

Service Manual

ORDER NO.
RRV4271

Blu-ray 3D™ PLAYER

BDP-440 BDP-52FD

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	DVD Region No.	BD Region No.	Serial No.	Remarks
BDP-440	YXCN5	AC 100 V to 240 V	2	B	&&&&#####YY	YY : Europe
BDP-440	VXCN5	AC 100 V to 240 V	2	B	&&&&#####GB	GB : U.K
BDP-52FD	UCXCN	AC 120 V	1	A	&&&&#####UC	UC : NORTH AMERICA

This service manual should be used together with the following manual(s).

Model No.	Order No.	Remarks
BDP-140/YXCN5	RRV4263	

For SPECIFICATIONS and PANEL FACILITIES, refer to the operating instructions.

1. CONTRAST OF MISCELLANEOUS PARTS

NOTES: ● Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.

● The  mark found on some component parts indicates the importance of the safety factor of the part.

Therefore, when replacing, be sure to use parts of identical designation.

● Screws adjacent to  mark on product are used for disassembly.

● For the applying amount of lubricants or glue, follow the instructions in this manual.

(In the case of no amount instructions, apply as you think it appropriate.)

● Nos. indicate the pages and Nos. in the service manual for the base model.

● When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 Ω $\rightarrow$ 56 x 10¹ $\rightarrow$ 561 RD1/4PU    J

47k Ω $\rightarrow$ 47 x 10³ $\rightarrow$ 473 RD1/4PU    J

0.5 Ω $\rightarrow$ R50 RN2H    K

1 Ω $\rightarrow$ 1R0 RS1P    K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k Ω $\rightarrow$ 562 x 10¹ $\rightarrow$ 5621 RN1/4PC     F

CONTRAST TABLE

BDP-140/YXC�5, BDP-440/YXC�5, BDP-440/VXC�5 and BDP-52FD/UCXC� are constructed the same except for the following:

Mark	No.	Symbol and Description	BDP-140/YXC�5	BDP-440/YXC�5	BDP-440/VXC�5	BDP-52FD/UCXC�	Remarks
C	P37-1	PCB ASSEMBLIES MAIN BOARD ASSY	08-BDP140-MA0/Y-TL	08-BDP440-MA0/Y-TL	08-BDP440-MA0/Y-TL	08-BDP440-MA1/U-TL	*1
	P37-2	POWER BOARD ASSY	08-BDP140-PW0-TL	08-BDP140-PW0-TL	08-BDP140-PW0-TL	08-BDP440-PW2-TL	*2
	P37-3	FRONT BOARD ASSY	08-BDP140-FV0-TL	08-BDP440-FV0-TL	08-BDP440-FV0-TL	08-BDP440-FV2-TL	*3
	P37-4	SWITCH BOARD ASSY	08-BDP140-SW0-TL	08-BDP440-SW0-TL	08-BDP440-SW0-TL	08-BDLX55-SW0-TL	*4
	P37-5	AV BOARD ASSY	08-BDP130-AV0-TL	Not used	Not used	Not used	
		RS-232C BOARD ASSY	Not used	Not used	Not used	08-BDP440-RS0-TL	No.26
		PACKING SECTION					
	P35-1	Remote Control Unit (RC-2930)	06-RC2930-A000-TL	06-RC2930-A000-TL	06-RC2930-A000-TL	Not used	
	P35-1	Remote Control Unit (RC-2920)	Not used	Not used	Not used	06-RC2920-A000-TL	
	P35-2	Video Audio Cable	41-UH1200-0KK8A-TL	41-UH1500-0KK8A-TL	41-UH1500-0KK8A-TL	41-UH1500-0KK8A-TL	
D	 P35-3	AC Power Cord	51-DC0120-0CRA3-TL	51-DC0120-0CRA3-TL	51-DC0120-0CRD4-TL	51-BC0150-0LSA9-TL	
	P35-4	Operating Instructions (En)	72-BDP140-EN0B1-TL	72-BDP140-EN0B1-TL	72-BDP140-EN0B1-TL	Not used	
	P35-5	Operating Instructions (Fr/De/It/Ni/Es)	72-BDP140-YX0B1-TL	72-BDP140-YX0B1-TL	Not used	Not used	
	P35-6	Operating Instructions (En/Frca)	Not used	Not used	Not used	72-DP52FD-UC0B1-TL	
	P35-7	Polyethylene Bag	74-053035-50GB1-TL	74-056045-50HB1-TL	74-056045-50HB1-TL	74-056045-50HB1-TL	
	P35-9	Packing Case	76-104520-0ATB1-TL	76-106630-0ATB1-TL	76-106630-0ATB5-TL	76-106630-0ATB9-TL	
	P35-10	Right Card	76-104530-0AP-TL	Not used	Not used	Not used	
	P35-11	Left Card	76-104540-0AP-TL	Not used	Not used	Not used	
	P35-13	Pad	76-984950-0AP-TL	Not used	Not used	Not used	
		EXTERIOR SECTION					
E	P37-7	Top Cover	67-BD14T1-0E0B1-TL	67-BD44T1-0E0B1-TL	67-BD44T1-0E0B1-TL	67-BD44T1-0E0B1-TL	
	P37-8	Back Plate	67-BD14B1-0E0B1-TL	67-BD44B1-0E0B1-TL	67-BD44B1-0E0B1-TL	67-BD44B1-1E0B1-TL	
	P37-9	Bottom Cabinet	67-BD14R1-0E0-TL	67-BD14R1-1E0-TL	67-BD14R1-1E0-TL	67-BD14R1-1E0-TL	
	P37-10	Front Cabinet ASSY	08-BDP140-FA1-TL	08-BDP440-FA1-TL	08-BDP440-FA1-TL	08-BDP440-FA5-TL	
	P37-11	Rubber Pad	54-907220-000-TL	54-106480-000-TL	54-106480-000-TL	54-106480-000-TL	
	P37-12	ST Screw B 3.0 x 7	63-B30080-BF4-TL	Not used	Not used	Not used	
		S/T Screw B 3x8 BF	Not used	63-B30080-BF3-TL	63-B30080-BF3-TL	63-B30080-BF3-TL	
	P37-16	ST Screw B 3 x 6 B	64-B30060-303-TL	Not used	Not used	Not used	
		Trianglem/C Screw B 3x4	Not used	64-B30040-3H8-TL	64-B30040-3H8-TL	64-B30040-3H8-TL	

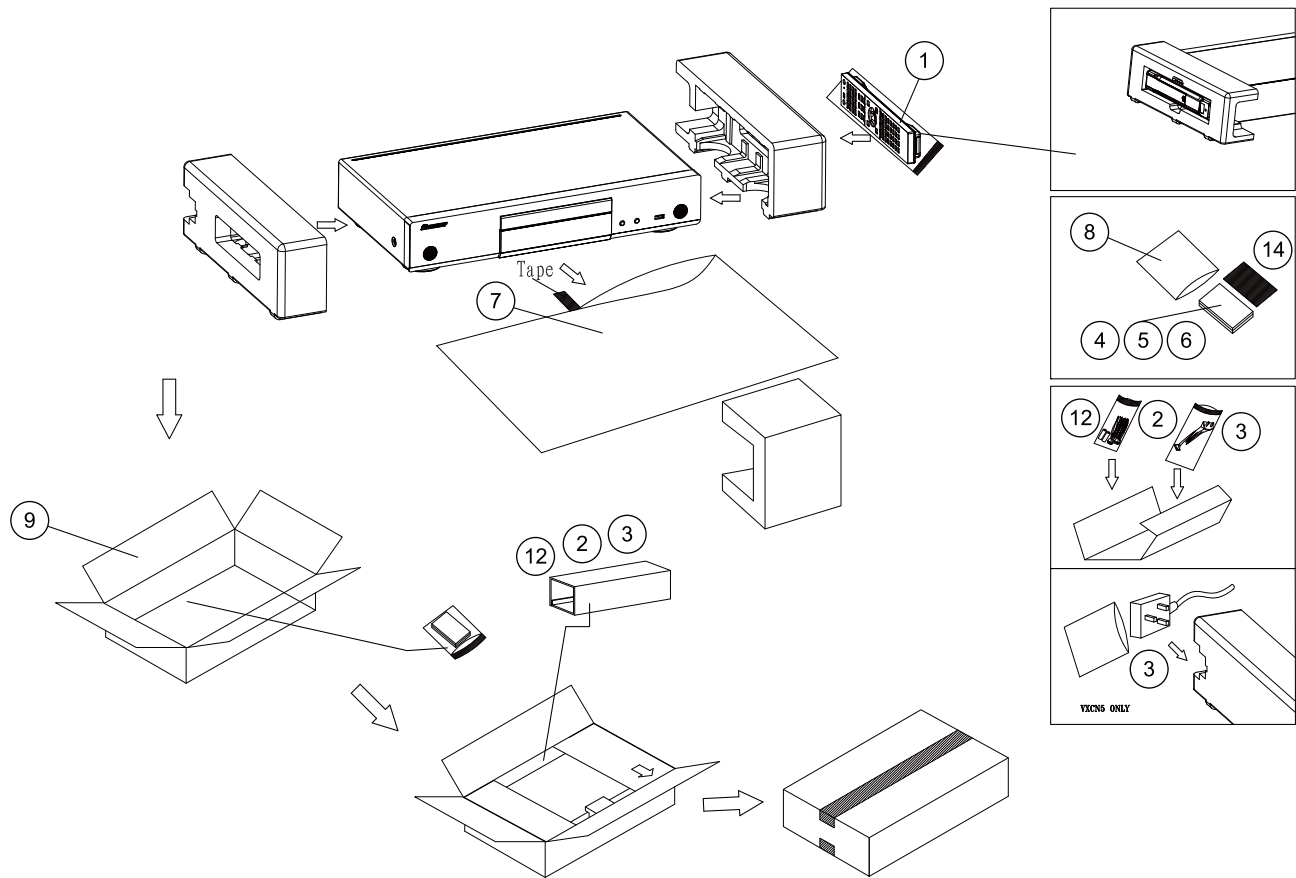
Mark	No.	Symbol and Description	BDP-140/YXCN5	BDP-440/YXCN5	BDP-440/VXCN5	BDP-52FD/UCXCN	Remarks
	P37-21	Cable 6pin 400mm	46-CC040T-06K-TL	Not used	Not used	Not used	
	P37-21	Cable 6pin 360mm	Not used	46-CC036T-06K-TL	46-CC036T-06K-TL	46-CC036T-06K-TL	
	P37-22	Cable 2pin 140mm	46-FH014T-02P-TL	Not used	Not used	Not used	
	P37-22	Cable 2pin 100mm	Not used	46-FH010T-02P-TL	46-FH010T-02P-TL	Not used	
	P37-22	Cable 3pin 100mm	Not used	Not used	Not used	46-FH010T-03P-TL	
	P37-23	Cable 9pin 140mm	46-FG022T-09S-TL	Not used	Not used	Not used	
	P37-23	Cable 11pin 180mm	Not used	46-FH022T-11S-TL	46-FH022T-11S-TL	46-FH022T-11S-TL	
	P37-25	Tray Panel	08-BDP140-DA1-TL	08-BDP440-DA1-TL	08-BDP440-DA1-TL	08-BDP440-DA2-TL	
		Cable 4pin 60mm	Not used	Not used	Not used	46-FH006T-04SA-TL	No.27

Notes : For PCB ASSEMBLIES, Refer to "2. SCHEMATIC DIAGRAM" and "3 PCB CONNECTION DIAGRAM".

- *1 MAIN BOARD ASSY has no service parts.
- *2 POWER BOARD ASSY has no service parts.
- *3 Although 08-BDP140-FV0-TL and 08-BDP440-FV0-TL are different in part number, they consist of the same service components.
- *4 SWITCH BOARD ASSY has no service parts.

EXPLODED VIEWS

PACKING SECTION



1 2 3 4

EXTERIOR SECTION

A

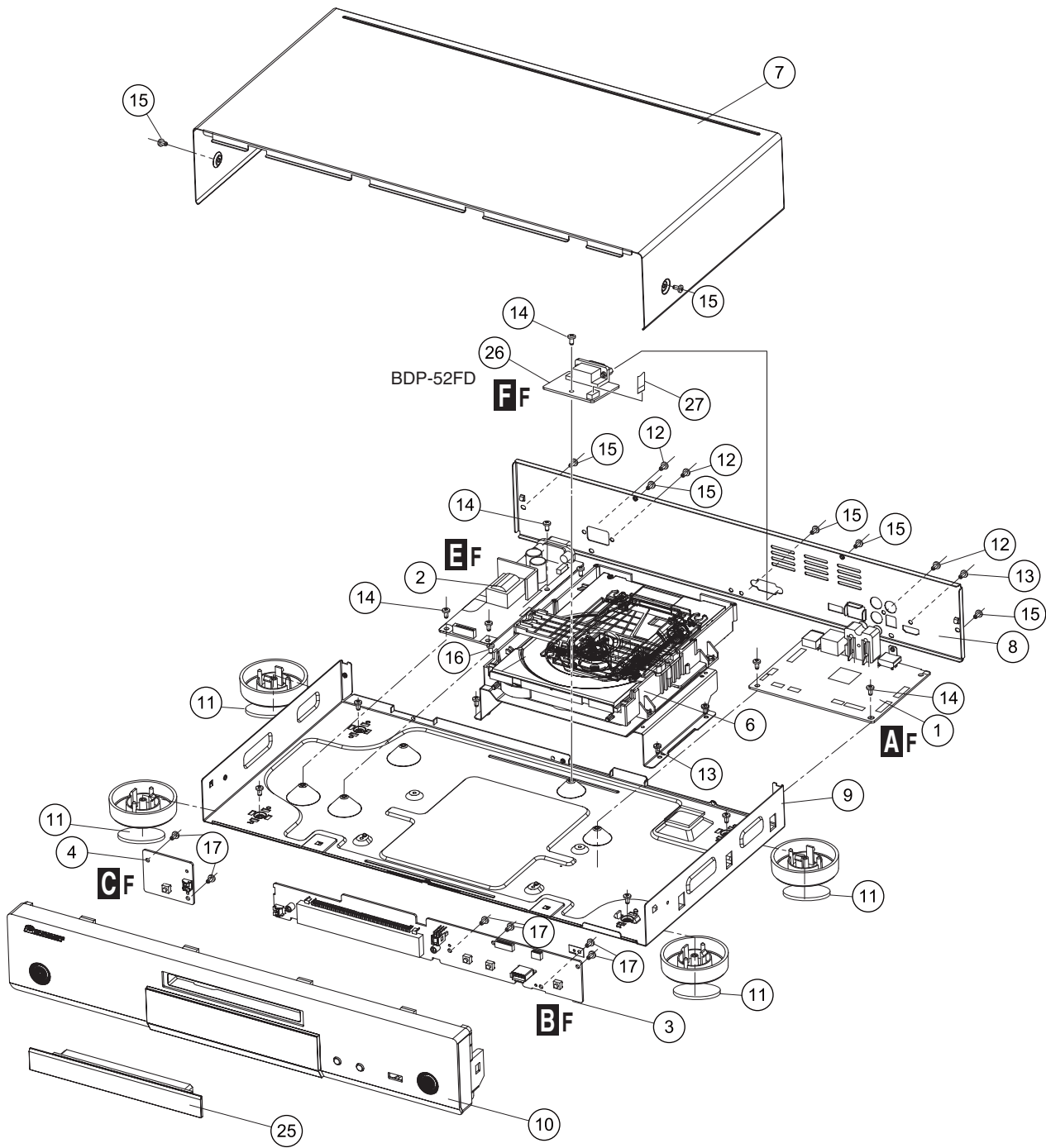
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BDP-440

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1234

2. SCHEMATIC DIAGRAM

2.1 MAIN BOARD ASSY (1/10) : POWER

A

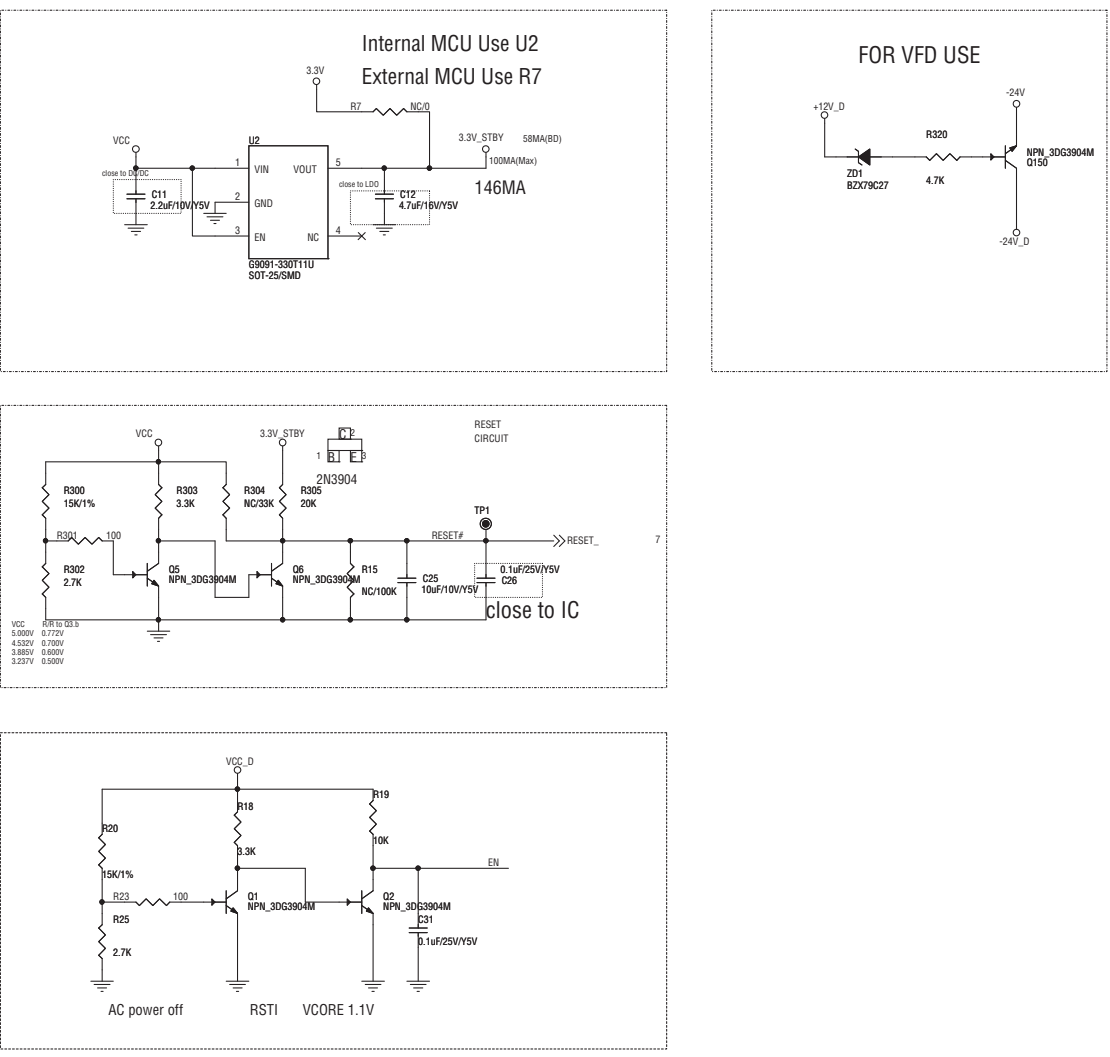
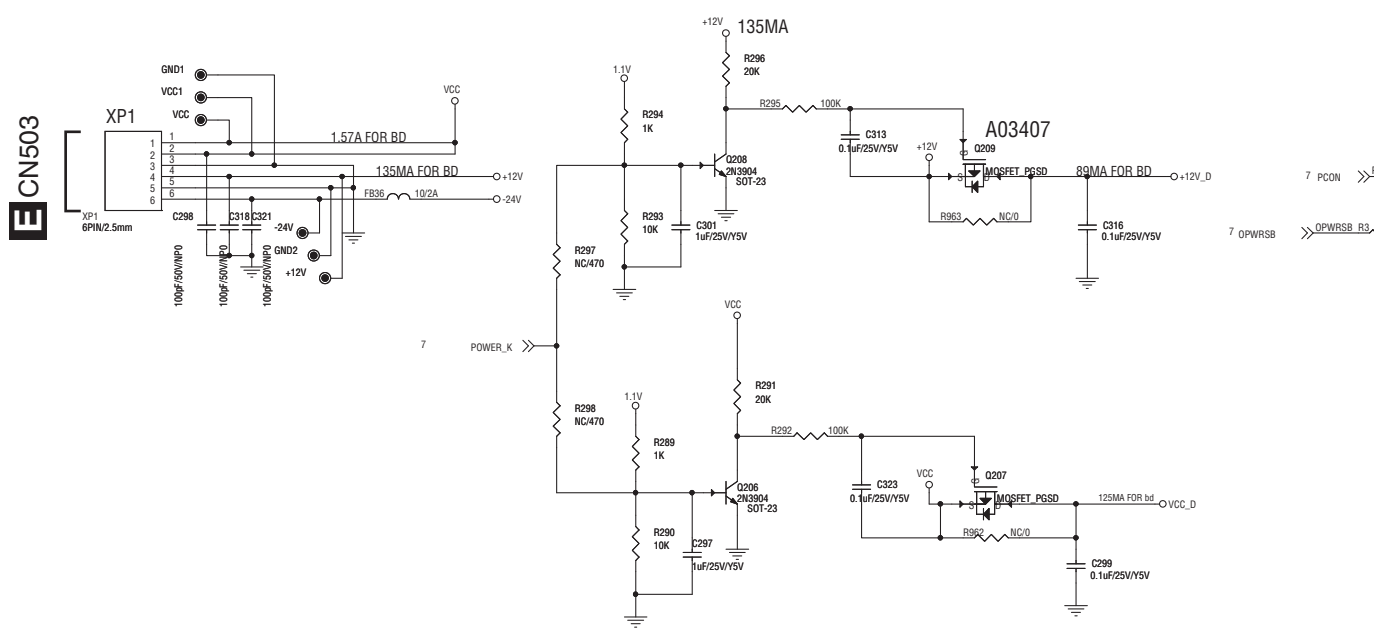
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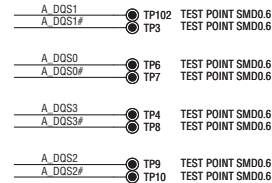
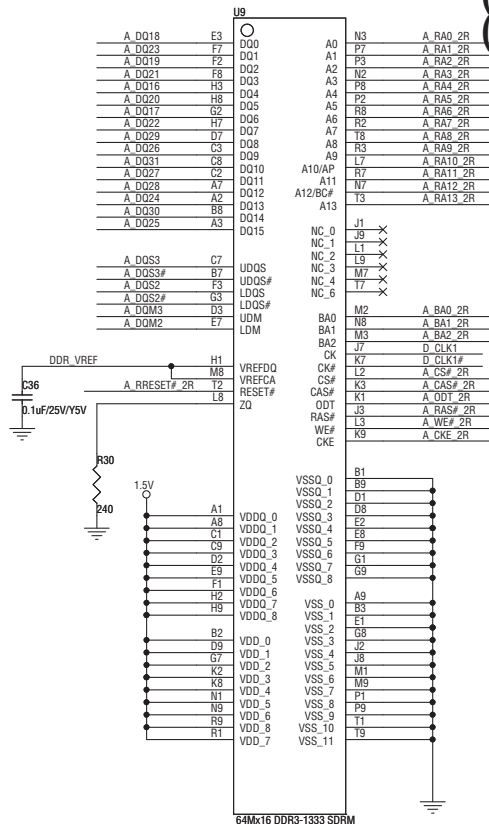
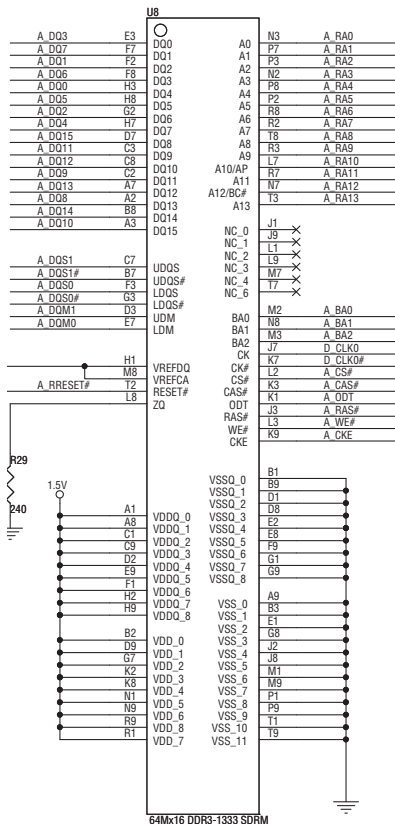


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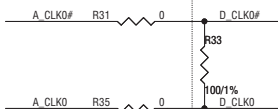
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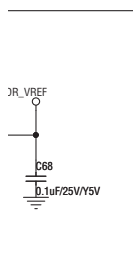
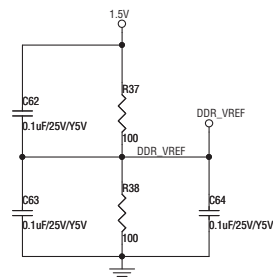
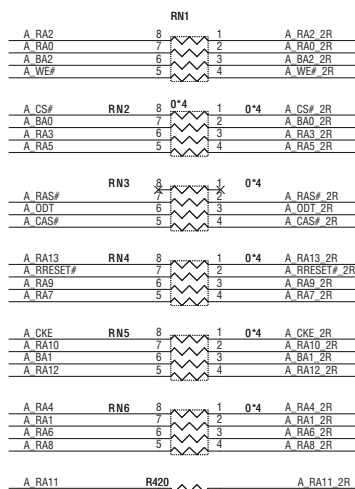
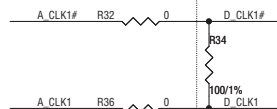
A2/10F MAIN BOARD ASSY (2/10) **(BDP-440 : 08-BDP440-MA0/Y-TL)** **(BDP-52FD : 08-BDP440-MA1/U-TL)**



NEAR 8555 NEAR DRAM



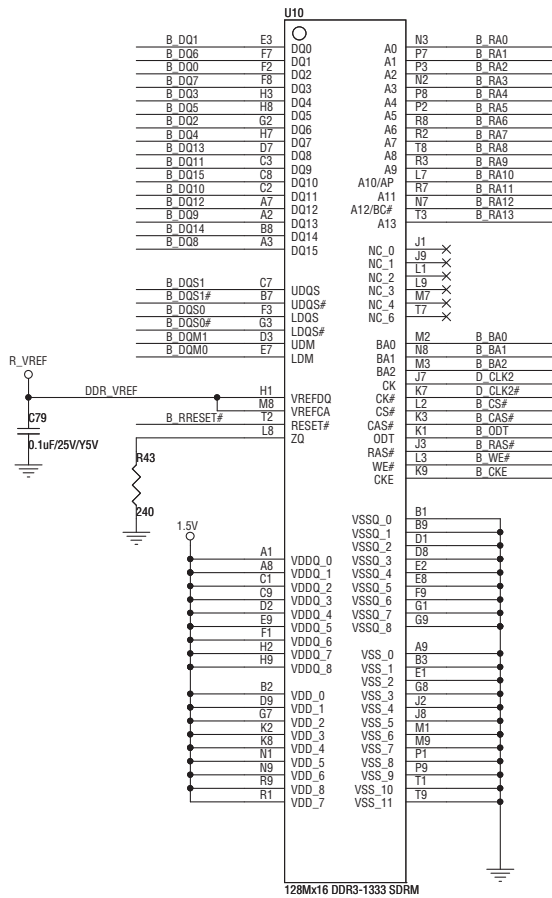
NEAR 8555 NEAR DRAM



BDP-440



A3/10F MAIN BOARD ASSY (3/10) **(BDP-440 : 08-BDP440-MA0/Y-TL)** **(BDP-52FD : 08-BDP440-MA1/U-TL)**



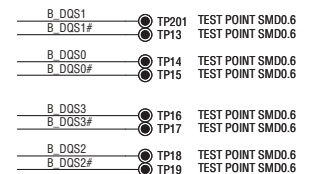
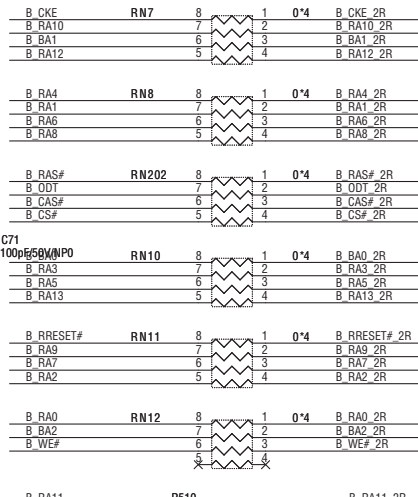
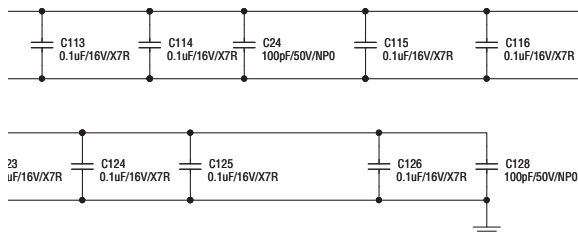
NEAR 8555

NEAR DRAM

NEAR 8555

NEAR DRAM

DRIC_VREF

3
uF/16V/X7R

4

A



C

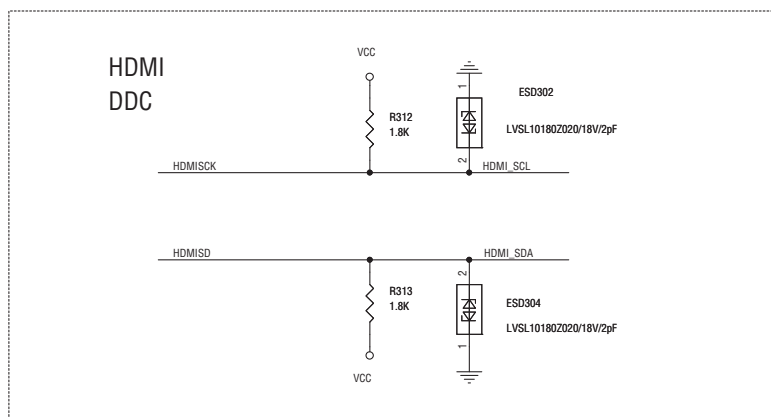
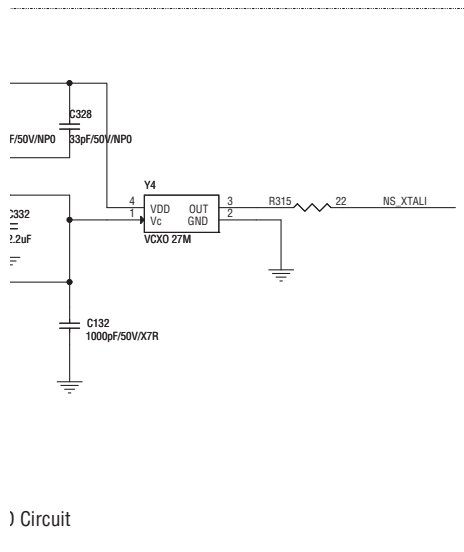
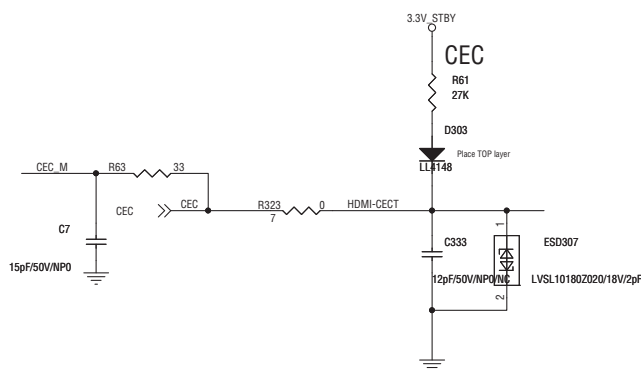
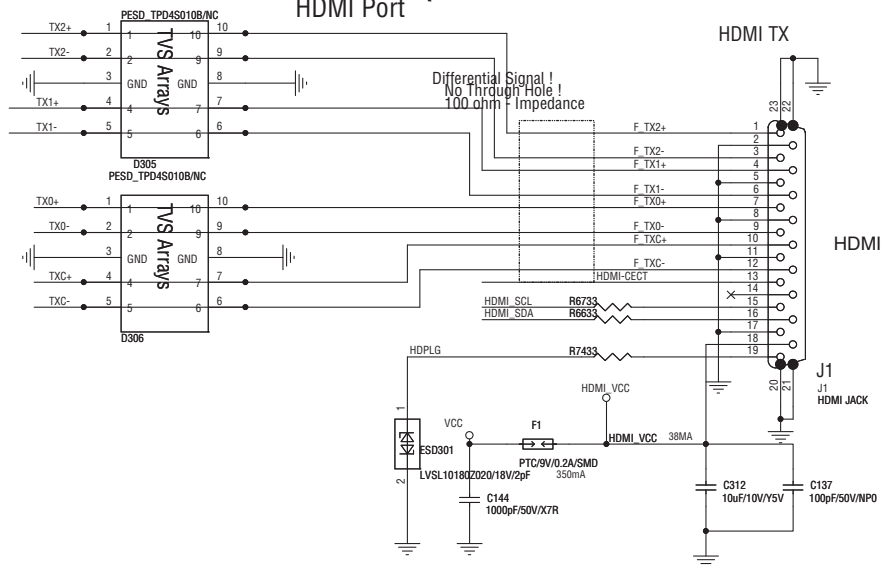
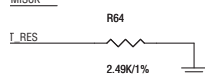
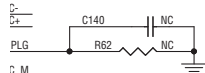
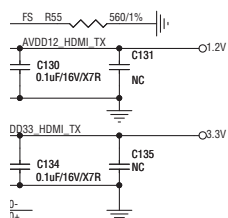
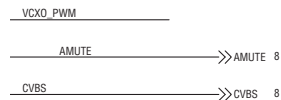
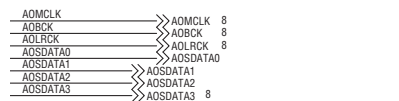
D



F



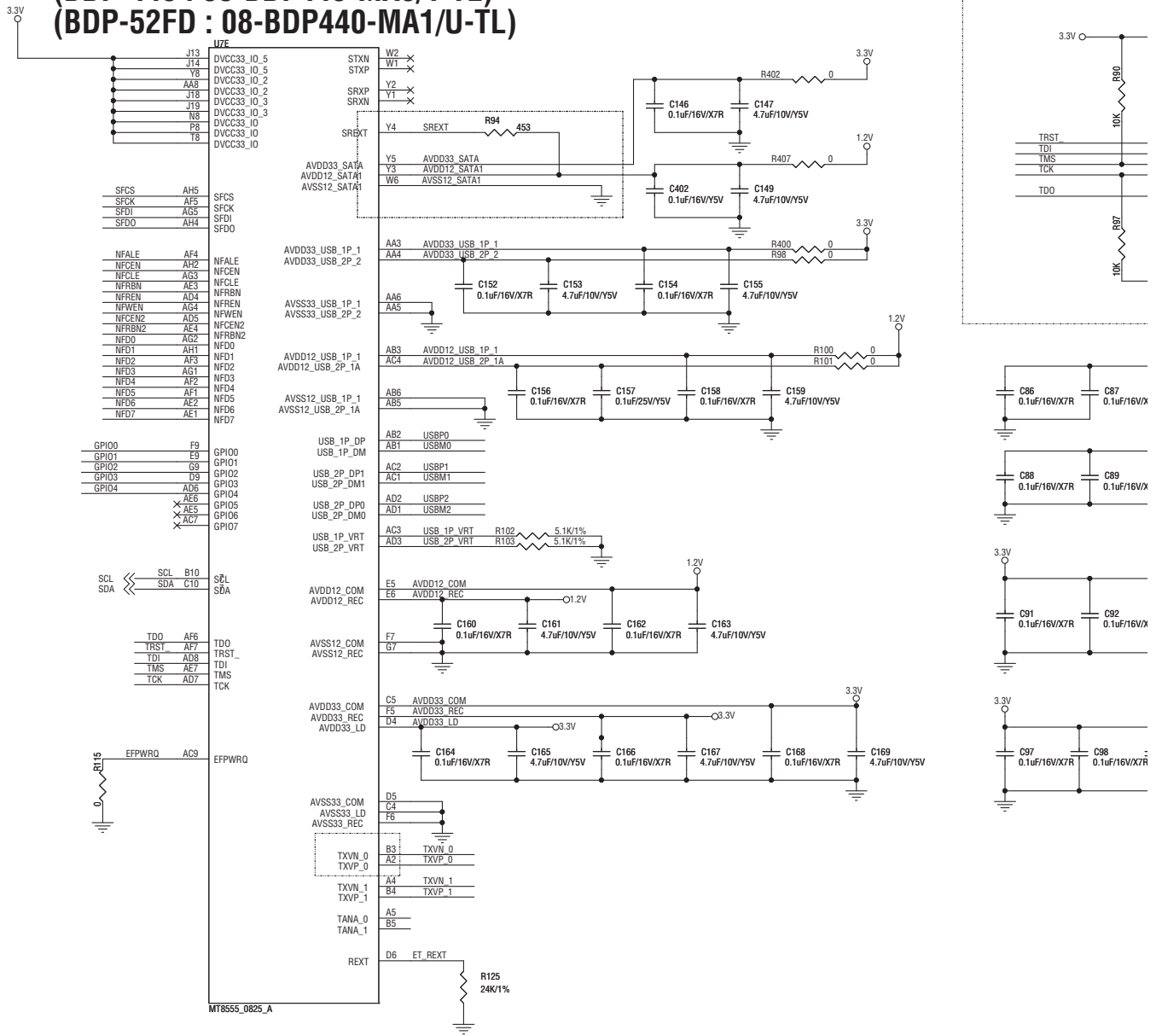
A4/10F MAIN BOARD ASSY (4/10) (BDP-440 : 08-BDP440-MA0/Y-TL) (BDP-52FD : 08-BDP440-MA1/U-TL)



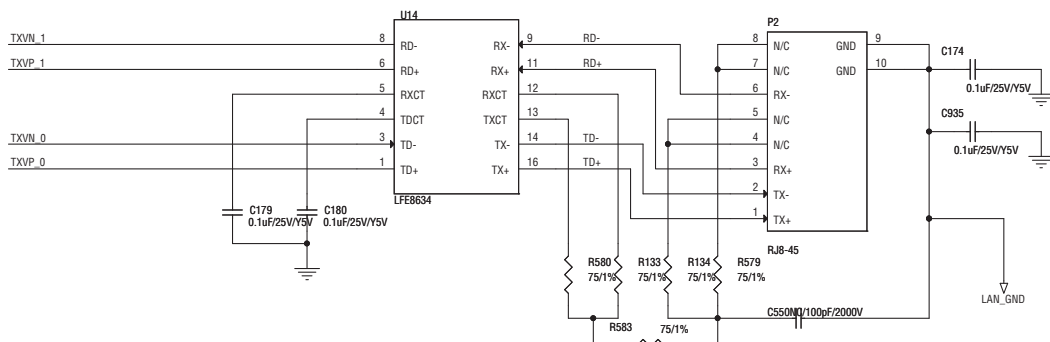
) Circuit

2.5 MAIN BOARD ASSY (5/10) : FLASH

A5/10F MAIN BOARD ASSY (5/10) (BDP-440 : 08-BDP440-MA0/Y-TL) (BDP-52FD : 08-BDP440-MA1/U-TL)



ETHERNET PHY



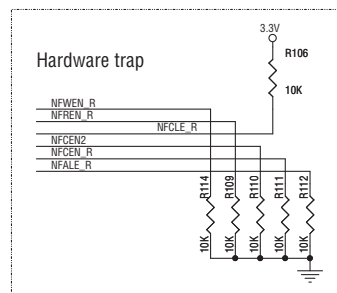
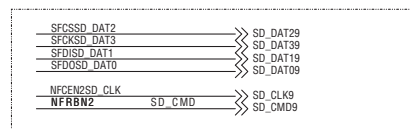
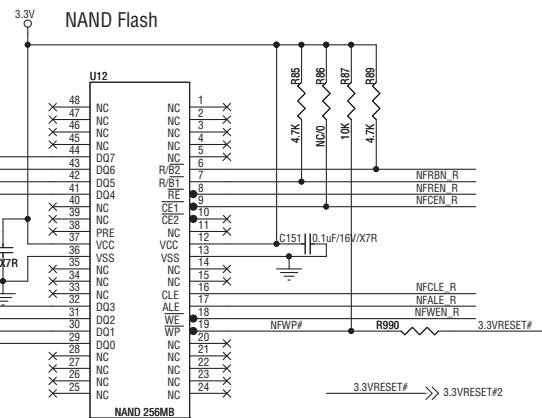
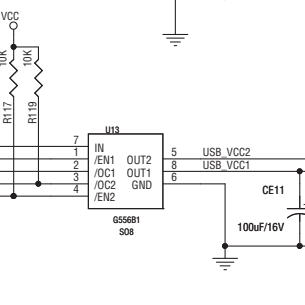
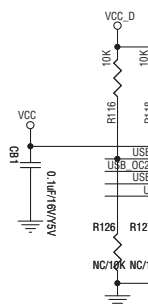
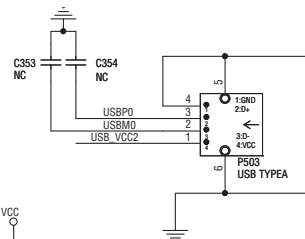
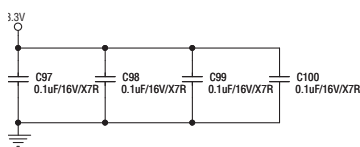
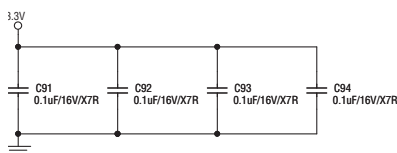
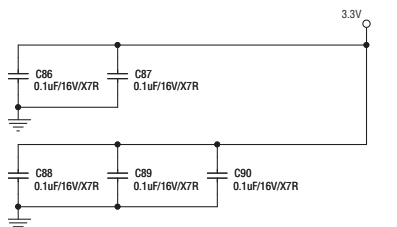
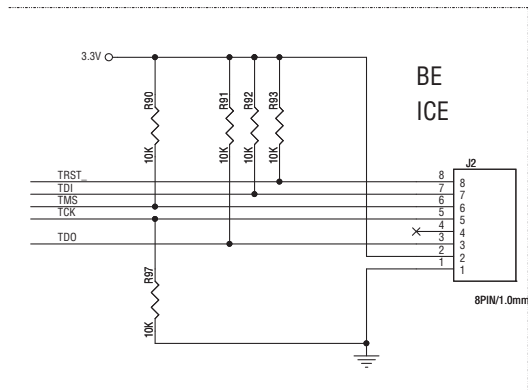
PCB TOP I

US1
US1
US1

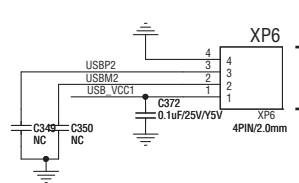
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US1
US1
US1

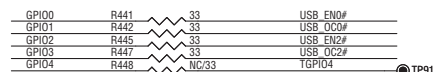
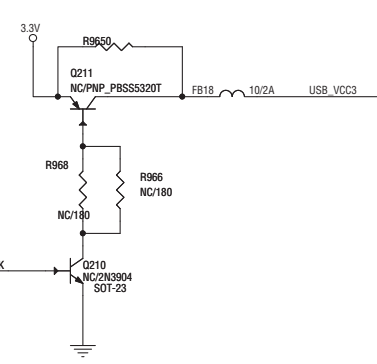
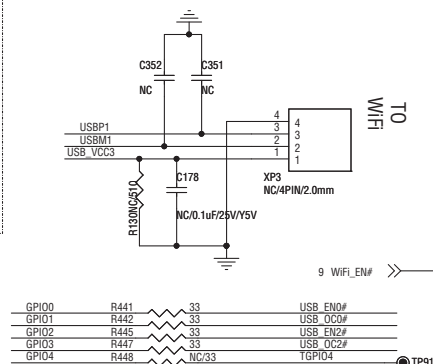
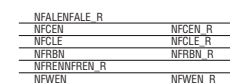
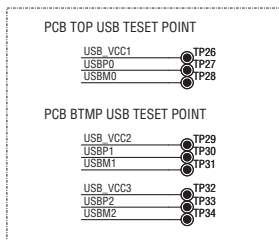
NFALE NFALE
NFCEN NFCEN
NFCLE NFCLE
NFRBN NFRBN
NFRBN NFRBN
NFRBN NFRBN
NFRBN NFRBN



To Front USB



BF XS221

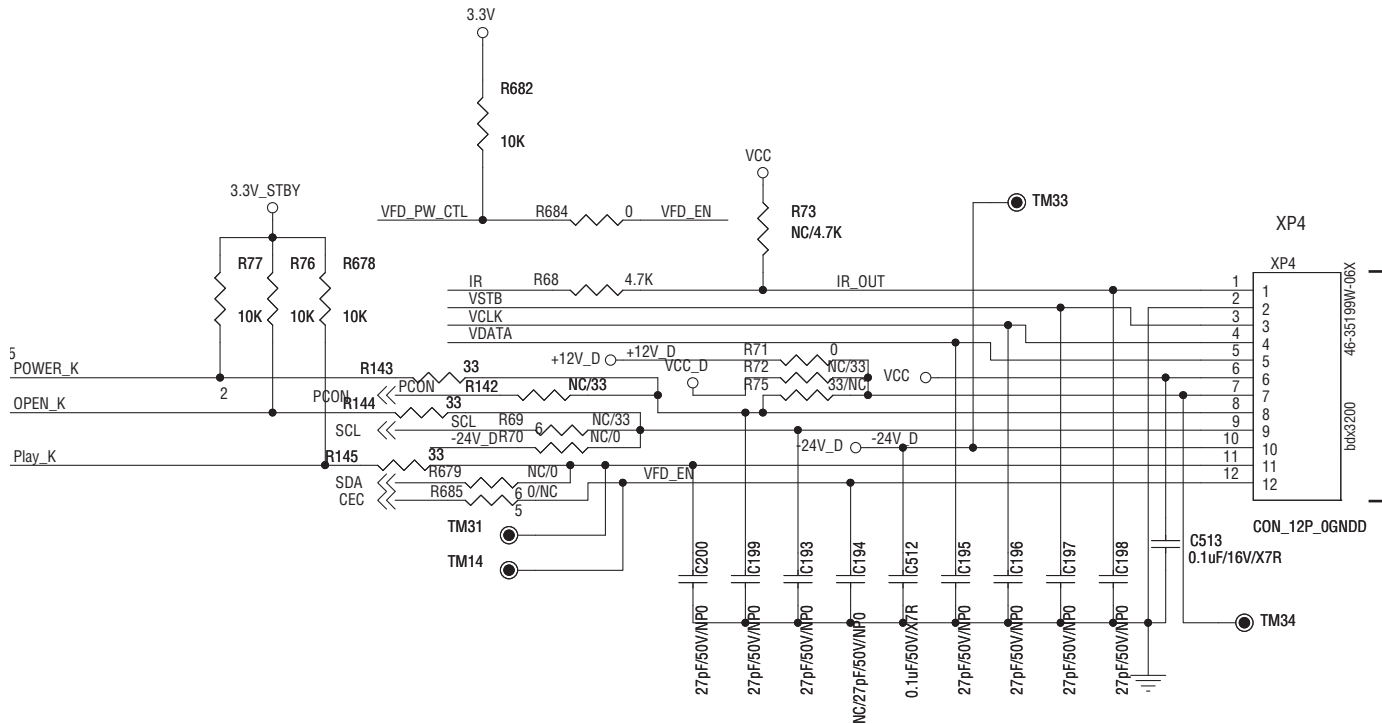


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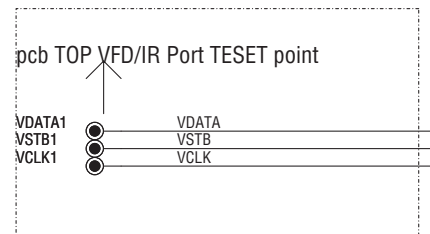
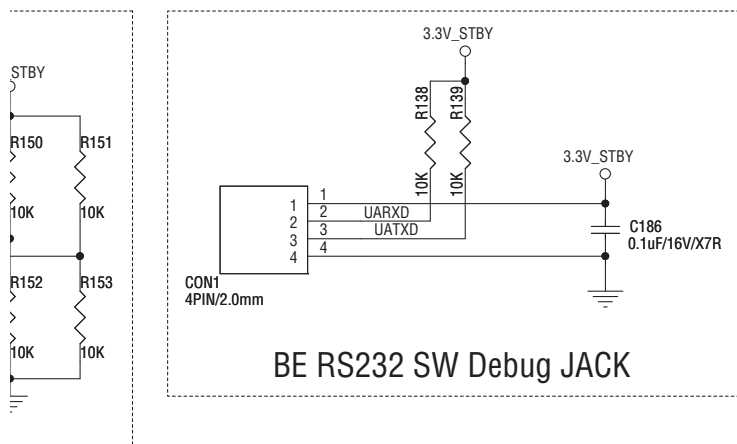
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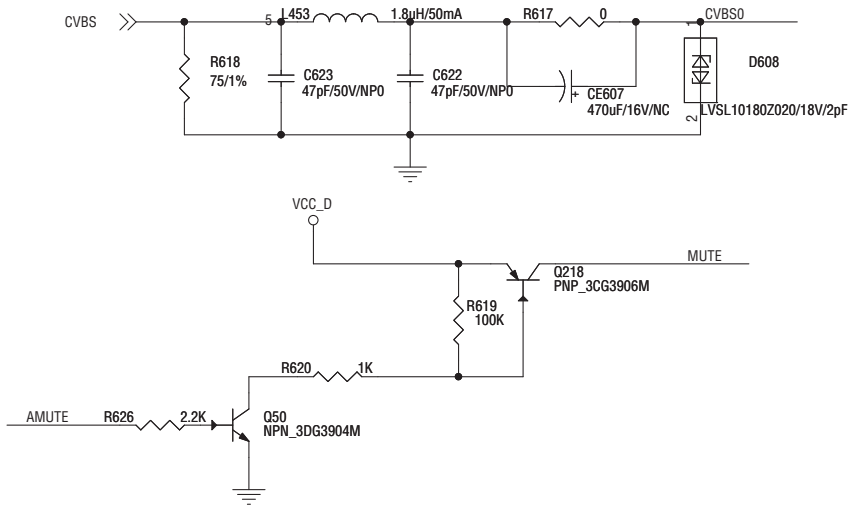
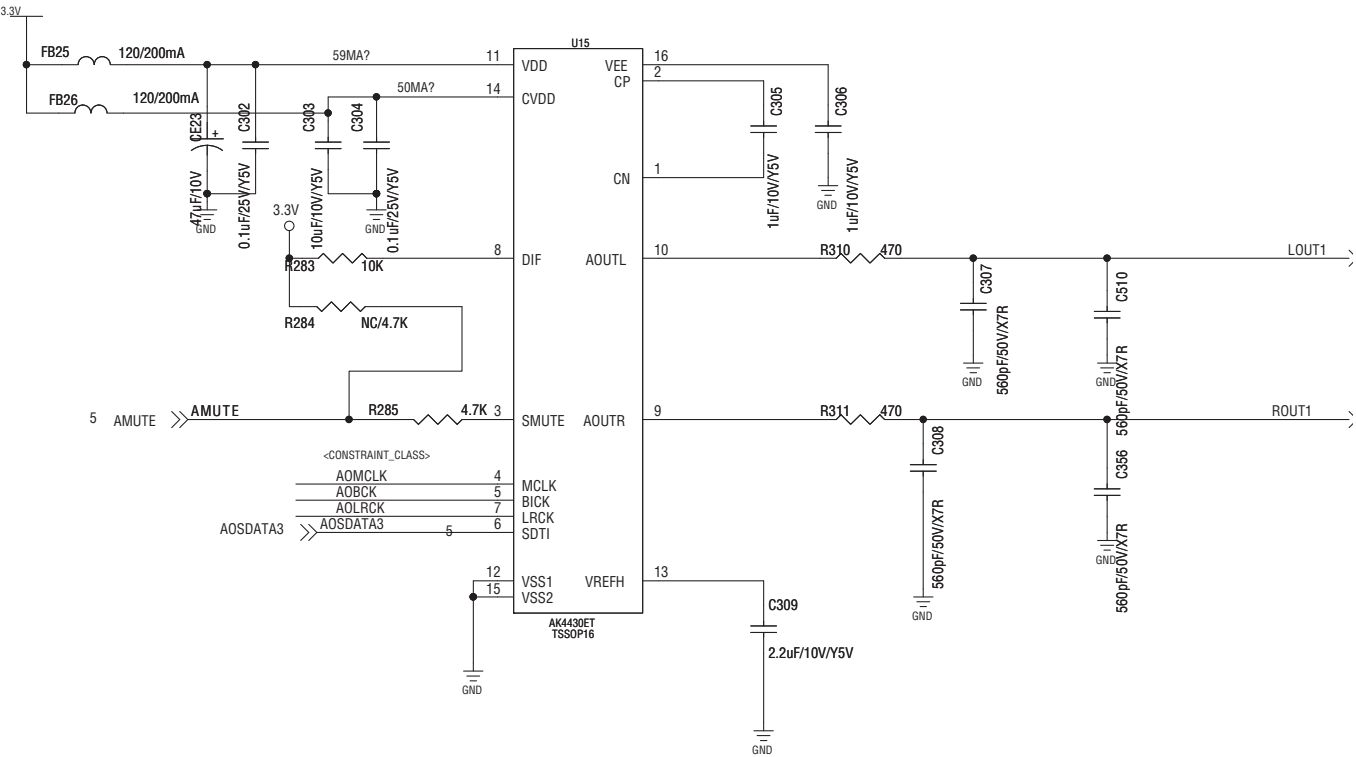
A6/10F MAIN BOARD ASSY (6/10) (BDP-440 : 08-BDP440-MA0/Y-TL) (BDP-52FD : 08-BDP440-MA1/U-TL)



TO VFD BOARD



2.7 MAIN BOARD ASSY (7/10) : AUDIO DAC

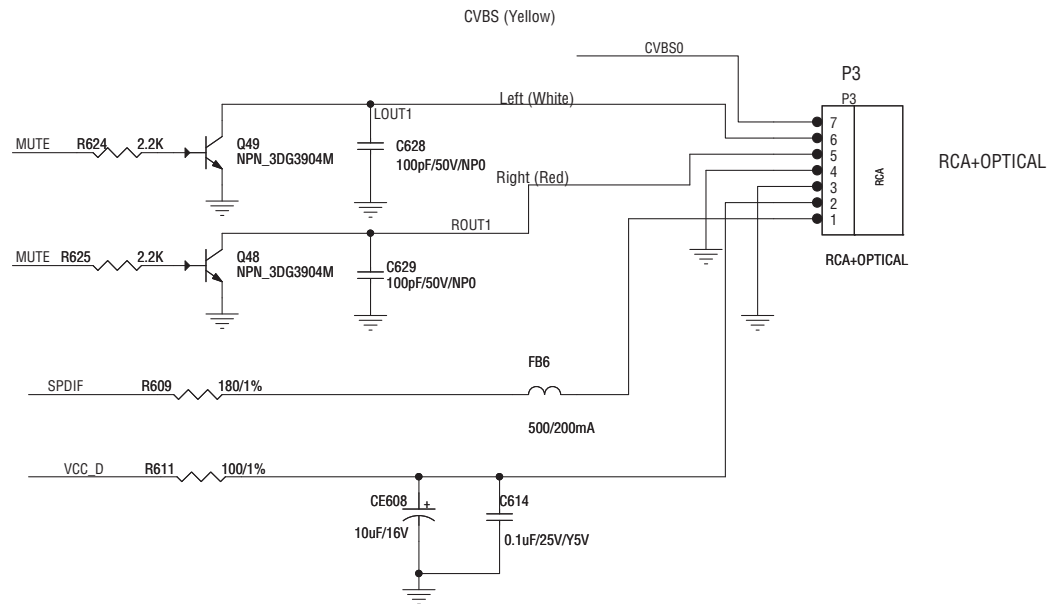


A7/10F MAIN BOARD ASSY (7/10) **(BDP-440 : 08-BDP440-MA0/Y-TL)** **(BDP-52FD : 08-BDP440-MA1/U-TL)**

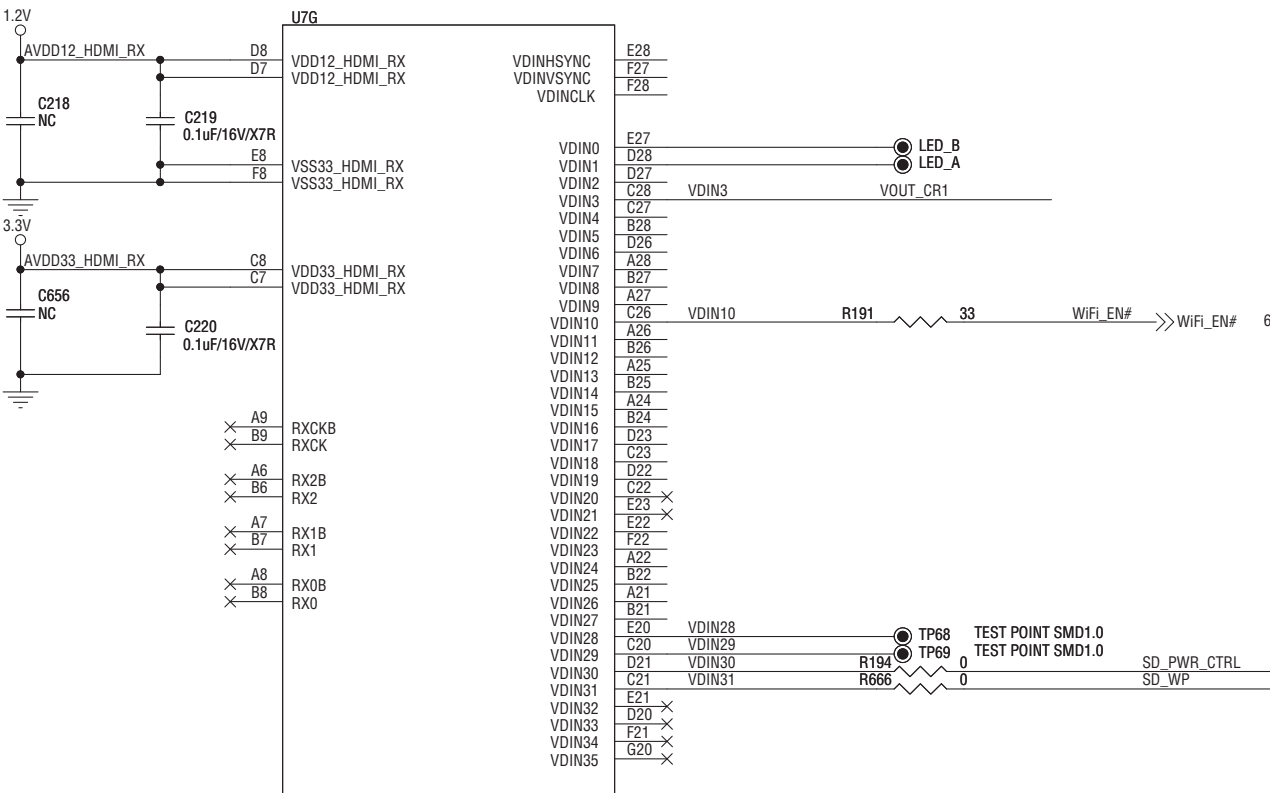
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AOBCK	>>>	AOBCK	5
AOSDATA0	>>>	AOSDATA0	5
AOLRCK	>>>	AOLRCK	5
SPDIF	>>>	SPDIF	5

LOUT1 >>> LOUT1

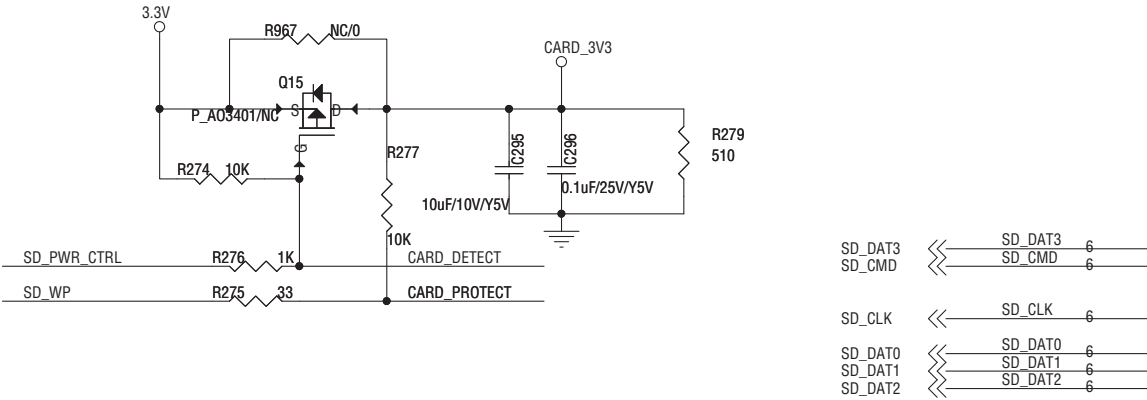
ROUT1 >>> ROUT1



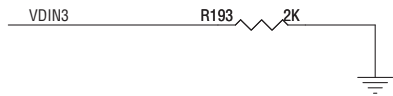
2.8 MAIN BOARD ASSY (8/10) : VIDEO/SD OUTPUT



MT8555_0825_A

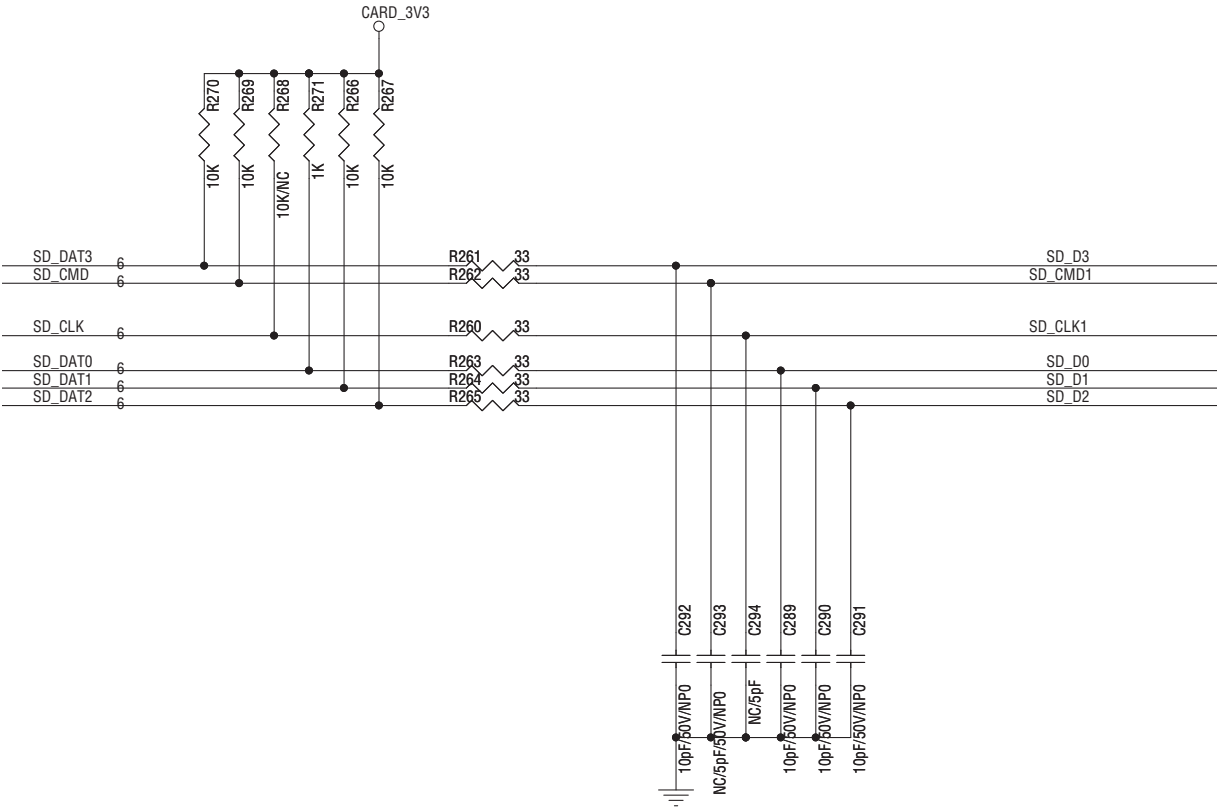
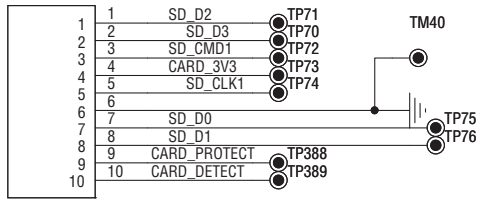


A8/10F MAIN BOARD ASSY (8/10) **(BDP-440 : 08-BDP440-MA0/Y-TL)** **(BDP-52FD : 08-BDP440-MA1/U-TL)**



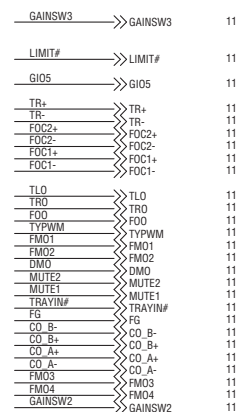
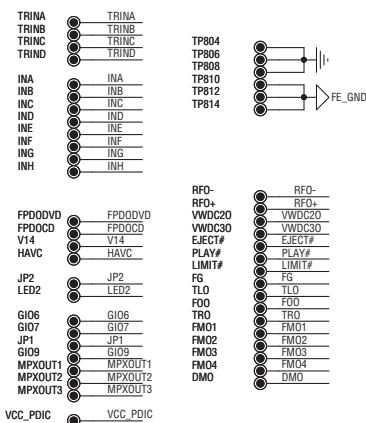
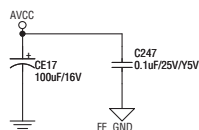
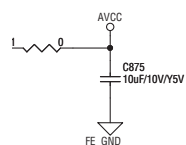
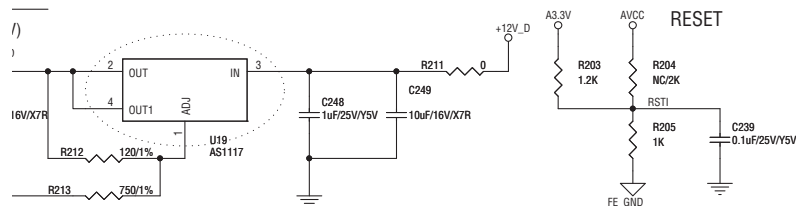
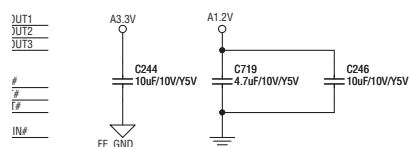
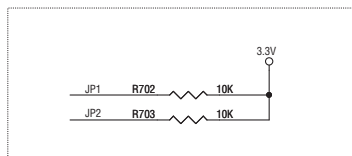
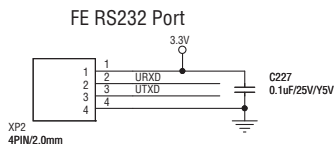
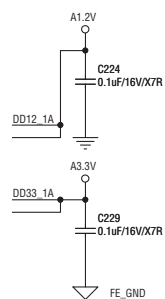
i_EN# >> WiFi_EN# 6

0
0
SD_PWR_CTRL
SD_WP

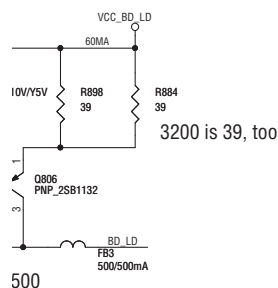


△

F

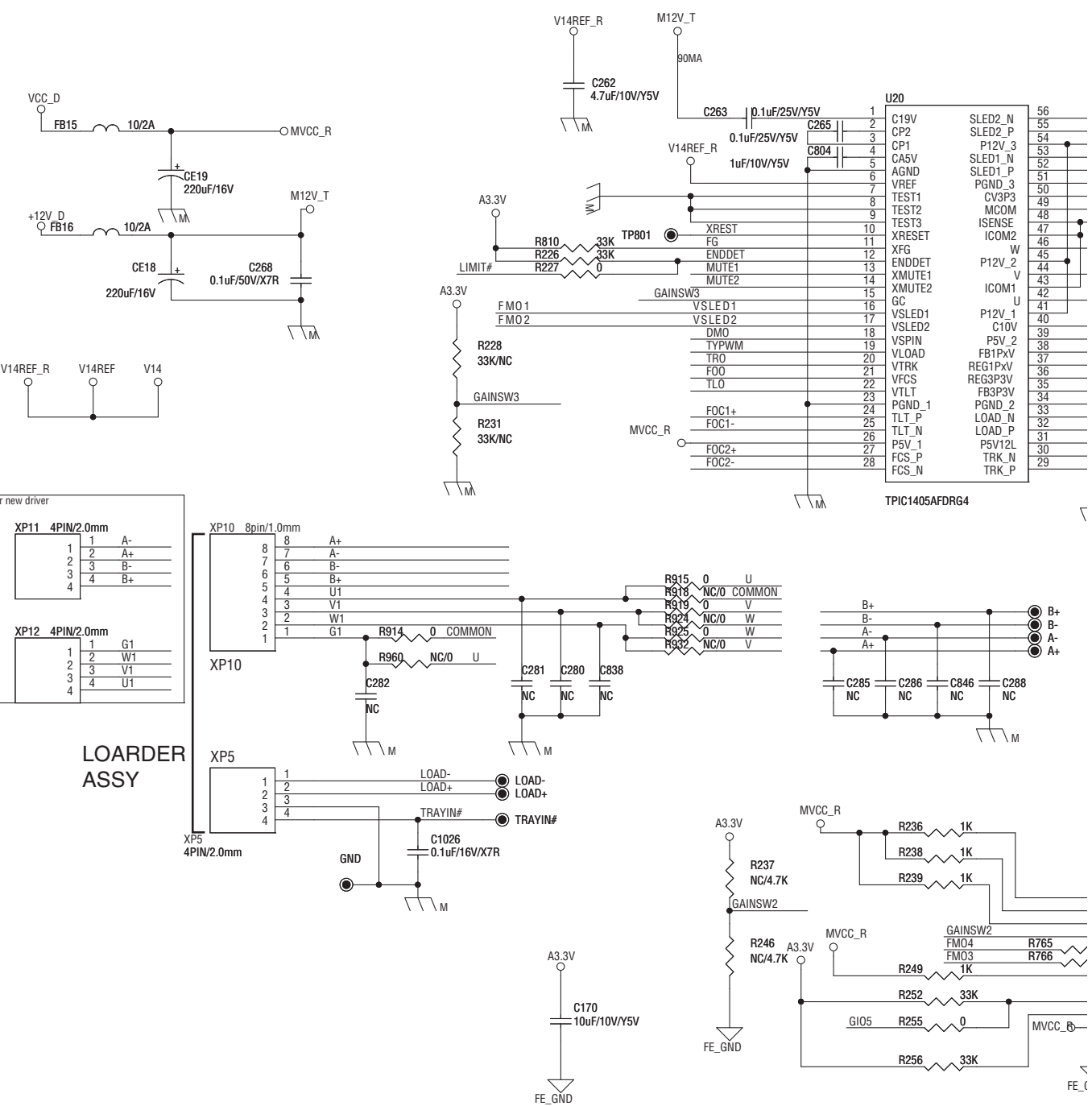


Reserved for FE POWER



A9/10F MAIN BOARD ASSY (9/10)
(BDP-440 : 08-BDP440-MA0/Y-TL)
(BDP-52FD : 08-BDP440-MA1/U-TL)

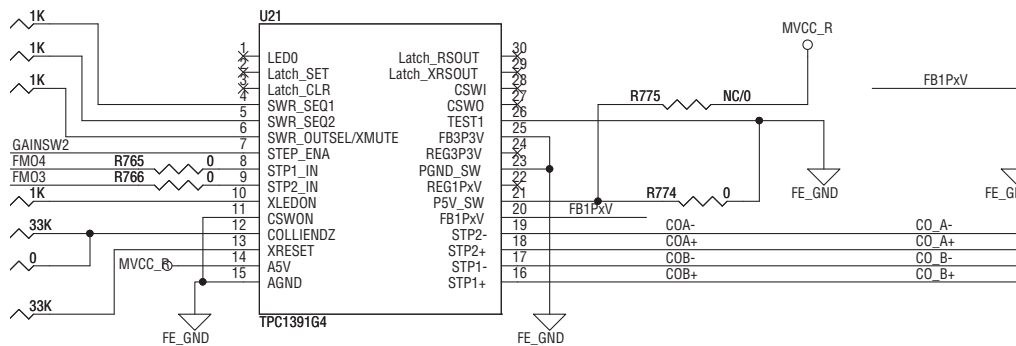
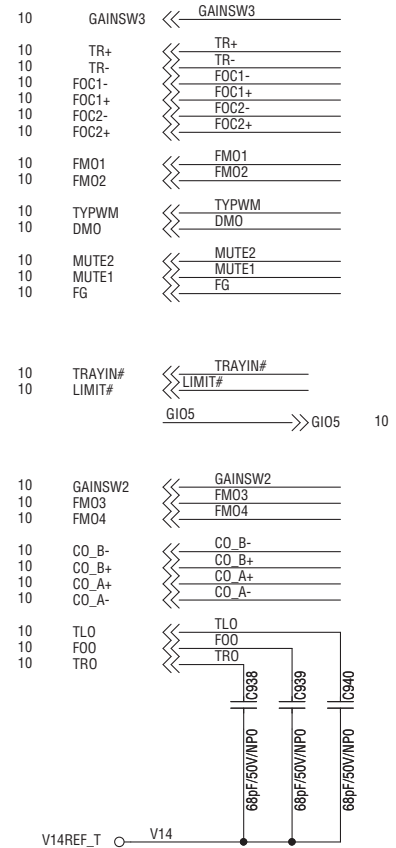
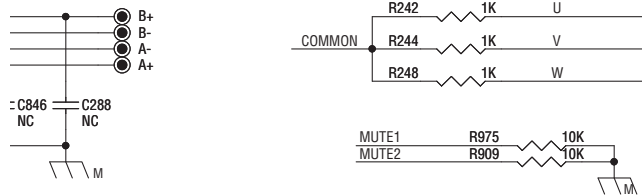
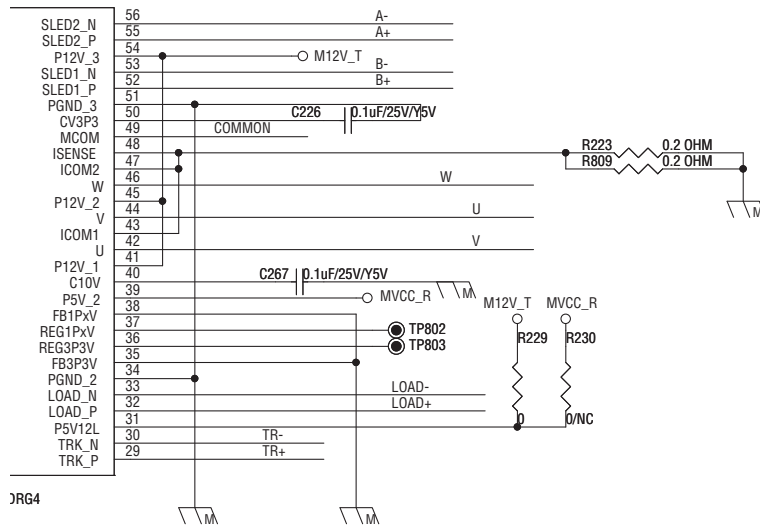
2.10 MAIN BOARD ASSY (10/10) : MOTOR DRIVER

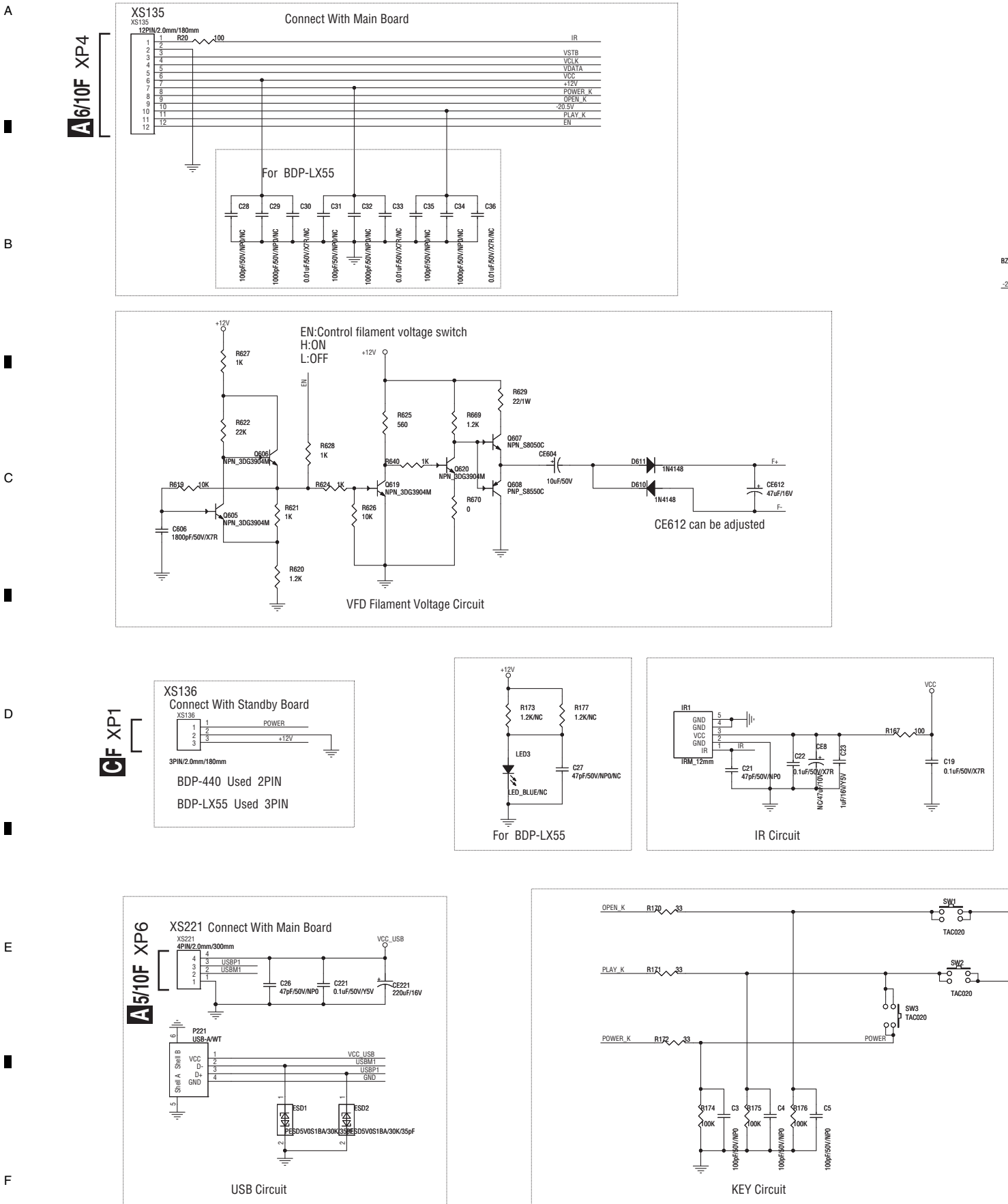


sanyo 414H08	R915	R919	R925	R914	0 R
	R918	R924	R932	R960	NC
Hitach HOP-B1350	R918	R924	R932	R960	NC
	R915	R919	R925	R914	0 R

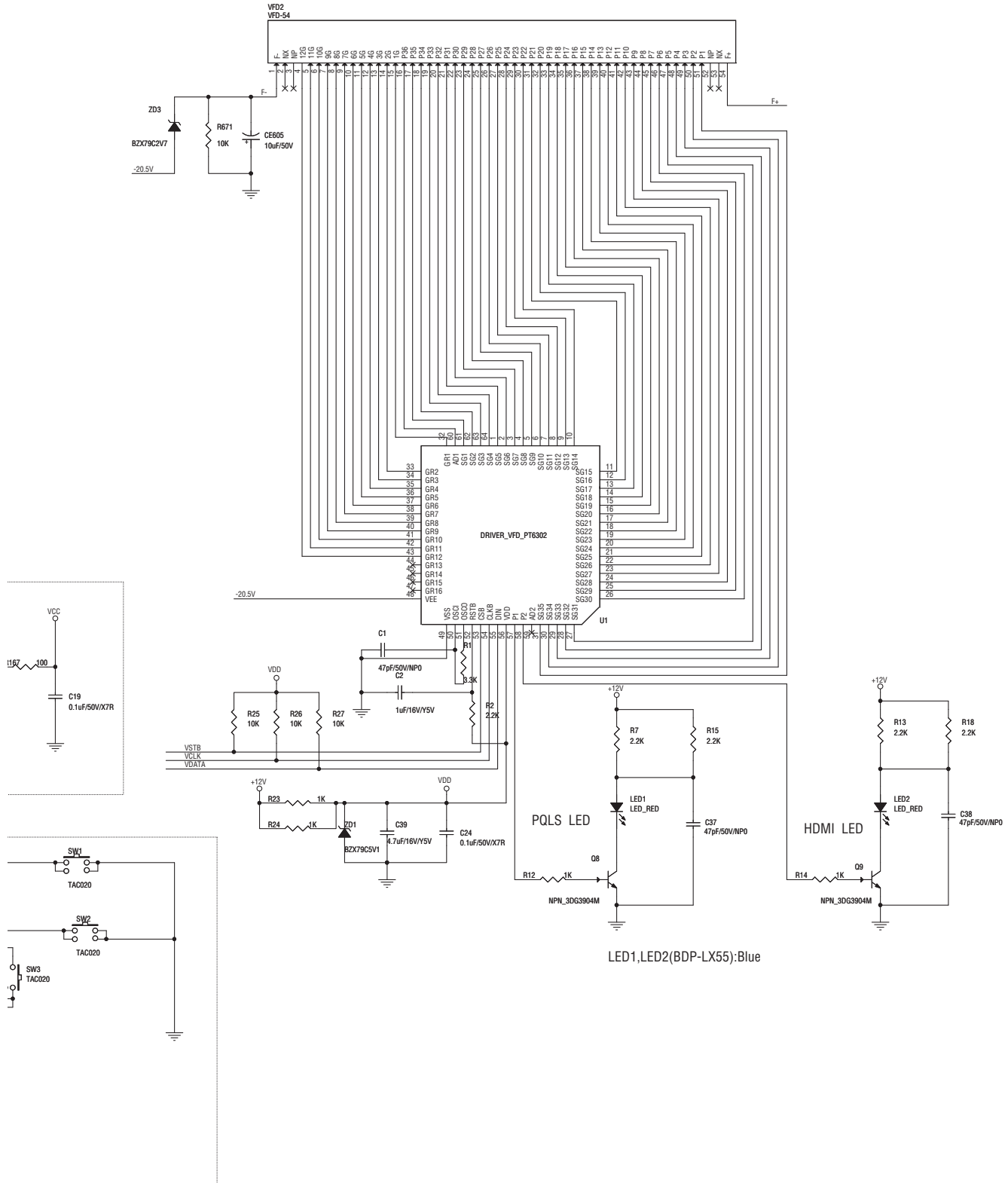
When use Hitach OPU R863 is 10K

A10/10F MAIN BOARD ASSY (10/10) (BDP-440 : 08-BDP440-MA0/Y-TL) (BDP-52FD : 08-BDP440-MA1/U-TL)



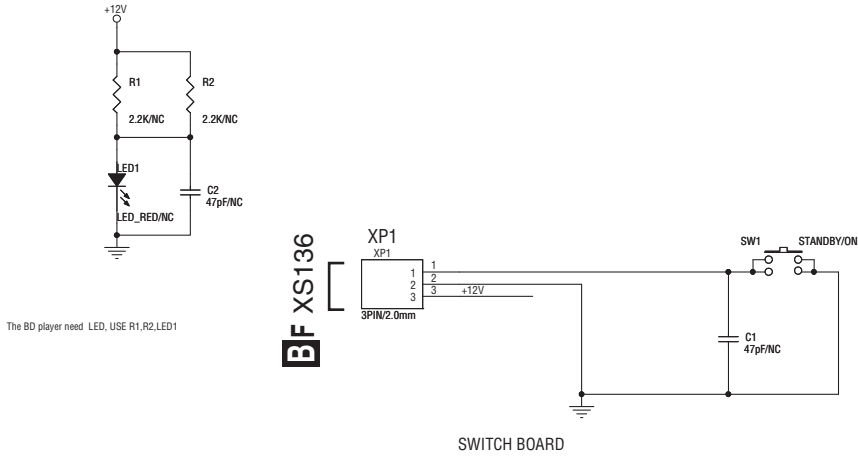


Bf FRONT BOARD ASSY
(BDP-440 : 08-BDP440-FV0-TL)
(BDP-52FD : 08-BDP440-FV2-TL)

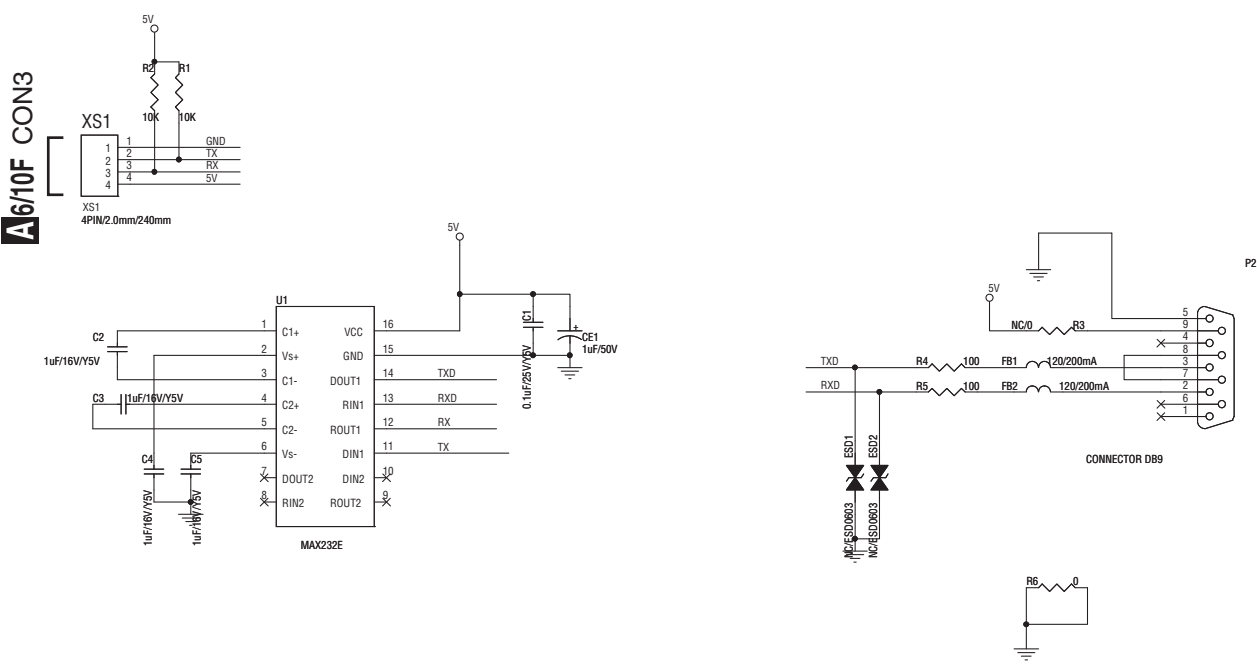


2.12 SWITCH BOARD and RS-232C BOARD ASSYS

CF SWITCH BOARD ASSY
(BDP-440 : 08-BDP440-SW0-TL)
(BDP-52FD : 08-BDLX55-SW0-TL)



FF RS-232C BOARD ASSY
(BDP-52FD : 08-BDP440-RS0-TL)



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A

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B

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C

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D

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E

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8

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BDP-440

1234

3. PCB CONNECTION DIAGRAM

3.1 MAIN BOARD ASSY

A

SIDE A

A

F MAIN BOARD ASSY

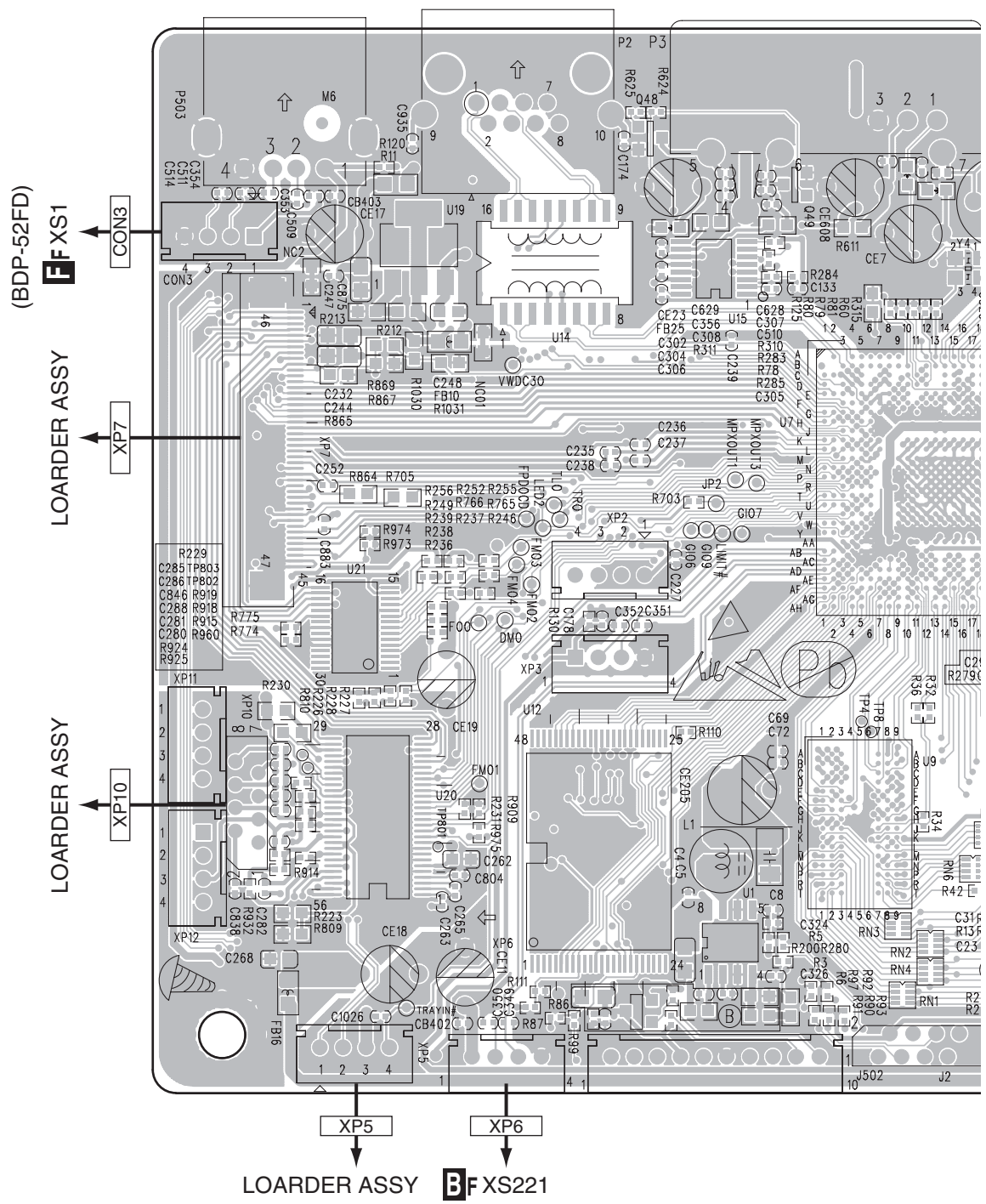
B

C

D

E

F



SIDE A

A

B

C

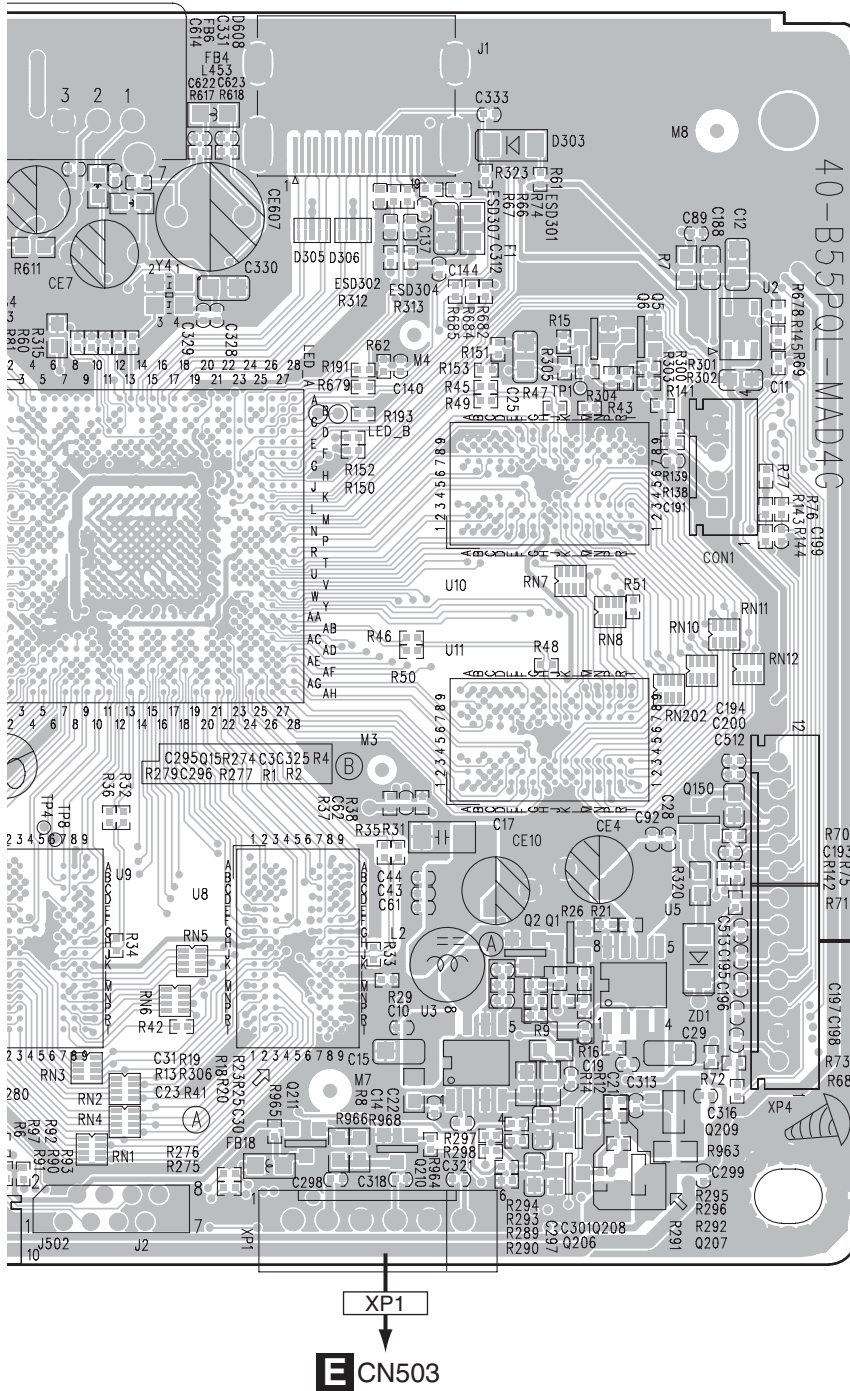
D

E

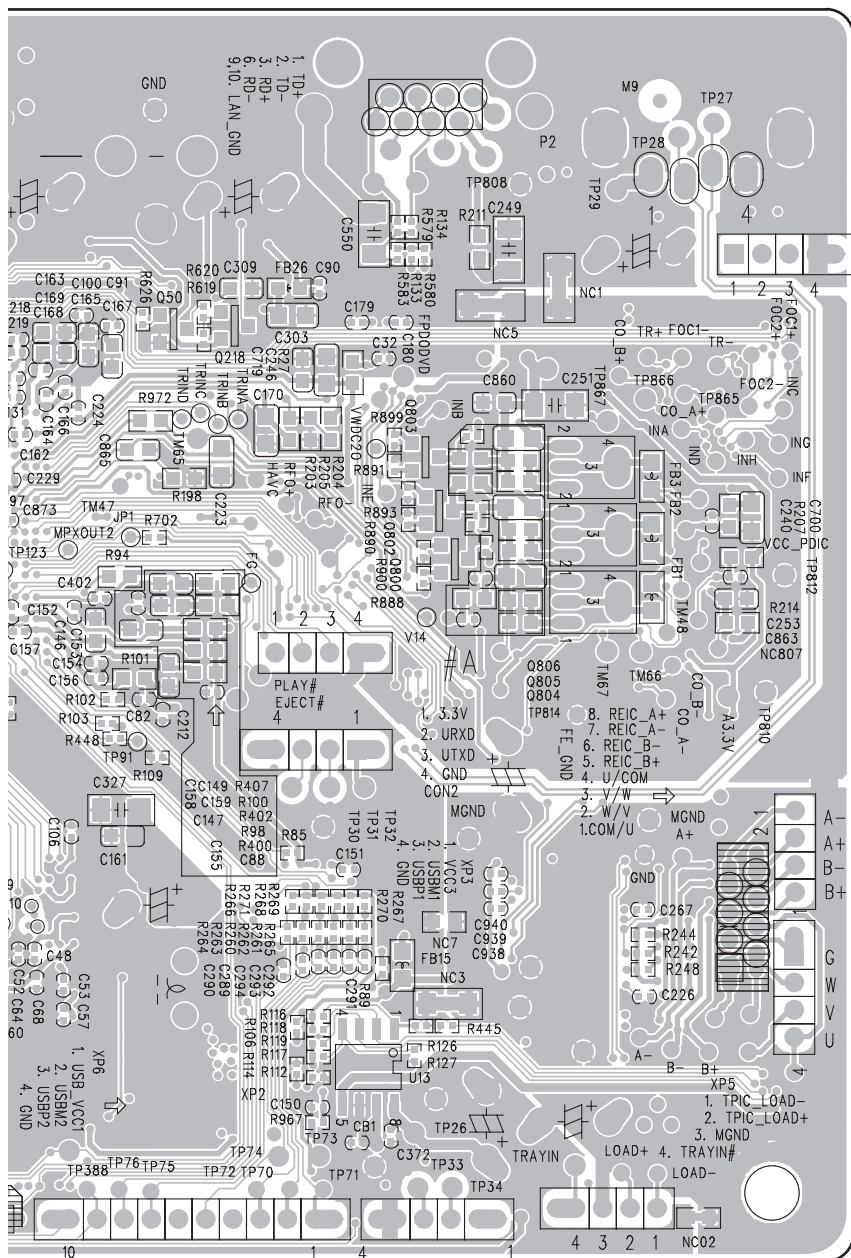
F

A_F

31

B_FXS135E_CN503

BDP-440



3.2 FRONT BOARD ASSY

SIDE A

A

B

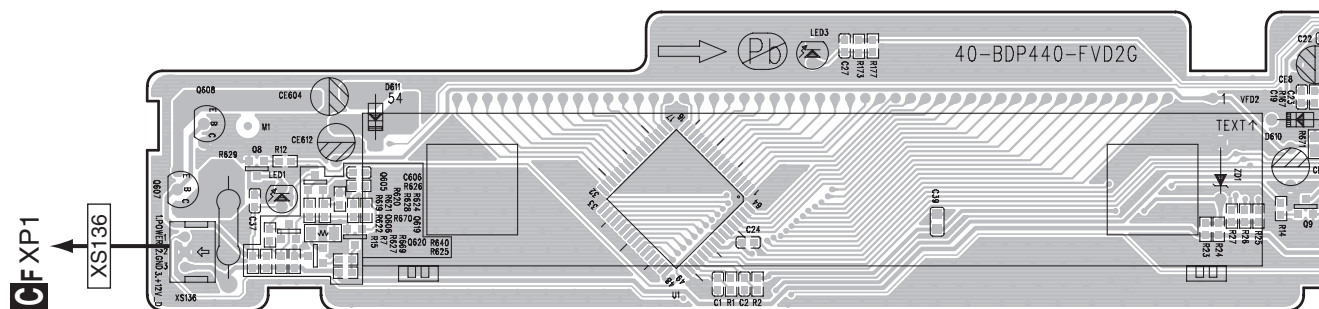
C

D

E

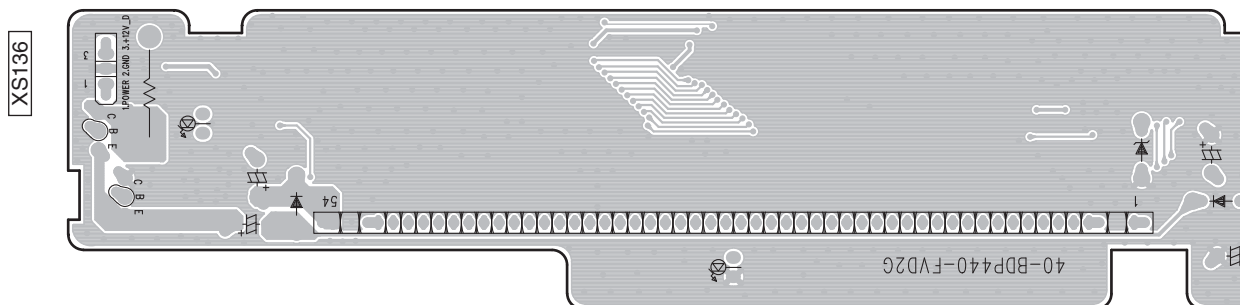
F

B_F FRONT BOARD ASSY



SIDE B

B_F FRONT BOARD ASSY

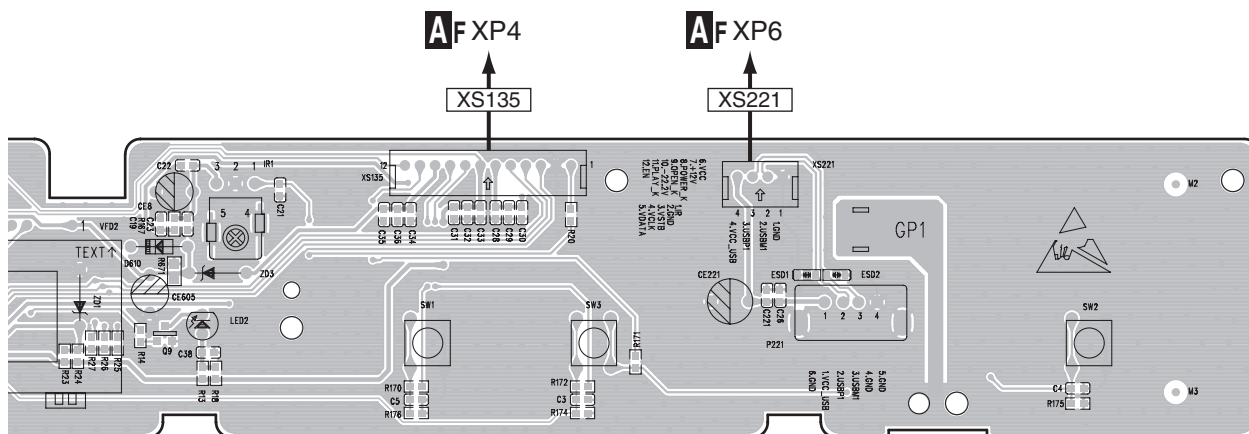


SIDE A

A

B

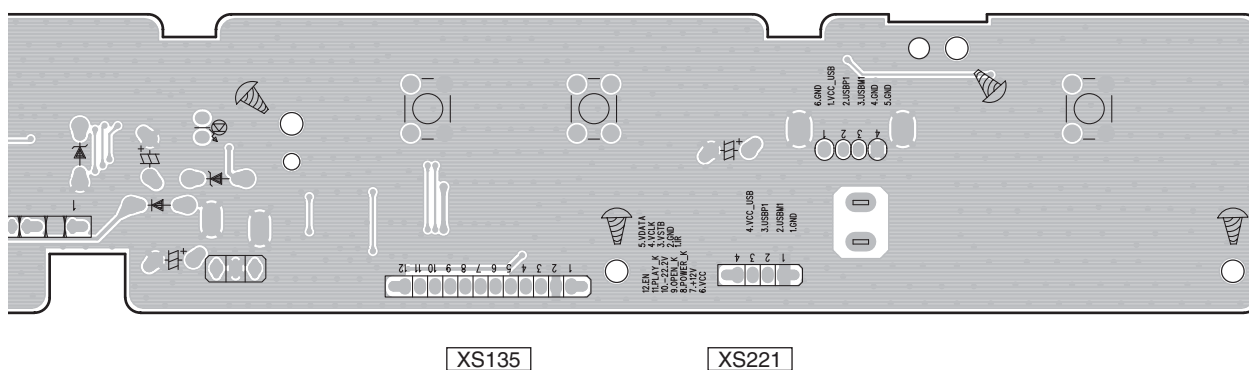
C

**SIDE B**

D

E

F

**B_F**

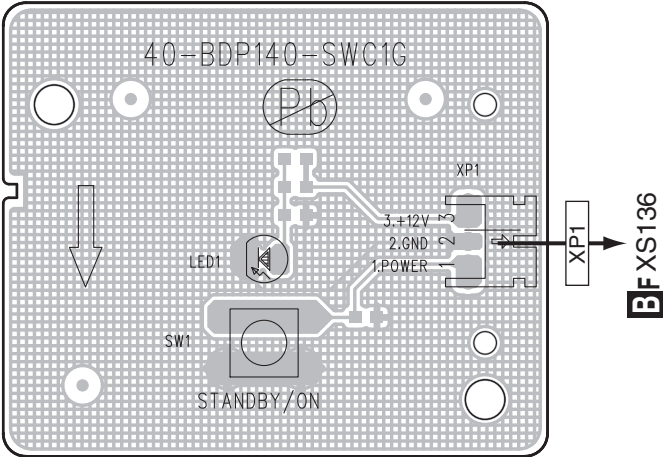
1 2 3 4

3.3 SWITCH BOARD and RS-232C BOARD ASSYS

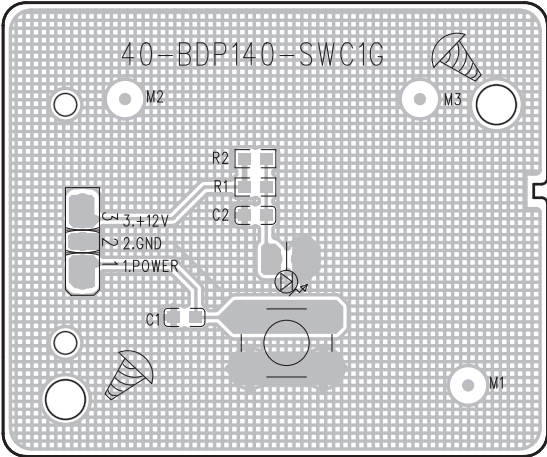
SIDE A

SIDE B

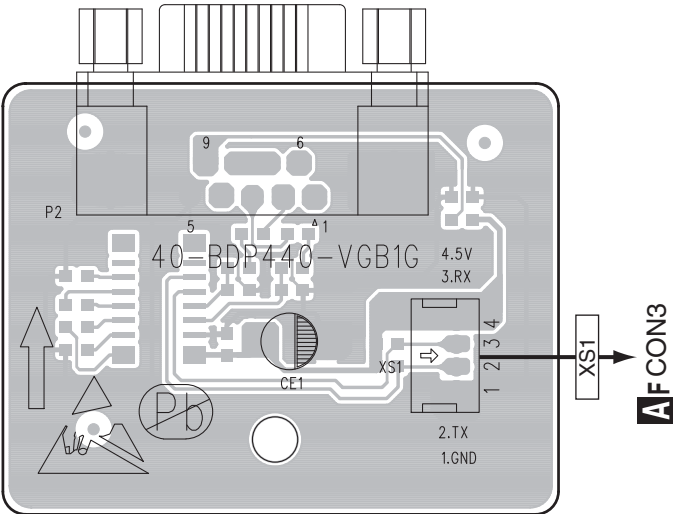
CF SWITCH BOARD ASSY



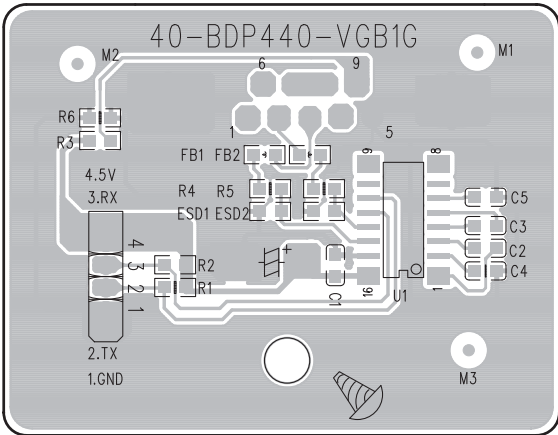
CF SWITCH BOARD ASSY



FF RS-232C BOARD ASSY (BDP-52FD)



FF RS-232C BOARD ASSY (BDP-52FD)



CF **F**F

CF **F**F