR for best focus of overall picture.

3) Repeat for Red and Blue focus VR.

3. Focus–Optical Lens Adjustment

Note: This adjustment normally should not required resetting unless the lens has been replaced or adjustment has changed.

1) Loosen the adjustment knurls locking knob.
2) Turn the projection TV on, and apply a crosshatch pattern.
3) Cover the Red and Blue CRT, projecting green only. Rotate the Green lens for best focus around screen center area.
4) Repeat for Red and Blue focus lens.

4. Cut–off Voltage Adjustment

1) Focus adjustments should be performed after 1 hour of aging.
2) Apply a white field testing pattern.
3) Enter the service mode and set AKBOPC to 03. Exit the service mode.
4) Set Brightness to 10, and contrast to 0.
5) Rotate RGB screen knob on focus potentiometer to make three projection tubes not light.
6) Resume the picture to the normal state.
7) Enter the service mode and set AKBOPC to 01.
8) Exit the service mode.

Picture Position and White Balance Adjustment

1. Before adjusting DY position and centering magnet

Preparation

1) Receive Philips pattern.
2) Enter the convergence mode and reset the convergence data (refers to Digital Convergence Adjustment).
3) Enter the service mode, and adjust VA, VSH, HA, HSH and HP to middle values.
4) Loosen slightly screws locking DY.

Procedure:

1) Cover the Red and Blue CRT lens, projecting Green only.
2) Rotate DY for green CRT lens if the projected green horizontal line does not line up with the screen horizontal center line, and the projected vertical line does not line up with the screen vertical center line.
3) Adjust green centering magnets so that the center of the pattern lines up with the screen center.
4) Cover the Red CRT lens, projecting Blue and Green.
5)Rotate DY for blue CRT lens if the projected blue horizontal line is not parallel with the green horizontal center line, and the projected blue vertical line is not parallel with the green vertical center line.

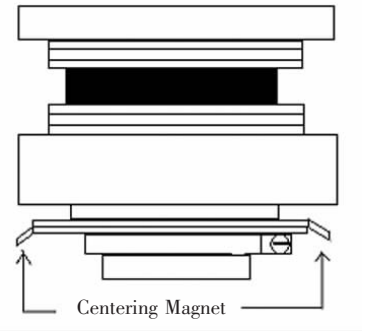
6) Adjust blue centering magnets to make the blue horizontal center line up with the green horizontal center basically, and position vertical line W2 away from the right of the green vertical center line.

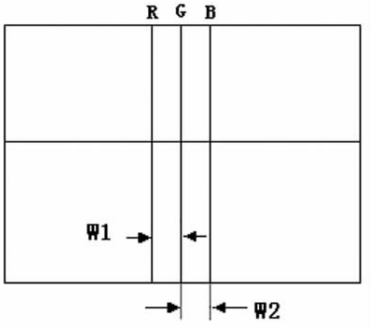
7)Cover the Blue CRT lens, projecting Red and Green.

8) Repeat step 5 for red.

9)Adjust red centering magnets until the red horizontal center line up with the green horizontal center basically, and the vertical line is at W1 on the right of the green vertical center line.

10) Tighten screws locking DY.



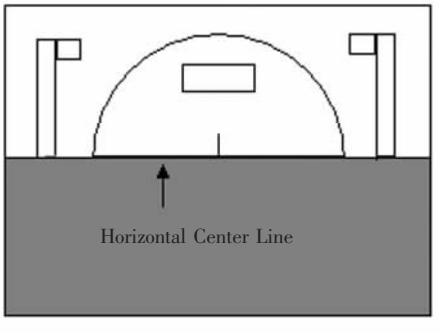


51"	W1=29.5mm±2.5mm W2=29.5mm±2.5mm
43"	W1=25mm±2.0mm W2=25mm±2.0mm
55"	W1=35mm±2.5mm W2=35mm±2.5mm
65"	W1=40mm±3mm W2=40mm±3mm

2. Picture Geometric Parameter Bus Adjustment

Complete DY position and centering magnet adjustment and clear convergence data before making this adjustment.

Procedure



1) Turn the projection TV on, and receive Philips pattern with picture mode set to "NORMAL".

2) Enter Menu 3 in the service mode.

3) Set SBL to 01 and turn on half–field blanking.

4)Adjust VS to make the picture just like the right figure.

5) Set SBL to 00.

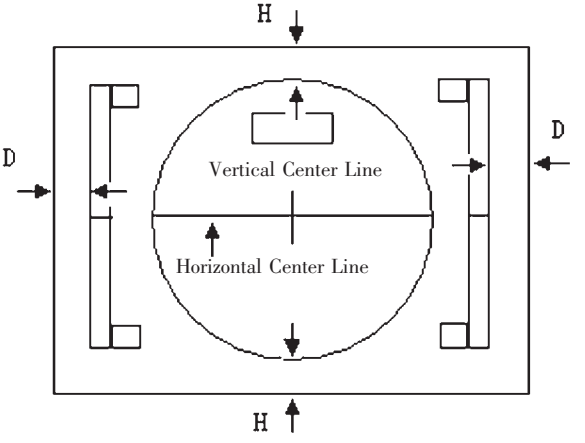
6) Adjust VSH to make the picture horizontal center locate at the screen horizontal center.

7) Adjust SC for best S linearity in vertical direction.

8) Adjust VA to make vertical amplitude meet the requirements shown as the right figure.

9) Adjust HSH to make the picture vertical center locate at the screen vertical center.

10)Adjust HA to make the picture horizontal amplitude meet the requirements shown as the right figure.



11) Adjust EW to make E–W pincushion minimum.

12) Adjust UCP and LCP to make geometric distortion at corners minimum.

13) Adjust HP to make picture parallelogram distortion minimum.

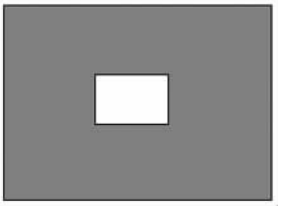
14) Adjust BOW to make bow distortion minimum.

15) Adjust TC to make keystone distortion minimum.

16) Exit the service mode after completion.

43"	H=60mm±5mm
	D=50mm±5mm
51"	H=70mm±5mm
	D=60mm±5mm
55"	H=50±5mm
	D=65±5mm
65"	H=59±5mm
	D=76±5mm

3. White Balance Adjustment



White balance adjustment should be performed after 1 hour of aging.

1) Receive a window pattern (see the right figure).

2) Set picture mode to "NORMAL", and tint to middle.

3) Enter white balance adjustment menu (menu 4) in the service mode.

4) Adjust R_CUT, and G_CUT and make window colorless.

5) Adjust R_DRI, G–DRI and B–DRI, and make the window white (no color).

6) Exit the service mode after completion.

Digital Convergence Adjustment

When the followings occur, adjust the convergence.

- Replacing EEPROM on the convergence board
- Re–adjust geometric parameters of picture
- Replacing components on scanning or high–voltage generating circuit
- Replacing or moving optical parts
- Replacing or moving deflection yoke.

Preparation:

- Adjust focus and cut–off voltage.
- Adjust picture position.

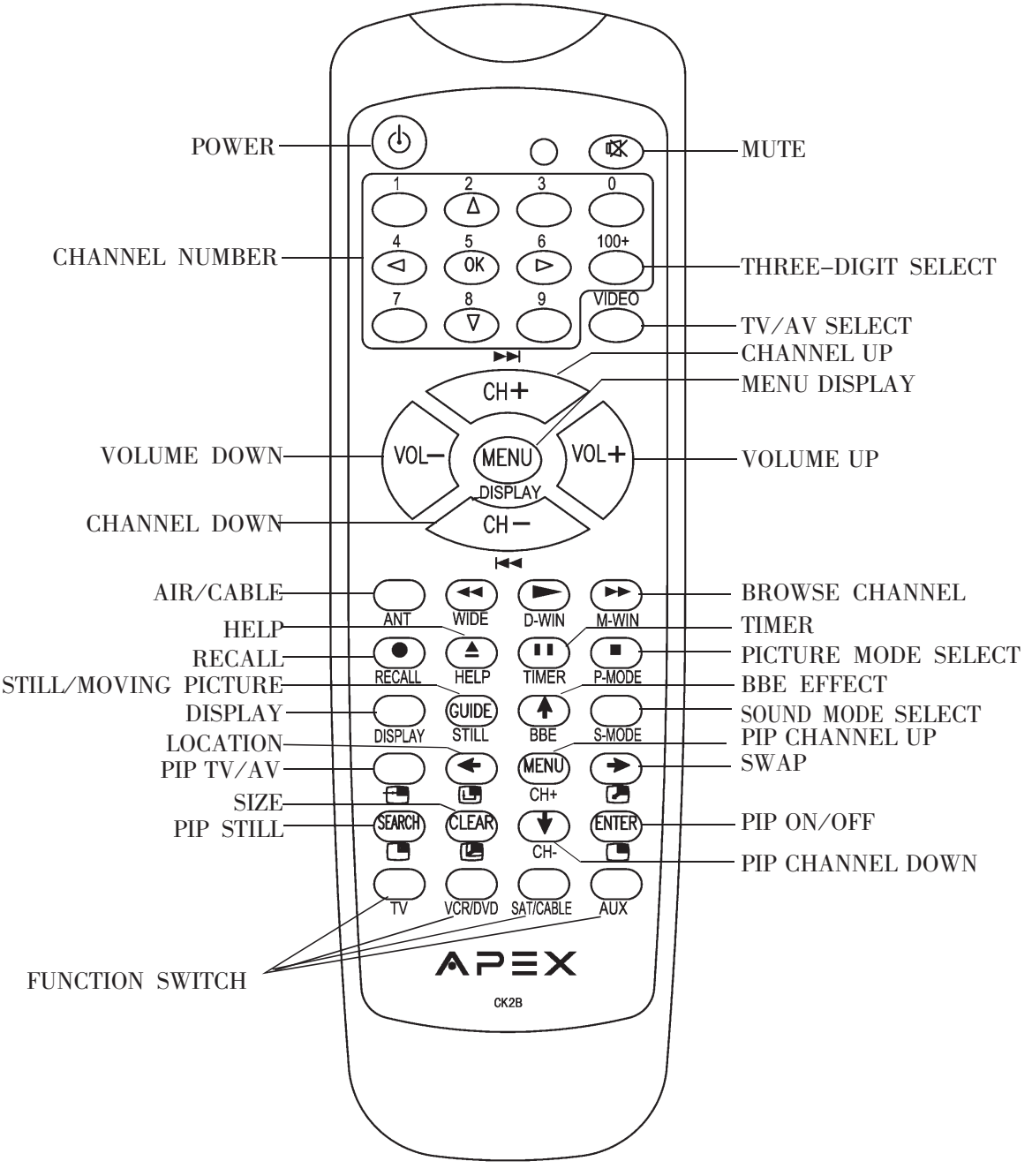
1. To enter and exit the convergence adjustment mode:

In the service mode, press "PIP STILL" on the remote control to enter convergence adjustment mode and a convergence crosshatch appears on the screen. And press "PIP STILL" again to exit.

2. Descriptions of function buttons on remote control

"PIP TV/AV" — Clear the convergence data
"PIP STILL" — Enter/exit the convergence adjustment mode
"M–WIN" — Change crosshatch color
"ANT" — Change cursor color
"100+" — Point/dot
"RECALL" — Superimpose crosshatch with picture
"MUTE" — Lock/move cursor
"P–MODE" — Crosshatch/point/cross
"PIP CH+" — Increase convergence step
"PIP CH–" — Decrease convergence step
"VIDEO" — Change convergence adjustment mode
"CH+ or CH–" — Move/adjust cursor up or down
"VOL+ or VOL–" — Move/adjust cursor right or left
"9" — Backup data
"0" — Load data
"POWER" — Save data
"PIP ON/OFF" — Load data

Remote control



Note:

The button design and specifications of the remote controller are subject to change without notice.

3. Procedure:

① Phase Adjustment

a.Press VIDEO to enter the phase adjustment mode, and press M–WIN to make the crosshatch green. Press ANT to turn the cursor green.

b.Press CH+/– to highlight TPOPH, and press VOL+/– to make the cursor locate at the picture vertical center line.

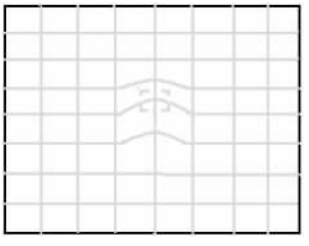
c. Press CH+/– to select TPOPV, and press VOL+/– to make the cursor align with the picture center.

Note:

The cursor location can only be changed by adjusting TPOPH and TPOPV in the convergence adjustment mode.

d. In the green crosshatch mode, press VIDEO to call up FINE, and press ANT to turn the cursor green. Press 100+ to enter DOT MODE mode. Press and hold MUTE until GHV appears. Then press CH+/– to display the GV value of fine–adjusted convergence as the maximum value on the screen (shown as the figure).

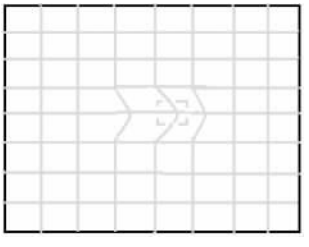
e. Press VIDEO to call up PHASE, and press CH+/– to call up FINEP to make convergence peak locate at the cursor (shown as the figure).



f. Press VIDEO to return to the fine adjustment mode. Press CH+/– to clear the GV peak.

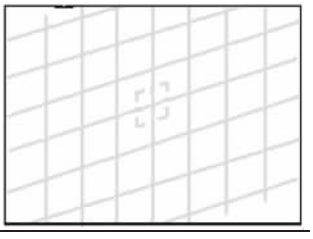
g.Press VIDEO to enter the fine adjustment mode. Press MUTE to lock the cursor and press VOL+/– to display the GH value as the maximum on the screen (shown as the figure).

h. Press VIDEO to call up PHASE, and press CH+/– to call up STARTLIN. Press VOL+/– to make the cursor locate at the crosshatch peak (shown as the figure).



i. Press VIDEO to enter the fine adjustment mode. Press MUTE to lock the cursor and VOL+/– to clear the GH value.

j. Press VIDEO to enter the COARSE mode, and call up H1GV by pressing CH+/–. Press VOL+/– to make it maximum. Enter the PHASE mode by pressing VIDEO, and call up COARSEP by pressing CH+/–. Press VOL+/– to adjust the value so that the cursor is aligned with the screen horizontal center (shown as the figure). Press VIDEO to enter the COARSE mode and call up H1GV, and clear it.



k. Press VIDEO to enter the PHASE mode, and press CH+/– to call up V1OFSET and V1CNTUP. Set V1OFSET to 0, and V1CNTUP to 1D1.

l. Press VIDEO to enter the COARSE mode, and press CH+/– to call up V1GH to make it maximum (The crosshatch is parallelogam now. You should keep it unchanged in the process of adjustment). Press VIDEO to enter the PHASE mode, and press CH+/– to call up V1DLY. Press VOL+/– to align the cursor with the screen center (shown as the figure).

m. Press VIDEO to enter the COARSE mode, and clear V1GH. (Note: Re–adjust V1CNTUP and V1OFSET when the crosshatch is not parallelogram in the process of adjustment).

② Green Convergence Coarse Adjustment

Enter the COARSE mode by pressing VIDEO. Press CH+/– to call up the item you want to adjust and press VOL+/– to adjust in the order shown as the following (the picture should obtain 90% good convergence after adjustment).

1) Green horizontal center (DCGH)
2) Green vertical center (DCGV)
3) Green field keystone correction (V1H1GV)
4) Green field pincushion correction (V1H2GV)
5) Green field amplitude (V1GV)
6) Green bow correction (V2H2GH)
7) Green horizontal pincushion correction (V2H1GH)
8) Green horizontal linearity (H2GH)
9) Green horizontal amplitude (H1GV)
10) Green field skew (H1GV)
11) Green horizontal skew (V1GH)

③ Green Convergence Fine Adjustment

Press VIDEO to enter the FINE adjustment mode, and press ANT to turn the cursor green. Press 100+ to select point or dot. Press MUTE to lock or move the cursor (three color appear when locking). When moving: Press CH+/– or VOL+/– to move the cursor to the point where you wish to change the data. When locking: Press CH+/– or VOL+/– to adjust the data at point.

④Red convergence coarse/fine adjustment

Press VIDEO to enter the COARSE mode, and press CH+/– to select the item you wish to change. And adjust in the order shown as the following by VOL+/–.

1) Red horizontal center (DCRH)
2) Red horizontal linearity (H2RH)
3) Red horizontal amplitude (H1RH)
4) Red horizontal skew (V1RH)
5) Red vertical center (DCRV)

6) Red field amplitude (V1RV)
7) Red field skew (H1RV)
8) Red field keystone correction (V1H1RV)
9) Red field pincushion correction (V1H2RV)
10) Red bow correction (V2H2RH)
11) Red horizontal pincushion correction (V2H1RH)

Press VIDEO to enter the FINE mode, and press ANT to turn the cursor red. Repeat the green adjustment procedures for adjusting red convergence so that the red crosshatch is lined up with the green crosshatch.

⑤ Blue convergence coarse/fine adjustment

Press VIDEO to enter the COARSE mode, and press CH+/– to select the item you wish to change. And adjust in the order shown as the following by VOL+/–.

1) Blue horizontal center (DCBH)
2) Blue horizontal linearity (H2BH)
3) Blue horizontal amplitude (H1BH)
4) Blue horizontal skew (V1BH)
5) Blue vertical center (DCBV)
6) Blue field amplitude (V1BV)
7) Blue field skew (H1BV)
8) Blue field keystone correction (V1H1BV)
9) Blue field pincushion correction (V1H2BV)
10) Blue bow correction (V2H2BH)
11) Blue horizontal pincushion correction (V2H1BH)

Press VIDEO to enter the FINE mode, and press ANT to turn the cursor blue. Repeat the green adjustment procedures for adjusting blue convergence so that the blue crosshatch is lined up with the green crosshatch.

⑥ To save adjustment data

In convergence adjustment mode, press POWER to save the adjusted data to EEPROM, and press 9 to save the adjusted data as backup.

Note: You are recommended to save the adjusted data frequently during the convergence adjustment in order to avoid data loss due to power failure. After the completion of adjustment, press POWER to save the current data, and press 9 to save it as backup.

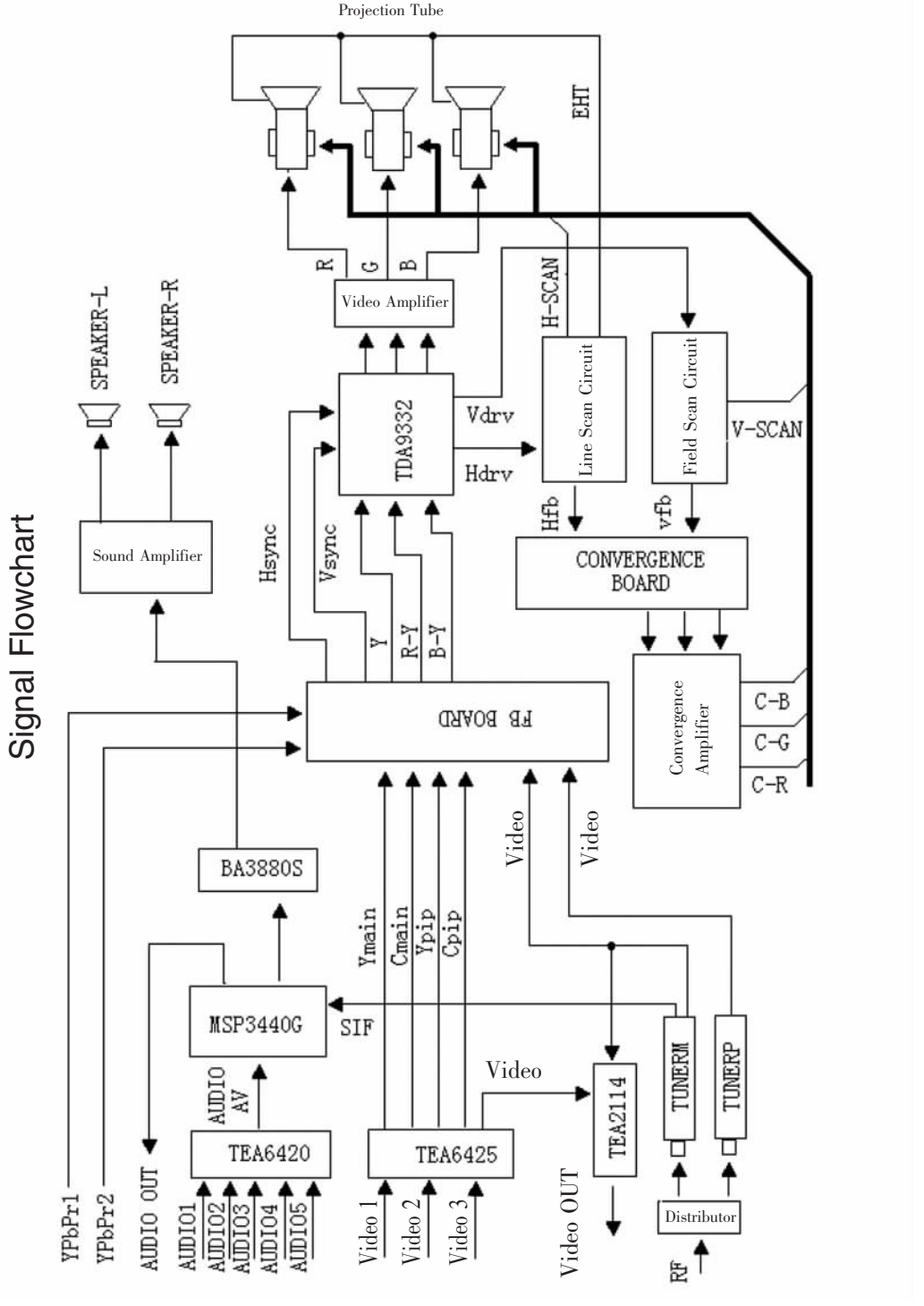
⑦ To load the adjusted data

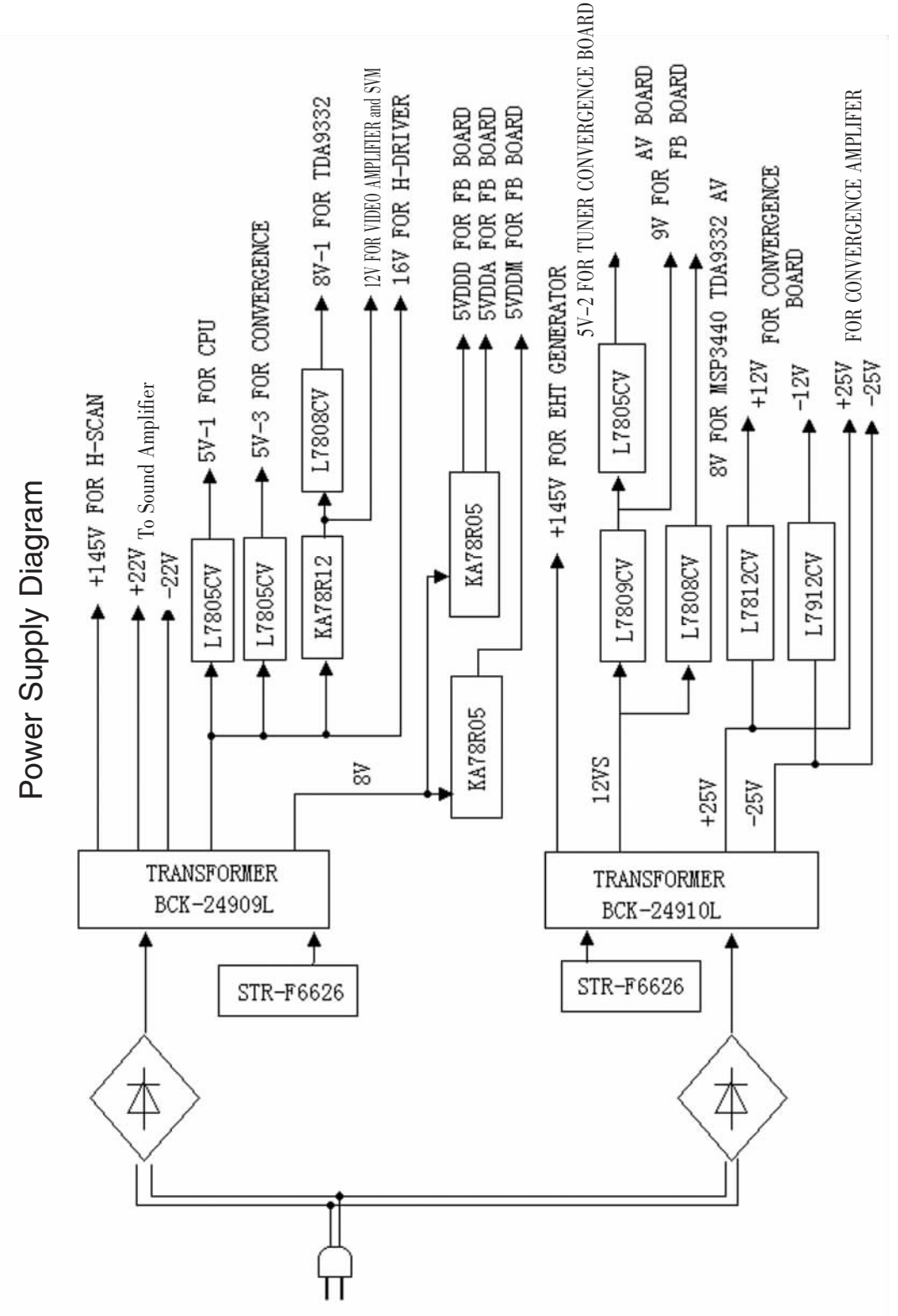
In normal operation, the current convergence data will be loaded when you change channels. In convergence adjustment mode, press 0 to load the backup data.

Block Diagrams

The followings are signal flowchart and power supply system for PU–3. They are only for reference.

Signal Flowchart




Power Supply Diagram
+145V FOR H-SCAN
+22V
To Sound Amplifier
-22V
5V-1 FOR CPU
5V-3 FOR CONVERGENCE
8V-1 FOR TDA9332
12V FOR VIDEO AMPLIFIER and SVM
16V FOR H-DRIVER
5VDDD FOR FB BOARD
5VDDA FOR FB BOARD
5VDDM FOR FB BOARD
+145V FOR EHT GENERATOR
5V-2 FOR TUNER CONVERGENCE BOARD
9V FOR AV BOARD FB BOARD
8V FOR MSP3440 TDA9332 AV
+12V FOR CONVERGENCE BOARD
-12V
+25V FOR CONVERGENCE AMPLIFER
-25V
L7805CV
L7805CV
KA78R12
L7808CV
KA78R05
KA78R05
L7805CV
L7809CV
L7808CV
L7812CV
L7912CV
8V
12VS
+25V
-25V
TRANSFORMER BCK-24909L
TRANSFORMER BCK-24910L
STR-F6626
STR-F6626

Replacement Parts List

Notes:

1 Components having special safety–related characteristics are identified by marking "⚠" on Replacement Parts List. Always be certain that the specified replacement parts on replacement parts list are used and keep the replaced parts at the original position.

2. "⚠ FDA": This symbol tells you that replacement components related to high voltage, beam current and x–ray radiation should not be made at will.

3. Replacement parts list is only for reference, and subject to change without notice.

POSITION	TYPE	NAME
	DY Board	
R819	RT13–0.166W–1KΩJ	carbon film resistor
R820	RT13–0.166W–1KΩJ	carbon film resistor
R847	RT13–0.166W–1KΩJ	carbon film resistor
R853	RT13–0.166W–1KΩJ	carbon film resistor
R837	RT13–0.166W–10KΩJ	carbon film resistor
R836	RT13–0.166W–47KΩJ	carbon film resistor
R872	RT14–0.25W–220ΩJ	carbon film resistor
R807	RT14–0.25W–680ΩJ	carbon film resistor
R807A	RT14–0.25W–680ΩJ	carbon film resistor
R870	RT14–0.25W–910ΩJ	carbon film resistor
R871	RT14–0.25W–910ΩJ	carbon film resistor
R873	RT14–0.25W–47KΩJ	carbon film resistor
R803	RT14–0.25W–220KΩJ	carbon film resistor
R803A	RT14–0.25W–220KΩJ	carbon film resistor
R811	RJ14–0.25W–2.4KΩG	metal film resistor
R811A	RJ14–0.25W–2.7KΩG	metal film resistor
R808	RJ14–0.25W–1.5MΩJ	metal film resistor
R808A	RJ14–0.25W–1.5MΩJ	metal film resistor
R812	RY21–0.5W–10ΩJ	oxide metal film resistor
R810	RY21–0.5W–33ΩJ	oxide metal film resistor
R810A	RY21–0.5W–33ΩJ	oxide metal film resistor
R813	RY21–0.5W–3.3KΩJ	oxide metal film resistor
R813A	RY21–0.5W–3.3KΩJ	oxide metal film resistor
R812A	RY21–0.5W–3.9KΩJ	oxide metal film resistor
R814	RY21–1W–4.7KΩJ	oxide metal film resistor
R809A	RY21–1W–56KΩJ	oxide metal film resistor
	or MOS1W563J	oxide metal film resistor
R809	RY21–1W–56KΩJ	oxide metal film resistor
	or MOS1W563J	oxide metal film resistor

R805	RY21–2W–0.15ΩJ	oxide metal film resistor
R805A	RY21–2W–0.15ΩJ	oxide metal film resistor
R806A	RY21–2W–0.15ΩJ	oxide metal film resistor
R804	RY21–2W–47ΩJ	oxide metal film resistor
R804A	RY21–2W–47ΩJ	oxide metal film resistor
R877	RY21–2W–1.5KΩJ	oxide metal film resistor
R877A	RY21–2W–1.5KΩJ	oxide metal film resistor
R888	RY21–2W–1.5KΩJ	oxide metal film resistor
R888A	RY21–2W–1.5KΩJ	oxide metal film resistor
R851	RY21–2W–15KΩJ	oxide metal film resistor
R801	232224213275(VR37–0.5W–2.7M)	glass enamel film resistor ⚠
RV899	232259352316(PH–593–230V)	piezoresistor ⚠
RT802	B57237–S479–M	heat–sensitive resistor
RT802A	B57237–S479–M	heat–sensitive resistor
RF814	PRF5000F008	fuse
RF816	PRF5000F008	fuse
RF817	PRF5000F008	fuse
RF818	PRF5000F008	fuse
RF819	PRF5000F008	fuse
RF824	PRF5000F008	fuse
RF825	PRF5000F008	fuse
RF826	PRF5000F008	fuse
RF834	PRF5000F008	fuse
RF838	PRF5000F008	fuse
F801	U/C/T 51S–8A–125VAC	fuse ⚠
F802	U/C/T 51S–8A–125VAC	fuse ⚠
F803	U/C/T 51S–8A–125VAC	fuse ⚠
C803	CT7–400VAC–2B4–470PFK	ceramic chip capacitor
C804	CT7–400VAC–2B4–470PFK	ceramic chip capacitor
C809	CT1–500V–06a–2B4–470PFK	ceramic chip capacitor
C809A	CT1–500V–06a–2B4–470PFK	ceramic chip capacitor
C812	CT1–500V–06a–2B4–470PFK	ceramic chip capacitor
C815	CT1–500V–06a–2B4–470PFK	ceramic chip capacitor
C816	CT1–500V–06a–2B4–470PFK	ceramic chip capacitor
C832	CT1–500V–06a–2B4–470PFK	ceramic chip capacitor
C833A	CT1–500V–06a–2B4–470PFK	ceramic chip capacitor
C834	CT1–500V–06a–2B4–470PFK	ceramic chip capacitor
C835	CT1–500V–06a–2B4–470PFK	ceramic chip capacitor
C817	CT1–500V–06a–2B4–470PFK	ceramic chip capacitor
C810	CT1–500V–06a–2B4–680PFK	ceramic chip capacitor
C810A	CT1–500V–06a–2B4–680PFK	ceramic chip capacitor

C805	CT1–500V–14c–2B4–4700PFK	ceramic chip capacitor
C805A	CT1–500V–14c–2B4–4700PFK	ceramic chip capacitor
C806	CT1–500V–14c–2B4–4700PFK	ceramic chip capacitor
C806A	CT1–500V–14c–2B4–4700PFK	ceramic chip capacitor
C814	CT81–2KV–08c–2B4–220PFJ	ceramic chip capacitor
C836	CT81–2KV–08c–2B4–220PFJ	ceramic chip capacitor
C808	CT81–2KV–14c–2B4–1500PFJ	ceramic chip capacitor
C808A	CT81–2KV–14c–2B4–1500PFJ	ceramic chip capacitor
C823	CL21X–50V–0.01μFJ	polyester film capacitor
C837	CL21X–50V–0.01μFJ	polyester film capacitor
C811	CL21X–50V–0.1μFJ	polyester film capacitor
C811A	CL21X–50V–0.1μFJ	polyester film capacitor
C807	CBB13–630V–0.01μFJ	polypropylene capacitor
C807A	CBB13–630V–0.01μFJ	polypropylene capacitor
C801	222233550224	polypropylene capacitor ⚠
C801	222233820224	polypropylene capacitor ⚠
C802	222233550224	polypropylene capacitor ⚠
C802	222233820224	polypropylene capacitor ⚠
C802A	222233550224	polypropylene capacitor ⚠
C802A	222233820224	polypropylene capacitor ⚠
C899A	CT81–250VAC–4700PFM	ceramic chip capacitor ⚠
C899B	CT81–250VAC–4700PFM	ceramic chip capacitor ⚠
C899C	CT81–250VAC–4700PFM	ceramic chip capacitor ⚠
C899D	CT81–250VAC–4700PFM	ceramic chip capacitor ⚠
C831	CD110X–25V–470μFM	electrolytic capacitor
C853A	CD110X–16V–47μFM	electrolytic capacitor
C862A	CD110X–16V–47μFM	electrolytic capacitor
C824	CD110X–25V–1000μFM	electrolytic capacitor
C827	CD110X–25V–1000μFM	electrolytic capacitor
C822	CD110X–35V–1000μFM	electrolytic capacitor
C825	CD110X–35V–1000μFM	electrolytic capacitor
C826	CD110X–35V–1000μFM	electrolytic capacitor
C828	CD110X–35V–1000μFM	electrolytic capacitor
C830	CD110X–35V–1000μFM	electrolytic capacitor
C821	CD110X–50V–100μFM	electrolytic capacitor
C821A	CD110X–50V–100μFM	electrolytic capacitor
C823A	CD110X–250V–10μFM	electrolytic capacitor
C822A	CD293/289–200V–330μFM	electrolytic capacitor
C829	CD293/289–200V–330μFM	electrolytic capacitor
C820	CD293–250V–820μFM	electrolytic capacitor
C820A	CD293–250V–820μFM	electrolytic capacitor

L803A	TEM2011	cored inductance
L804	TEM2011	cored inductance
L804A	TEM2011	cored inductance
L805	TEM2011	cored inductance
L806	TEM2011	cored inductance
L807	TEM2011	cored inductance
L808	TEM2011	cored inductance
L809	TEM2011	cored inductance
L809A	TEM2011	cored inductance
L810	TEM2011	cored inductance
L811	TEM2011	cored inductance
L825	TEM2011	cored inductance
L826	TEM2011	cored inductance
L816	TEM2011	cored inductance
L805A	TEM2011	cored inductance
L812	AL0312–3R0K	fixed inductance
L813	AL0312–3R0K	fixed inductance
L860	TLN2026–11μHK	fixed inductance
L861	TLN2026–11μHK	fixed inductance
L862	TLN2026–11μHK	fixed inductance
L863	TLN2026–11μHK	fixed inductance
L864	TLN2026–11μHK	fixed inductance
L865	TLN2026–11μHK	fixed inductance
L866	TLN2026–11μHK	fixed inductance
L867	TLN2026–11μHK	fixed inductance
L841	TLN3155D–100μHK	fixed inductance
L851	TLN3155D–100μHK	fixed inductance
T802A	LCL–F11	filter line
T801	LCL–F12	filter line
T802	LCL–F12	filter line
VD813	AK03	diode
VD813A	AK03	diode
VD804	AU01Z	diode
VD804A	AU01Z	diode
VD805	AU01Z	diode
VD805A	AU01Z	diode
VD806	AU01Z	diode
VD806A	AU01Z	diode
VD802	SARS01	diode
VD802A	SARS01	diode
VD811	RU4A	diode

VD812	RU4A	diode
VD815	RU4A	diode
VD816	RU4A	diode
VD809A	RU4A	diode
VD819	RU4A	diode
VD888	2CZRU2	diode
VD810	FMLG16S	diode
VD893	FMLG16S	diode
VD820	FMLG12S	diode
VD880	W05Z6.8B	diode
VD803A	W05Z18C	diode
VD808A	W05Z18C	diode
VD807A	W05Z24C	diode
V811	2SC1815–Y	transistor
V822	2SC1815–Y	transistor
V801A	2SC2655–Y(C)	transistor
AC801	D6SB60L	rectifier
AC801	RBV–606	rectifier
AC802	D6SB60L	rectifier
AC802	RBV–606	rectifier
N841	JQX–68F/012–1HS	relay ⚠
N811	L7805CV	IC
N814	KA78R12STU	IC
N844	SE140N	IC
N844A	SE140N	IC
N821	STR–F6626	IC
N821A	STR–F6626	IC
N801	LTV–816	photo–electrical coupling ⚠
N801A	LTV–816	photo–electrical coupling ⚠
T805	BCK–24910L(JUB4.726.109)	transformer switch ⚠
T805A	BCK–24909L(JUB4.726.110)	transformer switch ⚠
	Main Board	
R115	RT13–0.166W–33ΩJ	carbon film resistor
	or NAS1/6330J	carbon film resistor
R250	RT13–0.166W–33ΩJ	carbon film resistor
	or NAS1/6330J	carbon film resistor
R251	RT13–0.166W–33ΩJ	carbon film resistor
	or NAS1/6330J	carbon film resistor
R252	RT13–0.166W–33ΩJ	carbon film resistor
	or NAS1/6330J	carbon film resistor
R253	RT13–0.166W–33ΩJ	carbon film resistor

	or NAS1/6330J	carbon film resistor
R254	RT13–0.166W–33ΩJ	carbon film resistor
	or NAS1/6330J	carbon film resistor
R255	RT13–0.166W–33ΩJ	carbon film resistor
	or NAS1/6330J	carbon film resistor
R256	RT13–0.166W–33ΩJ	carbon film resistor
	or NAS1/6330J	carbon film resistor
R257	RT13–0.166W–33ΩJ	carbon film resistor
	or NAS1/6330J	carbon film resistor
R258	RT13–0.166W–33ΩJ	carbon film resistor
	or NAS1/6330J	carbon film resistor
R259	RT13–0.166W–33ΩJ	carbon film resistor
	or NAS1/6330J	carbon film resistor
R260	RT13–0.166W–33ΩJ	carbon film resistor
	or NAS1/6330J	carbon film resistor
R261	RT13–0.166W–33ΩJ	carbon film resistor
	or NAS1/6330J	carbon film resistor
R262	RT13–0.166W–33ΩJ	carbon film resistor
	or NAS1/6330J	carbon film resistor
R540B	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
R541B	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
R542B	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
R528	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
R529	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
R530	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
R501B	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
R502B	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
W169	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
RV66C	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
RV67C	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor

RV68C	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
R544B	RT13–0.166W–75ΩJ	carbon film resistor
	or NAS1/6750J	carbon film resistor
R545B	RT13–0.166W–75ΩJ	carbon film resistor
	or NAS1/6750J	carbon film resistor
R546B	RT13–0.166W–75ΩJ	carbon film resistor
	or NAS1/6750J	carbon film resistor
R101	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R102	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R103	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R107	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R108	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R110	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R100	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R508	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R509	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R513	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R514	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R533	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R503B	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R532C	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R551B	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R118	RT13–0.166W–150ΩJ	carbon film resistor
	or NAS1/6151J	carbon film resistor
R527B	RT13–0.166W–180ΩJ	carbon film resistor

	or NAS1/6181J	carbon film resistor
R531B	RT13–0.166W–220ΩJ	carbon film resistor
	or NAS1/6221J	carbon film resistor
R523B	RT13–0.166W–220ΩJ	carbon film resistor
	or NAS1/6221J	carbon film resistor
R550B	RT13–0.166W–220ΩJ	carbon film resistor
	or NAS1/6221J	carbon film resistor
R604B	RT13–0.166W–220ΩJ	carbon film resistor
	or NAS1/6221J	carbon film resistor
R105	RT13–0.166W–330ΩJ	carbon film resistor
	or NAS1/6331J	carbon film resistor
R136	RT13–0.166W–330ΩJ	carbon film resistor
	or NAS1/6331J	carbon film resistor
R280	RT13–0.166W–330ΩJ	carbon film resistor
	or NAS1/6331J	carbon film resistor
R537B	RT13–0.166W–330ΩJ	carbon film resistor
	or NAS1/6331J	carbon film resistor
R538B	RT13–0.166W–330ΩJ	carbon film resistor
	or NAS1/6331J	carbon film resistor
R539B	RT13–0.166W–330ΩJ	carbon film resistor
	or NAS1/6331J	carbon film resistor
R530B	RT13–0.166W–390ΩJ	carbon film resistor
	or NAS1/6391J	carbon film resistor
R151	RT13–0.166W–470ΩJ	carbon film resistor
	or NAS1/6471J	carbon film resistor
R428	RT13–0.166W–470ΩJ	carbon film resistor
	or NAS1/6471J	carbon film resistor
R522B	RT13–0.166W–470ΩJ	carbon film resistor
	or NAS1/6471J	carbon film resistor
R532B	RT13–0.166W–470ΩJ	carbon film resistor
	or NAS1/6471J	carbon film resistor
R526B	RT13–0.166W–470ΩJ	carbon film resistor
	or NAS1/6471J	carbon film resistor
R533B	RT13–0.166W–470ΩJ	carbon film resistor
	or NAS1/6471J	carbon film resistor
R534B	RT13–0.166W–470ΩJ	carbon film resistor
	or NAS1/6471J	carbon film resistor
R535B	RT13–0.166W–470ΩJ	carbon film resistor
	or NAS1/6471J	carbon film resistor
R106	RT13–0.166W–560ΩJ	carbon film resistor
	or NAS1/6561J	carbon film resistor

R431	RT13–0.166W–560ΩJ	carbon film resistor
	or NAS1/6561J	carbon film resistor
RV04	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
RV66D	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
RV67D	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
RV68D	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
R622	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
R112	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
R150	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
R430	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
R621	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
R510	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
W211	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
W212	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
R113	RT13–0.166W–1.5KΩJ	carbon film resistor
	or NAS1/6152J	carbon film resistor
R536B	RT13–0.166W–1.5KΩJ	carbon film resistor
	or NAS1/6152J	carbon film resistor
R543	RT13–0.166W–1.8KΩJ	carbon film resistor
	or NAS1/6182J	carbon film resistor
R117	RT13–0.166W–2KΩJ	carbon film resistor
	or NAS1/6202J	carbon film resistor
R152	RT13–0.166W–2.2KΩJ	carbon film resistor
	or NAS1/6222J	carbon film resistor
R521	RT13–0.166W–2.2KΩJ	carbon film resistor
	or NAS1/6222J	carbon film resistor
R120	RT13–0.166W–2.7KΩJ	carbon film resistor
	or NAS1/6272J	carbon film resistor
R121	RT13–0.166W–2.7KΩJ	carbon film resistor

	or NAS1/6272J	carbon film resistor
R153	RT13–0.166W–3.3KΩJ	carbon film resistor
	or NAS1/6332J	carbon film resistor
R529B	RT13–0.166W–3.3KΩJ	carbon film resistor
	or NAS1/6332J	carbon film resistor
R524	RT13–0.166W–3.3KΩJ	carbon film resistor
	or NAS1/6332J	carbon film resistor
R525	RT13–0.166W–3.3KΩJ	carbon film resistor
	or NAS1/6332J	carbon film resistor
R526	RT13–0.166W–3.3KΩJ	carbon film resistor
	or NAS1/6332J	carbon film resistor
R527	RT13–0.166W–3.3KΩJ	carbon film resistor
	or NAS1/6332J	carbon film resistor
R521B	RT13–0.166W–3.3KΩJ	carbon film resistor
	or NAS1/6332J	carbon film resistor
R524B	RT13–0.166W–3.3KΩJ	carbon film resistor
	or NAS1/6332J	carbon film resistor
R429	RT13–0.166W–3.9KΩJ	carbon film resistor
	or NAS1/6392J	carbon film resistor
R422A	RT13–0.166W–4.7KΩJ	carbon film resistor
	or NAS1/6472J	carbon film resistor
R424	RT13–0.166W–4.7KΩJ	carbon film resistor
	or NAS1/6472J	carbon film resistor
R522	RT13–0.166W–6.8KΩJ	carbon film resistor
	or NAS1/6682J	carbon film resistor
R119	RT13–0.166W–7.5KΩJ	carbon film resistor
	or NAS1/6752J	carbon film resistor
R122	RT13–0.166W–8.2KΩJ	carbon film resistor
	or NAS1/6822J	carbon film resistor
R120A	RT13–0.166W–8.2KΩJ	carbon film resistor
	or NAS1/6822J	carbon film resistor
R137	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
R422	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
R423	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
R501	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
R504	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor

R506	RT13–0.166W–10KΩJ	carbon film resistor ⚠FDA
	or NAS1/6103J	carbon film resistor
R507	RT13–0.166W–10KΩJ	carbon film resistor ⚠FDA
	or NAS1/6103J	carbon film resistor
R531	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
R630	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
R633	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
R520B	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
R525B	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
R528B	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
R543B	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
R552B	RT13–0.166W–10KΩJ	carbon film resistor ⚠FDA
	or NAS1/6103J	carbon film resistor
R601B	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
R602B	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RA01	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RA02	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
W240	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
R425	RT13–0.166W–12KΩJ	carbon film resistor
	or NAS1/6123J	carbon film resistor
R135	RT13–0.166W–15KΩJ	carbon film resistor
	or NAS1/6153J	carbon film resistor
R426	RT13–0.166W–18KJ	carbon film resistor
	or NAS1/6183J	carbon film resistor
R617	RT13–0.166W–20KJ	carbon film resistor
	or NAS1/6203J	carbon film resistor
R618	RT13–0.166W–20KJ	carbon film resistor
	or NAS1/6203J	carbon film resistor
R116	RT13–0.166W–22KΩJ	carbon film resistor

	or NAS1/6223J	carbon film resistor
R05	RT13–0.166W–33KΩJ	carbon film resistor
	or NAS1/6333J	carbon film resistor
R07	RT13–0.166W–33KΩJ	carbon film resistor
	or NAS1/6333J	carbon film resistor
R505	RT13–0.166W–33KΩJ	carbon film resistor
	or NAS1/6333J	carbon film resistor
R595	RT13–0.166W–33KΩJ	carbon film resistor
	or NAS1/6333J	carbon film resistor
R630A	RT13–0.166W–33KΩJ	carbon film resistor
	or NAS1/6333J	carbon film resistor
R633A	RT13–0.166W–33KΩJ	carbon film resistor
	or NAS1/6333J	carbon film resistor
RV02	RT13–0.166W–36KΩJ	carbon film resistor
	or NAS1/6363J	carbon film resistor
RS01	RT13–0.166W–47KΩJ	carbon film resistor
	or NAS1/6473J	carbon film resistor
RV03	RT13–0.166W–47KΩJ	carbon film resistor
	or NAS1/6473J	carbon film resistor
R429A	RT13–0.166W–47KΩJ	carbon film resistor
	or NAS1/6473J	carbon film resistor
R510A	RT13–0.166W–56KΩJ	carbon film resistor
	or NAS1/6563J	carbon film resistor
R503	RT13–0.166W–100KΩJ	carbon film resistor
	or NAS1/6104J	carbon film resistor
R532A	RT13–0.166W–180KΩJ	carbon film resistor
	or NAS1/6184J	carbon film resistor
R533A	RT13–0.166W–360KΩJ	carbon film resistor
	or NAS1/6364J	carbon film resistor
R432	RT13–0.166W–330KΩJ	carbon film resistor
	or NAS1/6334J	carbon film resistor
R427	RT13–0.166W–560KΩJ	carbon film resistor
	or NAS1/6564J	carbon film resistor
R603B	RT13–0.166W–560KΩJ	carbon film resistor
	or NAS1/6564J	carbon film resistor
R541	RT13–0.166W–1MΩJ	carbon film resistor
	or NAS1/6105J	carbon film resistor
R542	RT13–0.166W–1MΩJ	carbon film resistor
	or NAS1/6105J	carbon film resistor
R506B	RT13–0.166W–1MΩJ	carbon film resistor
	or NAS1/6105J	carbon film resistor

R213	RT14–0.25W–330ΩJ	carbon film resistor
	or NAS1/4331J	carbon film resistor
RS203	RT14–0.25W–2.2KΩJ	carbon film resistor
	or NAS1/4222J	carbon film resistor
R512	RJ14–0.25W–39KΩG	metal film resistor
R127A	RY21–2W–1ΩJ	oxide metal film resistor
	or MOS2W1R0J	oxide metal film resistor
R654A	RY21–2W–1ΩJ	oxide metal film resistor
	or MOS2W1R0J	oxide metal film resistor
R619	RY21–2W–4.7ΩJ	oxide metal film resistor
	or MOS2W4R7J	oxide metal film resistor
R620	RY21–2W–4.7ΩJ	oxide metal film resistor
	or MOS2W4R7J	oxide metal film resistor
RS200	RY21–2W–47ΩJ	oxide metal film resistor
	or MOS2W470J	oxide metal film resistor
RS201	RY21–2W–47ΩJ	oxide metal film resistor
	or MOS2W470J	oxide metal film resistor
C526	CC1–63V–06a–C–10PFJ	ceramic chip capacitor
C537B	CC1–63V–06a–C–10PFJ	ceramic chip capacitor
C538B	CC1–63V–06a–C–10PFJ	ceramic chip capacitor
C539B	CC1–63V–06a–C–10PFJ	ceramic chip capacitor
C569	CC1–63V–06a–P–30PFJ	ceramic chip capacitor
C523B	CC1–63V–06a–P–30PFJ	ceramic chip capacitor
C116	CC1–63V–06a–SL–27PFJ	ceramic chip capacitor
C115	CC1–63V–06a–SL–33PFJ	ceramic chip capacitor
CV61	CC1–63V–06a–SL–33PFJ	ceramic chip capacitor
CV63	CC1–63V–06a–SL–33PFJ	ceramic chip capacitor
CV65	CC1–63V–06a–SL–33PFJ	ceramic chip capacitor
C537	CC1–63V–06a–SL–47PFJ	ceramic chip capacitor
C503B	CC1–63V–06a–SL–47PFJ	ceramic chip capacitor
C102	CC1–63V–06a–SL–100PFJ	ceramic chip capacitor
C512	CC1–63V–06a–SL–100PFJ	ceramic chip capacitor
C513	CC1–63V–06a–SL–100PFJ	ceramic chip capacitor
C113	CC1–63V–06a–SL–100PFJ	ceramic chip capacitor
C117	CT1–63V–06a–2B4–150PFK	ceramic chip capacitor
C536	CT1–63V–06c–2B4–470PFK	ceramic chip capacitor
CA01	CT1–63V–06c–2B4–470PFK	ceramic chip capacitor
CA10	CT1–63V–06c–2B4–470PFK	ceramic chip capacitor
C603B	CT1–63V–06a–2B4–560PFK	ceramic chip capacitor
C604B	CT1–63V–06a–2B4–560PFK	ceramic chip capacitor
C114	CT1–63V–06a–2B4–1000PFK	ceramic chip capacitor

C501B	CT1–63V–06a–2B4–1000PFK	ceramic chip capacitor
C502B	CT1–63V–06a–2B4–1000PFK	ceramic chip capacitor
C118	CT1–63V–06a–2B4–1000PFK	ceramic chip capacitor
C520C	CT1–63V–06a–2B4–1000PFK	ceramic chip capacitor
C521C	CT1–63V–06a–2B4–1000PFK	ceramic chip capacitor
C522C	CT1–63V–06a–2B4–1000PFK	ceramic chip capacitor
C420	CT1–63V–06a–2B4–1500PFK	ceramic chip capacitor
C120A	CT1–63V–06C–2B4–2200PFJ	ceramic chip capacitor
C122A	CT1–63V–06C–2B4–2200PFJ	ceramic chip capacitor
CA13	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
CA17	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
C112	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
C122	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
C124	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
C504	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
C504A	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
C103	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
C131	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
C251	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
CS204	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
CS205	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
C601B	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
C633A	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
CA02	CL21X–50V–0.015μFJ	polyester film capacitor
CA09	CL21X–50V–0.015μFJ	polyester film capacitor
C510	CL21X–50V–0.022μFJ	polyester film capacitor
CA14	CL21X–50V–0.033μFJ	polyester film capacitor
CA16	CL21X–50V–0.033μFJ	polyester film capacitor
C421	CL21X–50V–0.039μFJ	polyester film capacitor
C423	CL21X–50V–0.039μFJ	polyester film capacitor
C530	CL21X–50V–0.047μFJ	polyester film capacitor
C531	CL21X–50V–0.047μFJ	polyester film capacitor
C532	CL21X–50V–0.047μFJ	polyester film capacitor
C507	2222–336–76104	polyester film capacitor
C120	CL21X–50V–0.1μFJ	polyester film capacitor
CS10	CL21X–50V–0.1μFJ	polyester film capacitor
CS13	CL21X–50V–0.1μFJ	polyester film capacitor
CS14	CL21X–50V–0.1μFJ	polyester film capacitor
C208	CL21X–50V–0.1μFJ	polyester film capacitor
C209	CL21X–50V–0.1μFJ	polyester film capacitor
C228	CL21X–50V–0.1μFJ	polyester film capacitor

C515	CL21X–50V–0.1μFJ	polyester film capacitor
C516	CL21X–50V–0.1μFJ	polyester film capacitor
C127A	CL21X–50V–0.1μFJ	polyester film capacitor
C525B	CL21X–50V–0.1μFJ	polyester film capacitor
C630A	CL21X–50V–0.1μFJ	polyester film capacitor
C654A	CL21X–50V–0.1μFJ	polyester film capacitor
CS01A	CL21X–50V–0.1μFJ	polyester film capacitor
CS02A	CL21X–50V–0.1μFJ	polyester film capacitor
CS03A	CL21X–50V–0.1μFJ	polyester film capacitor
CS03	CL21X–50V–0.1μFJ	polyester film capacitor
CS05	CL21X–50V–0.1μFJ	polyester film capacitor
CS07	CL21X–50V–0.1μFJ	polyester film capacitor
C210	CL21X–50V–0.1μFJ	polyester film capacitor
CA04	CL21X–50V–0.1μFJ	polyester film capacitor
C517	CL21X–50V–0.1μFJ	polyester film capacitor
CV86	CL21X–50V–0.1μFJ	polyester film capacitor
C647	CL21X–50V–0.1μFJ	polyester film capacitor
C648	CL21X–50V–0.1μFJ	polyester film capacitor
C503	CL21X–50V–0.1μFJ	polyester film capacitor
C506	CL21X–50V–0.1μFJ	polyester film capacitor
C508	CL21X–50V–0.1μFJ	polyester film capacitor
C511	CL21X–50V–0.1μFJ	polyester film capacitor
C534	CL21X–50V–0.1μFJ	polyester film capacitor
C541	CL21X–50V–0.1μFJ	polyester film capacitor
C05	CL21X–50V–0.1μFJ	polyester film capacitor
C07	CL21X–50V–0.1μFJ	polyester film capacitor
C214B	CL21X–50V–0.1μFJ	polyester film capacitor
CS11A	CL21X–50V–0.1μFJ	polyester film capacitor
CS541C	CL21X–50V–0.1μFJ	polyester film capacitor
CS01A	CL21X–50V–0.1μFJ	polyester film capacitor
C543C	CL21X–50V–0.1μFJ	polyester film capacitor
CS14A	CL21X–50V–0.1μFJ	polyester film capacitor
C250A	CL21X–50V–0.1μFJ	polyester film capacitor
CS544C	CL21X–50V–0.1μFJ	polyester film capacitor
C303	CL21X–50V–0.1μFJ	polyester film capacitor
C214	CL21X–50V–0.1μFJ	polyester film capacitor
CV66A	CL21X–50V–0.22μFJ	polyester film capacitor
CA05	CD110X–50V–1μFM	electrolytic capacitor
CA08	CD110X–50V–1μFM	electrolytic capacitor
C424	CD110X–50V–1μFM	electrolytic capacitor
C505B	CD110X–50V–2.2μFM	electrolytic capacitor

CA06	CD110X–63V–4.7μFM	electrolytic capacitor
CA07	CD110X–63V–4.7μFM	electrolytic capacitor
CA11	CD110X–63V–4.7μFM	electrolytic capacitor
CA12	CD110X–63V–4.7μFM	electrolytic capacitor
CA15	CD110X–63V–4.7μFM	electrolytic capacitor
CA18	CD110X–63V–4.7μFM	electrolytic capacitor
CA19	CD110X–63V–4.7μFM	electrolytic capacitor
C250	CD110X–16V–10μFM	electrolytic capacitor
CV02	CD110X–16V–10μFM	electrolytic capacitor
C520B	CD110X–16V–10μFM	electrolytic capacitor
C521B	CD110X–16V–10μFM	electrolytic capacitor
C502A	CD110X–16V–22μFM	electrolytic capacitor
C422	CD110X–16V–33μFM	electrolytic capacitor
C522B	CD110X–16V–47μFM	electrolytic capacitor
C533	CD110X–16V–47μFM	electrolytic capacitor
C509	CD110X–16V–47μFM	electrolytic capacitor
C352A	CD110X–16V–47μFM	electrolytic capacitor
C104	CD110X–16V–47μFM	electrolytic capacitor
C137	CD110X–16V–47μFM	electrolytic capacitor
C135	CD110X–16V–47μFM	electrolytic capacitor
C121	CD110X–16V–47μFM	electrolytic capacitor
C123	CD110X–16V–47μFM	electrolytic capacitor
C128	CD110X–16V–47μFM	electrolytic capacitor
CA03	CD110X–16V–47μFM	electrolytic capacitor
CS02	CD110X–16V–47μFM	electrolytic capacitor
C526B	CD110X–16V–100μFM	electrolytic capacitor
C541B	CD110X–16V–100μFM	electrolytic capacitor
C542B	CD110X–16V–100μFM	electrolytic capacitor
C119	CD110X–16V–100μFM	electrolytic capacitor
C130	CD110X–16V–100μFM	electrolytic capacitor
CS04	CD110X–16V–100μFM	electrolytic capacitor
CS06	CD110X–16V–100μFM	electrolytic capacitor
CS08	CD110X–16V–100μFM	electrolytic capacitor
CS09	CD110X–16V–100μFM	electrolytic capacitor
CS01	CD110X–16V–220μFM	electrolytic capacitor
CS12	CD110X–16V–220μFM	electrolytic capacitor
CS15	CD110X–16V–220μFM	electrolytic capacitor
CS11	CD110X–16V–470μFM	electrolytic capacitor
C602B	CD110X–16V–470μFM	electrolytic capacitor
C543B	CD110X–25V–100μFM	electrolytic capacitor
C544B	CD110X–25V–100μFM	electrolytic capacitor

C649	CD110X–50V–10μFM	electrolytic capacitor
C650	CD110X–50V–10μFM	electrolytic capacitor
C110	CD110X–50V–47μFM	electrolytic capacitor
C110A	CD110X–50V–47μFM	electrolytic capacitor
CS200	CD110X–50V–100μFM	electrolytic capacitor
CS201	CD110X–50V–100μFM	electrolytic capacitor
CS202	CD110X–50V–100μFM	electrolytic capacitor
CS203	CD110X–50V–100μFM	electrolytic capacitor
C543B	CD110X–50V–100μFM	electrolytic capacitor
C544B	CD110X–50V–100μFM	electrolytic capacitor
C127	CD110X–35V–2200μFM	electrolytic capacitor
C654	CD110X–35V–2200μFM	electrolytic capacitor
L264	TEM2011	cored inductance
LS01	TEM2011	cored inductance
LS02	TEM2011	cored inductance
LS03	TEM2011	cored inductance
L120	LGB0606–1μHJ	fixed inductance
L103	LGB0606–10μHK	fixed inductance
L104	LGB0606–10μHK	fixed inductance
L123	LGB0606–10μHK	fixed inductance
L201	LGB0606–15μHK	fixed inductance
L120A	LGA0307–22μHJ	fixed inductance
L121	LGB0606–22μHK	fixed inductance
LV22	LGB0606–22μHK	fixed inductance
LV66A	LGB0606–22μHK	fixed inductance
L501	LGB0606–33μHK	fixed inductance
L502	LGB0606–33μHK	fixed inductance
L521B	LGB0606–33μHK	fixed inductance
L100	LGB0606–56μHK	fixed inductance
L101	LGB0606–56μHK	fixed inductance
W352	LGB0606–56μHK	fixed inductance
VD502B	W05Z5.1B	diode
VD501	W05Z8.2B	diode
VD505	1N4148	diode
	or 2CK75D	diode
VD501B	1N4148	diode
	or 2CK75D	diode
VD502A	1N4148	diode
	or 2CK75D	diode
VD532B	1N4148	diode
	or 2CK75D	diode

VD601B	1N4148	diode
	or 2CK75D	diode
VD602B	1N4148	diode
	or 2CK75D	diode
V422	2SA1015–Y	transistor
	or 3CG1015–Y	transistor
V523B	2SA1015–Y	transistor
	or 3CG1015–Y	transistor
V502	2SA1015–Y	transistor FDA
	or 3CG1015–Y	transistor
V503	2SA1015–Y	transistor FDA
	or 3CG1015–Y	transistor
V406	2SA1015–Y	transistor
	or 3CG1015–Y	transistor
V524B	2SA1015–Y	transistor
	or 3CG1015–Y	transistor
V525B	2SA1015–Y	transistor
	or 3CG1015–Y	transistor
V526B	2SA1015–Y	transistor
	or 3CG1015–Y	transistor
V601B	2SA1015–Y	transistor
	or 3CG1015–Y	transistor
QV01	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
V106	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
V405	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
QA01	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
V101	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
V520B	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
V521B	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
V522B	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
V100	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
QV66	2SC1815–Y	transistor

	or 3DG1815–Y	transistor
QV67	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
QV68	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
V504	RN1204	transistor
G501	JA18A–12.000MHz	crystal oscillator
VD100	uPC574J	IC
	or CW574CS	IC
NS05	L7805CV	IC
	or MC7805	IC
N503	L7805CV	IC
	or MC7805	IC
NS04	L7808CV	IC
	or MC7808	IC
N502	L7808CV	IC
	or MC7808	IC
NS03	L7809CV	IC
	or MC7809	IC
N204	L7812CV	IC
	or MC7812	IC
N205	L7912CV	IC
	or MC7912	IC
NS01	L780S05FA	IC
NS02	L780S05FA	IC
N601	LM1876TF	IC
N202	TEA2114	IC
NV03	TDA8601/C1	IC
N005	TDA9332H–N2	IC
N203	BA3880AS	IC
N001	TDQ–6A9–FM	tuner
N002	TDQ–6A9–FM	tuner
N003	DAE133B2	antenna distributor
	AV Board	
RS04	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
RV80	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
RV05	RT13–0.166W–75ΩJ	carbon film resistor
	or NAS1/6750J	carbon film resistor
RV57	RT13–0.166W–75ΩJ	carbon film resistor

	or NAS1/6750J	carbon film resistor
RV66	RT13–0.166W–75ΩJ	carbon film resistor
	or NAS1/6750J	carbon film resistor
RV06	RT13–0.166W–82ΩJ	carbon film resistor
	or NAS1/6820J	carbon film resistor
RV07	RT13–0.166W–82ΩJ	carbon film resistor
	or NAS1/6820J	carbon film resistor
RV08	RT13–0.166W–82ΩJ	carbon film resistor
	or NAS1/6820J	carbon film resistor
RV17	RT13–0.166W–82ΩJ	carbon film resistor
	or NAS1/6820J	carbon film resistor
RV18	RT13–0.166W–82ΩJ	carbon film resistor
	or NAS1/6820J	carbon film resistor
RV19	RT13–0.166W–82ΩJ	carbon film resistor
	or NAS1/6820J	carbon film resistor
RV25	RT13–0.166W–82ΩJ	carbon film resistor
	or NAS1/6820J	carbon film resistor
RV31	RT13–0.166W–82ΩJ	carbon film resistor
	or NAS1/6820J	carbon film resistor
RS01	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RV34	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RV35	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RV41	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RV42	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RV51	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RV52	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RV58	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RV61	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RV67	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RV69	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor

RV02A	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RV04	RT13–0.166W–180ΩJ	carbon film resistor
	or NAS1/6181J	carbon film resistor
RV37B	RT13–0.166W–220ΩJ	carbon film resistor
	or NAS1/6221J	carbon film resistor
RV39B	RT13–0.166W–220ΩJ	carbon film resistor
	or NAS1/6221J	carbon film resistor
CV02	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
RV09	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
RV11	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
RV14	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
RV15	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
RV22	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
RV24	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
RV27	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
RV29	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
RV37A	RT13–0.166W–1.2KΩJ	carbon film resistor
	or NAS1/6122J	carbon film resistor
RV56	RT13–0.166W–2.2KΩJ	carbon film resistor
	or NAS1/6222J	carbon film resistor
RV62	RT13–0.166W–2.2KΩJ	carbon film resistor
	or NAS1/6222J	carbon film resistor
RV65	RT13–0.166W–2.2KΩJ	carbon film resistor
	or NAS1/6222J	carbon film resistor
RV70	RT13–0.166W–2.2KΩJ	carbon film resistor
	or NAS1/6222J	carbon film resistor
RV87	RT13–0.166W–2.2KΩJ	carbon film resistor
	or NAS1/6222J	carbon film resistor
RV90	RT13–0.166W–2.2KΩJ	carbon film resistor
	or NAS1/6222J	carbon film resistor
RV100	RT13–0.166W–3.9KΩJ	carbon film resistor

	or NAS1/6392J	carbon film resistor
RV101	RT13–0.166W–3.9KΩJ	carbon film resistor
	or NAS1/6392J	carbon film resistor
RV37	RT13–0.166W–3.9KΩJ	carbon film resistor
	or NAS1/6392J	carbon film resistor
RV39	RT13–0.166W–3.9KΩJ	carbon film resistor
	or NAS1/6392J	carbon film resistor
RV60	RT13–0.166W–3.9KΩJ	carbon film resistor
	or NAS1/6392J	carbon film resistor
RV68	RT13–0.166W–3.9KΩJ	carbon film resistor
	or NAS1/6392J	carbon film resistor
RV62A	RT13–0.166W–3.9KΩJ	carbon film resistor
	or NAS1/6392J	carbon film resistor
RV70A	RT13–0.166W–3.9KΩJ	carbon film resistor
	or NAS1/6392J	carbon film resistor
RS01A	RT13–0.166W–4.7KΩJ	carbon film resistor
	or NAS1/6472J	carbon film resistor
RV36	RT13–0.166W–4.7KΩJ	carbon film resistor
	or NAS1/6472J	carbon film resistor
RV38	RT13–0.166W–4.7KΩJ	carbon film resistor
	or NAS1/6472J	carbon film resistor
RV40	RT13–0.166W–4.7KΩJ	carbon film resistor
	or NAS1/6472J	carbon film resistor
RV10	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RV12	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RV13	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RV16	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RV21	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RV23	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RV28	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RV30	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RV48	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor

RV49	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RV50	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RV43	RT13–0.166W–27KΩJ	carbon film resistor
	or NAS1/6273J	carbon film resistor
RV45	RT13–0.166W–27KΩJ	carbon film resistor
	or NAS1/6273J	carbon film resistor
RS02	RT13–0.166W–47KΩJ	carbon film resistor
	or NAS1/6473J	carbon film resistor
RS03	RT13–0.166W–47KΩJ	carbon film resistor
	or NAS1/6473J	carbon film resistor
RV59	RT13–0.166W–47KΩJ	carbon film resistor
	or NAS1/6473J	carbon film resistor
RV71	RT13–0.166W–47KΩJ	carbon film resistor
	or NAS1/6473J	carbon film resistor
RV85	RT13–0.166W–47KΩJ	carbon film resistor
	or NAS1/6473J	carbon film resistor
RV86	RT13–0.166W–47KΩJ	carbon film resistor
	or NAS1/6473J	carbon film resistor
RV88	RT13–0.166W–47KΩJ	carbon film resistor
	or NAS1/6473J	carbon film resistor
RV89	RT13–0.166W–47KΩJ	carbon film resistor
	or NAS1/6473J	carbon film resistor
CV67	CC1–50V–05c–SL–1.5PF	ceramic chip capacitor
CV68	CC1–50V–05c–SL–1.5PF	ceramic chip capacitor
CV69	CC1–50V–05c–SL–56PFJ	ceramic chip capacitor
CV70	CC1–50V–05c–SL–56PFJ	ceramic chip capacitor
CV71	CC1–50V–05c–SL–56PFJ	ceramic chip capacitor
CV97	CC1–50V–08c–SL–220PF	ceramic chip capacitor
CV72	CT1–63V–06a–2B4–470PFK	ceramic chip capacitor
CV81	CT1–63V–06a–2B4–470PFK	ceramic chip capacitor
CV98	CT1–63V–06a–2B4–470PFK	ceramic chip capacitor
CV10	CT1–63V–06a–2B4–1000PFZ	ceramic chip capacitor
CV11	CT1–63V–06a–2B4–1000PFZ	ceramic chip capacitor
CV12	CT1–63V–06a–2B4–1000PFZ	ceramic chip capacitor
CV14	CT1–63V–06a–2B4–1000PFZ	ceramic chip capacitor
CV20	CT1–63V–06a–2B4–1000PFZ	ceramic chip capacitor
CV21	CT1–63V–06a–2B4–1000PFZ	ceramic chip capacitor
CV91	CT1–63V–06a–2B4–1000PFZ	ceramic chip capacitor
CV92	CT1–63V–06a–2B4–1000PFZ	ceramic chip capacitor

CV24	CT1–63V–06a–2B4–1000PFZ	ceramic chip capacitor
CV27	CT1–63V–06a–2B4–1000PFZ	ceramic chip capacitor
CV28	CT1–63V–06a–2B4–1000PFZ	ceramic chip capacitor
CV29	CT1–63V–06a–2B4–1000PFZ	ceramic chip capacitor
CS01	CT1–63V–06a–2B4–1000PFZ	ceramic chip capacitor
CV73	CT1–50V–05c–2B4–1500PF	ceramic chip capacitor
CV82	CT1–50V–05c–2B4–1500PF	ceramic chip capacitor
CV99	CT1–50V–05c–2B4–1500PF	ceramic chip capacitor
CV34	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
CV36	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
CV38	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
CV95	CL21X–63V–0.01μFJ	polyester film capacitor
CV40	CL21X–50V–0.1μFJ	polyester film capacitor
CV39	CL21X–50V–0.1μFJ	polyester film capacitor
CS02	CL21X–50V–0.1μFJ	polyester film capacitor
CV76	CL21X–50V–0.1μFJ	polyester film capacitor
CV88	CL21X–50V–0.1μFJ	polyester film capacitor
CV90	CL21X–50V–0.1μFJ	polyester film capacitor
CV119	CL21X–50V–0.1μFJ	polyester film capacitor
CV42	CL21X–50V–0.1μFJ	polyester film capacitor
CV79	CL21X–50V–0.1μFJ	polyester film capacitor
CV40A	CL21X–50V–0.1μFJ	polyester film capacitor
CV08	CL21X–63V–0.22μFJ	polyester film capacitor
CV07	CL21X–63V–0.22μFJ	polyester film capacitor
CV09	CL21X–63V–0.22μFJ	polyester film capacitor
CV16	CL21X–63V–0.22μFJ	polyester film capacitor
CV17	CL21X–63V–0.22μFJ	polyester film capacitor
CV18	CL21X–63V–0.22μFJ	polyester film capacitor
CV33	CL21X–63V–0.22μFJ	polyester film capacitor
CV35	CL21X–63V–0.22μFJ	polyester film capacitor
CV37	CL21X–63V–0.22μFJ	polyester film capacitor
CV96	CD110X–50V–1μFM	electrolytic capacitor
CV43	CD110X–16V–4.7μFM	electrolytic capacitor
CV44	CD110X–16V–4.7μFM	electrolytic capacitor
CV45	CD110X–16V–4.7μFM	electrolytic capacitor
CV46	CD110X–16V–4.7μFM	electrolytic capacitor
CV47	CD110X–16V–4.7μFM	electrolytic capacitor
CV48	CD110X–16V–4.7μFM	electrolytic capacitor
CV49	CD110X–16V–4.7μFM	electrolytic capacitor
CV50	CD110X–16V–4.7μFM	electrolytic capacitor
CV51	CD110X–16V–4.7μFM	electrolytic capacitor

CV52	CD110X–16V–4.7μFM	electrolytic capacitor
CV53	CD110X–16V–4.7μFM	electrolytic capacitor
CV54	CD110X–16V–4.7μFM	electrolytic capacitor
CV78	CD110X–16V–3.3μFM	electrolytic capacitor
CV05	CD110X–16V–10μFM	electrolytic capacitor
CV06	CD110X–16V–10μFM	electrolytic capacitor
CV74	CD110X–16V–10μFM	electrolytic capacitor
CV75	CD110X–16V–10μFM	electrolytic capacitor
CV80	CD110X–16V–10μFM	electrolytic capacitor
CV84	CD110X–16V–10μFM	electrolytic capacitor
CV83	CD110X–16V–10μFM	electrolytic capacitor
CV94	CD110X–16V–10μFM	electrolytic capacitor
CV100	CD110X–16V–10μFM	electrolytic capacitor
CV93	CD110X–16V–10μFM	electrolytic capacitor
CV41	CD110X–16V–22μFM	electrolytic capacitor
CV85	CD110X–16V–22μFM	electrolytic capacitor
CV86	CD110X–16V–22μFM	electrolytic capacitor
CV113	CD110X–16V–47μFM	electrolytic capacitor
CV116	CD110X–16V–47μFM	electrolytic capacitor
CV30	CD110X–16V–47μFM	electrolytic capacitor
CV110	CD110X–16V–47μFM	electrolytic capacitor
CV112	CD110X–16V–47μFM	electrolytic capacitor
CV117	CD110X–16V–47μFM	electrolytic capacitor
CV118	CD110X–16V–47μFM	electrolytic capacitor
CS77	CD110X–16V–100μFM	electrolytic capacitor
CS89	CD110X–16V–100μFM	electrolytic capacitor
CV01	CD110X–16V–470μFM	electrolytic capacitor
LV01	TEM2028K	cored inductance
LV02	TEM2028K	cored inductance
LV03	TEM2028K	cored inductance
LV04	TEM2028K	cored inductance
LV05	TEM2028K	cored inductance
LV06	TEM2028K	cored inductance
LV07	TEM2028K	cored inductance
LV08	TEM2028K	cored inductance
LV09	TEM2028K	cored inductance
LV10	TEM2028K	cored inductance
LV11	TEM2028K	cored inductance
LV12	TEM2028K	cored inductance
LV13	TEM2028K	cored inductance
LV14	TEM2028K	cored inductance

LV15	TEM2028K	cored inductance
LV16	TEM2028K	cored inductance
LV19	TEM2028K	cored inductance
LV22	TEM2028K	cored inductance
LV23	LGB0606–15μHJ	fixed inductance
LV24	LGB0606–100μHJ	fixed inductance
LV25	LGB0606–100μHJ	fixed inductance
LV16	LGB0606–22UHJ	fixed inductance
LV17	LGB0606–22UHJ	fixed inductance
LV20	LGB0606–22UHJ	fixed inductance
LV21	LGB0606–22UHJ	fixed inductance
LV20A	LGB0606–22UHJ	fixed inductance
LV26	LGB0606–22UHJ	fixed inductance
VDS01	1N4148	diode
VDS02	1N4148	diode
VDS03	1N4148	diode
VDS04	1N4148	diode
DV01	W04Z4.3A	diode
QS01	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
	or 2PC1815GR	transistor
QV01	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
	or 2PC1815GR	transistor
QV02	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
	or 2PC1815GR	transistor
QV08	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
	or 2PC1815GR	transistor
QV09	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
	or 2PC1815GR	transistor
VV01	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
	or 2PC1815GR	transistor
VV02	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
	or 2PC1815GR	transistor
SK01	AV–2–10PD	AV jack
ZV01	JA18A1–18.432MHz	crystal oscillator

SK02	AV–3S–9PD	AV jack
NV04	TEA6425	IC
NV02	TEA6420	IC
NV01	MSP3440G–PO–B8–V3	IC
	Convergence Board	
RP27	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RP28	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RP29	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RP26	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RP17	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RP18	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RP23	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RP24	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RP13	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RP14	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RP01	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RP02	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor

RP03	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RP04	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RP05	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RP06	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RC05	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RC12	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RC27	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RC26	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RC04	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RC07	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RC13	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RC14	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RD01	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RD02	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor

	or RC–05K101JT	chip resistor
RD03	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RD04	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RD05	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RD06	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RD07	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RD08	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RF03	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
R002	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
R004	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
R006	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
R001	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
R003	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
R005	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
CC26	ERJ6GEYJ101V	chip resistor

	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RC20	ERJ6GEYJ101V	chip resistor
	or CR1/10101JV	chip resistor
	or RC–05K101JT	chip resistor
RL53	ERJ6GEYJ561V	chip resistor
	or CR1/10561JV	chip resistor
	or RC–05K561JT	chip resistor
RL55	ERJ6GEYJ561V	chip resistor
	or CR1/10561JV	chip resistor
	or RC–05K561JT	chip resistor
RL59	ERJ6GEYJ561V	chip resistor
	or CR1/10561JV	chip resistor
	or RC–05K561JT	chip resistor
RL61	ERJ6GEYJ561V	chip resistor
	or CR1/10561JV	chip resistor
	or RC–05K561JT	chip resistor
RL64	ERJ6GEYJ561V	chip resistor
	or CR1/10561JV	chip resistor
	or RC–05K561JT	chip resistor
RL67	ERJ6GEYJ561V	chip resistor
	or CR1/10561JV	chip resistor
	or RC–05K561JT	chip resistor
RL71	ERJ6GEYJ561V	chip resistor
	or CR1/10561JV	chip resistor
	or RC–05K561JT	chip resistor
RL73	ERJ6GEYJ561V	chip resistor
	or CR1/10561JV	chip resistor
	or RC–05K561JT	chip resistor
RL76	ERJ6GEYJ561V	chip resistor
	or CR1/10561JV	chip resistor
	or RC–05K561JT	chip resistor
RL79	ERJ6GEYJ561V	chip resistor
	or CR1/10561JV	chip resistor
	or RC–05K561JT	chip resistor
RL83	ERJ6GEYJ561V	chip resistor
	or CR1/10561JV	chip resistor
	or RC–05K561JT	chip resistor
RL85	ERJ6GEYJ561V	chip resistor
	or CR1/10561JV	chip resistor
	or RC–05K561JT	chip resistor

RL89	ERJ6GEYJ561V	chip resistor
	or CR1/10561JV	chip resistor
	or RC–05K561JT	chip resistor
RL91	ERJ6GEYJ561V	chip resistor
	or CR1/10561JV	chip resistor
	or RC–05K561JT	chip resistor
RP36	ERJ6GEYJ561V	chip resistor
	or CR1/10561JV	chip resistor
	or RC–05K561JT	chip resistor
RC15	RC–05K621JT	chip resistor
	or RC–05K621FT	chip resistor
RL04	RC–05K122JT	chip resistor
	or RC–05K122FT	chip resistor
RC01	CR1/10222JV	chip resistor
	or RC–05K222JT	chip resistor
RC02	CR1/10222JV	chip resistor
	or RC–05K222JT	chip resistor
RC03	CR1/10222JV	chip resistor
	or RC–05K222JT	chip resistor
RP15	CR1/10222JV	chip resistor
	or RC–05K222JT	chip resistor
RP16	CR1/10222JV	chip resistor
	or RC–05K222JT	chip resistor
RP35	CR1/10242JV	chip resistor
	or RC–05K242JT	chip resistor
RC16	CR1/10302JV	chip resistor
	or RC–05K302JT	chip resistor
RP33	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RP32	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RP30	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RP20	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RP21	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor

	or RC–05K103JT	chip resistor
RP22	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RP25	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RP07	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RP08	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RP09	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RP10	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RP11	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RP12	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RP26A	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RC23	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RC25	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL01	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL02	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL96	ERJ6GEYJ103V	chip resistor

	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL88	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL03	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL86	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL52	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL54	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL65	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL66	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL77	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL78	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL50	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL62	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL74	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL58	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor

RL60	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL72	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL70	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL84	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL82	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL56	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL68	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RL80	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RP23A	ERJ6GEYJ103V	chip resistor
	or CR1/10103JV	chip resistor
	or RC–05K103JT	chip resistor
RP37	CR1/10183JV	chip resistor
	or RC–05K183JT	chip resistor
RF01	ERJ6GEYJ223V	chip resistor
	or CR1/10223JV	chip resistor
	or RC–05K223JT	chip resistor
RL51	ERJ6GEYJ473V	chip resistor
	or CR1/10473JV	chip resistor
	or RC–05K473JT	chip resistor
RL57	ERJ6GEYJ473V	chip resistor
	or CR1/10473JV	chip resistor
	or RC–05K473JT	chip resistor
RL63	ERJ6GEYJ473V	chip resistor
	or CR1/10473JV	chip resistor
	or RC–05K473JT	chip resistor

RL69	ERJ6GEYJ473V	chip resistor
	or CR1/10473JV	chip resistor
	or RC–05K473JT	chip resistor
RL75	ERJ6GEYJ473V	chip resistor
	or CR1/10473JV	chip resistor
	or RC–05K473JT	chip resistor
RL81	ERJ6GEYJ473V	chip resistor
	or CR1/10473JV	chip resistor
	or RC–05K473JT	chip resistor
RL87	ERJ6GEYJ473V	chip resistor
	or CR1/10473JV	chip resistor
	or RC–05K473JT	chip resistor
RF02	ERJ6GEYJ104V	chip resistor
	or CR1/10104JV	chip resistor
	or RC–05K104JT	chip resistor
RP34	ERJ6GEYJ334V	chip resistor
	or CR1/10334JV	chip resistor
	or RC–05K334JT	chip resistor
RP31	ERJ6GEYJ106V	chip resistor
	or CR1/10106JV	chip resistor
	or RC–05K106JT	chip resistor
CL53	0805CH100J500NT	chip capacitor
CL55	0805CH100J500NT	chip capacitor
CL63	0805CH100J500NT	chip capacitor
CL69	0805CH100J500NT	chip capacitor
CL73	0805CH100J500NT	chip capacitor
CL79	0805CH100J500NT	chip capacitor
CL83	0805CH100J500NT	chip capacitor
CL89	0805CH100J500NT	chip capacitor
CL93	0805CH100J500NT	chip capacitor
CL99	0805CH100J500NT	chip capacitor
CL103	0805CH100J500NT	chip capacitor
CL109	0805CH100J500NT	chip capacitor
CL113	0805CH100J500NT	chip capacitor
CL119	0805CH100J500NT	chip capacitor
CP07	GRM40CH200J50PT	chip capacitor
	or 0805CG200J500NT	chip capacitor
CP08	GRM40CH200J50PT	chip capacitor
	0805CG200J500NT	chip capacitor
CH01A	GRM40CH330J50PT	chip capacitor
	or 0805CG330J500NT	chip capacitor

CP26	GRM40B102K50PT	chip capacitor
	or 0805CG102J500NT	chip capacitor
CL52	GRM40COG152J50PT	chip capacitor
	or 0805CG152J500NT	chip capacitor
CL64	GRM40COG152J50PT	chip capacitor
	or 0805CG152J500NT	chip capacitor
CL74	GRM40COG152J50PT	chip capacitor
	or 0805CG152J500NT	chip capacitor
CL84	GRM40COG152J50PT	chip capacitor
	or 0805CG152J500NT	chip capacitor
CL94	GRM40COG152J50PT	chip capacitor
	or 0805CG152J500NT	chip capacitor
CL104	GRM40COG152J50PT	chip capacitor
	or 0805CG152J500NT	chip capacitor
CP09	GRM40F223Z50PT	chip capacitor
	or 0805F223Z500NT	chip capacitor
CP10	GRM40F223Z50PT	chip capacitor
	or 0805F223Z500NT	chip capacitor
CC02	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CC03	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CC06	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CC08	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CC11	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CC13	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CD12	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CC17	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CC22	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CD03	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CD05	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CD07	GRM40F104Z50PT	chip capacitor

	or 0805F104Z500NT	chip capacitor
CD11	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CD13	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CD14	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CD16	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CD20	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CD22	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL50	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL56	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL66	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL68	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL76	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL78	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL86	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL88	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL96	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL98	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL106	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL108	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL116	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL118	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor

CL128	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL114	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CC44	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CC45	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CC1	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CC2	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CC46	GRM40F104Z50PT	chip capacitor
	or 0805F104Z500NT	chip capacitor
CL59	CL21X–50V–1000PFJ	polyester film capacitor
CL60	CL21X–50V–1000PFJ	polyester film capacitor
CL70	CL21X–50V–1000PFJ	polyester film capacitor
CL80	CL21X–50V–1000PFJ	polyester film capacitor
CL90	CL21X–50V–1000PFJ	polyester film capacitor
CL100	CL21X–50V–1000PFJ	polyester film capacitor
CL110	CL21X–50V–1000PFJ	polyester film capacitor
CL57	CL21X–50V–1200PFJ	polyester film capacitor
CL62	CL21X–50V–1200PFJ	polyester film capacitor
CL72	CL21X–50V–1200PFJ	polyester film capacitor
CL82	CL21X–50V–1200PFJ	polyester film capacitor
CL92	CL21X–50V–1200PFJ	polyester film capacitor
CL102	CL21X–50V–1200PFJ	polyester film capacitor
CL112	CL21X–50V–1200PFJ	polyester film capacitor
CL58	CL21X–50V–5600PFJ	polyester film capacitor
CL61	CL21X–50V–5600PFJ	polyester film capacitor
CL71	CL21X–50V–5600PFJ	polyester film capacitor
CL81	CL21X–50V–5600PFJ	polyester film capacitor
CL91	CL21X–50V–5600PFJ	polyester film capacitor
CL101	CL21X–50V–5600PFJ	polyester film capacitor
CL111	CL21X–50V–5600PFJ	polyester film capacitor
CP04	CL21X–50V–0.01μFJ	polyester film capacitor
CP06	CL21X–50V–0.033μFJ	polyester film capacitor
CC07	CL21X–50V–0.082μFK	polyester film capacitor
CM02	CL21X–50V–0.1μFJ	polyester film capacitor
CC04A	CL21X–50V–0.1μFJ	polyester film capacitor
CM06	CL21X–50V–0.1μFJ	polyester film capacitor

CP05	CL21X–50V–0.1μFJ	polyester film capacitor
CP03	CL21X–50V–0.1μFJ	polyester film capacitor
CL11	CD110X–16V–33μFM	electrolytic capacitor
CL12	CD110X–16V–33μFM	electrolytic capacitor
CL67	CD110X–16V–33μFM	electrolytic capacitor
CL65	CD110X–16V–33μFM	electrolytic capacitor
CV02	CD110X–16V–33μFM	electrolytic capacitor
CV03	CD110X–16V–33μFM	electrolytic capacitor
CL120	CD110X–16V–33μFM	electrolytic capacitor
CL107	CD110X–16V–33μFM	electrolytic capacitor
CL127	CD110X–16V–33μFM	electrolytic capacitor
CL54	CD110X–16V–33μFM	electrolytic capacitor
CL77	CD110X–16V–33μFM	electrolytic capacitor
CL51	CD110X–16V–33μFM	electrolytic capacitor
CL117	CD110X–16V–33μFM	electrolytic capacitor
CL115	CD110X–16V–33μFM	electrolytic capacitor
CC23	CD110X–16V–47μFM	electrolytic capacitor
CC24	CD110X–16V–47μFM	electrolytic capacitor
CC25	CD110X–16V–47μFM	electrolytic capacitor
CC16	CD110X–16V–47μFM	electrolytic capacitor
CC15	CD110X–16V–47μFM	electrolytic capacitor
CC18	CD110X–16V–47μFM	electrolytic capacitor
CC21	CD110X–16V–47μFM	electrolytic capacitor
CC20	CD110X–16V–47μFM	electrolytic capacitor
CC19	CD110X–16V–47μFM	electrolytic capacitor
CD21	CD110X–16V–47μFM	electrolytic capacitor
CD04	CD110X–16V–47μFM	electrolytic capacitor
CD30	CD110X–16V–47μFM	electrolytic capacitor
CD06	CD110X–16V–47μFM	electrolytic capacitor
CD17	CD110X–16V–47μFM	electrolytic capacitor
CL02	CD110X–16V–47μFM	electrolytic capacitor
CL125	CD110X–16V–100μFM	electrolytic capacitor
CD15	CD110X–16V–100μFM	electrolytic capacitor
CD18	CD110X–16V–100μFM	electrolytic capacitor
CD19	CD110X–16V–100μFM	electrolytic capacitor
CC10	CD110X–16V–100μFM	electrolytic capacitor
CC14	CD110X–16V–100μFM	electrolytic capacitor
CC12	CD110X–16V–100μFM	electrolytic capacitor
CD01	CD110X–16V–100μFM	electrolytic capacitor
CD08	CD110X–16V–100μFM	electrolytic capacitor
CD09	CD110X–16V–100μFM	electrolytic capacitor

CD02	CD110X–16V–100μFM	electrolytic capacitor
CC09	CD110X–16V–100μFM	electrolytic capacitor
CC27	CD110X–16V–100μFM	electrolytic capacitor
CC01	CD110X–16V–100μFM	electrolytic capacitor
CC04	CD110X–16V–100μFM	electrolytic capacitor
CM01	CD110X–16V–100μFM	electrolytic capacitor
CV04	CD110X–16V–100μFM	electrolytic capacitor
CV05	CD110X–16V–100μFM	electrolytic capacitor
CP01	CD110X–16V–100μFM	electrolytic capacitor
CP02	CD110X–16V–100μFM	electrolytic capacitor
LV01	LGA0204–1μHJ	fixed inductance
LV02	LGA0204–1μHJ	fixed inductance
LV03	LGA0204–1μHJ	fixed inductance
LV04	LGA0204–1μHJ	fixed inductance
LC01	LGA0204–1μHJ	fixed inductance
LC02	LGA0204–1μHJ	fixed inductance
LP01	LGA0204–1μHJ	fixed inductance
ZP02	JA18D–32.768KHZ	crystal oscillator
VDP01	W05Z3.6B	diode
VP02	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
VP01	2SA1015–Y	transistor
	or 3CG1015–Y	transistor
N003	uPC4570G2–E1	IC
N004	uPC4570G2–E1	IC
N005	uPC4570G2–E1	IC
N006	uPC4570G2–E1	IC
N007	uPC4570G2–E1	IC
N008	uPC4570G2–E1	IC
N009	uPC4570G2–E1	IC
NV01	LF33ABDT	IC
NV02	LF33ABDT	IC
NM02	AT24C64–10PC	IC
N011	M24C64–BN6	IC
NM01	MC68HC908GR8	IC
N001	CM0021AF	IC
N002	CD0031AM	IC
	MCU Board	
R21	RC–05K0000T	chip resistor
R23	RC–05K0000T	chip resistor
R28	RC–05K4R7JT	chip resistor

R12	RC–05K470JT	chip resistor
R14	RC–05K470JT	chip resistor
R30	RC–05K470JT	chip resistor
R4	RC–05K101JT	chip resistor
R33	RC–05K101JT	chip resistor
R35	RC–05K101JT	chip resistor
R44	RC–05K101JT	chip resistor
R47	RC–05K101JT	chip resistor
R54	RC–05K101JT	chip resistor
R10	RC–05K101JT	chip resistor
R11	RC–05K101JT	chip resistor
R6	RC–05K201JT	chip resistor
R3	RC–05K221JT	chip resistor
R26	RC–05K471JT	chip resistor
R9	RC–05K102JT	chip resistor
R40	RC–05K102JT	chip resistor
R41	RC–05K102JT	chip resistor
R42	RC–05K102JT	chip resistor
R43	RC–05K102JT	chip resistor
R45	RC–05K102JT	chip resistor
R46	RC–05K102JT	chip resistor
R48	RC–05K102JT	chip resistor
R49	RC–05K102JT	chip resistor
R50	RC–05K102JT	chip resistor
R51	RC–05K102JT	chip resistor
R52	RC–05K102JT	chip resistor
R53	RC–05K102JT	chip resistor
R58	RC–05K102JT	chip resistor
R77	RC–05K102JT	chip resistor
R78	RC–05K102JT	chip resistor
R17	RC–05K222JT	chip resistor
R1	RC–05K472JT	chip resistor
R18	RC–05K472JT	chip resistor
R19	RC–05K472JT	chip resistor
R20	RC–05K472JT	chip resistor
R31	RC–05K472JT	chip resistor
R59	RC–05K472JT	chip resistor
R60	RC–05K472JT	chip resistor
R16	RC–05K562JT	chip resistor
R29	RC–05K682JT	chip resistor
R55	RC–05K682JT	chip resistor

R2	RC–05K822JT	chip resistor
R5	RC–05K103JT	chip resistor
R7	RC–05K103JT	chip resistor
R8	RC–05K103JT	chip resistor
R32	RC–05K103JT	chip resistor
R34	RC–05K103JT	chip resistor
R39	RC–05K103JT	chip resistor
R56	RC–05K103JT	chip resistor
R57	RC–05K103JT	chip resistor
R63	RC–05K103JT	chip resistor
R64	RC–05K103JT	chip resistor
R65	RC–05K103JT	chip resistor
R66	RC–05K103JT	chip resistor
R67	RC–05K103JT	chip resistor
R69	RC–05K103JT	chip resistor
R70	RC–05K103JT	chip resistor
R71	RC–05K103JT	chip resistor
R74	RC–05K103JT	chip resistor
R75	RC–05K103JT	chip resistor
R76	RC–05K103JT	chip resistor
R80	RC–05K103JT	chip resistor
R81	RC–05K103JT	chip resistor
R82	RC–05K103JT	chip resistor
R13	RC–05K123JT	chip resistor
R15	RC–05K123JT	chip resistor
R93	RC–05K153JT	chip resistor
R90	RC–05K203JT	chip resistor
R94	RC–05K473JT	chip resistor
R92	RC–05K6803FT	chip resistor
R91	RC–05K104JT	chip resistor
C16	MCH215A300JK	chip capacitor
	or 0805CG300J500NT	chip capacitor
C17	MCH215A300JK	chip capacitor
	or 0805CG300J500NT	chip capacitor
C12	MCH215A330JK	chip capacitor
	or 0805CG330J500NT	chip capacitor
C13	MCH215A470JK	chip capacitor
	or 0805CG470J500NT	chip capacitor
C4	MCH215A101JK	chip capacitor
	or 0805CG101J500NT	chip capacitor
C5	MCH215A101JK	chip capacitor

	or 0805CG101J500NT	chip capacitor
C14	MCH215A101JK	chip capacitor
	or 0805CG101J500NT	chip capacitor
C15	MCH215A101JK	chip capacitor
	or 0805CG101J500NT	chip capacitor
C32	MCH215A101JK	chip capacitor
	or 0805CG101J500NT	chip capacitor
C33	MCH215A101JK	chip capacitor
	or 0805CG101J500NT	chip capacitor
C87	MCH215C561JK	chip capacitor
	or 0805B561J500NT	chip capacitor
C2	MCH215C102KK	chip capacitor
	or 0805B102K500NT	chip capacitor
C18	MCH215C102KK	chip capacitor
	or 0805B102K500NT	chip capacitor
C40	MCH215C102KK	chip capacitor
	or 0805B102K500NT	chip capacitor
C70	MCH215C102KK	chip capacitor
	or 0805B102K500NT	chip capacitor
C85	MCH215C682KK	chip capacitor
	or 0805B682K500NT	chip capacitor
C24	MCH215C103KK	chip capacitor
	or 0805B103K500NT	chip capacitor
C25	MCH215C103KK	chip capacitor
	or 0805B103K500NT	chip capacitor
C30	MCH215C103KK	chip capacitor
	or 0805B103K500NT	chip capacitor
C60	MCH215C103KK	chip capacitor
	or 0805B103K500NT	chip capacitor
C90	MCH215C103KK	chip capacitor
	or 0805B103K500NT	chip capacitor
C84	MCH215F683ZK	chip capacitor
	or 0805F683Z500NT	chip capacitor
C6	MCH215F104ZK	chip capacitor
	or 0805F104Z500NT	chip capacitor
C19	MCH215F104ZK	chip capacitor
	or 0805F104Z500NT	chip capacitor
C20	MCH215F104ZK	chip capacitor
	or 0805F104Z500NT	chip capacitor
C23	MCH215F104ZK	chip capacitor
	or 0805F104Z500NT	chip capacitor

C50	MCH215F104ZK	chip capacitor
	or 0805F104Z500NT	chip capacitor
C80	MCH215F104ZK	chip capacitor
	or 0805F104Z500NT	chip capacitor
C83	MCH215F104ZK	chip capacitor
	or 0805F104Z500NT	chip capacitor
C86	MCH215F104ZK	chip capacitor
	or 0805F104Z500NT	chip capacitor
C92	MCH215F104ZK	chip capacitor
	or 0805F104Z500NT	chip capacitor
C93	MCH215F104ZK	chip capacitor
	or 0805F104Z500NT	chip capacitor
C41	CD110X–16V–1μFM	electrolytic capacitor
C31	CD110X–16V–4.7μFM	electrolytic capacitor
C21	CD110X–16V–10μFM	electrolytic capacitor
C29	CD110X–16V–10μFM	electrolytic capacitor
C61	CD110X–16V–10μFM	electrolytic capacitor
C71	CD110X–16V–10μFM	electrolytic capacitor
C81	CD110X–16V–10μFM	electrolytic capacitor
C3	CD110X–16V–47μFM	electrolytic capacitor
C7	CD110X–16V–47μFM	electrolytic capacitor
C26	CD110X–16V–47μFM	electrolytic capacitor
C82	CD110X–16V–47μFM	electrolytic capacitor
C1	CD110X–16V–100μFM	electrolytic capacitor
D1	W05Z3.9B	diode
D2	W05Z5.1B	diode
D3	W05Z5.1B	diode
D4	1N4148	diode
Q1	2SA1015–Y	transistor
Q6	2SA1015–Y	transistor
Q3	2SC1815–Y	transistor
Q7	2SC1815–Y	transistor
Q4	2SC2878–A	transistor
Q5	2SC2878–A	transistor
X1	JA18A–10MHz	crystal oscillator
U1	HOT98C02A	IC
U2	74HC04D	IC
U4	GAL20V8B–15LP	IC
U3	24LC64–IP	IC
U5	74HC244D	IC
U6	W27E040–12	IC

U7	IS61C256AH	IC
U8	Z8622912SSC	IC
U9	EL4583CS–T13	IC
	SM Board	
R232	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
R361	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
R351	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
R504	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
R481	RT13–0.166W–56ΩJ	carbon film resistor
	or NAS1/6560J	carbon film resistor
R420	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R445	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R491	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R514	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R901	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R902	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R903	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R904	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R905	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R906	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R403	RT13–0.166W–470ΩJ	carbon film resistor
	or NAS1/6471J	carbon film resistor
R404	RT13–0.166W–470ΩJ	carbon film resistor
	or NAS1/6471J	carbon film resistor
R409	RT13–0.166W–470ΩJ	carbon film resistor
	or NAS1/6471J	carbon film resistor
R505	RT13–0.166W–470ΩJ	carbon film resistor

	or NAS1/6471J	carbon film resistor
R506	RT13–0.166W–470ΩJ	carbon film resistor
	or NAS1/6471J	carbon film resistor
R908	RT13–0.166W–560ΩJ	carbon film resistor
	or NAS1/6561J	carbon film resistor
R914	RT13–0.166W–560ΩJ	carbon film resistor
	or NAS1/6561J	carbon film resistor
R921	RT13–0.166W–560ΩJ	carbon film resistor
	or NAS1/6561J	carbon film resistor
R931	RT13–0.166W–560ΩJ	carbon film resistor
	or NAS1/6561J	carbon film resistor
R937	RT13–0.166W–560ΩJ	carbon film resistor
	or NAS1/6561J	carbon film resistor
R944	RT13–0.166W–560ΩJ	carbon film resistor
	or NAS1/6561J	carbon film resistor
R402	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
R406	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
R465A	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
R405	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
R486	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
R513	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
R339	RT13–0.166W–1.2KΩJ	carbon film resistor
	or NAS1/6122J	carbon film resistor
R503	RT13–0.166W–1.8KΩJ	carbon film resistor
	or NAS1/6182J	carbon film resistor
R465	RT13–0.166W–2.2KΩJ	carbon film resistor
	or NAS1/6222J	carbon film resistor
R907	RT13–0.166W–4.7KΩJ	carbon film resistor
	or NAS1/6472J	carbon film resistor
R913	RT13–0.166W–4.7KΩJ	carbon film resistor
	or NAS1/6472J	carbon film resistor
R919	RT13–0.166W–4.7KΩJ	carbon film resistor
	or NAS1/6472J	carbon film resistor
R930	RT13–0.166W–4.7KΩJ	carbon film resistor
	or NAS1/6472J	carbon film resistor

R936	RT13–0.166W–4.7KΩJ	carbon film resistor
	or NAS1/6472J	carbon film resistor
R942	RT13–0.166W–4.7KΩJ	carbon film resistor
	or NAS1/6472J	carbon film resistor
R507	RT13–0.166W–3.6KΩJ	carbon film resistor
	or NAS1/6362J	carbon film resistor
R509	RT13–0.166W–6.8KΩJ	carbon film resistor
	or NAS1/6682J	carbon film resistor
R233A	RT13–0.166W–9.1KΩJ	carbon film resistor
	or NAS1/6912J	carbon film resistor
R233B	RT13–0.166W–9.1KΩJ	carbon film resistor
	or NAS1/6912J	carbon film resistor
R610	RT13–0.166W–10KΩJ	carbon film resistor FDA
	or NAS1/6103J	carbon film resistor
R611	RT13–0.166W–10KΩJ	carbon film resistor FDA
	or NAS1/6103J	carbon film resistor
R612	RT13–0.166W–10KΩJ	carbon film resistor FDA
	or NAS1/6103J	carbon film resistor
R384	RT13–0.166W–15KΩJ	carbon film resistor
	or NAS1/6153J	carbon film resistor
R511	RT13–0.166W–33KΩJ	carbon film resistor
	or NAS1/6333J	carbon film resistor
R512	RT13–0.166W–47KΩJ	carbon film resistor
	or NAS1/6473J	carbon film resistor
R510	RT13–0.166W–56KΩJ	carbon film resistor
	or NAS1/6563J	carbon film resistor
R407	RT13–0.166W–100KΩJ	carbon film resistor
	or NAS1/6104J	carbon film resistor
R502	RT13–0.166W–100KΩJ	carbon film resistor
	or NAS1/6104J	carbon film resistor
R341	RT13–0.166W–100KΩJ	carbon film resistor
	or NAS1/6104J	carbon film resistor
R401B	RT14–0.25W–10ΩJ	carbon film resistor
	or NAS1/4100J	carbon film resistor
R231	RT14–0.25W–10KΩJ	carbon film resistor
	or NAS1/4103J	carbon film resistor
R358A	RJ14–0.25W–1.2KΩF	metal film resistor
R352	RJ14–0.25W–2.4KΩG	metal film resistor
R353	RJ14–0.25W–2.4KΩG	metal film resistor
R340	RJ14–0.25W–82KΩJ	metal film resistor
R464	RI40–0.5W–10KΩJ	glass enamel film resistor

R463	RI40–0.5W–470KΩK	glass enamel film resistor
R452	RI40–0.5W–2.2MΩJ	glass enamel film resistor
R302	RF10–0.5W–0.27ΩJ	fuse–resistor
R303	RF10–0.5W–0.27ΩJ	fuse–resistor
R304	RF10–0.5W–0.27ΩJ	fuse–resistor
R410A	RF10–0.5W–0.27ΩJ	fuse–resistor
R610A	RF10–0.5W–0.27ΩJ	fuse–resistor ⚠ FDA
R479	RF10–1W–0.27ΩJ	fuse–resistor
R518	RF10–1W–0.27ΩJ	fuse–resistor
R359	RY21–0.5W–1ΩJ	oxide metal film resistor
	or MOS1/2W010J	oxide metal film resistor
R364	RY21–0.5W–2.2ΩJ	oxide metal film resistor
	or MOS1/2W2R2J	oxide metal film resistor
R364A	RY21–0.5W–2.2ΩJ	oxide metal film resistor
	or MOS1/2W2R2J	oxide metal film resistor
R570A	RY21–0.5W–330ΩJ	oxide metal film resistor
	or MOS1/2W331J	oxide metal film resistor
R570B	RY21–0.5W–330ΩJ	oxide metal film resistor
	or MOS1/2W331J	oxide metal film resistor
R570C	RY21–0.5W–330ΩJ	oxide metal film resistor
	or MOS1/2W331J	oxide metal film resistor
R415	RY21–0.5W–560ΩJ	oxide metal film resistor
	or MOS1/2W561J	oxide metal film resistor
R485	RY21–0.5W–560ΩJ	oxide metal film resistor
	or MOS1/2W561J	oxide metal film resistor
R515	RY21–0.5W–1.5KΩJ	oxide metal film resistor
	or MOS1/2W152J	oxide metal film resistor
R419	RY21–0.5W–4.7KΩJ	oxide metal film resistor
	or MOS1/2W472J	oxide metal film resistor
R473	RY21–1W–10KΩJ	oxide metal film resistor
	or MOS1W103J	oxide metal film resistor
R388	RY21–2W–1ΩJ	oxide metal film resistor
	or MOS2W010J	oxide metal film resistor
R389	RY21–2W–1ΩJ	oxide metal film resistor
	or MOS2W010J	oxide metal film resistor
W057	RY21–2W–1ΩJ	oxide metal film resistor
	or MOS2W010J	oxide metal film resistor
W058	RY21–2W–1ΩJ	oxide metal film resistor
	or MOS2W010J	oxide metal film resistor
R911	RY21–2W–3.3ΩJ	oxide metal film resistor
	or MOS2W3R3J	oxide metal film resistor

R912	RY21–2W–3.3ΩJ	oxide metal film resistor
	or MOS2W3R3J	oxide metal film resistor
R915	RY21–2W–3.3ΩJ	oxide metal film resistor
	or MOS2W3R3J	oxide metal film resistor
R916	RY21–2W–3.3ΩJ	oxide metal film resistor
	or MOS2W3R3J	oxide metal film resistor
R922	RY21–2W–3.3ΩJ	oxide metal film resistor
	MOS2W3R3J	oxide metal film resistor
R923	RY21–2W–3.3ΩJ	oxide metal film resistor
	or MOS2W3R3J	oxide metal film resistor
R933	RY21–2W–3.3ΩJ	oxide metal film resistor
	or MOS2W3R3J	oxide metal film resistor
R934	RY21–2W–3.3ΩJ	oxide metal film resistor
	or MOS2W3R3J	oxide metal film resistor
R939	RY21–2W–3.3ΩJ	oxide metal film resistor
	or MOS2W3R3J	oxide metal film resistor
R941	RY21–2W–3.3ΩJ	oxide metal film resistor
	or MOS2W3R3J	oxide metal film resistor
R947	RY21–2W–3.3ΩJ	oxide metal film resistor
	or MOS2W3R3J	oxide metal film resistor
R949	RY21–2W–3.3ΩJ	oxide metal film resistor
	or MOS2W3R3J	oxide metal film resistor
R464A	RY21–3W–33ΩJ	oxide metal film resistor
	or MOS3W330J	oxide metal film resistor
R464B	RY21–3W–33ΩJ	oxide metal film resistor
	or MOS3W330J	oxide metal film resistor
R925	RY21–2W–100ΩJ	oxide metal film resistor
	or MOS2W101J	oxide metal film resistor
R926	RY21–2W–100ΩJ	oxide metal film resistor
	or MOS2W101J	oxide metal film resistor
R945	RY21–2W–100ΩJ	oxide metal film resistor
	or MOS2W101J	oxide metal film resistor
R946	RY21–2W–100ΩJ	oxide metal film resistor
	or MOS2W101J	oxide metal film resistor
R416	RY21–2W–120ΩJ	oxide metal film resistor
	or MOS2W121J	oxide metal film resistor
R483	RY21–2W–220ΩJ	oxide metal film resistor
	or MOS2W221J	oxide metal film resistor
R927	RY21–2W–270ΩJ	oxide metal film resistor
	or MOS2W271J	oxide metal film resistor
R928	RY21–2W–270ΩJ	oxide metal film resistor

	or MOS2W271J	oxide metal film resistor
R929	RY21–2W–270ΩJ	oxide metal film resistor
	or MOS2W271J	oxide metal film resistor
R950	RY21–2W–270ΩJ	oxide metal film resistor
	or MOS2W271J	oxide metal film resistor
R951	RY21–2W–270ΩJ	oxide metal film resistor
	or MOS2W271J	oxide metal film resistor
R952	RY21–2W–270ΩJ	oxide metal film resistor
	or MOS2W271J	oxide metal film resistor
R478	RY21–2W–560ΩJ	oxide metal film resistor
	or MOS2W561J	oxide metal film resistor
R480	RY21–2W–560ΩJ	oxide metal film resistor
	or MOS2W561J	oxide metal film resistor
R517	RY21–2W–330ΩJ	oxide metal film resistor
	or MOS2W331J	oxide metal film resistor
R363A	RY21–2W–330ΩJ	oxide metal film resistor
	or MOS2W331J	oxide metal film resistor
R516	RY21–3W–10KΩJ	oxide metal film resistor
	or MOS2W103J	oxide metal film resistor
R508	WI06–2Y–0.125W–1KΩ–A	regulation–resistance
C445A	CT1–63V–06b–2B4–220PFK	ceramic chip capacitor
C413	CT1–500V–06a–2B4–390PFK	ceramic chip capacitor
C485	CT1–500V–06a–2B4–390PFK	ceramic chip capacitor
C303	CT1–500V–06a–2B4–470PFK	ceramic chip capacitor
C304	CT1–500V–06a–2B4–470PFK	ceramic chip capacitor
C310	CT1–500V–06a–2B4–470PFK	ceramic chip capacitor
C414	CT1–63V–06a–2B4–1000PFK	ceramic chip capacitor
C483	CT1–63V–06a–2B4–1000PFK	ceramic chip capacitor
C503	CT1–63V–06a–2B4–1000PFK	ceramic chip capacitor
C601	CT1–63V–06a–2B4–1000PFK	ceramic chip capacitor
C341A	CT1–63V–06a–2B4–2200PFK	ceramic chip capacitor
C356	CT1–63V–08c–2B4–4700PFK	ceramic chip capacitor
C462	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
C502A	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
C231A	CT1–63V–10c–2E4–10nFZ	ceramic chip capacitor
C412	CT1–500V–06a–2B4–2200PFK	ceramic chip capacitor
C486	CT1–500V–06a–2B4–2200PFK	ceramic chip capacitor
C467A	CT81–2KV–12c–2C1–1000PFK	ceramic chip capacitor
C454	CT81–2KV–12c–2C1–1500PFK	ceramic chip capacitor
C906	CC1–63V–06a–C–22PFJ	ceramic chip capacitor
C908	CC1–63V–06a–C–22PFJ	ceramic chip capacitor

C915	CC1–63V–06a–C–22PFJ	ceramic chip capacitor
C924	CC1–63V–06a–C–22PFJ	ceramic chip capacitor
C926	CC1–63V–06a–C–22PFJ	ceramic chip capacitor
C939	CC1–63V–06a–C–22PFJ	ceramic chip capacitor
C351	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
C901	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
C902	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
C903	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
C905	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
C909	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
C910	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
C921	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
C923	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
C927	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
C928	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
C929	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
C930	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
C904	CC1–63V–08C–SL–680PFK	ceramic chip capacitor
C907	CC1–63V–08C–SL–680PFK	ceramic chip capacitor
C916	CC1–63V–08C–SL–680PFK	ceramic chip capacitor
C922	CC1–63V–08C–SL–680PFK	ceramic chip capacitor
C925	CC1–63V–08C–SL–680PFK	ceramic chip capacitor
C940	CC1–63V–08C–SL–680PFK	ceramic chip capacitor
C475	CBB81–1.6KV–1000PFJ	polypropylene capacitor
C474	CBB21–250V–0.022μFJ	polypropylene capacitor
C912	CL21X–50V–0.1μFJ	polyester film capacitor
C914	CL21X–50V–0.1μFJ	polyester film capacitor
C918	CL21X–50V–0.1μFJ	polyester film capacitor
C920	CL21X–50V–0.1μFJ	polyester film capacitor
C932	CL21X–50V–0.1μFJ	polyester film capacitor
C934	CL21X–50V–0.1μFJ	polyester film capacitor
C936	CL21X–50V–0.1μFJ	polyester film capacitor
C938	CL21X–50V–0.1μFJ	polyester film capacitor
C307	CL21X–50V–0.1μFJ	polyester film capacitor
C353	CL21X–50V–0.1μFJ	polyester film capacitor
C363A	CL21X–50V–0.1μFJ	polyester film capacitor
C501	CL21X–50V–0.1μFJ	polyester film capacitor
C358	CL21X–63V–0.22μFJ	polyester film capacitor
C414A	CL21X–63V–0.22μFJ	polyester film capacitor
C445B	CL21X–50V–0.47μFJ	polyester film capacitor
C464A	CL21X–250V–0.1μFJ	polyester film capacitor

C445	CL21X–250V–0.1μFJ	polyester film capacitor
C479	CBB13–400V–0.51μFJ	polypropylene capacitor
C481	CBB13–400V–0.36μFJ	polypropylene capacitor
C478	CBBS–400V–0.82μFJ	polypropylene capacitor
C467	CBB13–630V–0.027μFJ	polypropylene capacitor
C465	CBB81–1.6KV–1000PFJ	polypropylene capacitor
C466	CBB81–1.6KV–9100PFH	polypropylene capacitor
C487	CBB81–1.6KV–9100PFH	polypropylene capacitor
C411	CD110–16V–4.7μFM	electrolytic capacitor
C491	CD110–16V–4.7μFM	electrolytic capacitor
C417	CD110X–25V–220μFM	electrolytic capacitor
C302	CD110X–25V–1000μFM	electrolytic capacitor
C305	CD110X–25V–1000μFM	electrolytic capacitor
C306	CD110X–25V–1000μFM	electrolytic capacitor
C354	CD110X–25V–1000μFM	electrolytic capacitor
C231	CD110X–63V–47μFM	electrolytic capacitor
C416	CD110X–63V–47μFM	electrolytic capacitor
C357	CD110X–63V–47μFM	electrolytic capacitor
C502	CD110X–63V–47μFM	electrolytic capacitor
C484	CD110X–50V–100μFM	electrolytic capacitor
C911	CD110X–50V–100μFM	electrolytic capacitor
C913	CD110X–50V–100μFM	electrolytic capacitor
C931	CD110X–50V–100μFM	electrolytic capacitor
C933	CD110X–50V–100μFM	electrolytic capacitor
C917	CD110X–50V–100μFM	electrolytic capacitor
C919	CD110X–50V–100μFM	electrolytic capacitor
C935	CD110X–50V–100μFM	electrolytic capacitor
C937	CD110X–50V–100μFM	electrolytic capacitor
C311	CD110X–50V–220μFM	electrolytic capacitor
C451	CD110X–250V–1μFM	electrolytic capacitor
C401B	CD110X–250V–10μFM	electrolytic capacitor
C611	CD110X–160V–10μFM	electrolytic capacitor
C464	CD110X–160V–4.7μFM	electrolytic capacitor
C410A	CD110–250V–22μFM	electrolytic capacitor
C476	CD110–250V–22μFM	electrolytic capacitor
C446A	CD110–250V–22μFM	electrolytic capacitor
L351	TEM2011	cored inductance
L352	TEM2011	cored inductance
L411	TEM2011	cored inductance
L481	TEM2011	cored inductance
L900	TEM2011	cored inductance

L901	TEM2011	cored inductance
L903	TEM2011	cored inductance
L904	TEM2011	cored inductance
L905	TEM2011	cored inductance
L906	TEM2011	cored inductance
L461	HFT1.8mH	fixed inductance
T410	TLN2168AH	dynamic focus transformer
L442	HFT160	fixed inductance
L441	HXT5R0	fixed inductance
L452	TLN2184	dynamic focusing width coil
D483	2CK75D	diode
	or 1N4148	diode
VD412	2CK75D	diode
	or 1N4148	diode
D501	2CK75D	diode
	or 1N4148	diode
D504A	2CK75D	diode
	or 1N4148	diode
D505	2CK75D	diode
	or 1N4148	diode
D506	2CK75D	diode
	or 1N4148	diode
VD381	2CK75D	diode
	or 1N4148	diode
VD232	2CK75D	diode
	or 1N4148	diode
VD483A	BAV21	diode
VD409	BAV21	diode
VD461	FML1–G16S	diode
VD302	2CZRU2	diode
VD303	2CZRU2	diode
VD306	2CZRU2	diode
D507	2CZRU2	diode
VD406A	2CZRU2	diode
VD450	2CZRU2	diode
VD610A	2CZRU2	diode
VD404	5VUZ52	diode
D481	5VUZ52	diode
VD352	1N4001	diode
D504	W05Z3.6A	diode
D502	W05Z5.1B	diode

VD401	W05Z8.2B	diode
VD414	W05Z8.2B	diode
V501	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
VQ401	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
VQ403	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
V502	2SC4793	transistor
V482	BSN304	transistor
VQ402	BSN304	transistor
V331	PHF9NQ20T	transistor
V503	2SD2045	transistor
V481	2SC5143	transistor
VQ404	2SC5588	transistor
VQ406	2SC4686A	transistor
N502	LM358N	IC
NZ301	LA7846N	IC
N303	L7812CV	IC
N601	STK392–020	IC
N602	STK392–020	IC
L482	LGT–500μH	horizontal amplitude inductance ⚠
N402	RCB–01CH(JUB3.340.001)	high tension box
T401	BCT–7	line–driving transformer
T481	BCT–7	line–driving transformer
T462	BCK24324L	line–switch transformer ⚠
T461	BSC70Z	flyback transformer ⚠
	FB Board	
L1	RC–05K0000T	chip resistor
L2	RC–05K0000T	chip resistor
L3	RC–05K0000T	chip resistor
R9	RC–05K0000T	chip resistor
R10	RC–05K0000T	chip resistor
R15	RC–05K0000T	chip resistor
R16	RC–05K0000T	chip resistor
R102	RC–05K0000T	chip resistor
R103	RC–05K0000T	chip resistor
R104	RC–05K0000T	chip resistor
R124	RC–05K0000T	chip resistor
R125	RC–05K0000T	chip resistor
R126	RC–05K0000T	chip resistor

R21	RC–05K0000T	chip resistor
R22	RC–05K0000T	chip resistor
R28	RC–05K0000T	chip resistor
R29	RC–05K0000T	chip resistor
R36	RC–05K0000T	chip resistor
R44	RC–05K0000T	chip resistor
R45	RC–05K0000T	chip resistor
R46	RC–05K0000T	chip resistor
R47	RC–05K0000T	chip resistor
R113	RC–05K0000T	chip resistor
FB26	RC–06K0000T	chip resistor
FB42	RC–06K0000T	chip resistor
FB50	RC–06K0000T	chip resistor
FB53	RC–06K0000T	chip resistor
R7	RC–05K220JT	chip resistor
R8	RC–05K220JT	chip resistor
R112	RC–05K220JT	chip resistor
R58	RC–05K330JT	chip resistor
R59	RC–05K330JT	chip resistor
R60	RC–05K330JT	chip resistor
R61	RC–05K330JT	chip resistor
R62	RC–05K330JT	chip resistor
R85	RC–05K330JT	chip resistor
R51	RC–05K750JT	chip resistor
R111	RC–05K750JT	chip resistor
R116	RC–05K750JT	chip resistor
R117	RC–05K750JT	chip resistor
R118	RC–05K750JT	chip resistor
R1	RC–05K101JT	chip resistor
R2	RC–05K101JT	chip resistor
R3	RC–05K101JT	chip resistor
R14	RC–05K101JT	chip resistor
R37	RC–05K101JT	chip resistor
R38	RC–05K101JT	chip resistor
R39	RC–05K101JT	chip resistor
R41	RC–05K101JT	chip resistor
R42	RC–05K101JT	chip resistor
R43	RC–05K101JT	chip resistor
R65	RC–05K101JT	chip resistor
R66	RC–05K101JT	chip resistor
R75	RC–05K101JT	chip resistor

R76	RC–05K101JT	chip resistor
R83	RC–05K101JT	chip resistor
R86	RC–05K101JT	chip resistor
R87	RC–05K101JT	chip resistor
R100	RC–05K101JT	chip resistor
R101	RC–05K101JT	chip resistor
R5	RC–05K331JT	chip resistor
R6	RC–05K331JT	chip resistor
R109	RC–05K331JT	chip resistor
R11	RC–05K271JT	chip resistor
R12	RC–05K271JT	chip resistor
R13	RC–05K271JT	chip resistor
R68	RC–05K361JT	chip resistor
R106	RC–05K471JT	chip resistor
R108	RC–05K471JT	chip resistor
R27	RC–05K561JT	chip resistor
R26	RC–05K102JT	chip resistor
R120	RC–05K102JT	chip resistor
R25	RC–05K222JT	chip resistor
R110	RC–05K222JT	chip resistor
R4	RC–05K332JT	chip resistor
R33	RC–05K392JT	chip resistor
R50	RC–05K472JT	chip resistor
R89	RC–05K472JT	chip resistor
R71	RC–05K512JT	chip resistor
R73	RC–05K512JT	chip resistor
R67	RC–05K752JT	chip resistor
R17	RC–05K103JT	chip resistor
R18	RC–05K103JT	chip resistor
R32	RC–05K103JT	chip resistor
R48	RC–05K103JT	chip resistor
R88	RC–05K103JT	chip resistor
R119	RC–05K103JT	chip resistor
R69	RC–05K153JT	chip resistor
R107	RC–05K153JT	chip resistor
R105	RC–05K223JT	chip resistor
RN1	RCML08W220JT	chip network resistor
RN2	RCML08W220JT	chip network resistor
RN3	RCML08W220JT	chip network resistor
RN4	RCML08W220JT	chip network resistor
RN5	RCML08W220JT	chip network resistor

RN6	RCML08W220JT	chip network resistor
RN7	RCML08W220JT	chip network resistor
RN8	RCML08W220JT	chip network resistor
RN9	RCML08W220JT	chip network resistor
RN10	RCML08W220JT	chip network resistor
RN11	RCML08W220JT	chip network resistor
RN12	RCML08W220JT	chip network resistor
C13	0805F104Z500NT	chip capacitor
C14	0805F104Z500NT	chip capacitor
C15	0805F104Z500NT	chip capacitor
C16	0805F104Z500NT	chip capacitor
C17	0805F104Z500NT	chip capacitor
C18	0805F104Z500NT	chip capacitor
C19	0805F104Z500NT	chip capacitor
C20	0805F104Z500NT	chip capacitor
C21	0805F104Z500NT	chip capacitor
C22	0805F104Z500NT	chip capacitor
C23	0805F104Z500NT	chip capacitor
C24	0805F104Z500NT	chip capacitor
C25	0805F104Z500NT	chip capacitor
C26	0805F104Z500NT	chip capacitor
C27	0805F104Z500NT	chip capacitor
C28	0805F104Z500NT	chip capacitor
C29	0805F104Z500NT	chip capacitor
C30	0805F104Z500NT	chip capacitor
C40	0805F104Z500NT	chip capacitor
C43	0805F104Z500NT	chip capacitor
C46	0805F104Z500NT	chip capacitor
C49	0805F104Z500NT	chip capacitor
C51	0805F104Z500NT	chip capacitor
C56	0805F104Z500NT	chip capacitor
C58	0805F104Z500NT	chip capacitor
C61	0805F104Z500NT	chip capacitor
C62	0805F104Z500NT	chip capacitor
C63	0805F104Z500NT	chip capacitor
C64	0805F104Z500NT	chip capacitor
C65	0805F104Z500NT	chip capacitor
C69	0805F104Z500NT	chip capacitor
C70	0805F104Z500NT	chip capacitor
C71	0805F104Z500NT	chip capacitor
C72	0805F104Z500NT	chip capacitor

C82	0805F104Z500NT	chip capacitor
C84	0805F104Z500NT	chip capacitor
C86	0805F104Z500NT	chip capacitor
C92	0805F104Z500NT	chip capacitor
C94	0805F104Z500NT	chip capacitor
C95	0805F104Z500NT	chip capacitor
C100	0805F104Z500NT	chip capacitor
C101	0805F104Z500NT	chip capacitor
C105	0805F104Z500NT	chip capacitor
C106	0805F104Z500NT	chip capacitor
C110	0805F104Z500NT	chip capacitor
C111	0805F104Z500NT	chip capacitor
C115	0805F104Z500NT	chip capacitor
C123	0805F104Z500NT	chip capacitor
C124	0805F104Z500NT	chip capacitor
C125	0805F104Z500NT	chip capacitor
C126	0805F104Z500NT	chip capacitor
C127	0805F104Z500NT	chip capacitor
C128	0805F104Z500NT	chip capacitor
C130	0805F104Z500NT	chip capacitor
C131	0805F104Z500NT	chip capacitor
C132	0805F104Z500NT	chip capacitor
C133	0805F104Z500NT	chip capacitor
C134	0805F104Z500NT	chip capacitor
C135	0805F104Z500NT	chip capacitor
C151	0805F104Z500NT	chip capacitor
C156	0805F104Z500NT	chip capacitor
C178	0805F104Z500NT	chip capacitor
C181	0805F104Z500NT	chip capacitor
C194	0805F104Z500NT	chip capacitor
C196	0805F104Z500NT	chip capacitor
C198	0805F104Z500NT	chip capacitor
C211	0805F104Z500NT	chip capacitor
C221	0805F104Z500NT	chip capacitor
C226	0805F104Z500NT	chip capacitor
C229	0805F104Z500NT	chip capacitor
C232	0805F104Z500NT	chip capacitor
C238	0805F104Z500NT	chip capacitor
C239	0805F104Z500NT	chip capacitor
C242	0805F104Z500NT	chip capacitor
C244	0805F104Z500NT	chip capacitor

C245	0805F104Z500NT	chip capacitor
C208	0805CG4R7J500NT	chip capacitor
C209	0805CG4R7J500NT	chip capacitor
C33	0805CG100J500NT	chip capacitor
C34	0805CG100J500NT	chip capacitor
C35	0805CG100J500NT	chip capacitor
C36	0805CG100J500NT	chip capacitor
C37	0805CG100J500NT	chip capacitor
C38	0805CG100J500NT	chip capacitor
C53	0805CG300J500NT	chip capacitor
C54	0805CG300J500NT	chip capacitor
C32	0805CG470J500NT	chip capacitor
C248	0805CG470J500NT	chip capacitor
C249	0805CG470J500NT	chip capacitor
C59	0805CG680J500NT	chip capacitor
C60	0805CG680J500NT	chip capacitor
C41	0805CG101J500NT	chip capacitor
C81	0805CG101J500NT	chip capacitor
C83	0805CG101J500NT	chip capacitor
C85	0805CG101J500NT	chip capacitor
C89	0805CG101J500NT	chip capacitor
C93	0805CG101J500NT	chip capacitor
C10	0805CG102K500NT	chip capacitor
C171	0805CG102K500NT	chip capacitor
C182	0805CG102K500NT	chip capacitor
C12	ECUV1H392KBN	chip capacitor
C45	0805B472K500NT	chip capacitor
C48	0805B472K500NT	chip capacitor
C11	0805CG393Z500NT	chip capacitor
C7	0805B473K500NT	chip capacitor
C8	0805B473K500NT	chip capacitor
C9	0805B473K500NT	chip capacitor
C31	0805B473K500NT	chip capacitor
C231	0805B473K500NT	chip capacitor
C66	ECUV1H102KBN	chip capacitor
C68	ECUV1H102KBN	chip capacitor
C137	ECUV1H102KBN	chip capacitor
C138	ECUV1H102KBN	chip capacitor
C139	ECUV1H102KBN	chip capacitor
C140	ECUV1H102KBN	chip capacitor
C141	ECUV1H102KBN	chip capacitor

C142	ECUV1H102KBN	chip capacitor
C144	ECUV1H102KBN	chip capacitor
C145	ECUV1H102KBN	chip capacitor
C146	ECUV1H102KBN	chip capacitor
C147	ECUV1H102KBN	chip capacitor
C148	ECUV1H102KBN	chip capacitor
C149	ECUV1H102KBN	chip capacitor
C154	0805B103K500NT	chip capacitor
C185	0805B103K500NT	chip capacitor
C176	0805F473Z500NT	chip capacitor
C179	0805F224M500NT	chip capacitor
C172	0805F684M500NT	chip capacitor
C173	0805F684M500NT	chip capacitor
C87	GRM40F105Z25PT	chip capacitor
C90	GRM40F105Z25PT	chip capacitor
C157	GRM40F105Z25PT	chip capacitor
C236	GRM40F105Z25PT	chip capacitor
C155	CA45–B–16V–2.2μFK	tantalum electrolytic capacitor
C175	CA45B–16V–10μFM	tantalum electrolytic capacitor
C195	CA45B–16V–10μFM	tantalum electrolytic capacitor
C197	CA45B–16V–10μFM	tantalum electrolytic capacitor
C88	CA45C–16V–22μFM	tantalum electrolytic capacitor
C91	CA45C–16V–22μFM	tantalum electrolytic capacitor
C237	CDP–25V–4.7μFM	electrolytic capacitor
C39	CDP–16V–10μFM	electrolytic capacitor
C44	CDP–16V–10μFM	electrolytic capacitor
C47	CDP–16V–10μFM	electrolytic capacitor
C50	CDP–16V–10μFM	electrolytic capacitor
C52	CDP–16V–10μFM	electrolytic capacitor
C55	CDP–16V–10μFM	electrolytic capacitor
C57	CDP–16V–10μFM	electrolytic capacitor
C74	CDP–16V–10μFM	electrolytic capacitor
C76	CDP–16V–10μFM	electrolytic capacitor
C77	CDP–16V–10μFM	electrolytic capacitor
C78	CDP–16V–10μFM	electrolytic capacitor
C79	CDP–16V–10μFM	electrolytic capacitor
C80	CDP–16V–10μFM	electrolytic capacitor
C193	CDP–16V–10μFM	electrolytic capacitor
C210	CDP–16V–10μFM	electrolytic capacitor
C230	CDP–16V–10μFM	electrolytic capacitor
C240	CDP–16V–22μFM	electrolytic capacitor

C222	CDP–16V–22μFM	electrolytic capacitor
C103	CDP–16V–22μFM	electrolytic capacitor
C108	CDP–16V–22μFM	electrolytic capacitor
C102	CDP–16V–22μFM	electrolytic capacitor
C223	CDP–16V–22μFM	electrolytic capacitor
C104	CDP–16V–22μFM	electrolytic capacitor
C107	CDP–16V–22μFM	electrolytic capacitor
C225	CDP–16V–22μFM	electrolytic capacitor
C224	CDP–16V–22μFM	electrolytic capacitor
C99	CDP–16V–22μFM	electrolytic capacitor
C98	CDP–16V–22μFM	electrolytic capacitor
C220	CDP–16V–22μFM	electrolytic capacitor
C96	CDP–16V–22μFM	electrolytic capacitor
C97	CDP–16V–22μFM	electrolytic capacitor
C180	CDP–16V–22μFM	electrolytic capacitor
C177	CDP–16V–22μFM	electrolytic capacitor
C114	CDP–16V–22μFM	electrolytic capacitor
C153	CDP–16V–22μFM	electrolytic capacitor
C152	CDP–16V–22μFM	electrolytic capacitor
C247	CDP–16V–22μFM	electrolytic capacitor
C228	CDP–16V–22μFM	electrolytic capacitor
C241	CDP–16V–22μFM	electrolytic capacitor
C243	CDP–16V–22μFM	electrolytic capacitor
C227	CDP–16V–22μFM	electrolytic capacitor
C246	CDP–16V–22μFM	electrolytic capacitor
C113	CDP–16V–22μFM	electrolytic capacitor
C112	CDP–16V–22μFM	electrolytic capacitor
C109	CDP–16V–22μFM	electrolytic capacitor
C67	CDP–16V–100μFM	electrolytic capacitor
C73	CDP–16V–100μFM	electrolytic capacitor
C129	CDP–16V–100μFM	electrolytic capacitor
C136	CDP–16V–100μFM	electrolytic capacitor
C143	CDP–16V–100μFM	electrolytic capacitor
C150	CDP–16V–100μFM	electrolytic capacitor
FB9	CBG2012U201T	chip bead
FB10	CBG2012U201T	chip bead
FB11	CBG2012U201T	chip bead
FB12	CBG2012U201T	chip bead
FB13	CBG2012U201T	chip bead
FB14	CBG2012U201T	chip bead
FB25	CBG2012U201T	chip bead

FB34	CBG2012U201T	chip bead
FB35	CBG2012U201T	chip bead
FB36	CBG2012U201T	chip bead
FB37	CBG2012U201T	chip bead
FB38	CBG2012U201T	chip bead
FB61	CBG2012U201T	chip bead
FB62	CBG2012U201T	chip bead
FB7	CBG2012U190T	chip bead
FB40	CBG2012U190T	chip bead
FB4	CBG3216U190T	chip bead
FB5	CBG3216U190T	chip bead
FB6	CBG3216U190T	chip bead
FB15	MCB–453215–380–T	chip bead
FB15	HF30ACC453215–T	chip bead
FB16	MCB–453215–380–T	chip bead
FB16	HF30ACC453215–T	chip bead
FB17	MCB–453215–380–T	chip bead
FB17	HF30ACC453215–T	chip bead
FB19	MCB–453215–380–T	chip bead
FB19	HF30ACC453215–T	chip bead
FB20	MCB–453215–380–T	chip bead
FB20	HF30ACC453215–T	chip bead
FB21	MCB–453215–380–T	chip bead
FB21	HF30ACC453215–T	chip bead
FB33	MCB–453215–380–T	chip bead
FB33	HF30ACC453215–T	chip bead
FB41	MCB–453215–380–T	chip bead
FB41	HF30ACC453215–T	chip bead
FB43	MCB–453215–380–T	chip bead
FB43	HF30ACC453215–T	chip bead
FB45	MCB–453215–380–T	chip bead
FB45	HF30ACC453215–T	chip bead
FB47	MCB–453215–380–T	chip bead
FB47	HF30ACC453215–T	chip bead
FB49	MCB–453215–380–T	chip bead
FB49	HF30ACC453215–T	chip bead
FB51	MCB–453215–380–T	chip bead
FB51	HF30ACC453215–T	chip bead
FB52	MCB–453215–380–T	chip bead
FB52	HF30ACC453215–T	chip bead
FB57	MCB–453215–380–T	chip bead

FB57	HF30ACC453215–T	chip bead
FB58	MCB–453215–380–T	chip bead
FB58	HF30ACC453215–T	chip bead
FB59	MCB–453215–380–T	chip bead
FB59	HF30ACC453215–T	chip bead
FB60	MCB–453215–380–T	chip bead
FB60	HF30ACC453215–T	chip bead
D1	RLS4148 TE–11	diode
D2	RLS4148 TE–11	diode
D3	RLS4148 TE–11	diode
D4	RLS4148 TE–11	diode
Q1	2SA1037AK	transistor
Q5	2SA1037AK	transistor
Q3	MMBT3904	transistor
Q4	MMBT3904	transistor
U1	AD9883AKST–110	IC
U3	DPTV–3D	IC
U16	AS1117M3–3.3	IC
U18	AS1117M3–3.3	IC
U19	AS1117M3–3.3	IC
U6	AS1117M3–2.5	IC
U9	KM416S1020B	IC
U9	M12L16161A–7T	IC
U10	KM416S1020B	IC
U10	M12L16161A–7T	IC
U11	KM416S1020B	IC
U11	M12L16161A–7T	IC
U12	KM416S1020B	IC
U12	M12L16161A–7T	IC
U13	TA1318N	IC
U14	VPX3226E–PQ–A1	IC
U2	PI5V330Q	IC
U15	PI5V330Q	IC
U17	AS2830AU–3.3	IC
Y2	CSB503F30	ceramic oscillator
Y1	JA18A1–14.31818MHz	crystal oscillator
Y3	JA18A–20.25MHz	crystal oscillator
	Y–G Board	
RG02A	RT13–0.166W–27ΩJ	carbon film resistor
	or NAS1/6270J	carbon film resistor
RG01A	RT13–0.166W–47ΩJ	carbon film resistor

	or NAS1/6470J	carbon film resistor
RG16	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RG19	RT13–0.166W–220ΩJ	carbon film resistor
	or NAS1/6221J	carbon film resistor
RG17	RT13–0.166W–330ΩJ	carbon film resistor
	or NAS1/6331J	carbon film resistor
RG01B	RT13–0.166W–330ΩJ	carbon film resistor
	or NAS1/6331J	carbon film resistor
RG09	RT13–0.166W–470ΩJ	carbon film resistor
	or NAS1/6471J	carbon film resistor
RG10	RT13–0.166W–1.5KΩJ	carbon film resistor
	or NAS1/6152J	carbon film resistor
RG02	RT13–0.166W–2KΩJ	carbon film resistor
	or NAS1/6202J	carbon film resistor
RG20	RT13–0.166W–3.3KΩJ	carbon film resistor
	or NAS1/6332J	carbon film resistor
RG08	RT13–0.166W–3.6KΩJ	carbon film resistor
	or NAS1/6362J	carbon film resistor
RG05	RT13–0.166W–5.6KΩJ	carbon film resistor
	or NAS1/6562J	carbon film resistor
RG21	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RG04	RT13–0.166W–12KΩJ	carbon film resistor
	or NAS1/6123J	carbon film resistor
RG22	RT13–0.166W–22KΩJ	carbon film resistor
	or NAS1/6223J	carbon film resistor
RG23	RY21–1W–100KΩJ	oxide metal film resistor
	or MOS1W104J	oxide metal film resistor
RG30	RY21–2W–39KΩJ	oxide metal film resistor
	or MOS2W393J	oxide metal film resistor
RG11	RY21–2W–100KΩJ	oxide metal film resistor
	or MOS2W104J	oxide metal film resistor
RG25	RI40–0.5W–1.5KΩJ	glass enamel film resistor
RG12	RI40–0.5W–3.9KΩJ	glass enamel film resistor
RG06A	RI40–0.5W–10KΩJ	glass enamel film resistor
RG24A	RI40–0.5W–10MΩJ	glass enamel film resistor
RG24	RI40–0.5W–4.7MΩK	glass enamel film resistor
RG15	RF11–0.5W–47ΩJ	fuse–resistor
RG25A	RF10–2W–1.5ΩJ	fuse–resistor
RG25B	RF10–2W–1.5ΩJ	fuse–resistor

RG26	RF10–2W–2.7ΩJ	fuse–resistor
CG06	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
CG09	CC1–63V–10a–SL–560PFJ	ceramic chip capacitor
CG08A	CC1–63V–06a–C–2PFC	ceramic chip capacitor
CG08	CC1–63V–06a–C–8PFC	ceramic chip capacitor
CG10	CL21X–250V–0.1μFJ	polyester film capacitor
CG14	CBB81–1.6KV–2200PFJ	polypropylene capacitor
CG13	CBB13–630V–0.01μFH	polypropylene capacitor
CG02	CL21X–50V–0.1μFJ	polyester film capacitor
CG05	CL21X–50V–0.1μFJ	polyester film capacitor
CG01	CD110X–16V–100μFM	electrolytic capacitor
CG11	CD110X–16V–220μFM	electrolytic capacitor
CG03	CD110X–16V–470μFM	electrolytic capacitor
CG12	CD288–250V–10μFM	electrolytic capacitor
CG15	CD288–250V–10μFM	electrolytic capacitor
CG17	CD288–250V–10μFM	electrolytic capacitor
CG07	CD288H–250V–33μFM	electrolytic capacitor
LG03	LGB0606–4.7μHJ	fixed inductance
LG01	LGB0606–47μHJ	fixed inductance
LG02	LGB0606–47μHJ	fixed inductance
DG04	1N4148	diode
	or 2CK75D	diode
DG02	BAV21	diode
DG03	BAV21	diode
DG12	BAV21	diode
DG05	2CZRU2	diode
DG06	2CZRU2	diode
VG02	2SC2688	transistor
VG01	2SA1015–Y	transistor
VG05	2SC1815–Y	transistor
AG01	GZS10–2–108	GZS CRT SOCKET ⚠
NG01	TDA6111Q	IC
	Y–B board	
RB02A	RT13–0.166W–27ΩJ	carbon film resistor
	or NAS1/6270J	carbon film resistor
RB01A	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
RB16	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RB19	RT13–0.166W–220ΩJ	carbon film resistor
	or NAS1/6221J	carbon film resistor

RB17	RT13–0.166W–330ΩJ	carbon film resistor
	or NAS1/6331J	carbon film resistor
RB01B	RT13–0.166W–330ΩJ	carbon film resistor
	or NAS1/6331J	carbon film resistor
RB09	RT13–0.166W–470ΩJ	carbon film resistor
	or NAS1/6471J	carbon film resistor
RB10	RT13–0.166W–1.5KΩJ	carbon film resistor
	or NAS1/6152J	carbon film resistor
RB02	RT13–0.166W–2KΩJ	carbon film resistor
	or NAS1/6202J	carbon film resistor
RB20	RT13–0.166W–3.3KΩJ	carbon film resistor
	or NAS1/6332J	carbon film resistor
RB08	RT13–0.166W–3.6KΩJ	carbon film resistor
	or NAS1/6362J	carbon film resistor
RB05	RT13–0.166W–5.6KΩJ	carbon film resistor
	or NAS1/6562J	carbon film resistor
RB21	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RB04	RT13–0.166W–12KΩJ	carbon film resistor
	or NAS1/6123J	carbon film resistor
RB22	RT13–0.166W–22KΩJ	carbon film resistor
	or NAS1/6223J	carbon film resistor
RB23	RY21–1W–100KΩJ	oxide metal film resistor
	or MOS1W104J	oxide metal film resistor
RB11	RY21–2W–100KΩJ	oxide metal film resistor
	or MOS2W104J	oxide metal film resistor
RB25	RI40–0.5W–1.5KΩJ	glass enamel film resistor
RB12	RI40–0.5W–3.9KΩJ	glass enamel film resistor
RB06A	RI40–0.5W–10KΩJ	glass enamel film resistor
RB24A	RI40–0.5W–10MΩJ	glass enamel film resistor
RB24	RI40–0.5W–4.7MΩK	solid resistor
RB15	RF11–0.5W–47ΩJ	fuse–resistor
RB26	RF11–2W–2.7ΩJ	fuse–resistor
CB06	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
CB09	CC1–63V–10a–SL–560PFJ	ceramic chip capacitor
CB08A	CC1–63V–06a–C–2PFC	ceramic chip capacitor
CB08	CC1–63V–06a–SL–10PFD	ceramic chip capacitor
CB10	CL21X–250V–0.1μFJ	polyester film capacitor
CB14	CBB81–1.6KV–2200PFJ	polypropylene capacitor
CB13	CBB13–630V–0.01μFH	polypropylene capacitor
CB02	CL21X–50V–0.1μFJ	polyester film capacitor

CB05	CL21X–50V–0.1μFJ	polyester film capacitor
CB01	CD110X–16V–100μFM	electrolytic capacitor
CB11	CD110X–16V–220μFM	electrolytic capacitor
CB03	CD110X–16V–470μFM	electrolytic capacitor
CB12	CD288–250V–10μFM	electrolytic capacitor
CB07	CD288–250V–33μFM	electrolytic capacitor
LB03	LGB0606–4.7μHJ	fixed inductance
LB01	LGB0606–47μHJ	fixed inductance
LB02	LGB0606–47μHJ	fixed inductance
DB04	1N4148	diode
	or 2CK75D	diode
DB02	BAV21	diode
DB03	BAV21	diode
DB12	BAV21	diode
DB05	2CZRU2	diode
DB06	2CZRU2	diode
VB02	2SC2688	transistor
VB01	2SA1015–Y	transistor
VB05	2SC1815–Y	transistor
AB01	GZS10–2–108	GZS CRT SOCKET ⚠
NB01	TDA6111Q	IC
	Y–R Board	
RR02A	RT13–0.166W–27ΩJ	carbon film resistor
	or NAS1/6270J	carbon film resistor
RR01A	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
RR16	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RR19	RT13–0.166W–220ΩJ	carbon film resistor
	or NAS1/6221J	carbon film resistor
RR17	RT13–0.166W–330ΩJ	carbon film resistor
	or NAS1/6331J	carbon film resistor
RR01B	RT13–0.166W–330ΩJ	carbon film resistor
	or NAS1/6331J	carbon film resistor
RR09	RT13–0.166W–470ΩJ	carbon film resistor
	or NAS1/6471J	carbon film resistor
RR10	RT13–0.166W–1.5KΩJ	carbon film resistor
	or NAS1/6152J	carbon film resistor
RR02	RT13–0.166W–2KΩJ	carbon film resistor
	or NAS1/6202J	carbon film resistor
RR20	RT13–0.166W–3.3KΩJ	carbon film resistor

	or NAS1/6332J	carbon film resistor
RR08	RT13–0.166W–3.6KΩJ	carbon film resistor
	or NAS1/6362J	carbon film resistor
RR05	RT13–0.166W–5.6KΩJ	carbon film resistor
	or NAS1/6562J	carbon film resistor
RR04	RT13–0.166W–12KΩJ	carbon film resistor
	or NAS1/6123J	carbon film resistor
RR21	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RR22	RT13–0.166W–22KΩJ	carbon film resistor
	or NAS1/6223J	carbon film resistor
RR23	RY21–1W–100KΩJ	oxide metal film resistor
	or MOS1W104J	oxide metal film resistor
RR11	RY21–2W–100KΩJ	oxide metal film resistor
	or MOS2W104J	oxide metal film resistor
RR25	RI40–0.5W–1.5KΩK	glass enamel film resistor
RR12	RI40–0.5W–3.9KΩJ	glass enamel film resistor
RR06A	RI40–0.5W–10KΩJ	glass enamel film resistor
RR24A	RI40–0.5W–10MΩJ	glass enamel film resistor
RR24	RI40–0.5W–4.7MΩK	glass enamel film resistor
RR15	RF10–0.5W–47ΩJ	fuse–resistor
RR26	RF10–2W–2.7ΩJ	fuse–resistor
CR06	CC1–63V–06c–SL–100PFJ	ceramic chip capacitor
CR09	CC1–63V–10a–SL–560PFJ	ceramic chip capacitor
CR08A	CC1–63V–06a–C–2PFC	ceramic chip capacitor
CR08	CC1–63V–06a–C–12PFJ	ceramic chip capacitor
CR10	CL21X–250V–0.1μFJ	polyester film capacitor
CR14	CBB81–1.6KV–2200PFJ	polypropylene capacitor
CR13	CBB13–630V–0.01μFH	polypropylene capacitor
CR02	CL21X–50V–0.1μFJ	polyester film capacitor
CR05	CL21X–50V–0.1μFJ	polyester film capacitor
CR01	CD110X–16V–100μFM	electrolytic capacitor
CR11	CD110X–16V–220μFM	electrolytic capacitor
CR03	CD110X–16V–470μFM	electrolytic capacitor
CR12	CD288–250V–10μFM	electrolytic capacitor
CR07	CD81–250V–33μFM	electrolytic capacitor
LR03	LGB0606–4.7μHJ	fixed inductance
LR01	LGB0606–47μHJ	fixed inductance
LR02	LGB0606–47μHJ	fixed inductance
DR04	1N4148	diode
	or 2CK75D	diode

DR11	1N4148	diode
	or 2CK75D	diode
DR02	BAV21	diode
DR03	BAV21	diode
DR12	BAV21	diode
DR05	2CZRU2	diode
DR06	2CZRU2	diode
VR02	2SC2688	transistor
VR01	2SA1015–Y	transistor
VR05	2SC1815–Y	transistor
AR01	GZS10–2–108	GZS CRT SOCKET ⚠
NR01	TDA6111Q	IC
	KZ Board	
RF15	RT13–0.166W–47ΩJ	carbon film resistor
	or NAS1/6470J	carbon film resistor
RF03	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RF04	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RF08	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RF09	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RF13	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
RF14	RT13–0.166W–100ΩJ	carbon film resistor
	or NAS1/6101J	carbon film resistor
R10	RT13–0.166W–220ΩJ	carbon film resistor
	or NAS1/6221J	carbon film resistor
R06	RT13–0.166W–330ΩJ	carbon film resistor
	or NAS1/6331J	carbon film resistor
R08	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
R09	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
RF16	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
RF17	RT13–0.166W–1KΩJ	carbon film resistor
	or NAS1/6102J	carbon film resistor
RF05	RT13–0.166W–2.2KΩJ	carbon film resistor
	or NAS1/6222J	carbon film resistor

RF11	RT13–0.166W–2.2KΩJ	carbon film resistor
	or NAS1/6222J	carbon film resistor
RF06	RT13–0.166W–3.9KΩJ	carbon film resistor
	or NAS1/6392J	carbon film resistor
RF10	RT13–0.166W–3.9KΩJ	carbon film resistor
	or NAS1/6392J	carbon film resistor
RF12	RT13–0.166W–3.9KΩJ	carbon film resistor
	or NAS1/6392J	carbon film resistor
RF01	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
RF02	RT13–0.166W–10KΩJ	carbon film resistor
	or NAS1/6103J	carbon film resistor
R01	RT13–0.166W–18KΩJ	carbon film resistor
	or NAS1/6183J	carbon film resistor
R03	RT13–0.166W–18KΩJ	carbon film resistor
	or NAS1/6183J	carbon film resistor
RF07	RT13–0.166W–33KΩJ	carbon film resistor
	or NAS1/6333J	carbon film resistor
R02	RT13–0.166W–62KΩJ	carbon film resistor
	or NAS1/6623J	carbon film resistor
R04	RT13–0.166W–62KΩJ	carbon film resistor
	or NAS1/6623J	carbon film resistor
CF06	CC1–63V–12a–SL–680PFJ	ceramic chip capacitor
CF17	CT1–63V–06a–2B4–1000PFK	ceramic chip capacitor
CF18	CT1–63V–06a–2B4–1000PFK	ceramic chip capacitor
CF05	CL21X–63V–0.01μFJ	polyester film capacitor
CF03	CD110X–16V–22μFM	electrolytic capacitor
CF01	CD110X–16V–47μFM	electrolytic capacitor
CF02	CD110X–16V–47μFM	electrolytic capacitor
CF04	CD110X–16V–220μFM	electrolytic capacitor
DF1	1N4148	diode
	or 2CK75D	diode
DF2	1N4148	diode
	or 2CK75D	diode
KS01	FG5RGD	diode
V01	2SC1815–Y	transistor
V02	2SC1815–Y	transistor
KK01	KA3L6×5×7.5–22–10	KEY–press
KK04	KA3L6×5×7.5–22–10	KEY–press
FA01	AV–1S–3PD	frant AV jack
	Remote Board	

RM01	RT13–0.166W–75ΩJ	carbon film resistor
	or NAS1/6750J	carbon film resistor
RM03	RT13–0.166W–2.2KΩJ	carbon film resistor
	or NAS1/6222J	carbon film resistor
CM01	CD110–16V–47μFM	electrolytic capacitor
NM01	HS0038A2	IC
	Other Components	
	HV–WB	anode cap
	HV–WG	anode cap
	HV–WR	anode cap
	ZHQ222B2	antenna inputor
	ZCAT2035–0930	magnetic ring
	RVVZ–2U2M–C69–TJC1–3Y	power cord with connector
	YD140–A1–30W–8Ω	electronic speaker
	YDQG80–A1–10W–8Ω	electronic speaker
	CD71–50V–3.3μFM	electrolytic capacitor
	Import Module	
	P16LSG03RJA	projection tube(R) ⚠
	P16LSG03HKA	projection tube(G) ⚠
	P16LSG03BMB	projection tube(B) ⚠
	DAV4964A	DY deflection coil
	DAV4964A	DY deflection coil
	DAV4964A	DY deflection coil
	MHF116–62A	focus module ⚠
	MSC102–01C	high voltage capacitor module ⚠
	VM Amplifier Board(R)	
RRY16	RT13–0.166W–20ΩJ	carbon film resistor
RRY14	RT13–0.166W–20ΩJ	carbon film resistor
RRY27	RT13–0.166W–100ΩJ	carbon film resistor
RRY29	RT13–0.166W–100ΩJ	carbon film resistor
RRY28	RT13–0.166W–220ΩJ	carbon film resistor
RRY07	RT13–0.166W–1.2KΩJ	carbon film resistor
RRY09	RT13–0.166W–1.2KΩJ	carbon film resistor
RRY06	RT13–0.166W–1.5KΩJ	carbon film resistor
RRY08	RT13–0.166W–1.5KΩJ	carbon film resistor
RRY40	RT13–0.166W–2.2KΩJ	carbon film resistor
RRY41	RT13–0.166W–5.6KΩJ	carbon film resistor
RRY02	RT13–0.166W–10KΩJ	carbon film resistor
RRY03	RT13–0.166W–10KΩJ	carbon film resistor
RRY13	RT13–0.166W–12KΩJ	carbon film resistor
RRY10	RT13–0.166W–68KΩJ	carbon film resistor

RRY11	RT13–0.166W–68KΩJ	carbon film resistor
RRY15	RY21–0.5W–2.7ΩJ	oxide metal film resistor
RRY17	RY21–0.5W–2.7ΩJ	oxide metal film resistor
RRY30	RY21–0.5W–4.7ΩJ	oxide metal film resistor
RRY31	RY21–0.5W–4.7ΩJ	oxide metal film resistor
RRY18	RY21–2W–220ΩJ	oxide metal film resistor
RRY01	RY21–2W–470ΩJ	oxide metal film resistor
CRY15	CT1–63V–10a–2B4–4700PFK	ceramic chip capacitor
CRY16	CT1–63V–10a–2B4–4700PFK	ceramic chip capacitor
CRY04	CT1–500V–14C–2B4–4700PFK	ceramic chip capacitor
CRY06	CT1–500V–14C–2B4–4700PFK	ceramic chip capacitor
CRY21	CL21X–50V–0.1μFJ	polyester film capacitor
CRY11	CD110X–35V–220μFM	electrolytic capacitor
CRY02	CD110X–160V–47μFM	electrolytic capacitor
CRY05	CD110X–160V–47μFM	electrolytic capacitor
CRY03	CD110X–250V–10μFM	electrolytic capacitor
CRY10	CD110X–250V–10μFM	electrolytic capacitor
LRY01	TEM2011	cored inductance
LRY02	TEM2011	cored inductance
VDRY04	2CK75D	diode
	or 1N4148	diode
VDRY03	2CK75D	diode
	or 1N4148	diode
VDRY05	BYV26C	diode
VDRY06	BYV26C	diode
VRY03	2SA1837	transistor
VRY04	2SC4793	transistor
VRY10	3CG1015–Y	transistor
	or 2SA1015–Y	transistor
VRY13	3CG1015–Y	transistor
	or 2SA1015–Y	transistor
VRY11	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
VRY12	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
VRY16	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
XRP02	92LTU–040	VM coil
	VM Amplifier Board(G)	
RGY16	RT13–0.166W–20ΩJ	carbon film resistor
RGY14	RT13–0.166W–20ΩJ	carbon film resistor

RGY55	RT13–0.166W–47ΩJ	carbon film resistor
RGY27	RT13–0.166W–100ΩJ	carbon film resistor
RGY29	RT13–0.166W–100ΩJ	carbon film resistor
RGY28	RT13–0.166W–220ΩJ	carbon film resistor
RGY53	RT13–0.166W–220ΩJ	carbon film resistor
RGY58	RT13–0.166W–470ΩJ	carbon film resistor
RGY54	RT13–0.166W–510ΩJ	carbon film resistor
RGY52	RT13–0.166W–620ΩJ	carbon film resistor
RGY07	RT13–0.166W–1.2KΩJ	carbon film resistor
RGY09	RT13–0.166W–1.2KΩJ	carbon film resistor
RGY06	RT13–0.166W–1.5KΩJ	carbon film resistor
RGY08	RT13–0.166W–1.5KΩJ	carbon film resistor
RGY40	RT13–0.166W–2.2KΩJ	carbon film resistor
RGY57	RT13–0.166W–4.7KΩJ	carbon film resistor
RGY41	RT13–0.166W–5.6KΩJ	carbon film resistor
RGY02	RT13–0.166W–10KΩJ	carbon film resistor
RGY03	RT13–0.166W–10KΩJ	carbon film resistor
RGY56	RT13–0.166W–10KΩJ	carbon film resistor
RGY13	RT13–0.166W–12KΩJ	carbon film resistor
RGY51	RT13–0.166W–51KΩJ	carbon film resistor
RGY10	RT13–0.166W–68KΩJ	carbon film resistor
RGY11	RT13–0.166W–68KΩJ	carbon film resistor
RGY50	RT13–0.166W–91KΩJ	carbon film resistor
RGY15	RY21–0.5W–2.7ΩJ	oxide metal film resistor
RGY17	RY21–0.5W–2.7ΩJ	oxide metal film resistor
RGY30	RY21–0.5W–4.7ΩJ	oxide metal film resistor
RGY31	RY21–0.5W–4.7ΩJ	oxide metal film resistor
RGY18	RY21–2W–220ΩJ	oxide metal film resistor
RGY01	RY21–2W–470ΩJ	oxide metal film resistor
CGY15	CT1–63V–10a–2B4–4700PFK	ceramic chip capacitor
CGY16	CT1–63V–10a–2B4–4700PFK	ceramic chip capacitor
CGY04	CT1–500V–14C–2B4–4700PFK	ceramic chip capacitor
CGY06	CT1–500V–14C–2B4–4700PFK	ceramic chip capacitor
CGY20	CL21X–50V–0.01μFJ	polyester film capacitor
CGY21	CL21X–50V–0.01μFJ	polyester film capacitor
CGY22	CL21X–50V–0.01μFJ	polyester film capacitor
CGY11	CD110X–35V–220μFM	electrolytic capacitor
CGY02	CD110X–160V–47μFM	electrolytic capacitor
CGY05	CD110X–160V–47μFM	electrolytic capacitor
CGY03	CD110X–250V–10μFM	electrolytic capacitor
CGY10	CD110X–250V–10μFM	electrolytic capacitor

LGY01	TEM2011	cored inductance
LGY02	TEM2011	cored inductance
VDGY04	2CK75D	diode
	or 1N4148	diode
VDGY03	2CK75D	diode
	or 1N4148	diode
VDGY05	BYV26C	diode
VDGY06	BYV26C	diode
VGY03	2SA1837	transistor
VGY04	2SC4793	transistor
VGY10	3CG1015–Y	transistor
	or 2SA1015–Y	transistor
VGY13	3CG1015–Y	transistor
	or 2SA1015–Y	transistor
VGY21	3CG1015–Y	transistor
	or 2SA1015–Y	transistor
VGY11	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
VGY12	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
VGY16	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
VGY20	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
VGY22	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
XGP02	92LTU–040	VM coil
	VM Amplifier Board(B)	
RBY16	RT13–0.166W–20ΩJ	carbon film resistor
RBY14	RT13–0.166W–20ΩJ	carbon film resistor
RBY27	RT13–0.166W–100ΩJ	carbon film resistor
RBY29	RT13–0.166W–100ΩJ	carbon film resistor
RBY28	RT13–0.166W–220ΩJ	carbon film resistor
RBY07	RT13–0.166W–1.2KΩJ	carbon film resistor
RBY09	RT13–0.166W–1.2KΩJ	carbon film resistor
RBY06	RT13–0.166W–1.5KΩJ	carbon film resistor
RBY08	RT13–0.166W–1.5KΩJ	carbon film resistor
RBY40	RT13–0.166W–2.2KΩJ	carbon film resistor
RBY41	RT13–0.166W–5.6KΩJ	carbon film resistor
RBY02	RT13–0.166W–10KΩJ	carbon film resistor
RBY03	RT13–0.166W–10KΩJ	carbon film resistor

RBY13	RT13–0.166W–12KΩJ	carbon film resistor
RBY10	RT13–0.166W–68KΩJ	carbon film resistor
RBY11	RT13–0.166W–68KΩJ	carbon film resistor
RBY15	RY21–0.5W–2.7ΩJ	oxide metal film resistor
RBY17	RY21–0.5W–2.7ΩJ	oxide metal film resistor
RBY30	RY21–0.5W–4.7ΩJ	oxide metal film resistor
RBY31	RY21–0.5W–4.7ΩJ	oxide metal film resistor
RBY18	RY21–2W–220ΩJ	oxide metal film resistor
RBY01	RY21–2W–470ΩJ	oxide metal film resistor
CBY15	CT1–63V–10a–2B4–4700PFK	ceramic chip capacitor
CBY16	CT1–63V–10a–2B4–4700PFK	ceramic chip capacitor
CBY04	CT1–500V–14C–2B4–4700PFK	ceramic chip capacitor
CBY06	CT1–500V–14C–2B4–4700PFK	ceramic chip capacitor
CBY21	CL21X–50V–0.01μFJ	polyester film capacitor
CBY11	CD110X–35V–220μFM	electrolytic capacitor
CBY02	CD110X–160V–47μFM	electrolytic capacitor
CBY05	CD110X–160V–47μFM	electrolytic capacitor
CBY03	CD110X–250V–10μFM	electrolytic capacitor
CBY10	CD110X–250V–10μFM	electrolytic capacitor
LBY01	TEM2011	cored inductance
LBY02	TEM2011	cored inductance
VDBY04	2CK75D	diode
	or 1N4148	diode
VDBY03	2CK75D	diode
	or 1N4148	diode
VDBY05	BYV26C	diode
VDBY06	BYV26C	diode
VBY03	2SA1837	transistor
VBY04	2SC4793	transistor
VBY10	3CG1015–Y	transistor
	or 2SA1015–Y	transistor
VBY13	3CG1015–Y	transistor
	or 2SA1015–Y	transistor
VBY11	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
VBY12	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
VBY16	2SC1815–Y	transistor
	or 3DG1815–Y	transistor
XBP02	92LTU–040	VM coil

Schematic Diagrams

Notes:

1. Components having special related–related characteristics are identified by marking "⚠" on Schematic Diagrams. Always be certain that the specified replacement parts on Schematic Diagrams are used and keep the replaced parts at the original position.
2. "⚠ FDA": This symbol tells you that replacement components related to high voltage, beam current and x–ray radiation should not be made at will.
3. Schematic Diagrams include main board, scan board, AV board, Y board, front AV board, VM amplifier board, power supply board and N–S correction board.
4. Replacement parts list is only for reference, and subject to change without notice.

Part name	Remarks	Part number	List Pric
Remote	CK2B	8201801160L	$35.00
Versatile wheel		8420500020Y	$5.00
Chassis assembly		8504900120T	$95.00
Speaker assembly A		85834008500	$22.00
Speaker assembly B		85834008600	$22.00
Speaker assembly C		85834009000	$4.70
Audio cover plate assembly(L)		86116074800	$6.50
Audio cover plate assembly(R)		86116074900	$6.50
Chassis rear cover assembly		8611601210T	$23.64
Rear cover assembly		8611601050T	$45.00
Front panel assembly		8611600860T	$36.24
Front frame assembly		8611601250T	$289.67
Base frame assembly		8611600900T	$73.44
Mirror assembly		8611601270T	$52.00
Small gate assembly		8617700060T	$2.00
Projection tube assembly(R)	For Panasonic CRT (P16LSG03RJA)	86152027200	$142.00
Projection tube assembly(G)	For Panasonic CRT (P16LSG03HKA)	86152027700	$142.00
Projection tube assembly(B)	For Panasonic CRT (P16LSG03BMB)	86152027300	$142.00
Power button assembly		8661800080T	$4.50
Main board assembly	JUT7.820.040	8667200670T	$98.00
Scan board assembly	JUT7.820.041-1	8667200680T	$112.00
South-North emendation board	JUC7.820.295	8667201280T	$19.80
AV board assembly	JUT7.820.043	8667200690T	$37.23
Power board assembly	JUT7.820.042-1	8667200700T	$82.17
Y-R board assembly	JUT7.820.046	8668200720T	$15.48
Y-G board assembly	JUT7.820.044	8667200730T	$24.00
Y-B board assembly	JUT7.820.045	8667200740T	$19.62
Remote board assembly	JUT7.820.063	8667200760T	$2.94
Convergence board assembly	JUT7.820.060	8667200800T	$75.50
VM-G amplifier board assembly	JUT7.820.066	8667200820T	$12.48
VM-B amplifier board assembly	JUT7.820.067	8667200830T	$8.70
VM-R amplifier board assembly	JUT7.820.065	8667200840T	$8.70
Digital board assembly	JUT7.820.048-1	8667201170T	$140.00
CPU board assembly	JUT7.820.047	8667201180T	$55.08
Power switch board assembly	JUT7.820.078	8667201350T	$2.00
Control board assembly	JUT7.820.062	8667201620T	$5.00
Key-press(six)		88337039500	$2.00
Power wire	RVVZ-2U-2M-C69-TJC1-3Y	53411216900	$2.70
Focus potentiometer	MHF116－62A	89842511620	$17.04
Focus potentiometer	841－01	8468700158	$17.04

Group component list of GB51HD09

Part name	Remarks	Part number	List Price
Remote	CK2B	8201801160L	$35.00
Versatile wheel		8420500020Y	$5.00
Chassis assembly		8504900120T	$98.00
Speaker assembly A		85834008500	$22.00
Speaker assembly B		85834008600	$22.00
Speaker assembly C		85834009000	$4.70
Audio cover plate assembly(L)		8611602730T	$28.00
Audio cover plate assembly(R)		8611602740T	$28.00
Chassis rear cover assembly		8611600830T	$23.64
Rear cover assembly		8611600840T	$38.00
Front panel assembly		8611600860T	$36.24
Front frame assembly		8611600890T	$170.00
Base frame assembly		8611600900T	$73.44
Mirror assembly		8611600910T	$75.50
Upper panel assembly		8611600920T	$19.80
Small gate assembly		8617700050T	$2.00
Projection tube assembly(R)	For Panasonic CRT (P16LSG03RJA)	86152026500	$142.00
Projection tube assembly(G)	For Panasonic CRT (P16LSG03HKA)	86152026600	$142.00
Projection tube assembly(B)	For Panasonic CRT (P16LSG03BMB)	86152026700	$142.00
Power button assembly		8661800080T	$4.50
Main board assembly	JUT7.820.040	8667200670T	$98.00
Scan board assembly	JUT7.820.041-1	8667200680T	$112.00
AV board assembly	JUT7.820.043	8667200690T	$37.23
Power board assembly	JUT7.820.042-1	8667200700T	$82.17
Y-R board assembly	JUT7.820.046	8668200720T	$15.48
Y-G board assembly	JUT7.820.044	8667200730T	$24.00
Y-B board assembly	JUT7.820.045	8667200740T	$19.62
Remote board assembly	JUT7.820.063	8667200760T	$2.94
Convergence board assembly	JUT7.820.060	8667200800T	$75.50
VM-G amplifier board assembly	JUT7.820.066	8667200820T	$12.48
VM-B amplifier board assembly	JUT7.820.067	8667200830T	$8.70
VM-R amplifier board assembly	JUT7.820.065	8667200840T	$8.70
Digital board assembly	JUT7.820.048-1	8667201170T	$140.00
Power switch board assembly	JUT7.820.078	8667201350T	$2.00
CPU board assembly	JUT7.820.047	8667201180T	$55.08
Control board assembly	JUT7.820.062	8667201620T	$5.00
Middle frame		88074018300	$44.04
Key-press(six)		88337039500	$2.00
Power wire	RVVZ-2U-2M-C69-TJC1-3Y	53411216900	$2.70
Focus potentiometer	MHF116－62A	89842511620	$17.04
Focus potentiometer	841－01	8468700158	$17.04

Group component list of GB55HD09W

Part name	Remarks	Part number	List Price
Remote	CK2C	82018013701	$35.00
Versatile wheel		8420500020Y	$5.00
Chassis assembly		8504900150T	$98.00
Speaker assembly A		8583400720C	$22.00
Speaker assembly B		8583400730C	$22.00
Speaker assembly C		8583400740C	$4.70
Front panel assembly（L）		8611601540T	$28.00
Front panel assembly（R）		8611601550T	$28.00
Front panel assembly		8611601530T	$17.82
Mirror assembly		8611601520T	$92.00
AV box assembly		8611601580T	$14.34
Front frame		8611601030T	$30.96
Projection tube assembly(R)	For Panasonic CRT (P16LSG03RJA)	8615200180T	$142.00
Projection tube assembly(G)	For Panasonic CRT (P16LSG03HKA)	8615200190T	$142.00
Projection tube assembly(B)	For Panasonic CRT(P16LSG03BMB)	8615200200T	$142.00
Power button assembly		8661800070T	$4.50
Main board assembly	JUT7.820.040	8667200670T	$98.00
Scan board assembly	JUT7.820.041-1	8667201200T	$112.00
Side AV board assembly	JUT7.820.069	8667201030T	$10.12
AV board assembly	JUT7.820.043	8667200690T	$37.23
Power board assembly	JUT7.820.042-1	8667201060T	$82.17
Y-R board assembly	JUT7.820.046	8668201220T	$20.58
Y-G board assembly	JUT7.820.044	8667200730T	$24.00
Y-B board assembly	JUT7.820.045	8667200123T	$18.57
Remote board assembly	JUT7.820.068	8667200105T	$2.94
Convergence board assembly	JUT7.820.060	8667200800T	$75.50
VM-G amplifier board assembly	JUT7.820.066	8667201210T	$12.48
VM-B amplifier board assembly	JUT7.820.067	8667200830T	$8.70
VM-R amplifier board assembly	JUT7.820.065	8667200840T	$8.70
Digital board assembly	JUT7.820.048-1	8667201170T	$140.00
Power switch board assembly	JUT7.820.078	8667201380T	$3.00
CPU board assembly	JUT7.820.047	8667201180T	$55.08
Control board assembly	JUT7.820.093	8667201040T	$5.00
Key-press(six)		8833700640C	$2.00
Power wire	RVVZ-2U-2M-C69-TJC1-3Y	53411216900	$2.70
Focus potentiometer	MHF116-62A	89842511620	$17.04
Focus potentiometer	841-01(JUB4.687.015)	8468700158	$17.04

Group component list of GB65HD09W

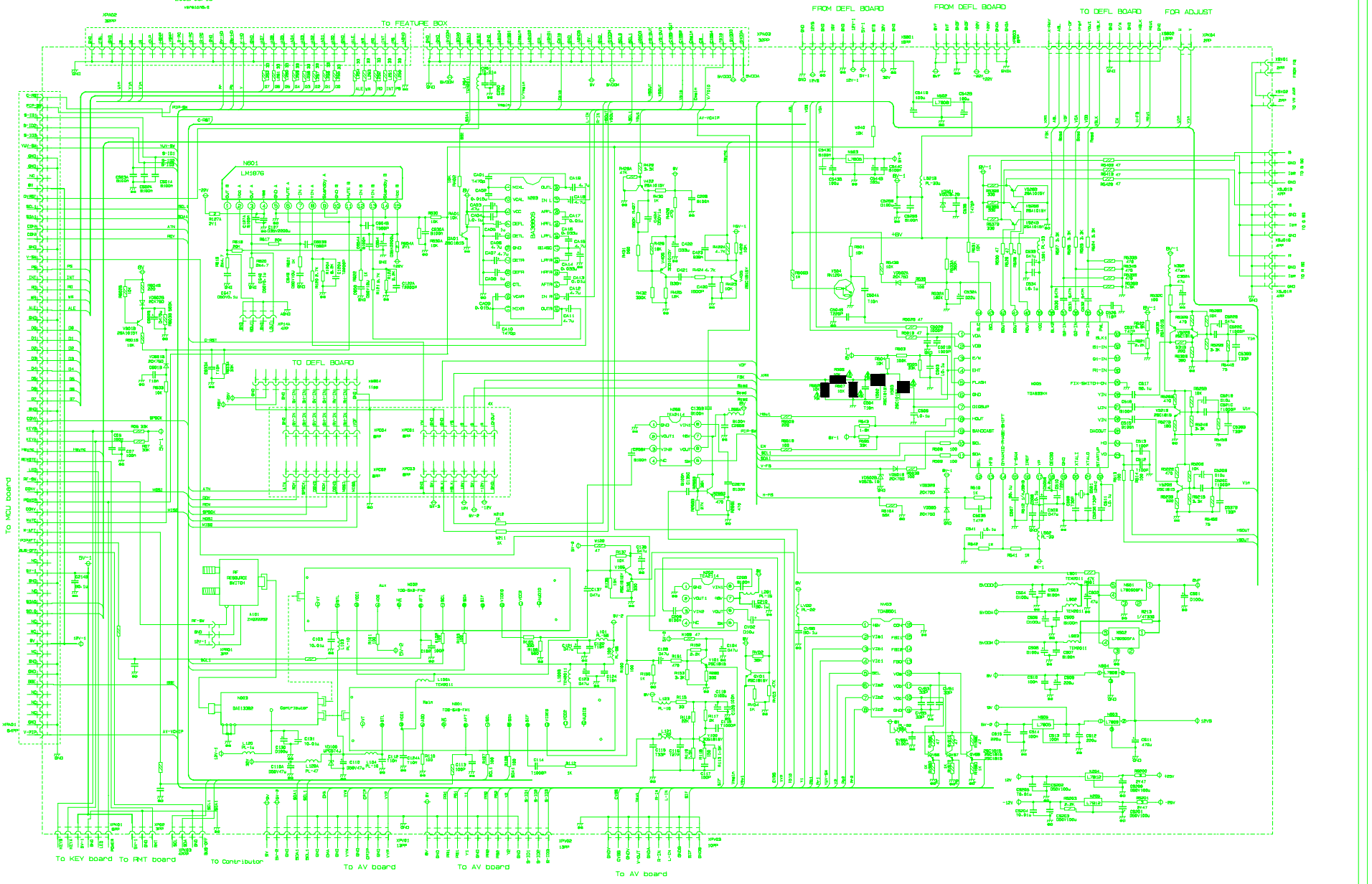
Part name	Remarks	Part number	List Price
Remote	CK2C	82018013701	$35.00
Versatile wheel		8420500020Y	$5.00
Chassis assembly		8504900150T	$98.00
Speaker assembly A		8583400720C	$22.00
Speaker assembly B		8583400730C	$22.00
Speaker assembly C		8583400740C	$4.70
Front panel assembly（L）		8611601830T	$28.00
Front panel assembly（R）		8611601840T	$28.00
Front panel assembly		8611601820T	$42.00
Mirror assembly		8611601640T	$125.00
AV box assembly		8611601580T	$14.34
Front frame		8611601000T	$15.75
Projection tube assembly(R)	For Panasonic CRT (P16LSG03RJA)	8615200020T	$142.00
Projection tube assembly(G)	For Panasonic CRT (P16LSG03HKA)	8615200030T	$142.00
Projection tube assembly(B)	For Panasonic CRT (P16LSG03BMB)	8615200040T	$142.00
Power button assembly		8661800070T	$4.50
Main board assembly	JUT7.820.040	8667200670T	$98.00
Scan board assembly	JUT7.820.041-1	8667201200T	$112.00
Side AV board assembly	JUT7.820. 069	8667201030T	$10.12
AV board assembly	JUT7.820.043	8667200690T	$37.23
Power board assembly	JUT7.820.042-1	8667201060T	$82.17
Y-R board assembly	JUT7.820.046	8668201220T	$20.58
Y-G board assembly	JUT7.820.044	8667200730T	$24.00
Y-B board assembly	JUT7.820.045	8667200123T	$18.57
Remote board assembly	JUT7.820.068	8667200105T	$2.94
Convergence board assembly	JUT7.820.060	8667200800T	$75.50
VM-G amplifier board assembly	JUT7.820.066	8667201210T	$12.48
VM-B amplifier board assembly	JUT7.820.067	8667200830T	$8.70
VM-R amplifier board assembly	JUT7.820.065	8667200840T	$8.70
Digital board assembly		8667201170T	$140.00
Power switch board assembly	JUT7.820.078	8667201380T	$3.00
CPU board assembly	JUT7.820.047	8667201180T	$55.08
Control board assembly	JUT7.820.093	8667201040T	$5.00
Key-press(six)		8833700640C	$2.00
Power wire	RVVZ-2U-2M-C69-TJC1-3Y	53411216900	$2.70
Focus potentiometer	MHF116-62A	89842511620	$17.04
Focus potentiometer	841-01	8468700158	$17.04

JUT7.025.023DL

CIRCUIT DIAGRAM OF PU-3 CHASIS

PU-3 MAINBOARD

2002/08/16

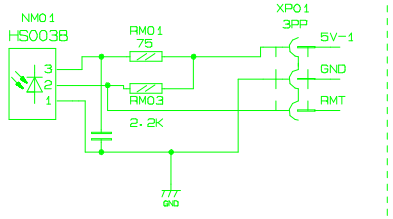


1. Any components identified by ⚠ have special safety-related characteristics. Use replacement components which have the same characteristics as the original parts.
2. ⏚ Cold ground ⊥ Hot ground
3. ⚠ FDA This symbol tells you that replacement components related to high voltage, beam current and X-ray radiation should not be made at will.

This circuit diagram is only for reference.
Specifications are subject to change without notice.

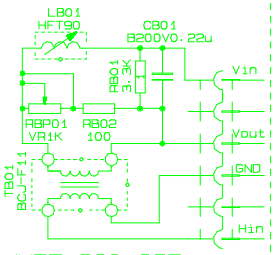
DESIGNER		CIRCUIT DIAGRAM OF	JUT2.025.023DL
DATE			
MANAGER			
DATE			

REMOTE SENSOR BOARD



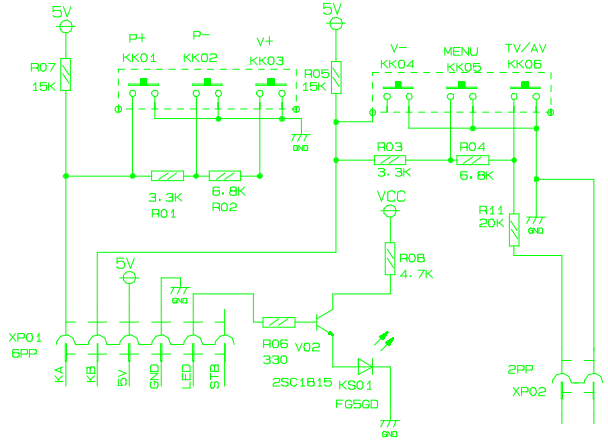
JUT7.820.063
FOR GB43HD09 GB51HD09
GB55HD09W GB65HD09W

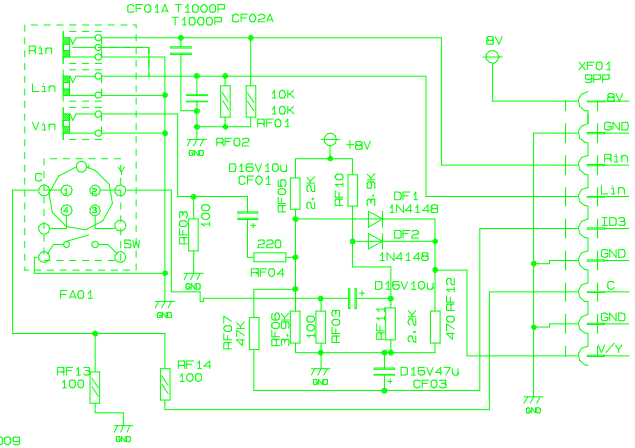
N-S CORRECT BOARD

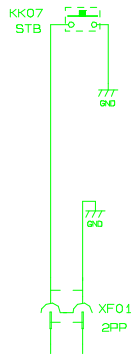


JUT7.820.295
FOR GB43HD09 GB55HD09W GB51HD09 GB65HD09W
XB406
6PP

FRONT AV&K BOARD



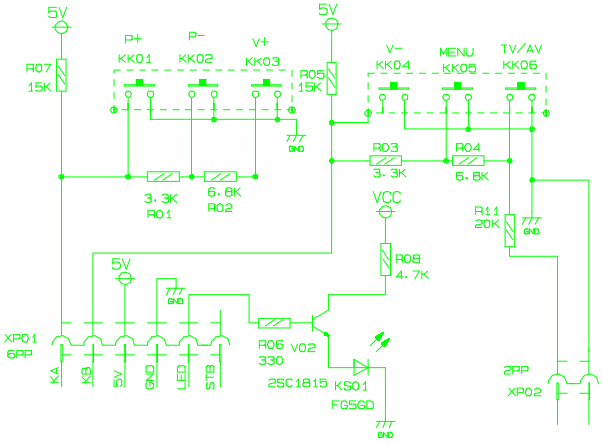




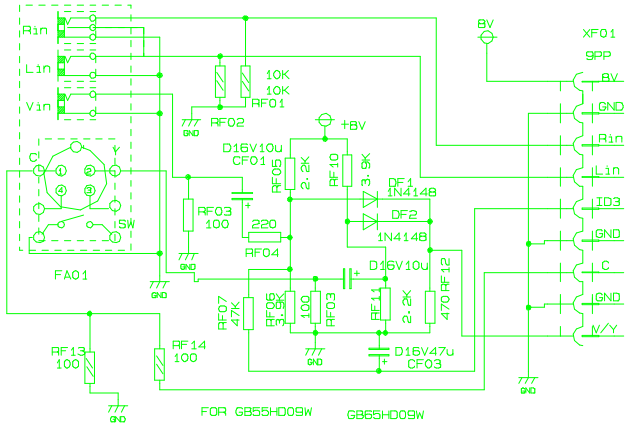
STANDBY CON BOARD

FOR GB43HD09 GB51HD09

FRONT K BOARD



FOR GB55HD09W
FOR GB65HD09W



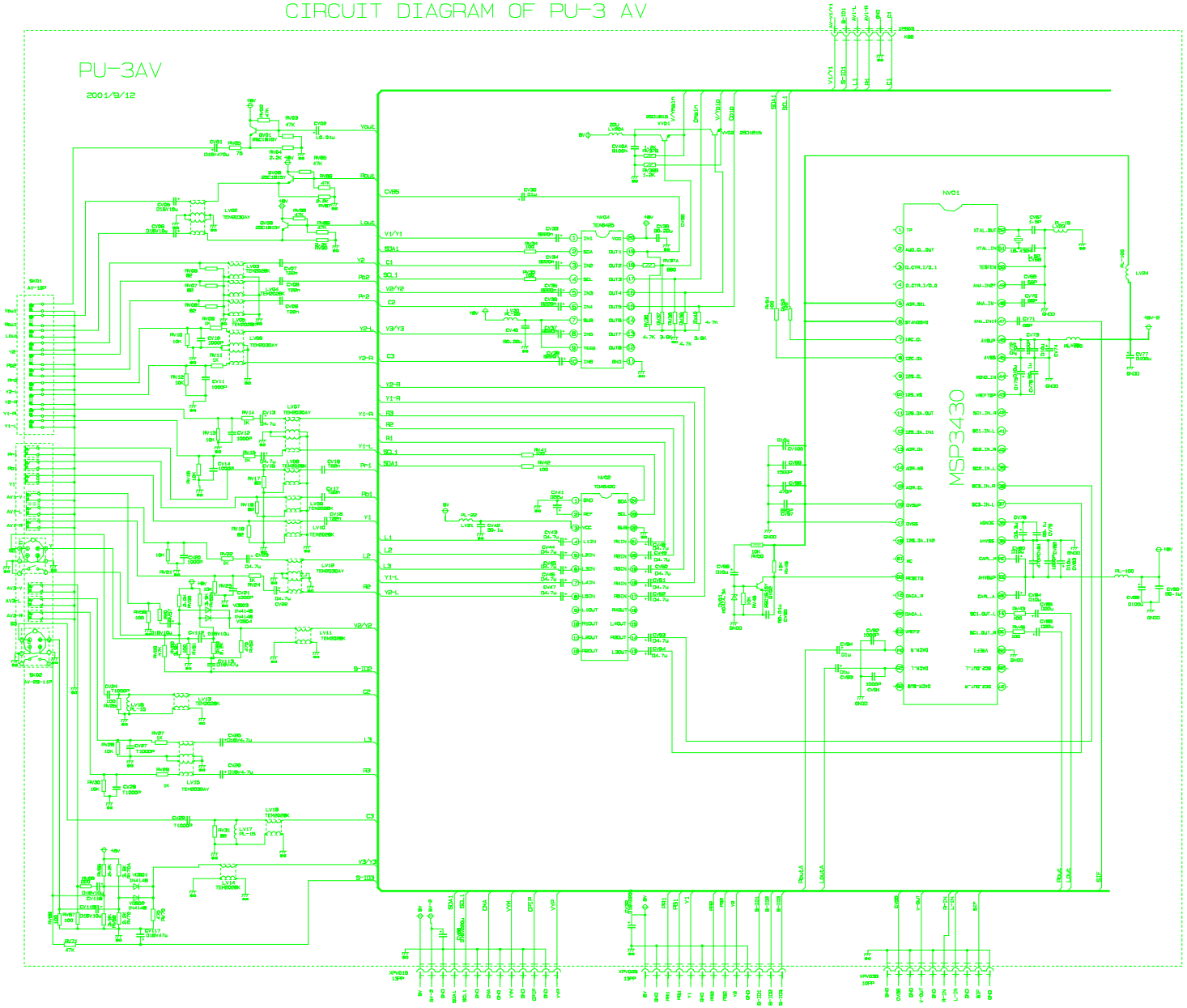
FOR GB55HD09W GB65HD09W

JUT7.820.043

CIRCUIT DIAGRAM OF PU-3 AV

PU-3AV

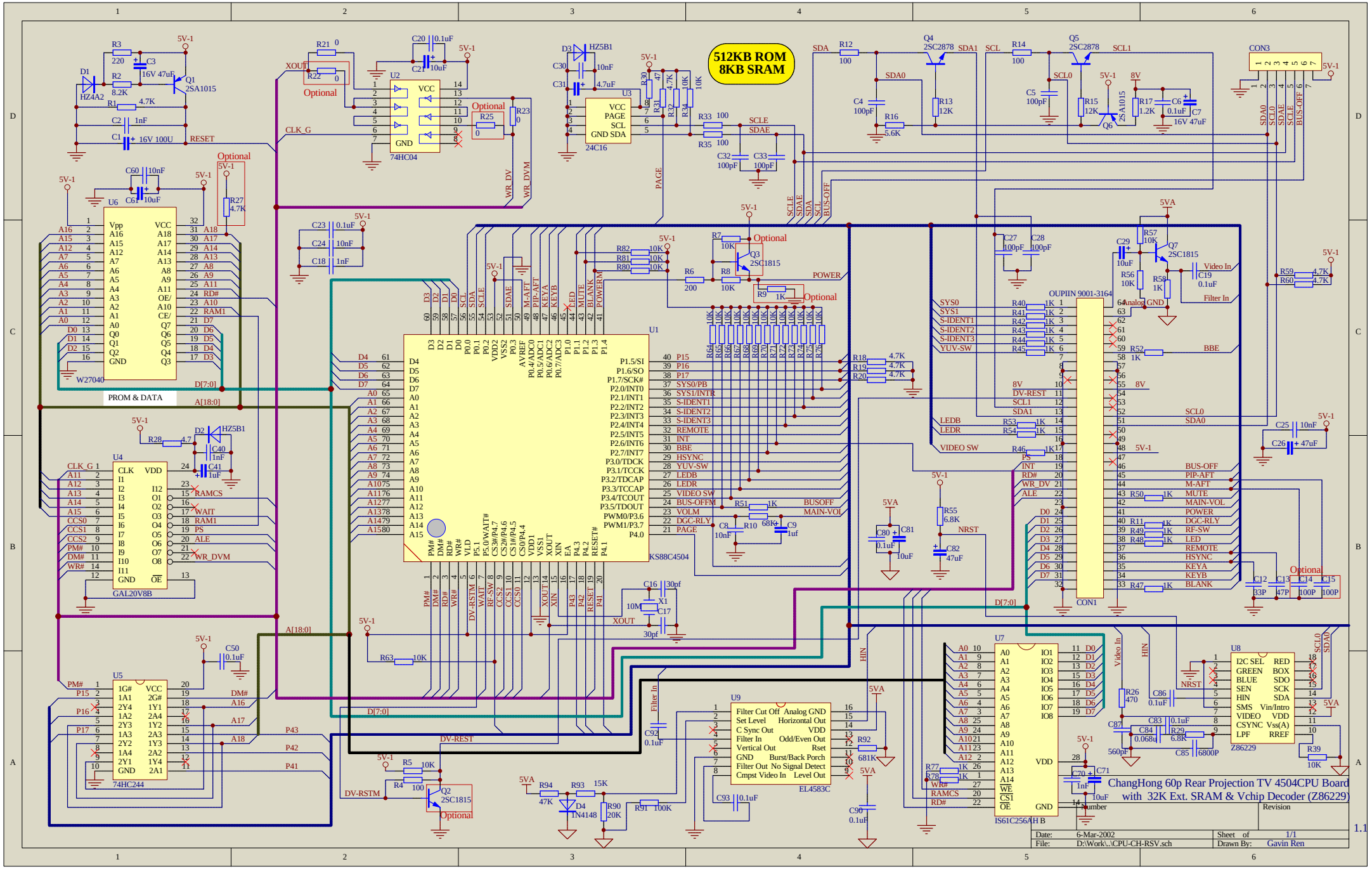
2001/9/12

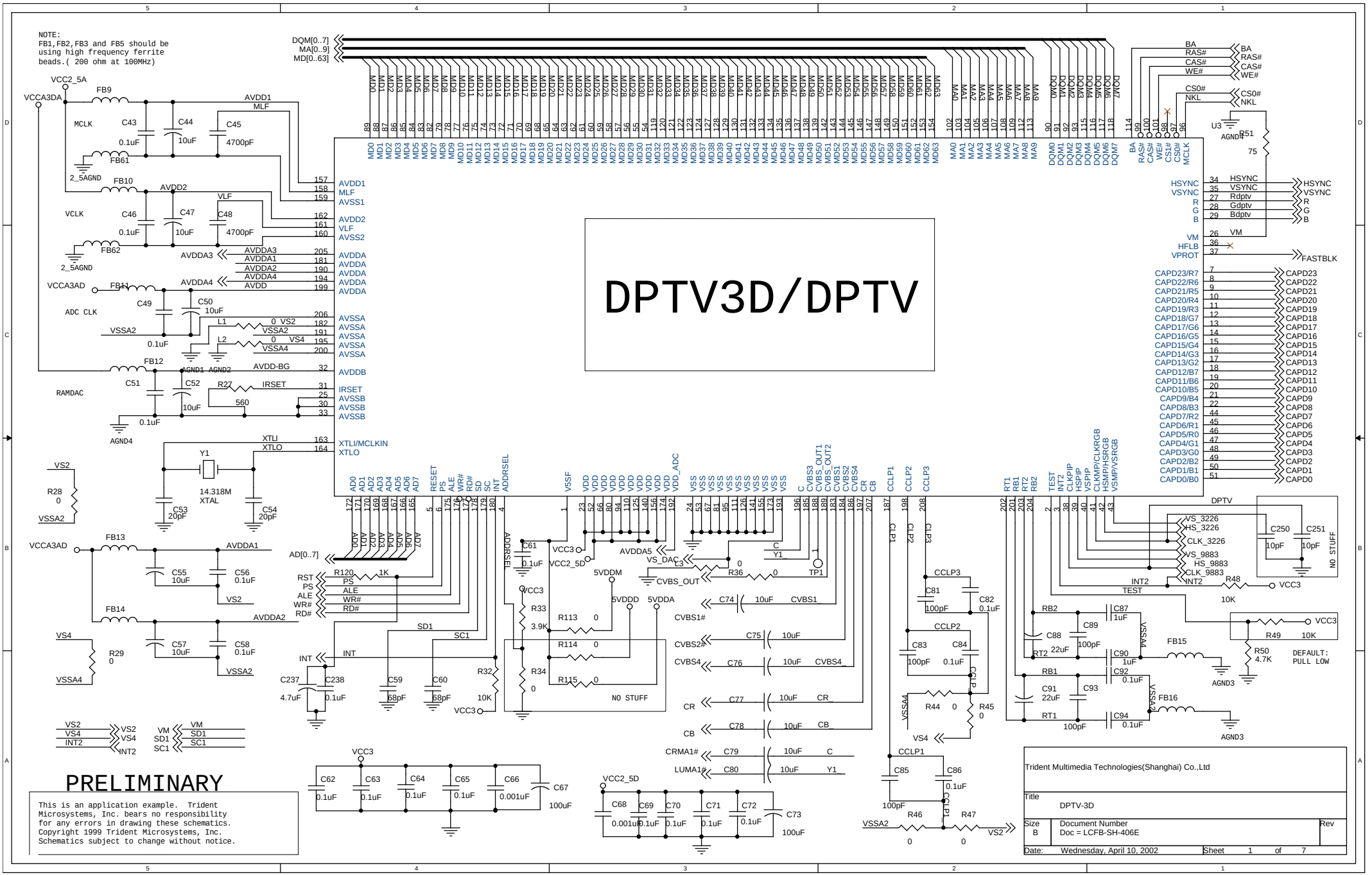


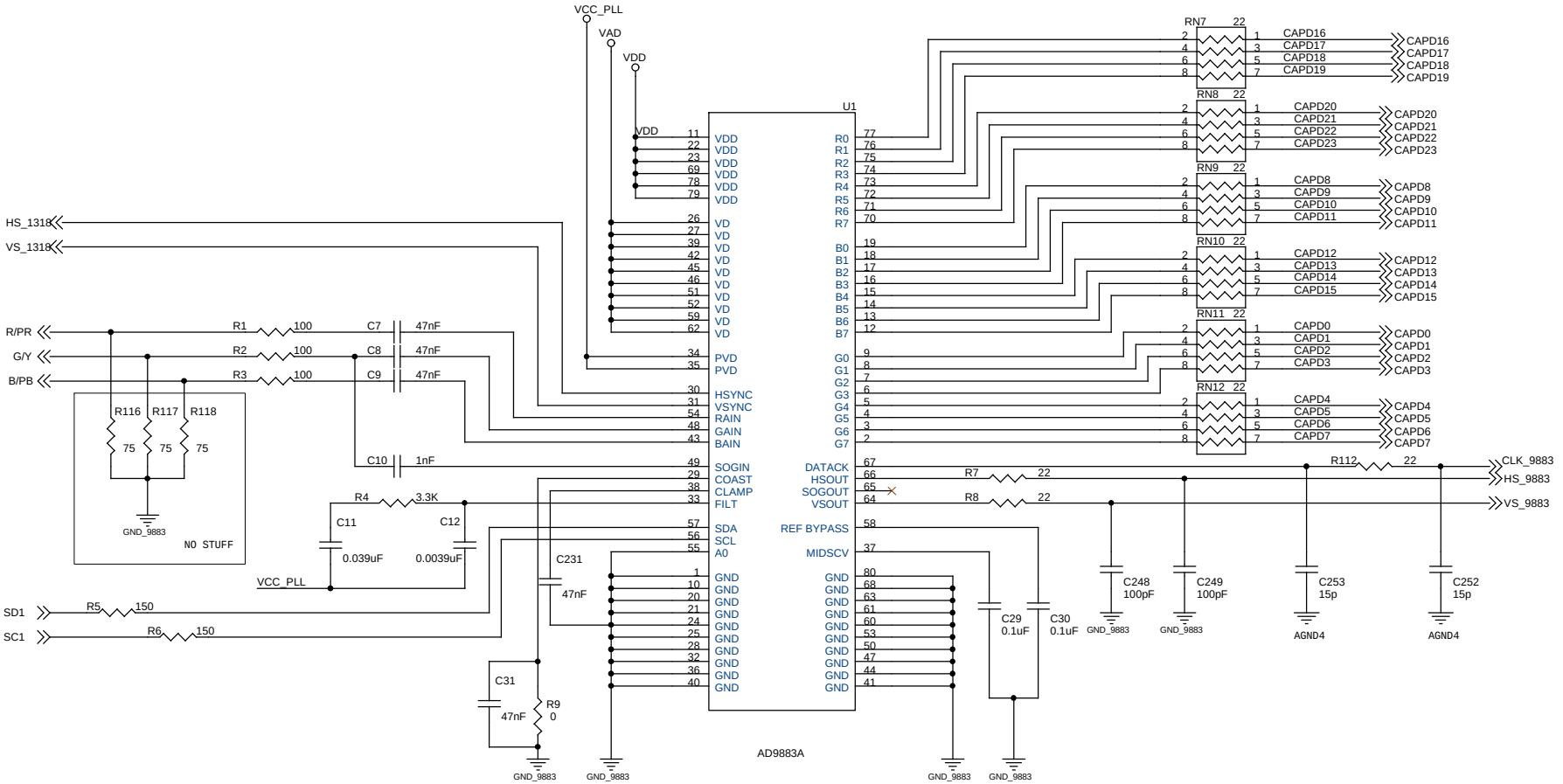
1. Any components identified by ⚠ have special safety-related characteristics.
   Use replacement components which have the same characteristics as the original parts.
2. ⏚ Cold ground ⊥ Hot ground
3. ⚠ FDA This symbol tells you that replacement components related to high voltage, beam current and X-ray radiation should not be made at will.

This circuit diagram is only for reference.
Specifications are subject to change without notice.

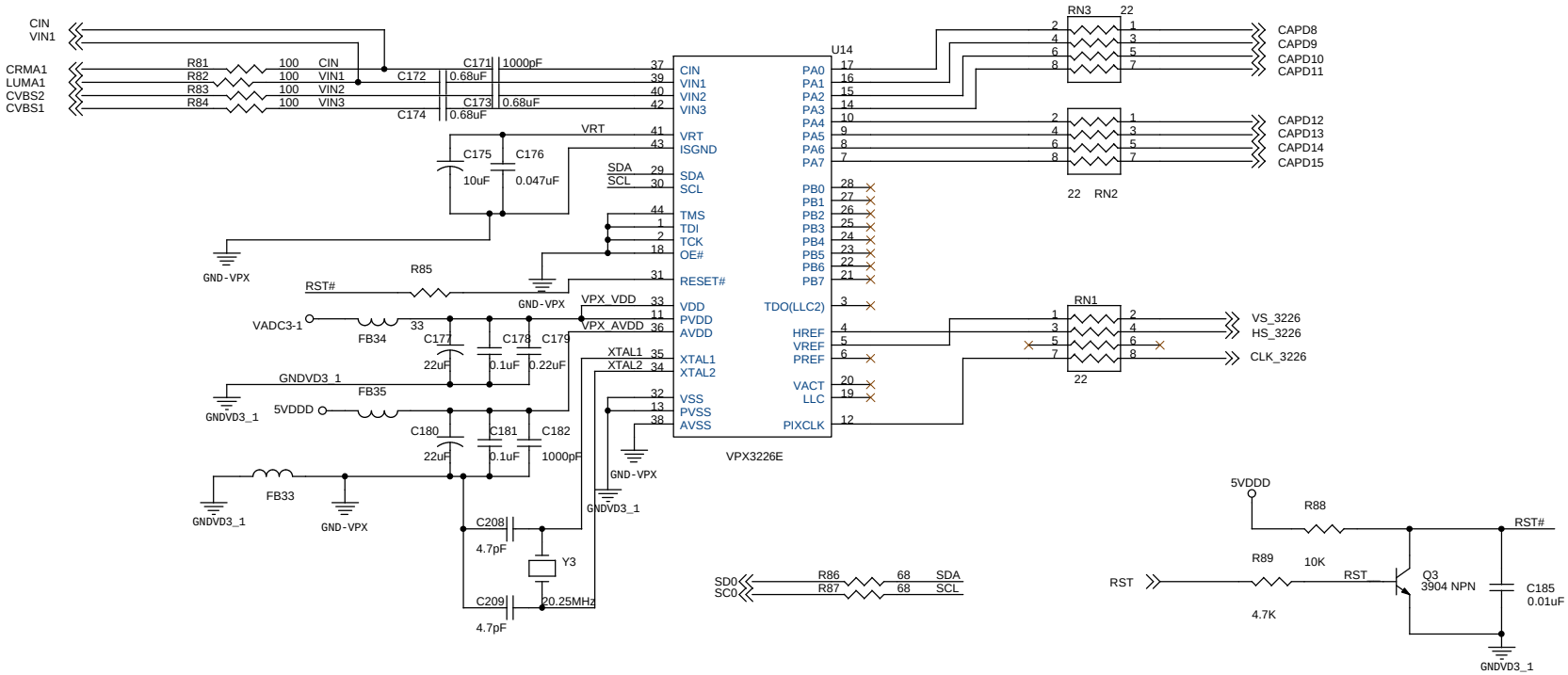
DESIGNER		CIRCUIT DIAGRAM OF	JUT7.820.043
DATE			
MANAGER			
DATE			


512KB ROM
8KB SRAM
ChangHong 60p Rear Projection TV 4504CPU Board
with 32K Ext. SRAM & Vchip Decoder (Z86229)
Number
Revision
1.1
Date: 6-Mar-2002
Sheet of 1/1
File: D:\Work\..\CPU-CH-RSV.sch
Drawn By: Gavin Ren
PROM & DATA
U1
KS88C4504
U2
74HC04
U3
24C16
U4
GAL20V8B
U5
74HC244
U6
W27040
U7
IS61C256AH
U8
Z86229
U9
EL4583C
CON1
CON3
OUPIIN 9001-3164

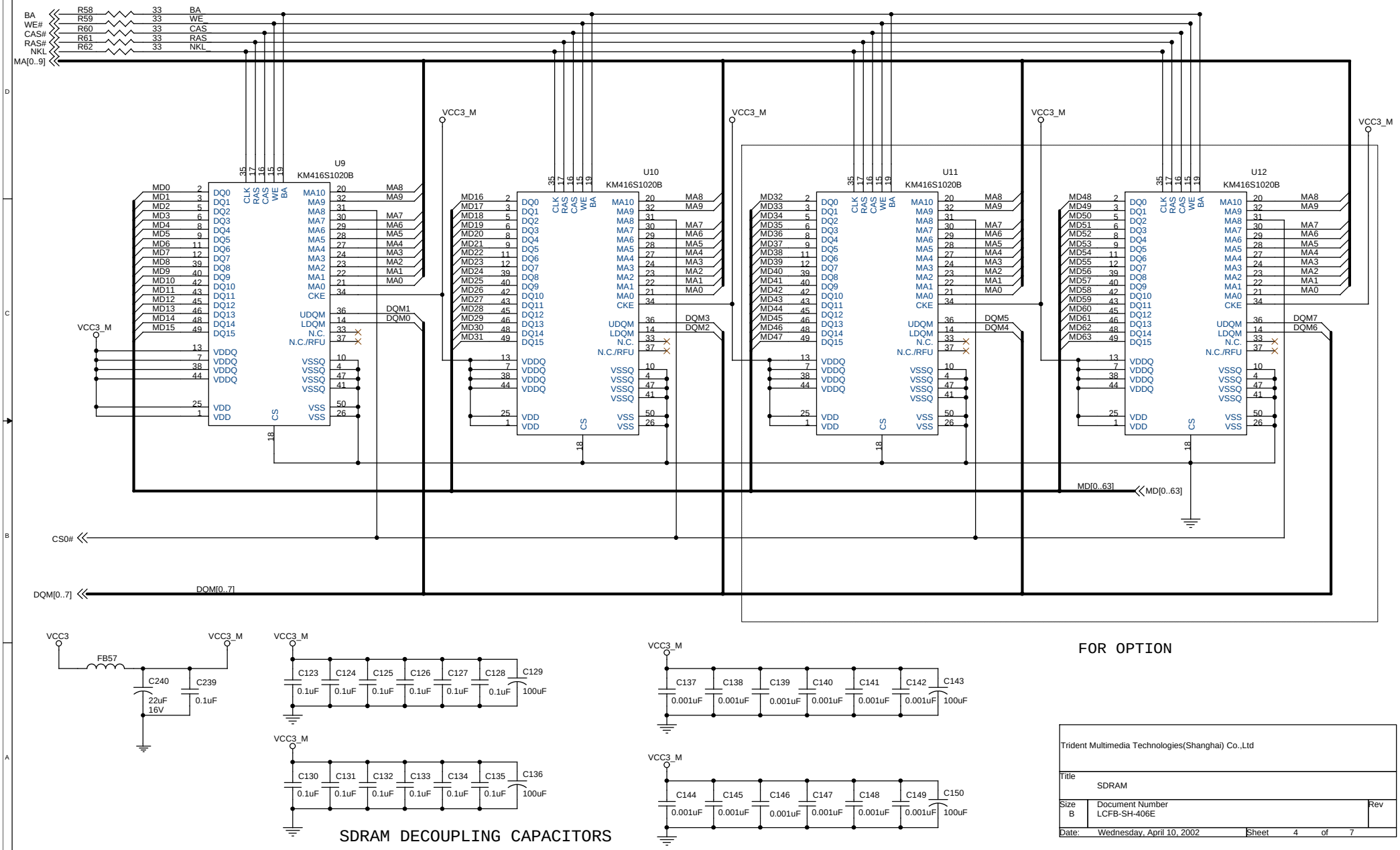

NOTE:
FB1,FB2,FB3 and FB5 should be using high frequency ferrite beads.(200 ohm at 100MHz)
DPTV3D/DPTV
PRELIMINARY
This is an application example. Trident Microsystems, Inc. bears no responsibility for any errors in drawing these schematics. Copyright 1999 Trident Microsystems, Inc. Schematics subject to change without notice.
Trident Multimedia Technologies(Shanghai) Co.,Ltd
Title
DPTV-3D
Size B
Document Number
Doc = LCFB-SH-406E
Rev
Date: Wednesday, April 10, 2002
Sheet 1 of 7



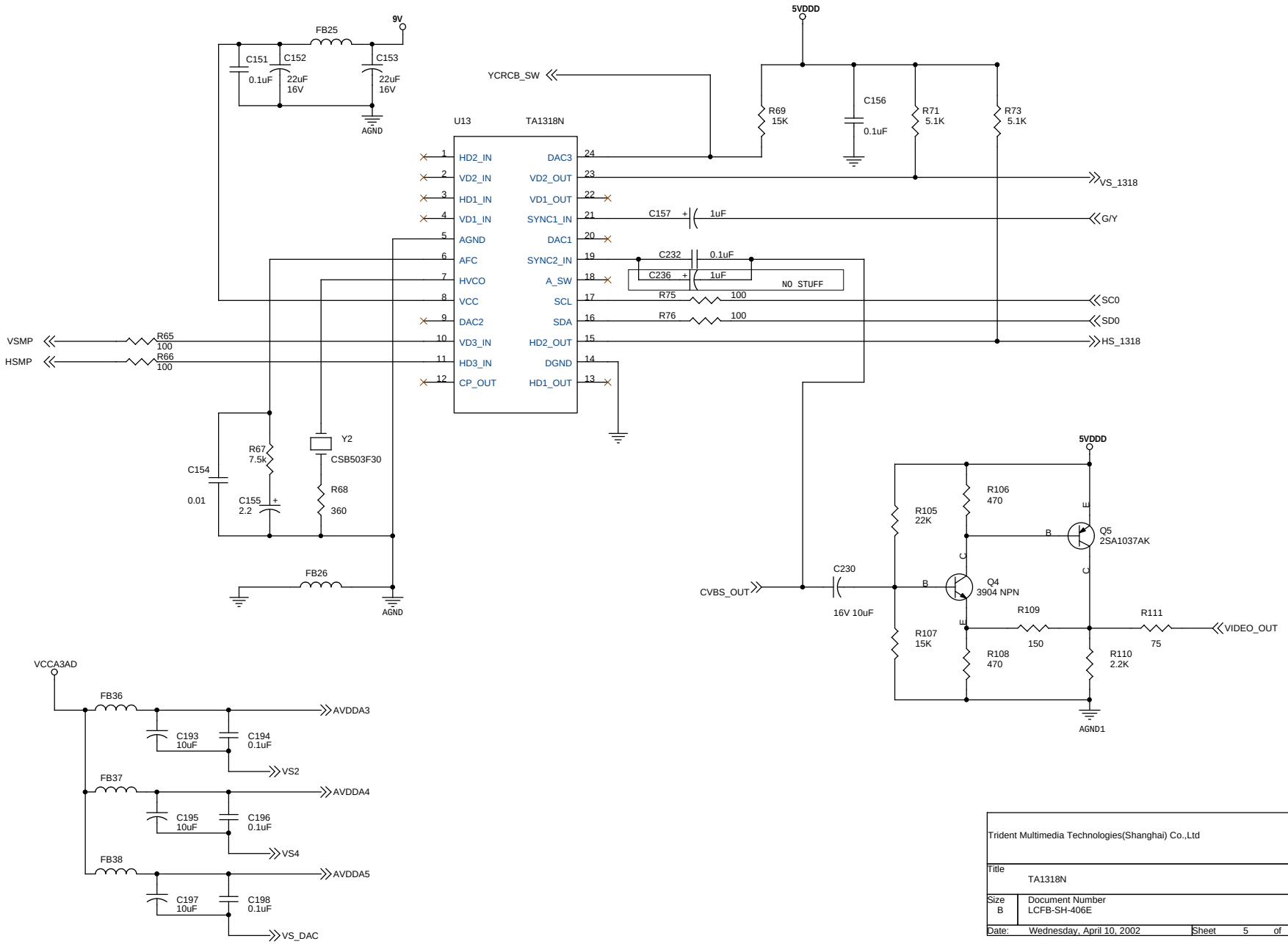
Trident Multimedia Technologies(Shanghai) Co.,Ltd		
Title: AD9883A		
Size: B	Document Number: LCFB-SH-406E	Rev
Date: Wednesday, April 10, 2002	Sheet 2 of 7	



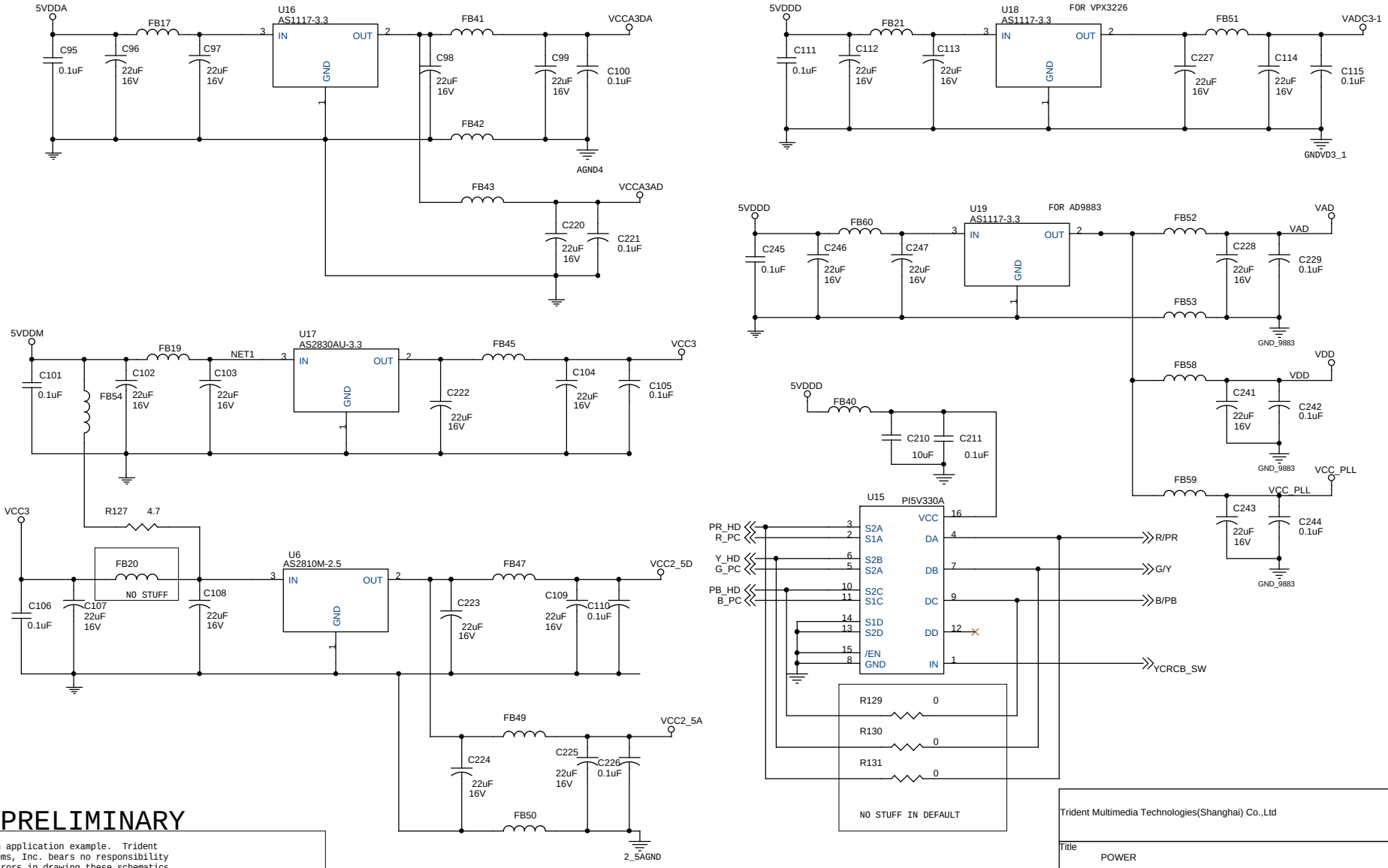
Trident Multimedia Technologies(Shanghai) Co.,Ltd		
Title: VPX3226		
Size: B	Document Number: LCFB-SH-406E	Rev:
Date: Wednesday, April 10, 2002	Sheet 3 of 7	



Trident Multimedia Technologies(Shanghai) Co.,Ltd		
Title: SDRAM		
Size: B	Document Number: LCFB-SH-406E	Rev
Date: Wednesday, April 10, 2002	Sheet 4 of 7	



Trident Multimedia Technologies(Shanghai) Co.,Ltd		
Title: TA1318N		
Size: B	Document Number: LCFB-SH-406E	Rev
Date: Wednesday, April 10, 2002	Sheet 5 of 7	



PRELIMINARY

This is an application example. Trident Microsystems, Inc. bears no responsibility for any errors in drawing these schematics.
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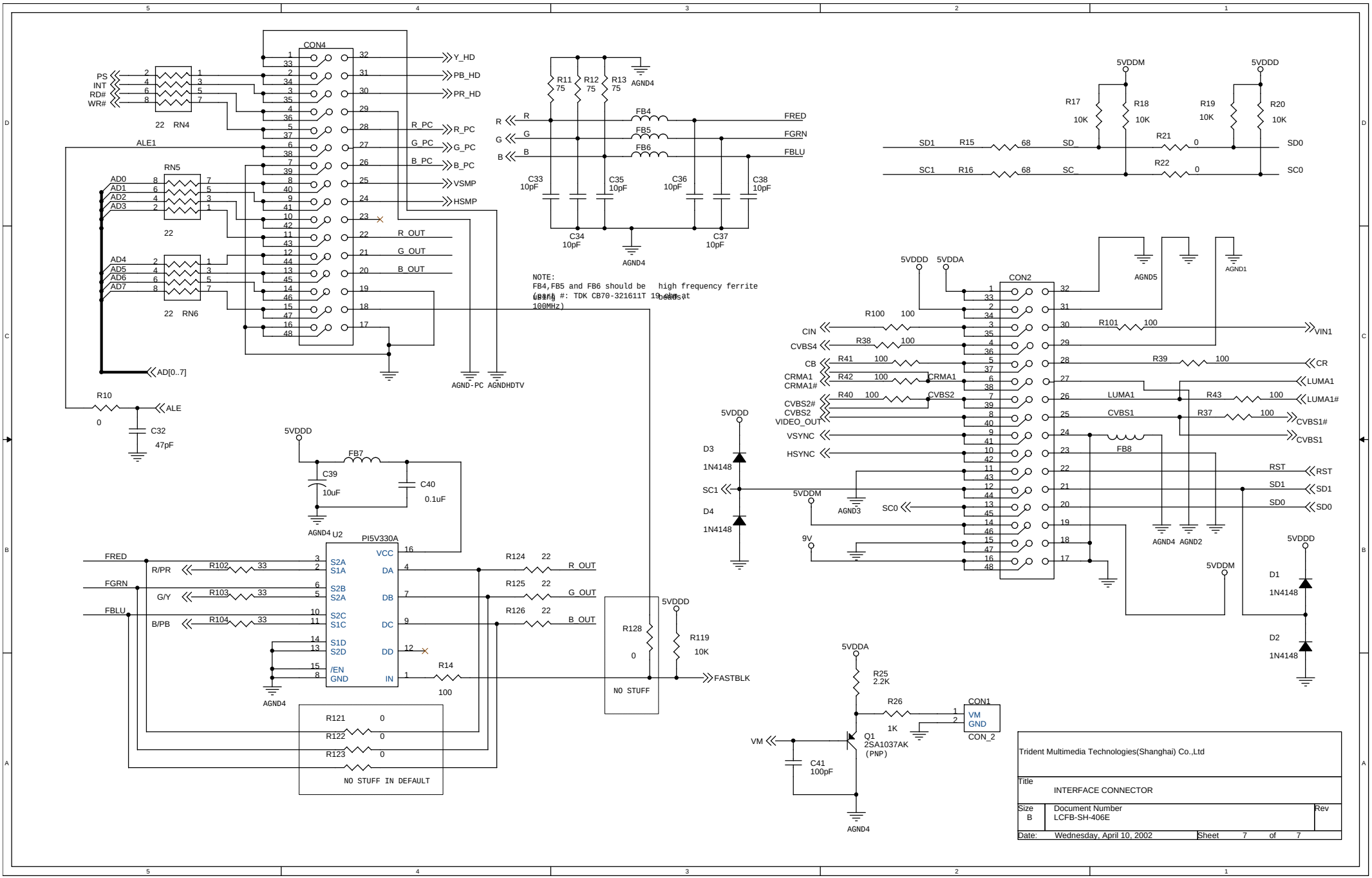
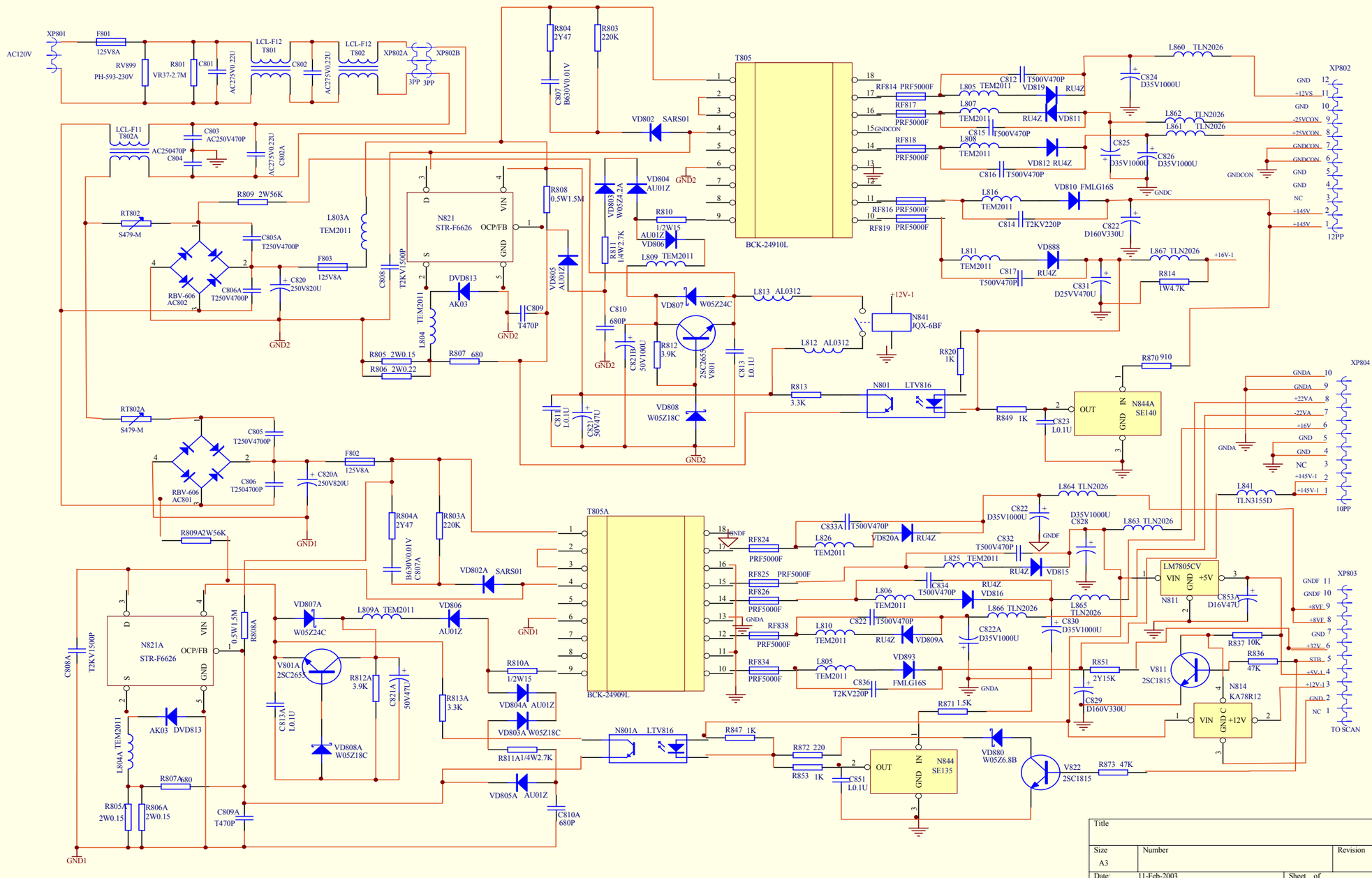
Schematics subject to change without notice.

Trident Multimedia Technologies(Shanghai) Co.,Ltd

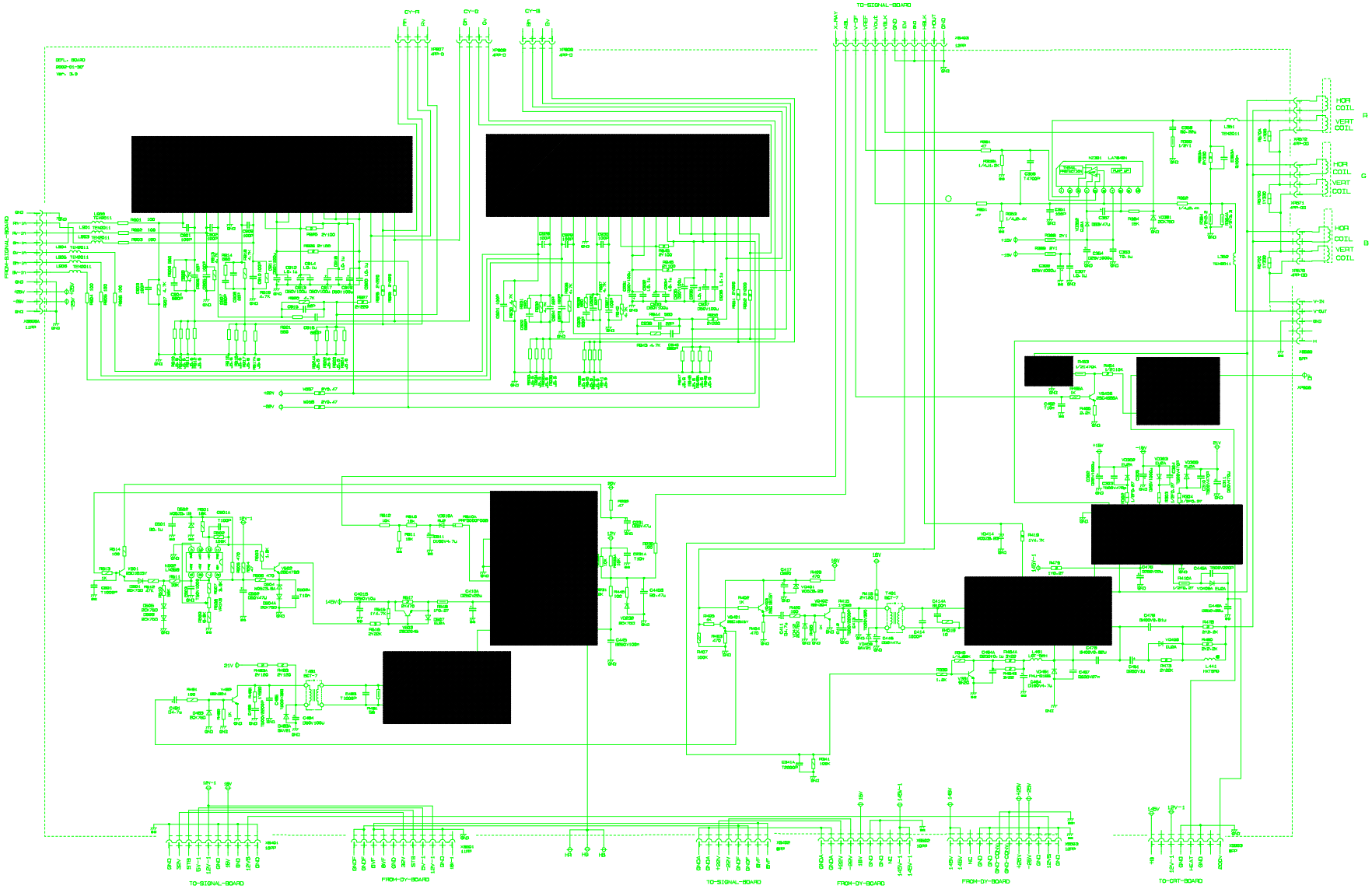
Title	POWER	
Size B	Document Number LCFB-SH-406E	Rev
Date: Wednesday, April 10, 2002	Sheet 6 of 7	


CON4
PS
INT
RD#
WR#
22 RN4
ALE1
RN5
AD0
AD1
AD2
AD3
22
AD4
AD5
AD6
AD7
22 RN6
AD[0..7]
Y_HD
PB_HD
PR_HD
R_PC
G_PC
B_PC
VSMP
HSMP
R_OUT
G_OUT
B_OUT
AGND-PC
AGNDHDTV
R10
0
ALE
C32
47pF
R11 75
R12 75
R13 75
AGND4
R
G
B
FB4
FB5
FB6
FRED
FGRN
FBLU
C33 10pF
C34 10pF
C35 10pF
C36 10pF
C37 10pF
C38 10pF
NOTE:
FB4,FB5 and FB6 should be high frequency ferrite beads.
(part #: TDK CB70-321611T 19 ohm at 100MHz)
5VDDD
R17 10K
R18 10K
R19 10K
R20 10K
SD1
R15 68
SD_
R21 0
SD0
SC1
R16 68
SC_
R22 0
SC0
5VDDD
5VDDA
CON2
AGND5
AGND1
R100 100
CIN
CVBS4
R38 100
CB
R41 100
CRMA1
CRMA1#
R42 100
CRMA1
R40 100
CVBS2
CVBS2#
CVBS2
VIDEO_OUT
VSYNC
HSYNC
R101 100
VIN1
R39 100
CR
LUMA1
LUMA1
R43 100
LUMA1#
CVBS1
R37 100
CVBS1#
CVBS1
FB8
RST
SD1
SD0
AGND4 AGND2
5VDDM
D1
1N4148
D2
1N4148
5VDDD
5VDDD
D3
1N4148
SC1
D4
1N4148
5VDDM
AGND3
SC0
9V
FB7
C39
10uF
C40
0.1uF
AGND4
U2
PI5V330A
FRED
R/PR
R102 33
FGRN
G/Y
R103 33
FBLU
B/PB
R104 33
S2A
S1A
S2B
S2A
S2C
S1C
S1D
S2D
/EN
GND
VCC
DA
DB
DC
DD
IN
R124 22
R_OUT
R125 22
G_OUT
R126 22
B_OUT
R14
100
AGND4
R128
0
NO STUFF
5VDDD
R119
10K
FASTBLK
R121 0
R122 0
R123 0
NO STUFF IN DEFAULT
5VDDA
R25
2.2K
R26
1K
CON1
VM
GND
CON_2
VM
Q1
2SA1037AK
(PNP)
C41
100pF
AGND4
Trident Multimedia Technologies(Shanghai) Co.,Ltd
Title
INTERFACE CONNECTOR
Size
B
Document Number
LCFB-SH-406E
Rev
Date:
Wednesday, April 10, 2002
Sheet
7
of
7


AC120V
XP801
F801
125V8A
RV899
PH-593-230V
R801
VR37-2.7M
C801
AC275V0.22U
LCF-F12
T801
C802
AC275V0.22U
LCF-F12
T802
XP802A
XP802B
3PP
3PP
LCL-F11
T802A
AC250470P
C804
C803
AC250V470P
AC275V0.22U
C802A
R809 2W56K
RT802
S479-M
RBV-606
AC802
C805A
T250V4700P
C806A
T250V4700P
C820
250V820U
F803
125V8A
L803A
TEM2011
GND2
C808
T2KV1500P
N821
STR-F6626
OCP/FB
VIN
GND
R808
0.5W1.5M
VD803
W05Z4.2A
VD804
AU01Z
GND2
R810
1/2W15
AU01Z
VD806
R811
14W2.7K
L809 TEM2011
DVD813
AK03
L804
TEM2011
C809
T470P
GND2
R805 2W0.15
R806 2W0.22
R807 680
VD805
AU01Z
C810
680P
C821B
50V100U
R812
3.9K
VD807
W05Z24C
2SC2655
V801
C813
L0.1U
L813 AL0312
L812 AL0312
+12V-1
N841
JQX-6BF
R820
1K
R813
3.3K
N801
LTV816
VD808
W05Z18C
GND2
C811B
L0.1U
C821B
50V47U
R849 1K
C823
L0.1U
OUT
IN
GND
N844A
SE140
R870 910
T805
BCK-24910L
RF814 PRF5000F
RF817
PRF5000F
RF818
PRF5000F
RF816 PRF5000F
RF819 PRF5000F
GNDCON
C812
T500V470P
VD819
RU4Z
L805 TEM2011
L807
TEM2011
RU4Z
VD811
C815
T500V470P
L808
TEM2011
VD812 RU4Z
C816
T500V470P
L816
TEM2011
VD810 FMLG16S
C814
T2KV220P
C822
D160V330U
L811
TEM2011
VD888
RU4Z
C817
T500V470P
C831
D25VV470U
L867 TLN2026
+16V-1
R814
1W4.7K
L860 TLN2026
C824
D35V1000U
L862 TLN2026
L861 TLN2026
C825
D35V1000U
C826
D35V1000U
GNDC
XP802
GND 12
+12VS 11
GND 10
-25VCON 9
+25VCON 8
GNDCON 7
GNDCON 6
GND 5
GND 4
NC 3
+145V 2
+145V 1
12PP
XP804
GNDA 10
GNDA 9
+22VA 8
-22VA 7
+16V 6
GND 5
GND 4
NC 3
+145V-1 2
+145V-1 1
10PP
L841
TLN3155D
RT802A
S479-M
RBV-606
AC801
C805
T250V4700P
C806
T2504700P
C820A
250V820U
F802
125V8A
R804A
2Y47
R803A
220K
B630V0.01V
C807A
R809A2W56K
T805A
BCK-24909L
VD802A SARS01
VD807A
W05Z24C
L809A TEM2011
VD806
AU01Z
N821A
STR-F6626
OCP/FB
VIN
GND
R808A
0.5W1.5M
C808A
T2KV1500P
V801A
2SC2655
R812A
3.9K
C821A
50V47U
C813A
L0.1U
R813A
3.3K
VD808A
W05Z18C
R810A
1/2W15
VD804A AU01Z
VD803A W05Z18C
R811A1/4W2.7K
VD805A AU01Z
C810A
680P
L804A TEM2011
AK03 DVD813
R807A680
R805A
2W0.15
R806A
2W0.15
C809A
T470P
GND1
N801A LTV816
R847 1K
R872 220
R853 1K
C851
L0.1U
OUT
IN
GND
N844
SE135
VD880
W05Z6.8B
V822
2SC1815
R873 47K
R871 1.5K
RF824
PRF5000F
RF825 PRF5000F
RF826
PRF5000F
RF838
PRF5000F
RF834
PRF5000F
GNDF
GNDA
C833A T500V470P
L826
TEM2011
VD820A RU4Z
C832
T500V470P
RU4Z
VD815
L825 TEM2011
L806
TEM2011
C834
T500V470P
RU4Z
VD816
C822
T500V470P
L810
TEM2011
VD809A
L805
TEM2011
VD893
FMLG16S
C836
T2KV220P
C822A
D35V1000U
L866 TLN2026
C830
D35V1000U
L865
TLN2026
L864 TLN2026
C822
D35V1000U
D35V1000U
C828
L863 TLN2026
LM7805CV
VIN
GND
+5V
N811
C853A
D16V47U
R851
2Y15K
C829
D160V330U
V811
2SC1815
R837 10K
R836
47K
N814
KA78R12
VIN
GND C
+12V
XP803
GNDF 11
GNDF 10
+8VF 9
+8VF 8
GND 7
+32V 6
STB 5
+5V-1 4
+12V-1 3
GND 2
NC 1
TO SCAN
Title
Size
A3
Number
Revision
Date: 11-Feb-2003
Sheet of
File: E:\A?\EÇà\Dlpav\dy.DDB
Drawn By:

JUT7.025.0230L

CIRCUIT DAIGRAM OF PU-3 CHASIS



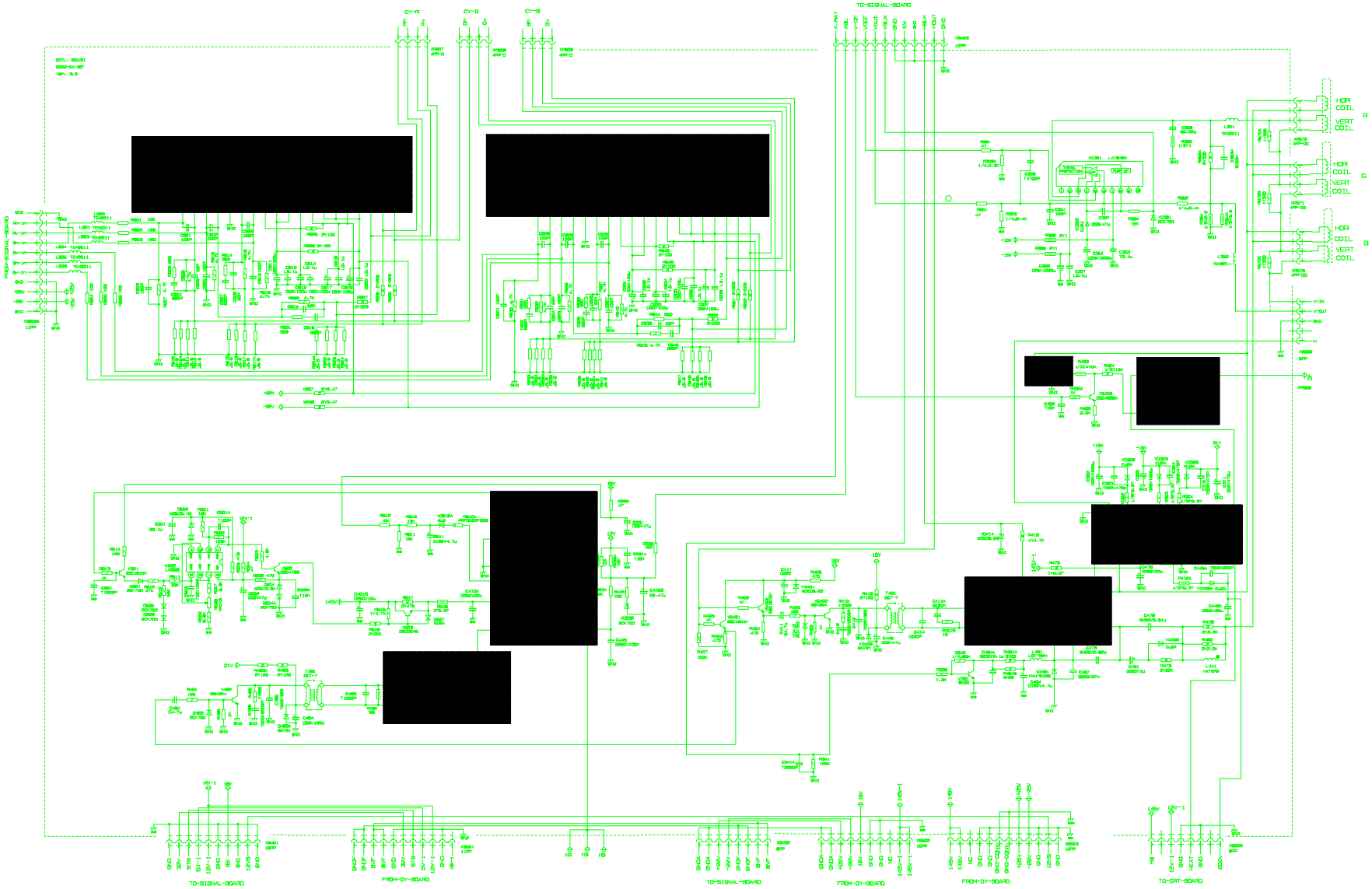
This circuit diagram is only for reference.
Specifications are subject to change without notice.

1. Any components identified by ⚠ have special safety-related characteristics. Use replacement components which have the same characteristics as the original parts.
2. ⏚ Cold ground ⊥ Hot ground
3. ⚠ FDA This symbol tells you that replacement components related to high voltage, beam current and X-ray radiation should not be made at will.

DESIGNER		CIRCUIT DIAGRAM OF	JUT7.025.0230L
DATE			
MANAGER			
DATE			

JUT7.025.0230L

CIRCUIT DAIGRAM OF PU-3 CHASIS



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1. Any components identified by ⚠ have special safety-related characteristics. Use replacement components which have the same characteristics as the original parts.
2. ⏚ Cold ground ⊥ Hot ground
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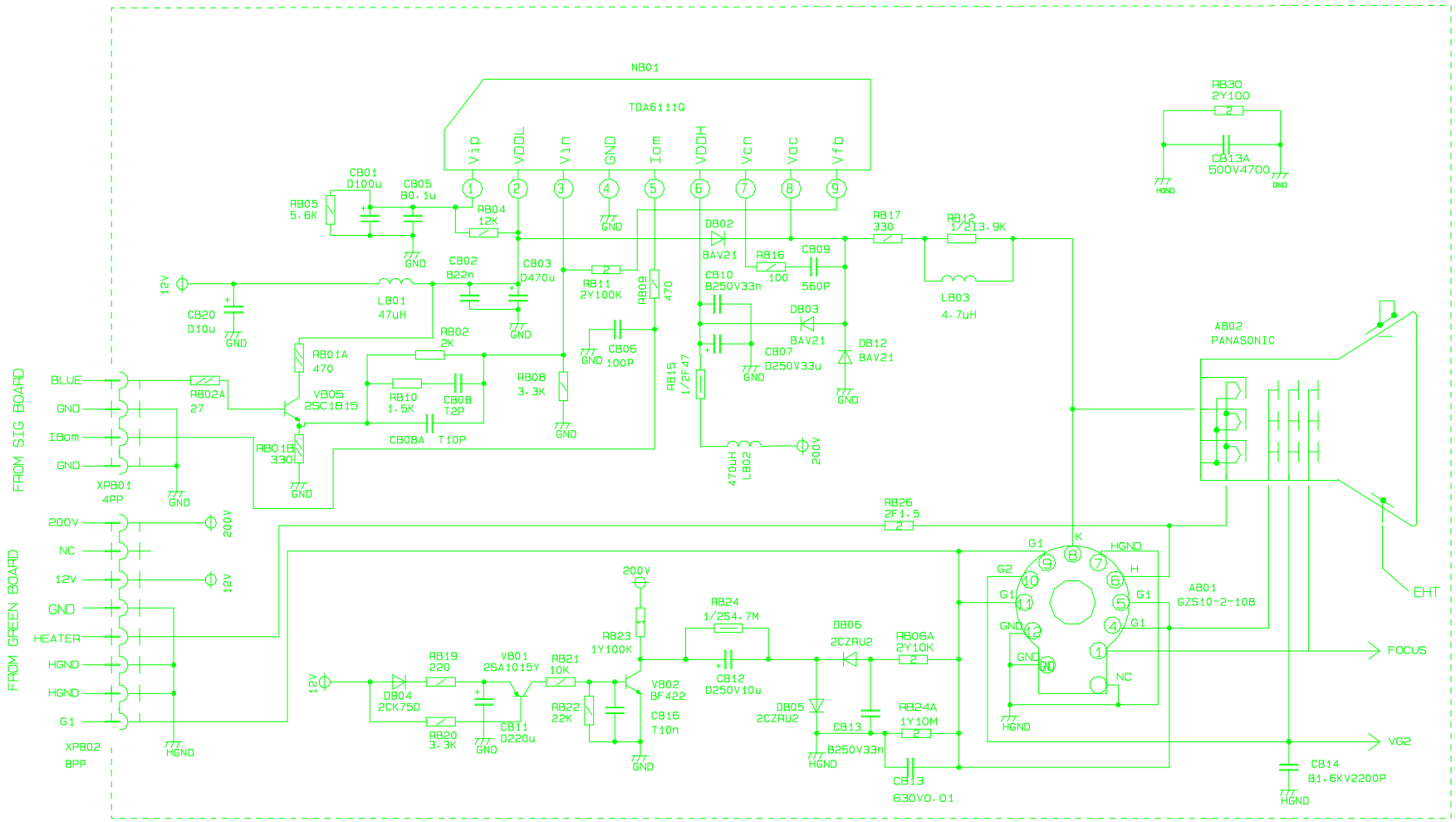
DESIGNER		CIRCUIT DIAGRAM OF	JUT7.025.0230L
DATE			
MANAGER			
DATE			



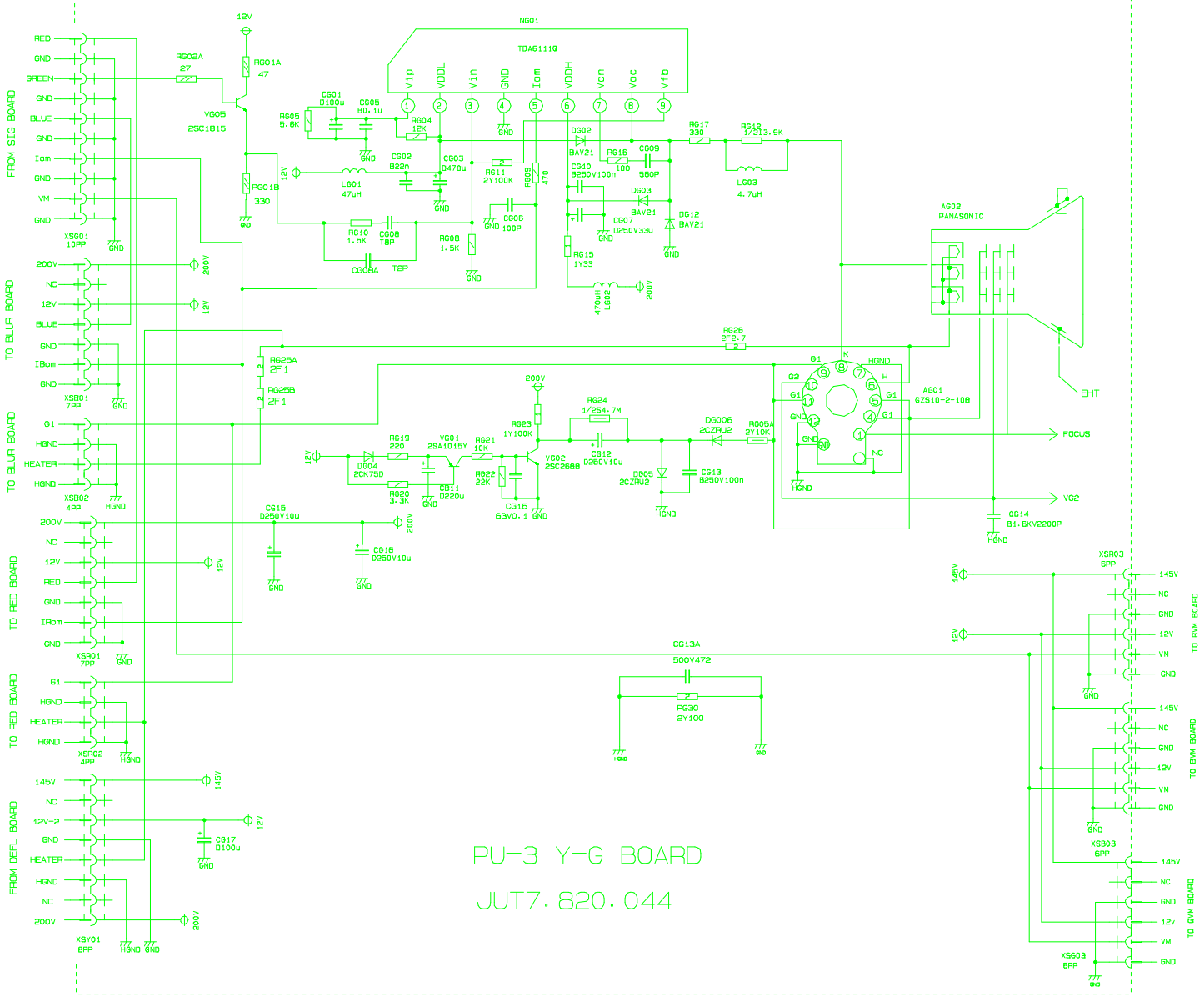
JUT7.820.045

PU-3 Y-B

1. Any components identified by ⚠ have special safety-related characteristics. Use replacement components which have the same characteristics as the original parts.
2. ⏚ Cold ground ⊥ Hot ground
3. ⚠ FDA This symbol tells you that replacement components related to high voltage. beam current and X-ray radiation should not be made at will.

This circuit diagram is only for reference.
Specifications are subject to change without notice.

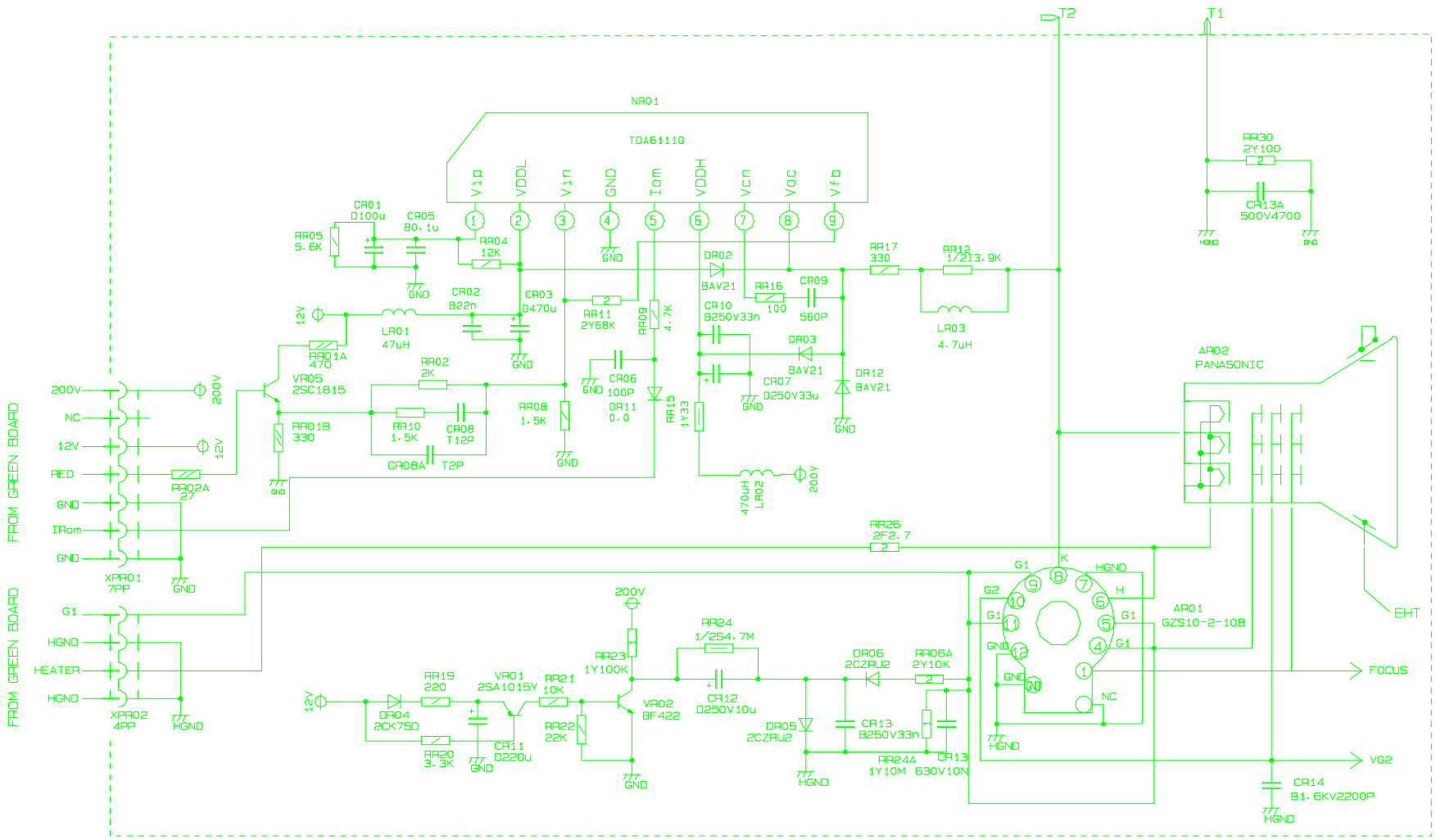
DESIGNER		CIRCUIT DIAGRAM OF GB43-1D09 GB51-1D09 GB55-1D09W GB65-1D09W	JUT7.820.045
DATE			
MANAGER			
DATE			



1. Any components identified by ⚠ have special safety-related characteristics. Use replacement components which have the same characteristics as the original parts.
2. ⏚ Cold ground ⊥ Hot ground
3. ⚠ FDA This symbol tells you that replacement components related to high voltage. beam current and X-ray radiation should not be made at will.

This circuit diagram is only for reference.
Specifications are subject to change without notice.

DESIGNER		CIRCUIT DIAGRAM OF GB43HD09 GB51HD09 GB55HD09W GB65HD09W	JUT7.820.044
DATE			
MANAGER			The page Total page
DATE			



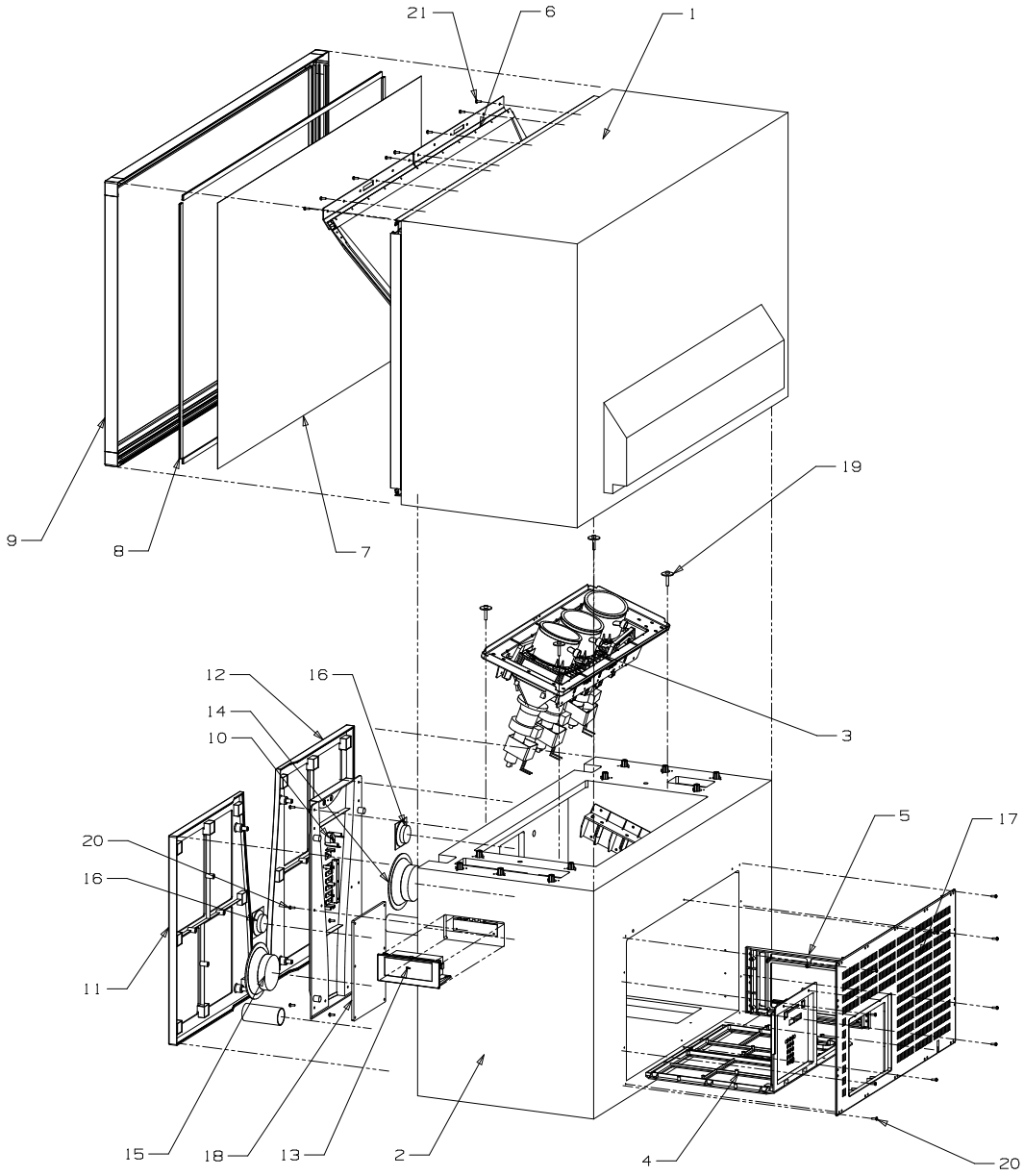
JUT7.820.046

PU-3 Y-R

1. Any components identified by ⚠ have special safety-related characteristics. Use replacement components which have the same characteristics as the original parts.
2. ⏚ Cold ground ⊥ Hot ground
3. ⚠ FDA This symbol tells you that replacement components related to high voltage. beam current and X-ray radiation should not be made at will.

This circuit diagram is only for reference.
Specifications are subject to change without notice.

DESIGNER		CIRCUIT DIAGRAM OF G843-1D09 G851-1D09 G865H-1D09W G865H-1D09W	JUT7.820.046
DATE			
MANAGER			This page Total page
DATE			



GB65HD09W/GB55HD09W

No		Description	Quantity
26			
25			
24			
23			
22			
21		Tapping screw 4X20HwAH0	16
20		Tapping screw 4X16HwAH0	20
19		Combined screw M6X35W-30F	4
18		Cover panel	1
17		Chassis rear cabinet	1
16		Speaker assembly C	1
15		Speaker assembly B	1
14		Speaker assembly A	1
13		Side AV box assembly	1
12		Left panel assembly	1
11		Right panel assembly	1
10		Front panel assembly	1
9		Front frame	1
8		Hold bar	4
7		Screen	1
6		Mirror assembly	1
5		Power board assembly	1
4		Chassis assembly	1
3		Projection tube assembly	1
2		Base frame assembly	1
1		Middle cabinet assembly	1

APEX DIGITAL TELEVISION In-Warranty Schedule by Model

Product Model No.	LIMITED WARRANTY [1]				Carry-In Service	In Home	Stock Repair	REIMBURSEMENT RATES				
								Carry-In		Home Service		Stock
	Parts	Remote Control	Labor	CRT [3]	Yes/No	Yes/No	Yes/No	Minor	Major	Minor	Major	Repair
13 inch [2]												
AT1302	90	90	90	90	N	N	N	N/A	N/A	N/A	N/A	N/A
AT1308	90	90	90	90	N	N	N	N/A	N/A	N/A	N/A	N/A
20 inch [2]												
AT2002 / AT2002S	365	90	90	365	N	N	N	N/A	N/A	N/A	N/A	N/A
AT2008 / AT2008S	365	90	90	365	N	N	N	N/A	N/A	N/A	N/A	N/A
GT2011J	365	90	90		N	N	N	N/A	N/A	N/A	N/A	N/A
GT2011S	365	90	90	365	N	N	N	N/A	N/A	N/A	N/A	N/A
GT2015	365	90	90	365	N	N	N	N/A	N/A	N/A	N/A	N/A
GT2015DV	365	90	90	365	N	N	N	N/A	N/A	N/A	N/A	N/A
KT2006	1 YEAR STORE REPLACEMENT											
24 inch [2&3]												
AT2402	365	90	90	365	N	N	N	N/A	N/A	N/A	N/A	N/A
AT2408 / AT2408S	365	90	90	365	N	N	N	N/A	N/A	N/A	N/A	N/A
GT2411S	365	90	90	365								
GT2415	365	90	90	365	N	N	N	N/A	N/A	N/A	N/A	N/A
PF2425	365	90	90	730	N	N	N	N/A	N/A	N/A	N/A	N/A
KT2406	365	90	90	365	Y	N	N	[4]	[4]	[4]	[4]	[4]
25 inch [2]												
AT2502	365	90	90	365	N	N	N	N/A	N/A	N/A	N/A	N/A
AT2502S	365	90	90	365	N	N	N	N/A	N/A	N/A	N/A	N/A
27 inch [3]												
AT2702	365	90	90	365	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
AT2702S	365	90	90	365	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
AT2708 / AT2708S	365	90	90	365	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
GT2711S	365	90	90	365	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
GT2715	365	90	90	365	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
PF2725	365	90	90	730	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
GT2715DV	365	90	90	365	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
32 inch [3]												
AT3208S	365	90	90	365	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
GT3215	365	90	90	365	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
PF3225	365	90	90	730	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
KT3226	365	90	90	730	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
PROJECTION												
GB4308	365	90	365	730	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
GB43HD09	365	90	365	365	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
GB5108	365	90	365	730	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
GB51HD09	365	90	365	365	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
GB55HD09W	365	90	365	365	Y	Y	Y	[4]	[4]	[4]	[4]	[4]
GB65HD09W	365	90	365	365	Y	Y	Y	[4]	[4]	[4]	[4]	[4]

[1] Limited Warranty is printed on the last page of the owner's manual

2 All defective units 13" - 25 "during the first 90 days of ownership will be exchanged at the original place of purchase. Dealer may contact APEX to receive a Return Authorization from Apex for credit or exchange.

3 Should the picture tube fail during the In-Warranty period the product will be exchanged. The customer is responsible for the Service Center diagnostic fee after the initial labor warranty period and for all packing, transportation and insurance charges.

4 See Master Dealer File for Rates for each Dealer