

JVC

SCHEMATIC DIAGRAMS

WIDE LCD TELEVISION

LT-42S90BU

DVD-ROM No.SML2008Q1



<FT4 CHASSIS LINEUP>

BASIC CHASSIS

FT4

InterArt
DynaPiX **HD**

HD
ready
1080p

DVB
Digital Video
Broadcasting

HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

T-V LINK

MAXX
Bass

LT-42S90BU

STANDARD CIRCUIT DIAGRAM

NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the \triangle symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

- (1)Input signal : Colour bar signal
- (2)Setting positions of each knob/button and variable resistor : Original setting position when shipped
- (3)Internal resistance of tester : DC 20k Ω /V
- (4)Oscilloscope sweeping time : H \Rightarrow 20 μ s / div
: V \Rightarrow 5ms / div
: Others \Rightarrow Sweeping time is specified
- (5)Voltage values : All DC voltage values

* Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

- In the PW board : R1209 \rightarrow R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

● Resistance value

- No unit : [Ω]
- K : [k Ω]
- M : [M Ω]

● Rated allowable power

- No indication : 1/16 [W]
- Others : As specified

● Type

- No indication : Carbon resistor
- OMR : Oxide metal film resistor
- MFR : Metal film resistor
- MPR : Metal plate resistor
- UNFR : Uninflammable resistor
- FR : Fusible resistor

* Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

● Capacitance value

- 1 or higher : [pF]
- less than 1 : [μ F]

● Withstand voltage

- No indication : DC50[V]
- Others : DC withstand voltage [V]
- AC indicated : AC withstand voltage [V]

* Electrolytic Capacitors

47/50[Example]: Capacitance value [μ F]/withstand voltage[V]

● Type

- No indication : Ceramic capacitor
- MM : Metalized mylar capacitor
- PP : Polypropylene capacitor
- MPP : Metalized polypropylene capacitor
- MF : Metalized film capacitor
- TF : Thin film capacitor
- BP : Bipolar electrolytic capacitor
- TAN : Tantalum capacitor

(3)Coils

- No unit : [μ H]
- Others : As specified

(4)Power Supply

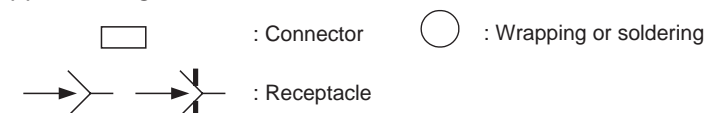


* Respective voltage values are indicated

(5)Test point



(6)Connecting method



(7)Ground symbol

- \perp : LIVE side ground
- \perp with a horizontal line through the stem : ISOLATED(NEUTRAL) side ground
- \perp with a horizontal line through the stem and a vertical line below : EARTH ground
- ∇ : DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE (\perp) side GND and the ISOLATED(NEUTRAL) (\perp with a horizontal line through the stem) side GND. Therefore, care must be taken for the following points.

- (1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. if the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.
- (2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected, a fuse or any parts will be broken.

◆ Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

NOTE

◆ Due improvement in performance, some part numbers show in the circuit diagram may not agree with those indicated in the part list.

When ordering parts, please use the numbers that appear in the Parts List.

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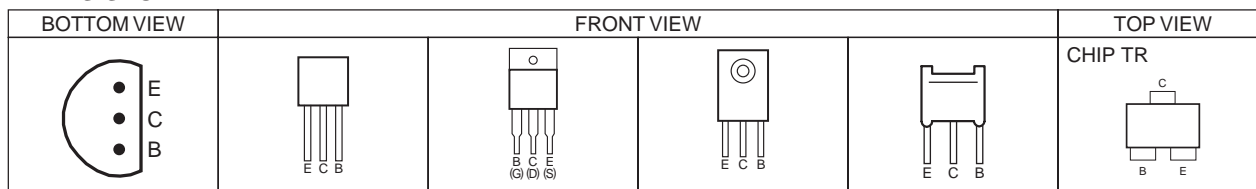
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USING P.W. BOARD

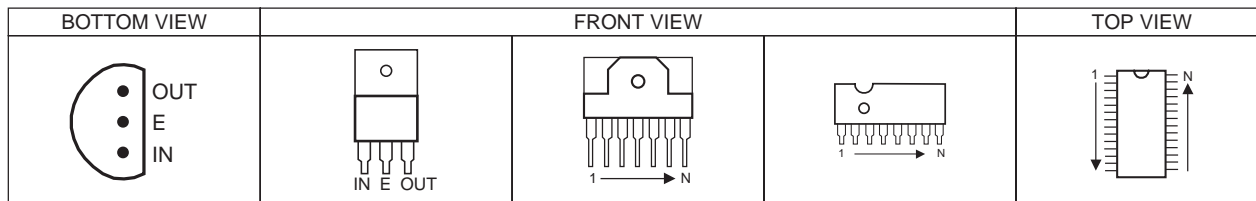
P.W.B ASS'Y name	LT-42S90BU
MAIN P.W. BOARD	SFT-1106A-H3
HP/USB P.W. BOARD	SFT-7303A-H3
CAPSENS P.W. BOARD	SFT-7701A-H3
LED P.W. BOARD	SFT-8701A-H3
IR P.W. BOARD	SFT-8801A-H3

SEMICONDUCTOR SHAPES

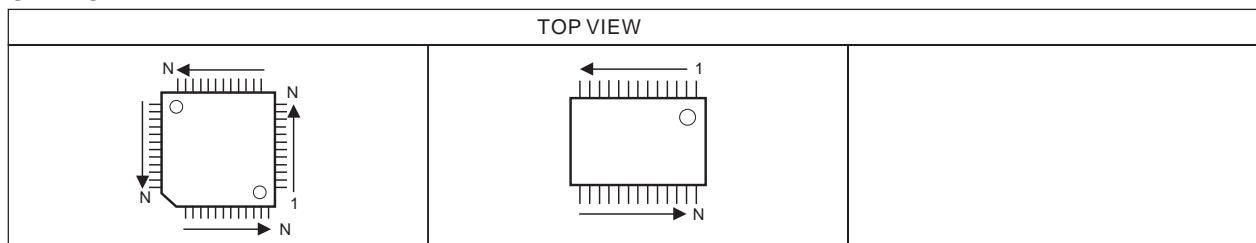
TRANSISTOR



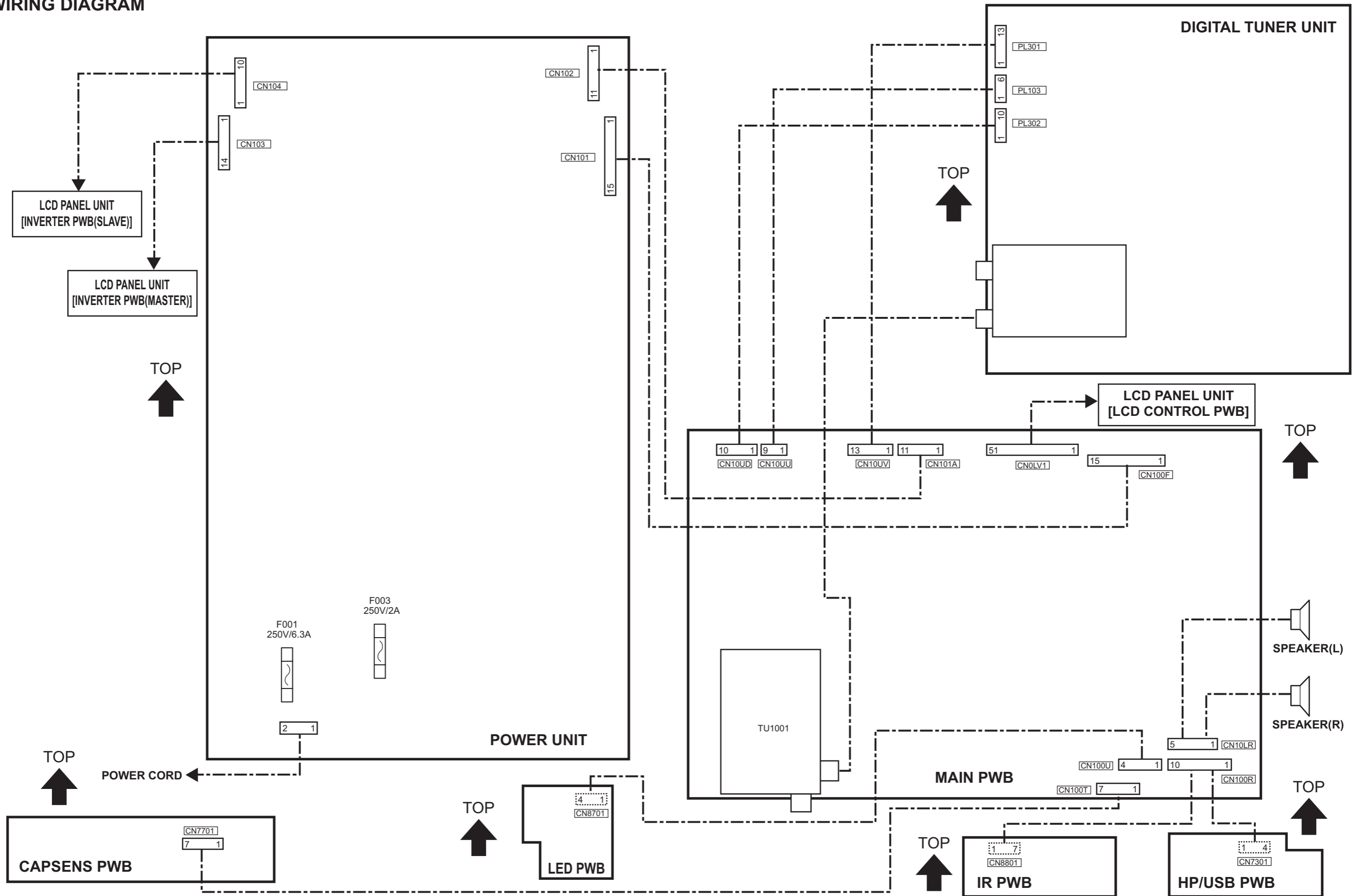
IC



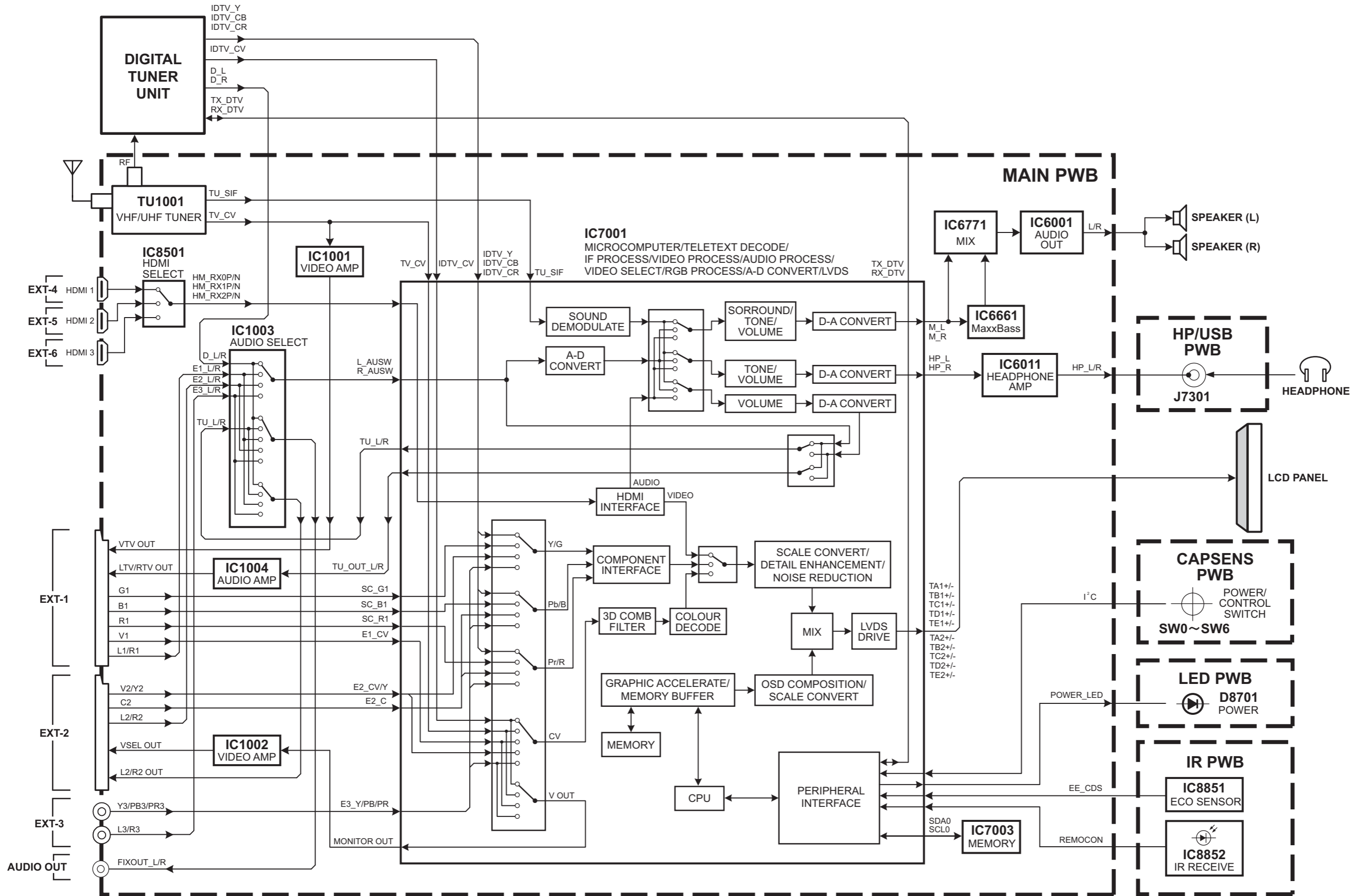
CHIP IC



WIRING DIAGRAM

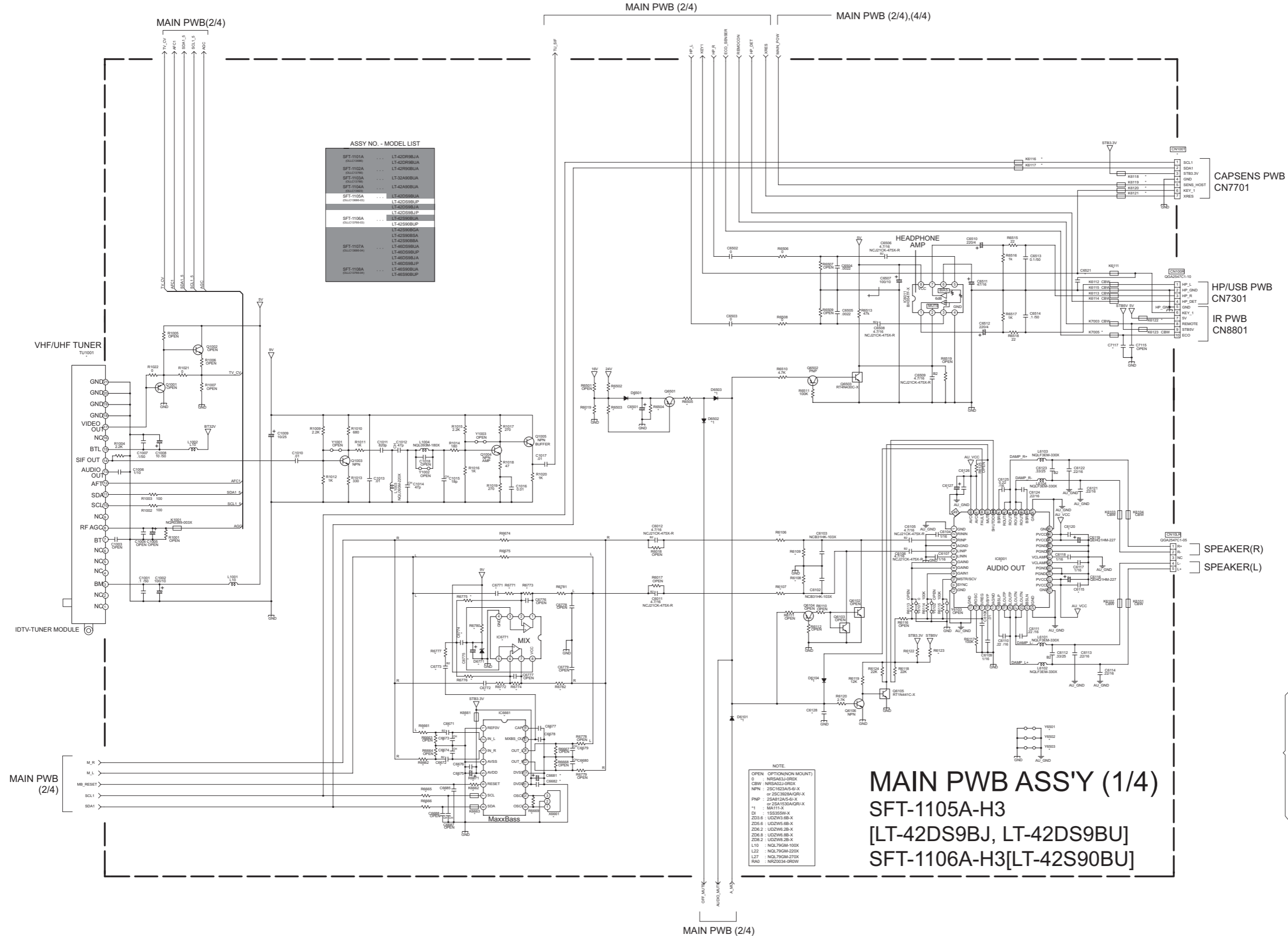


BLOCK DIAGRAM



CIRCUIT DIAGRAMS

MAIN PWB CIRCUIT DIAGRAM (1/4)



MAIN PWB ASS'Y (1/4)

SFT-1105A-H3

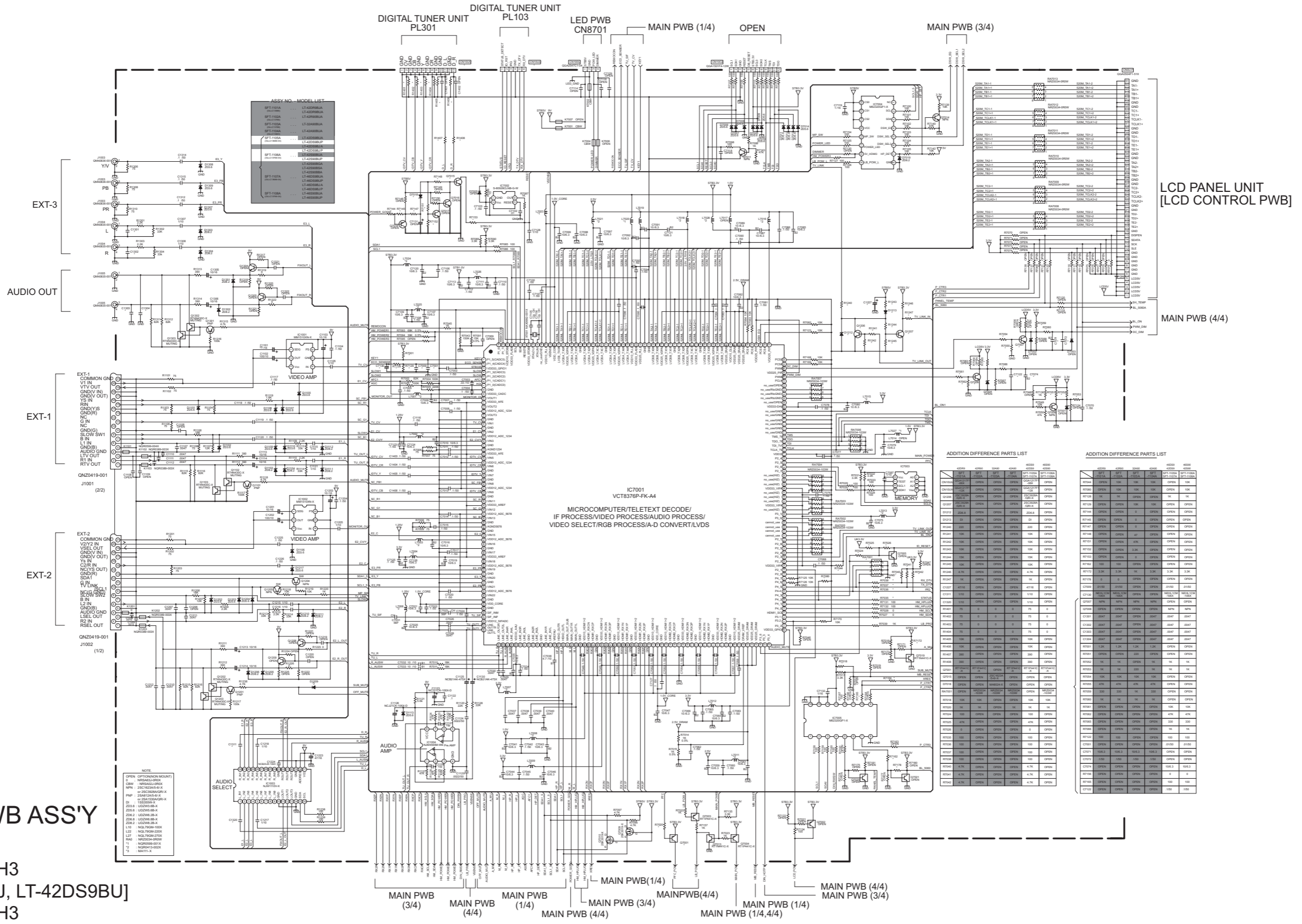
[LT-42DS9BJ, LT-42DS9BU]

SFT-1106A-H3[LT-42S90BU]

ADDITION DIFFERENCE PARTS LIST

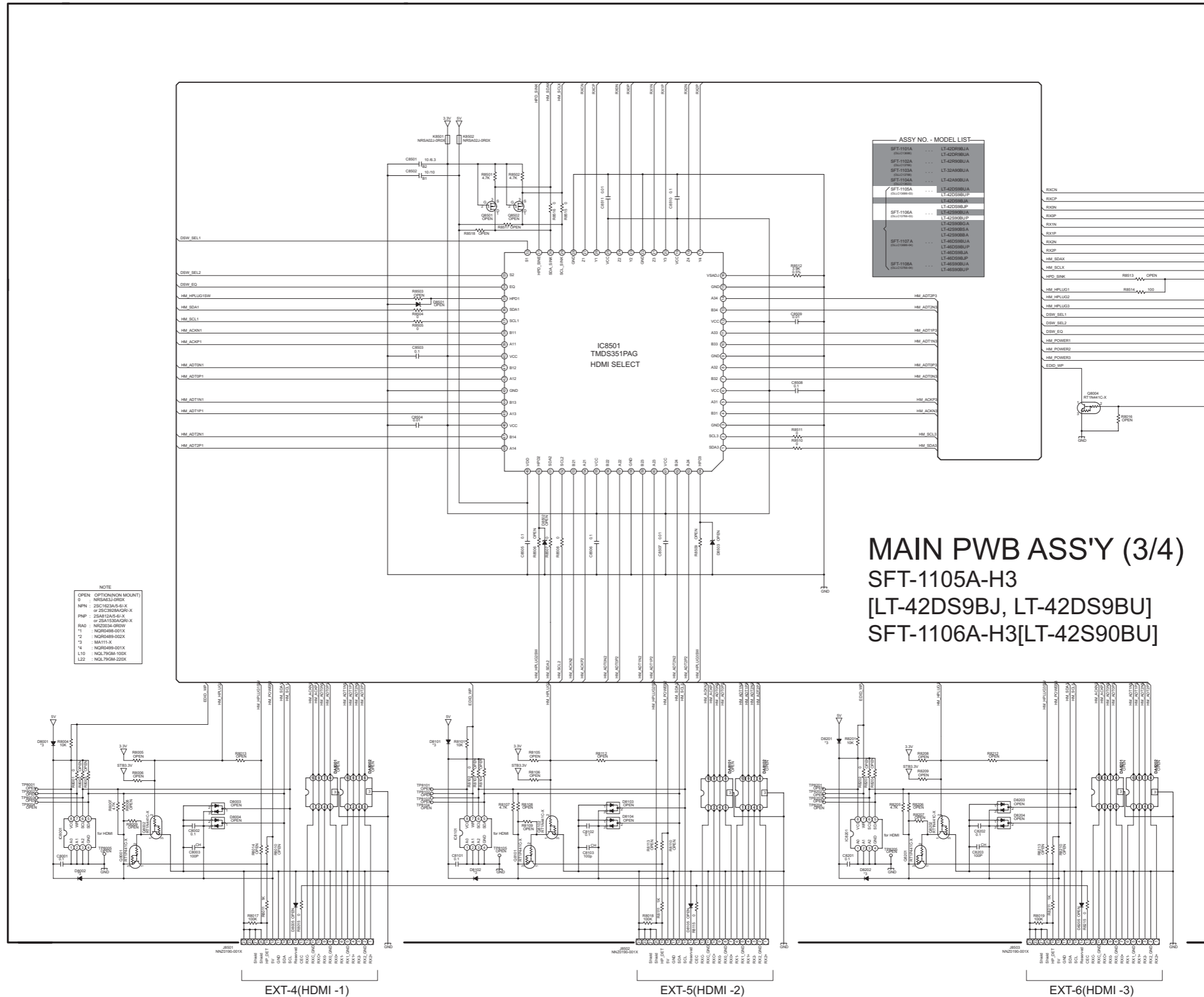
	42DR9	42DR9	42DR9	42DR9	42DR9	42DR9
	SFT-1101A	SFT-1102A	SFT-1103A	SFT-1104A	SFT-1105A	SFT-1106A
CN1007	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN
TV_CV	TV_CV	TV_CV	TV_CV	TV_CV	TV_CV	TV_CV
...
Y5003	OPEN	OPEN	OPEN	OPEN	OPEN	OPEN

MAIN PWB CIRCUIT DIAGRAM (2/4)



MAIN PWB ASS'Y (2/4)
SFT-1105A-H3 [LT-42DS9BJ, LT-42DS9BU]
SFT-1106A-H3 [LT-42S90BU]

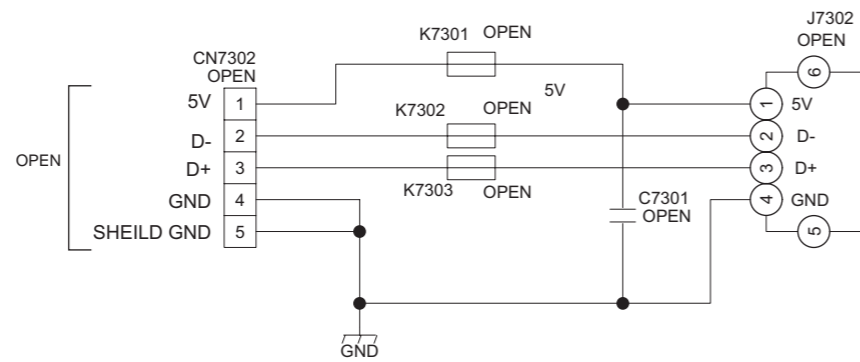
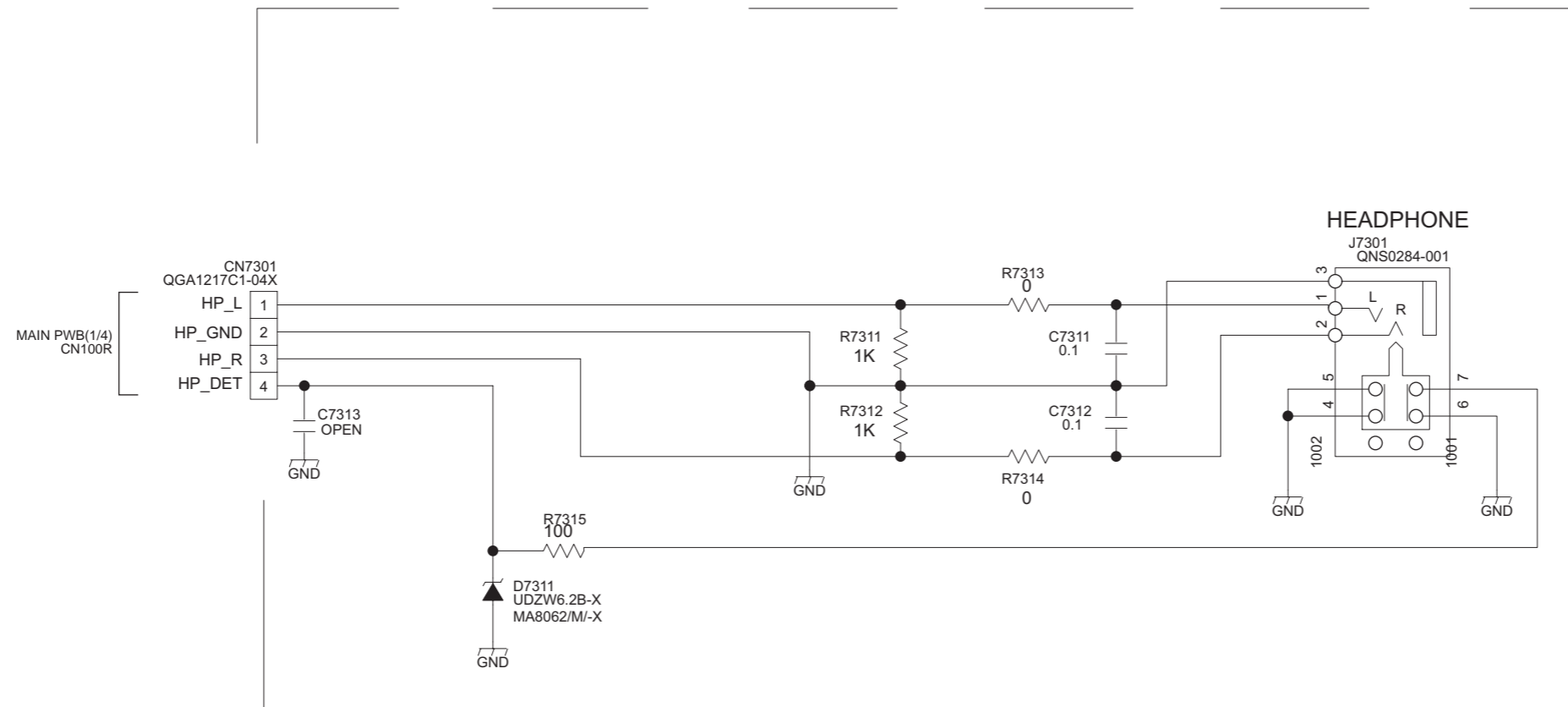
NOTE : Refer to the part list for the part number of IC7003



MAIN PWB (2/4)

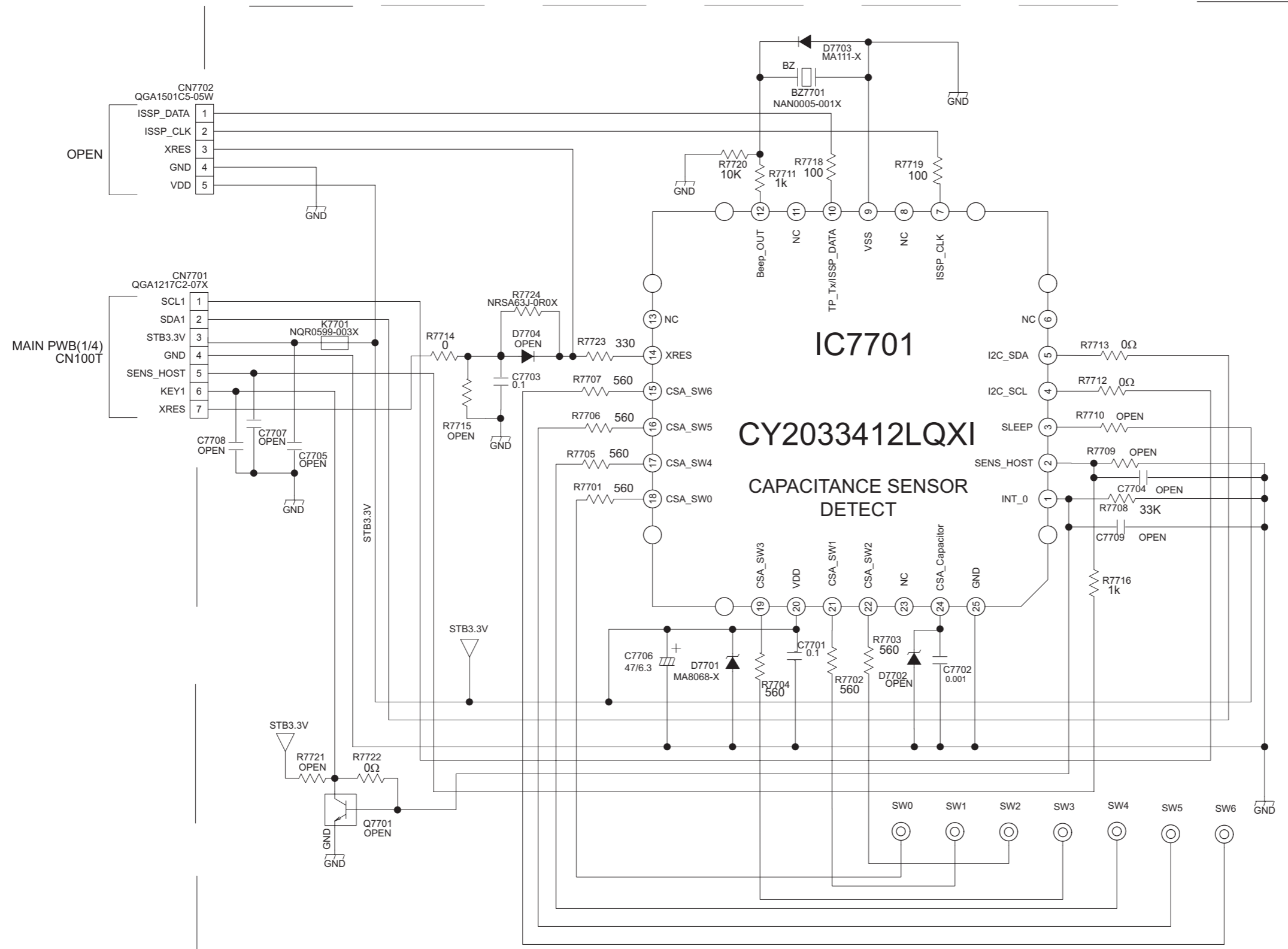
NOTE : Refer to the part list for the part number of IC8001,IC8101 and IC8201.

HP/USB PWB CIRCUIT DIAGRAM



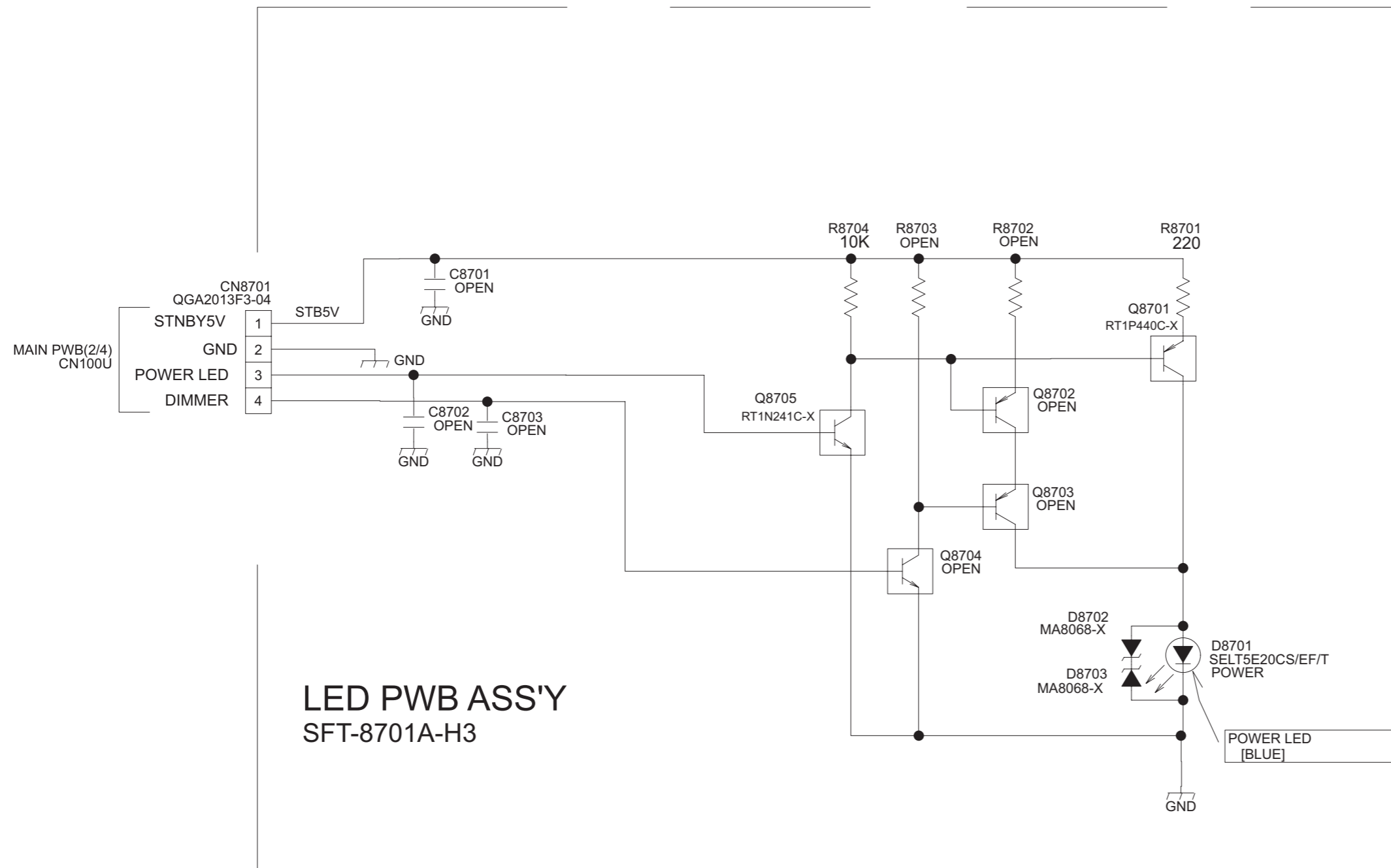
HP/USB PWB ASS'Y
SFT-7303A-H3

CAPSENS PWB CIRCUIT DIAGRAM



CAPSENS PWB ASS'Y
SFT-7701A-H3

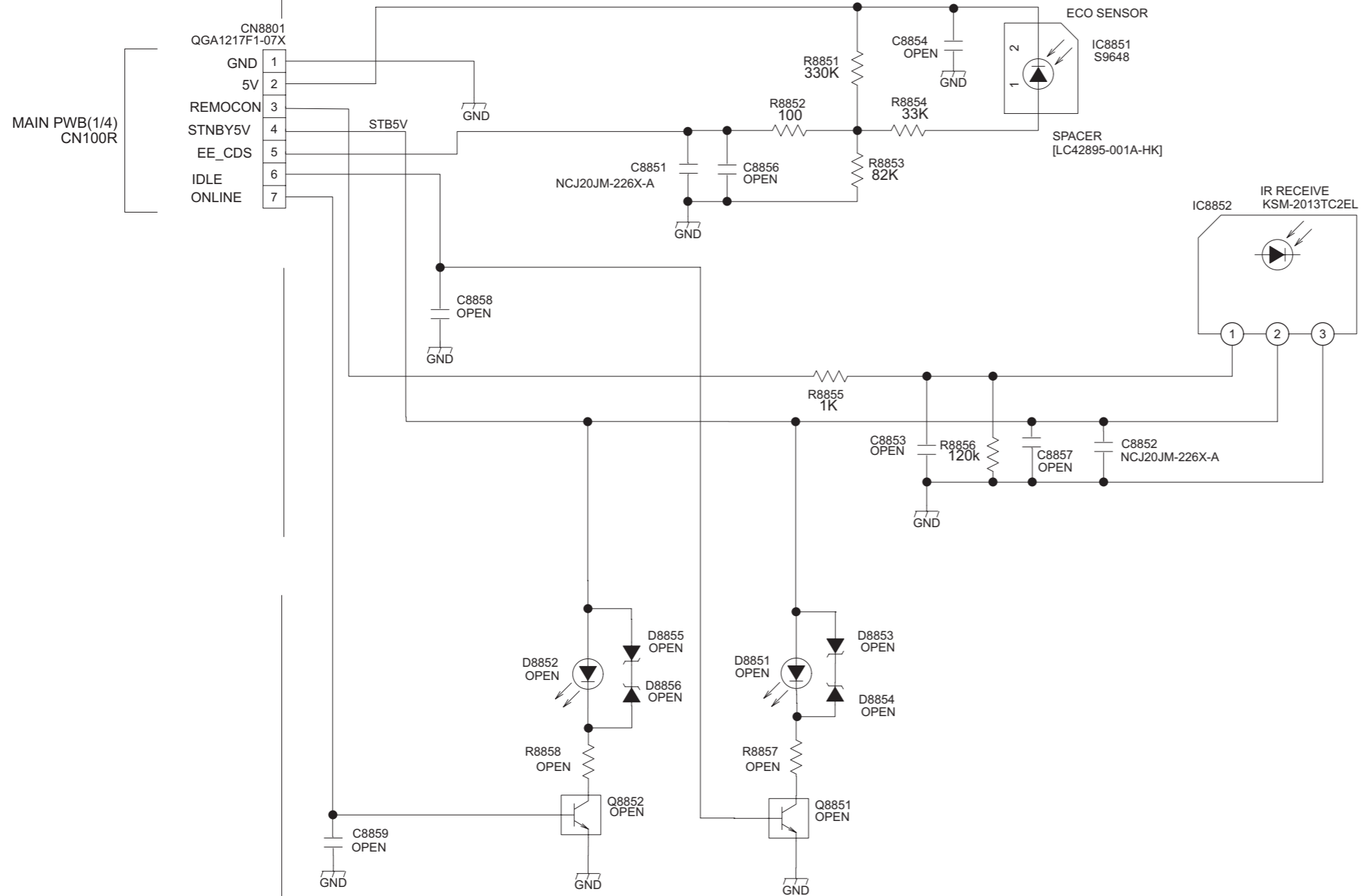
LED PWB CIRCUIT DIAGRAM



LED PWB ASS'Y
SFT-8701A-H3

POWER LED
[BLUE]

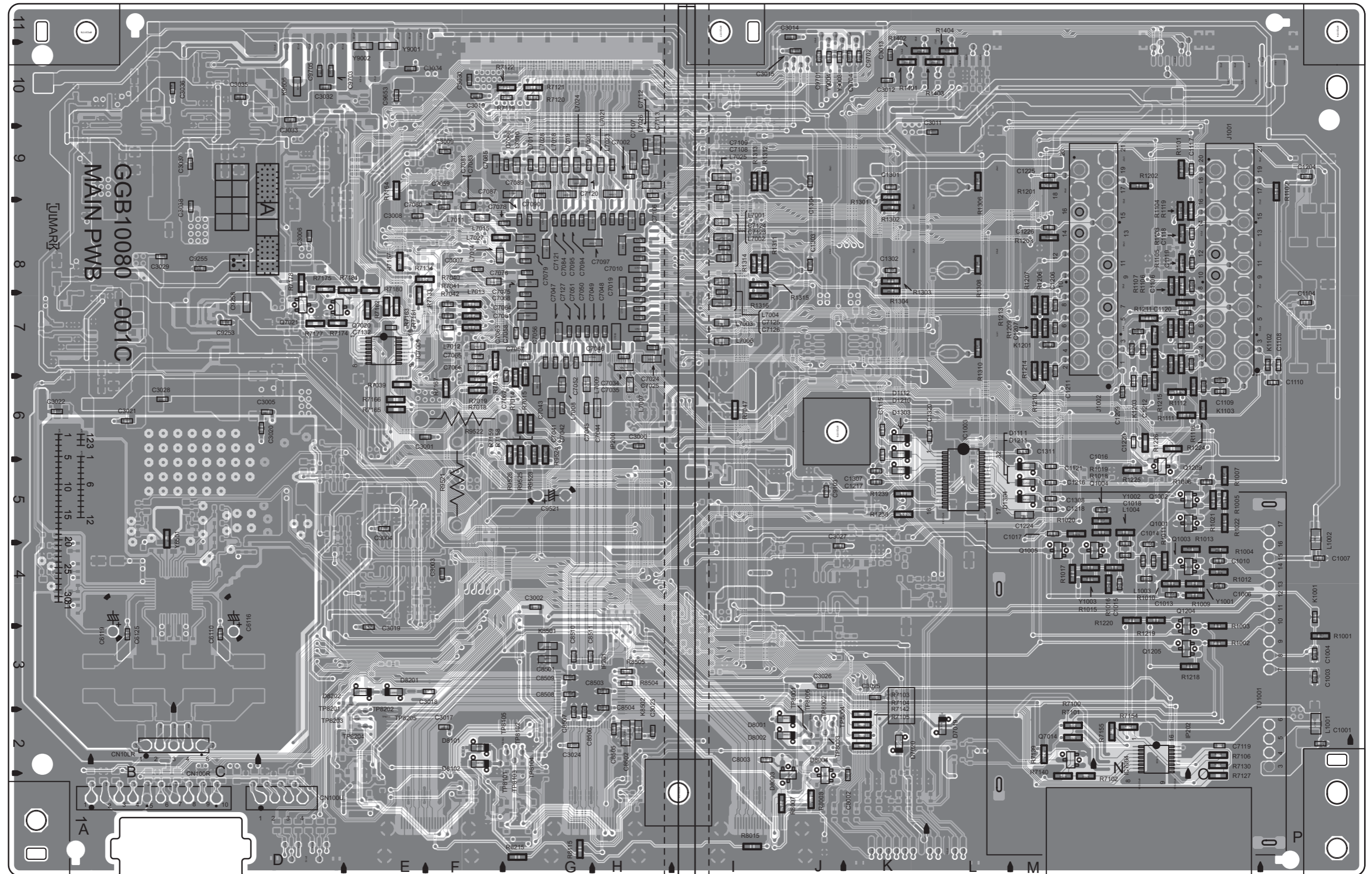
IR PWB ASS'Y SFT-8801A-H3

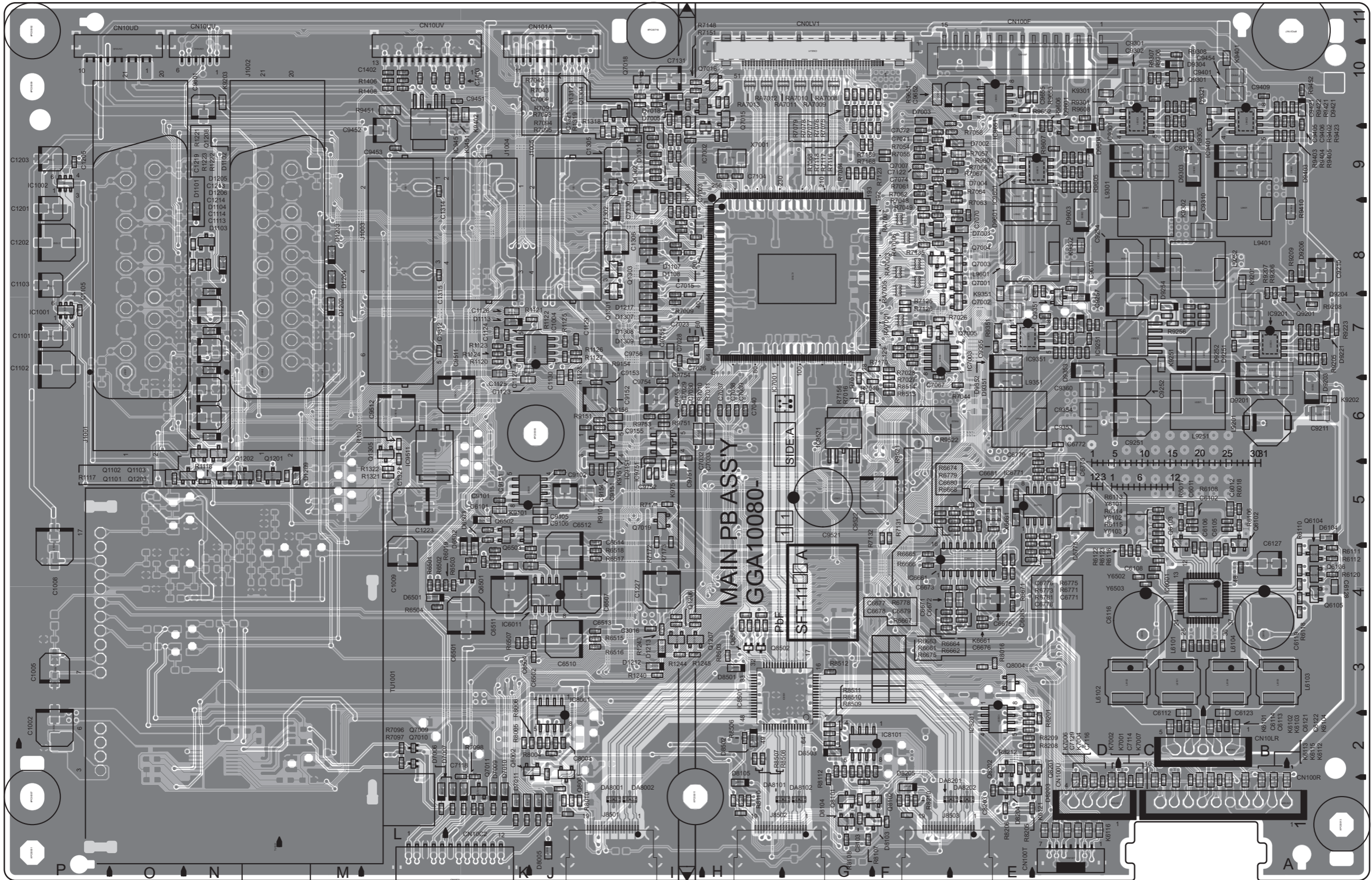


PATTERN DIAGRAMS

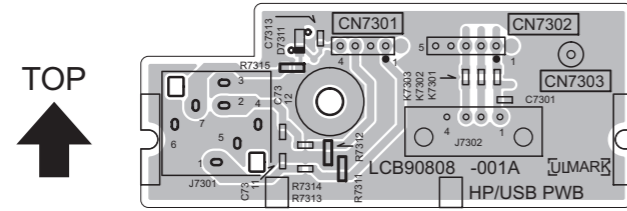
MAIN PWB PATTERN [SOLDER SIDE]

TOP
↑

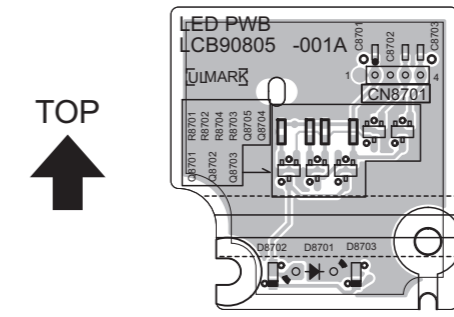




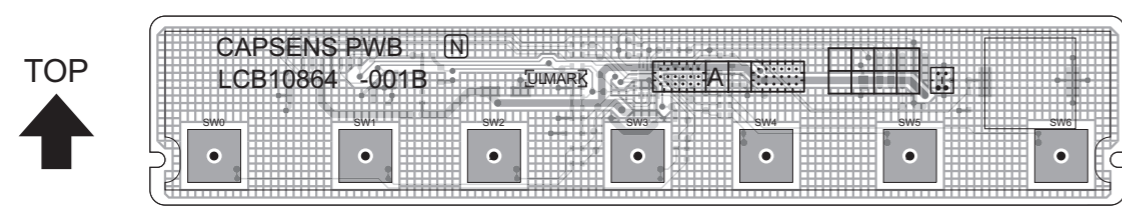
HP/USB PWB PATTERN



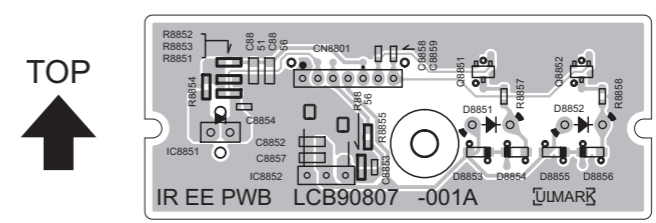
LED PWB PATTERN



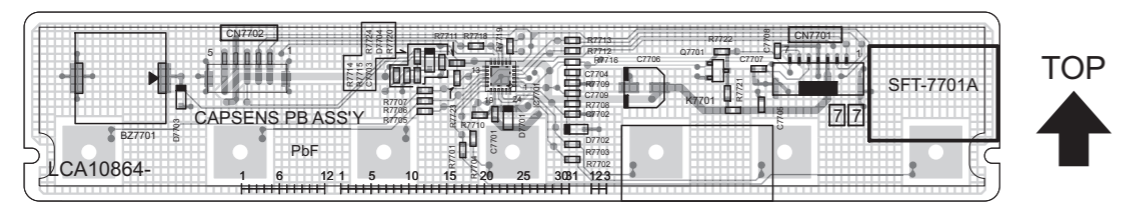
CAPSENS PWB PATTERN [SOLDER SIDE]



IR PWB PATTERN



CAPSENS PWB PATTERN [PARTS SIDE]





JVC

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(No.YA598<Rev.001>)