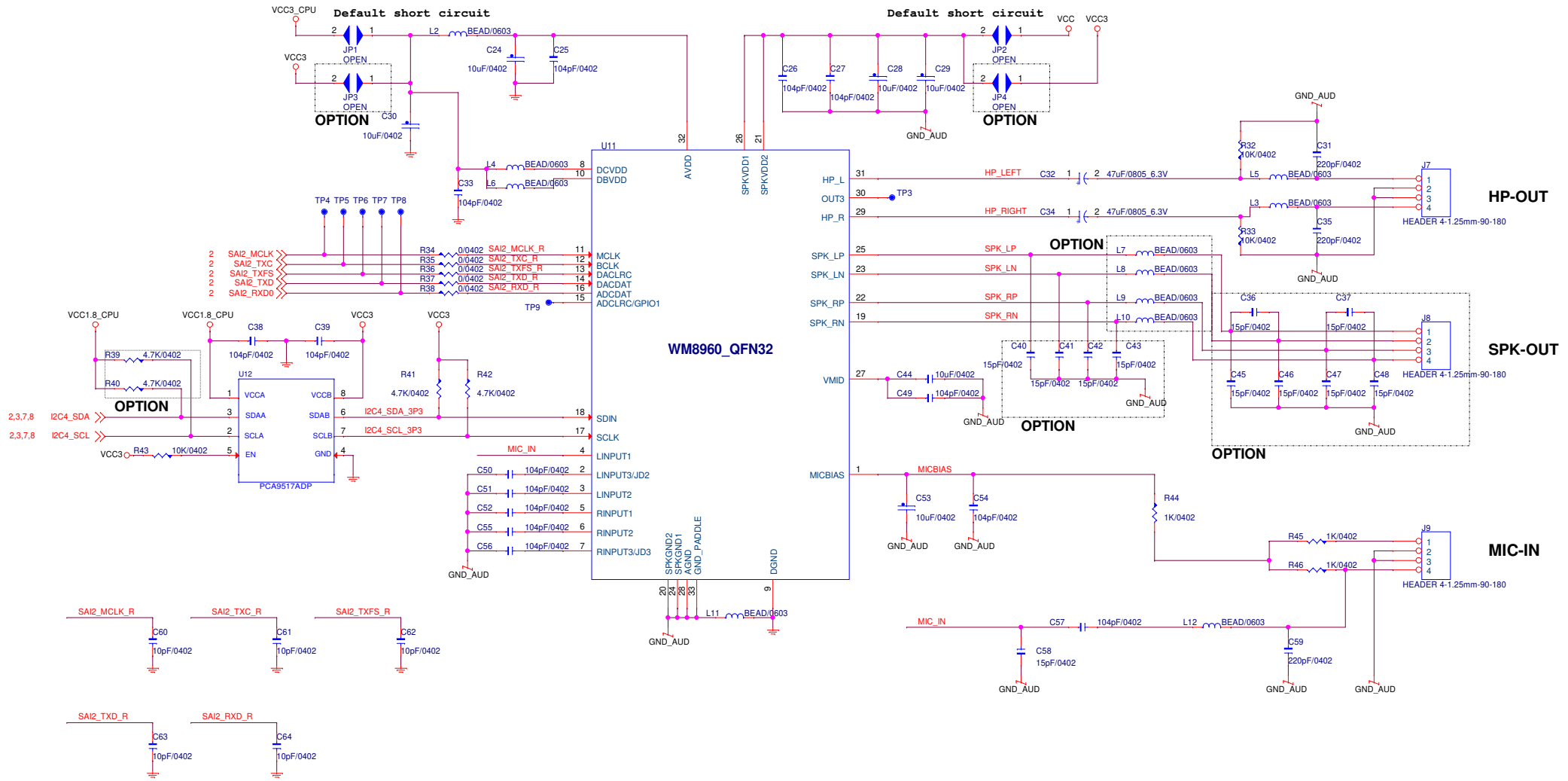
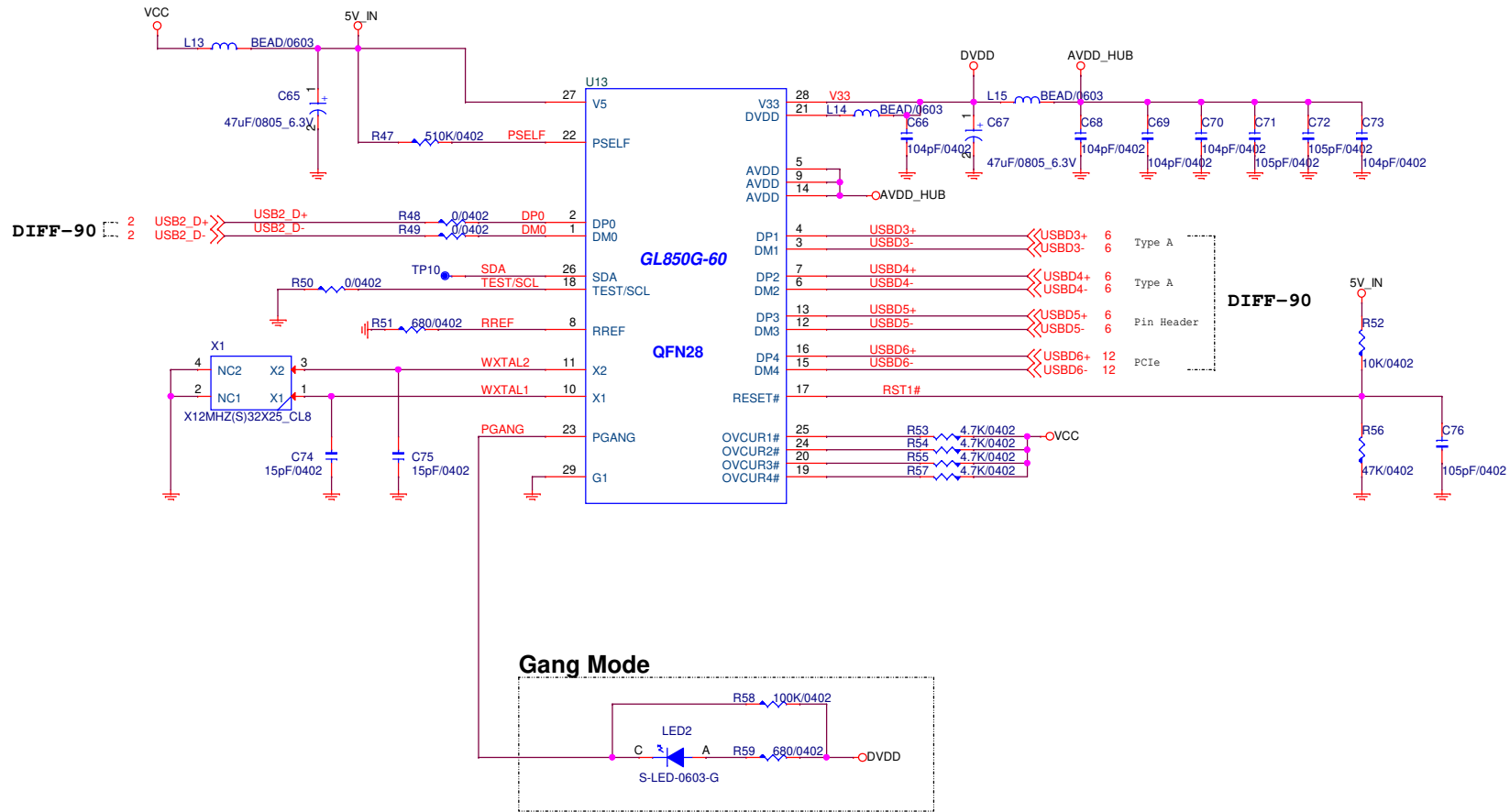


Audio CODEC



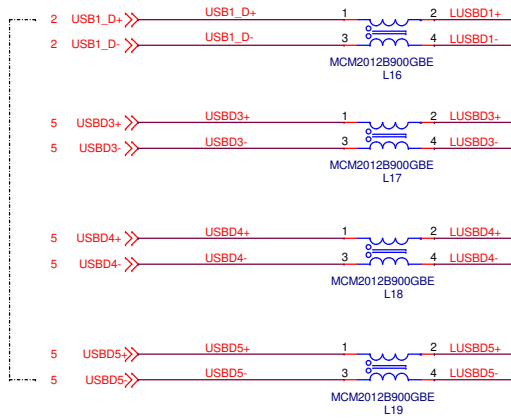
USB HUB



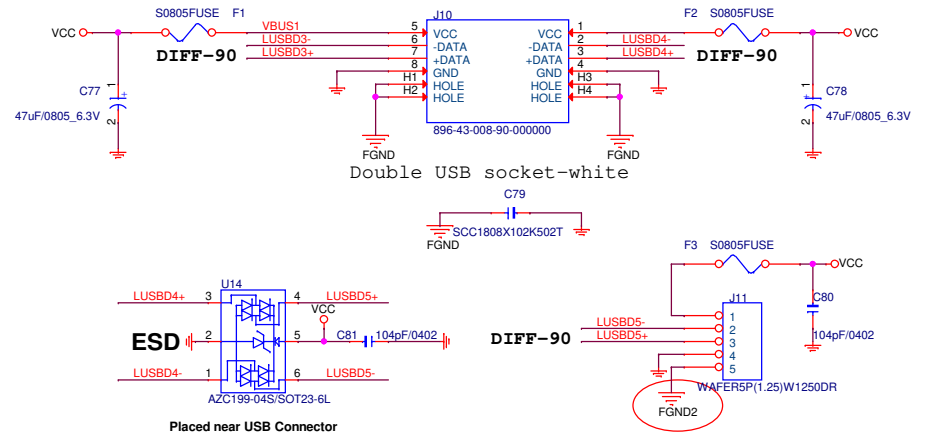
DMP ELECTRONICS INC.		
Title USB HUB		
Size	Document Number DM446	Rev 1.0
Date:	Friday, July 30, 2021	Sheet 5 of 20

USBx4

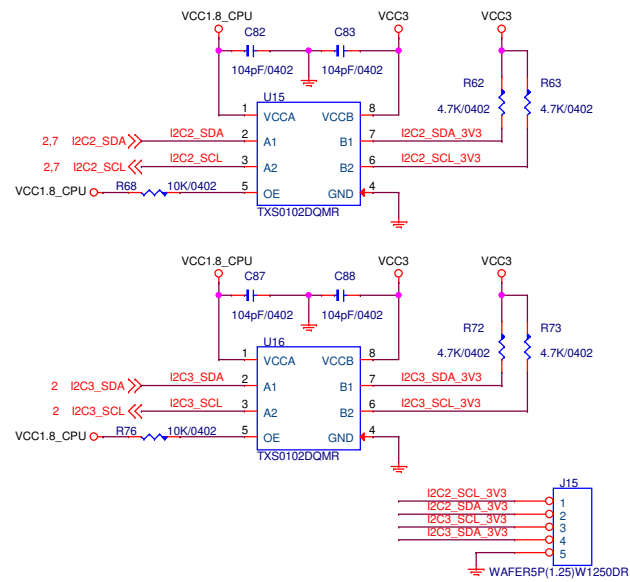
DIFF-90



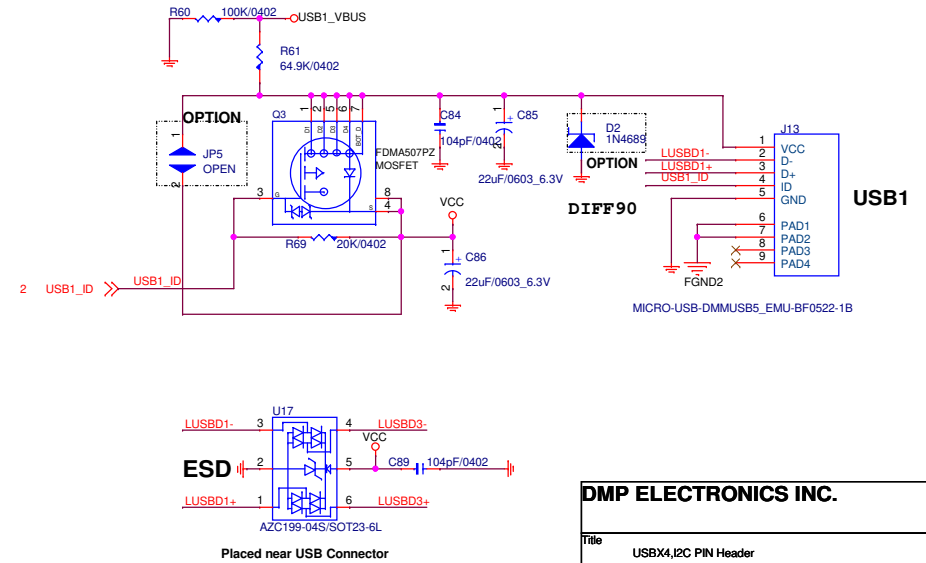
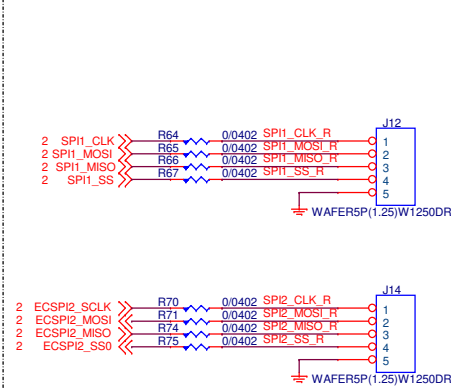
USB 3/4



I2C PIN Header



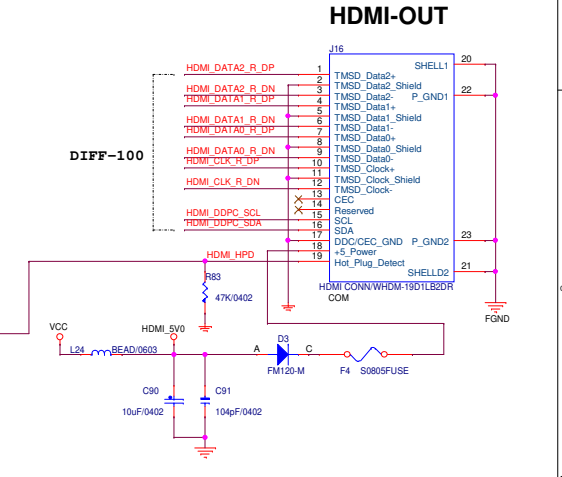
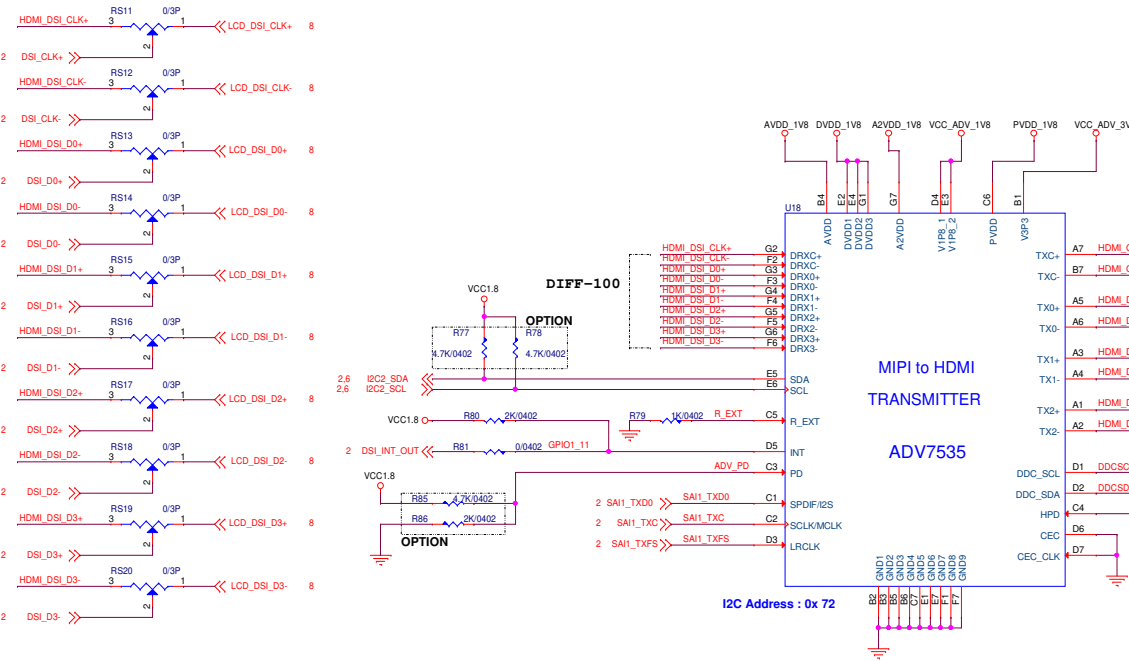
SPI PIN Header



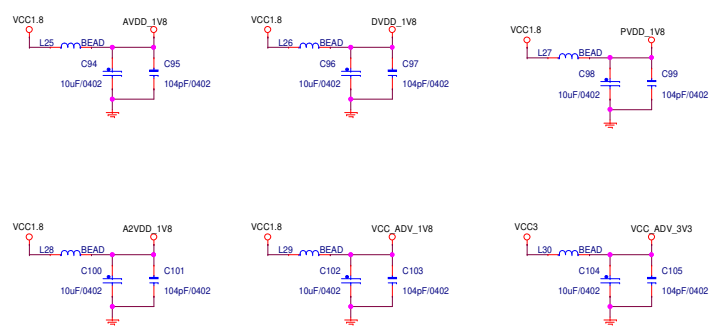
DMP ELECTRONICS INC.

Title: USBX4,I2C PIN Header		
Size: DM446	Document Number: DM446	Rev: 1.0
Date: Friday, July 30, 2021	Sheet: 6	of 20

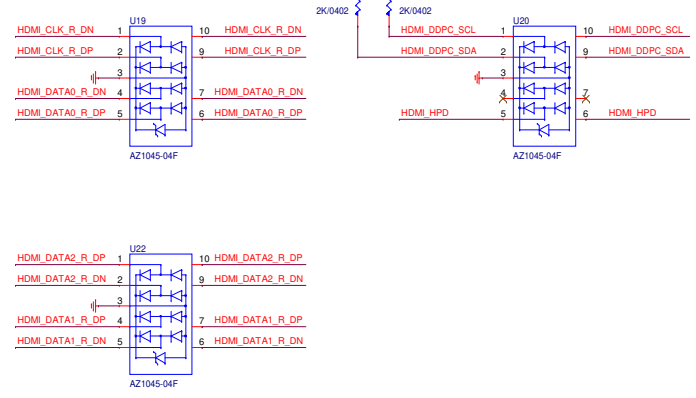
MIPI TO HDMI CONVERTER



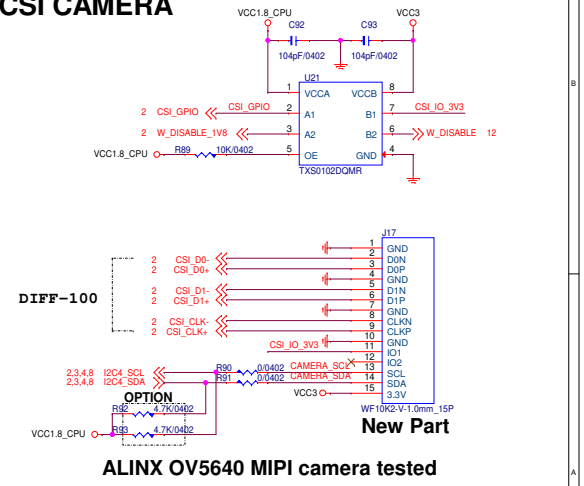
POWER



ESD

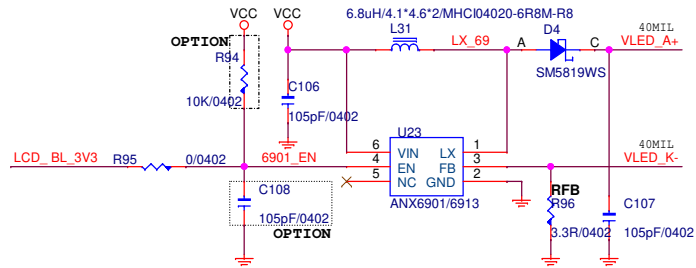


CSI CAMERA



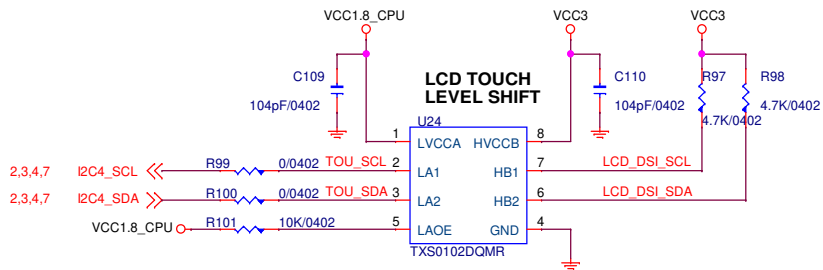
MIPI TO DSI

LED BACKLIGHT DRIVER

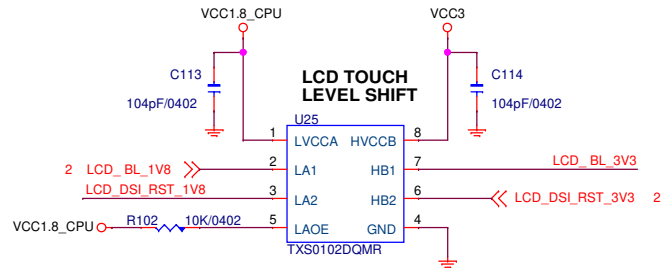


ILED(A)=0.2/RFB
60mA=0.2/3.3R TH0507201280CSM45S1->DSI

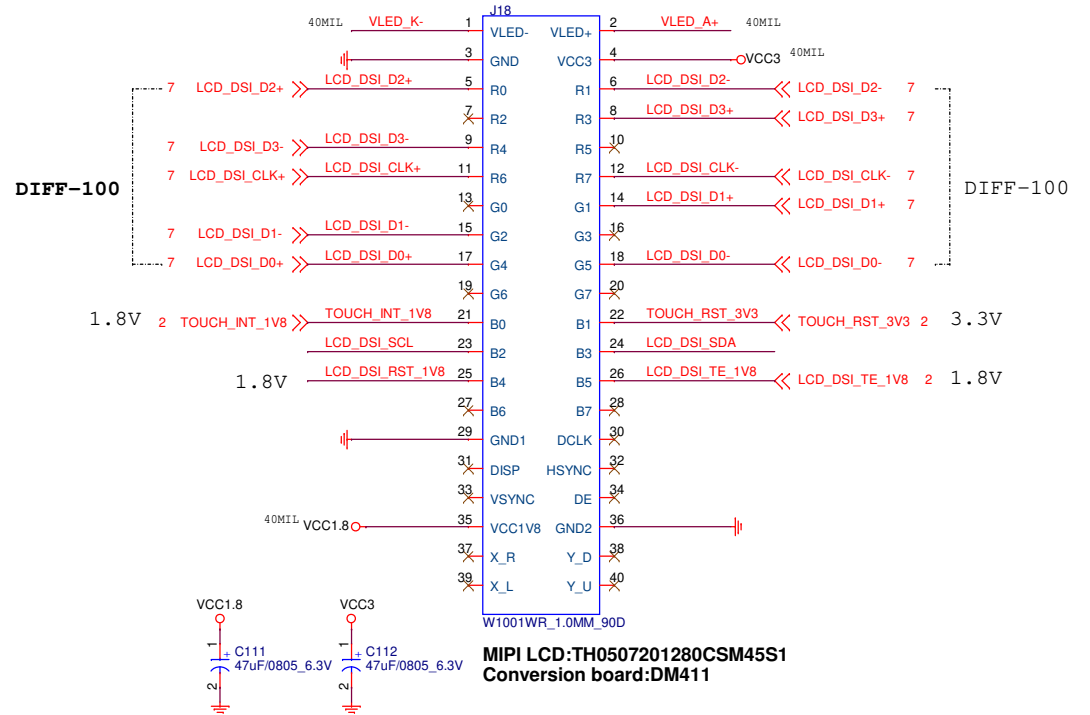
LCD TOUCH LEVEL SHIFT



LCD TOUCH LEVEL SHIFT



LCD CONN



MIPI LCD:TH0507201280CSM45S1
Conversion board:DM411

DMP ELECTRONICS INC.

Title
MIPI TO LCD

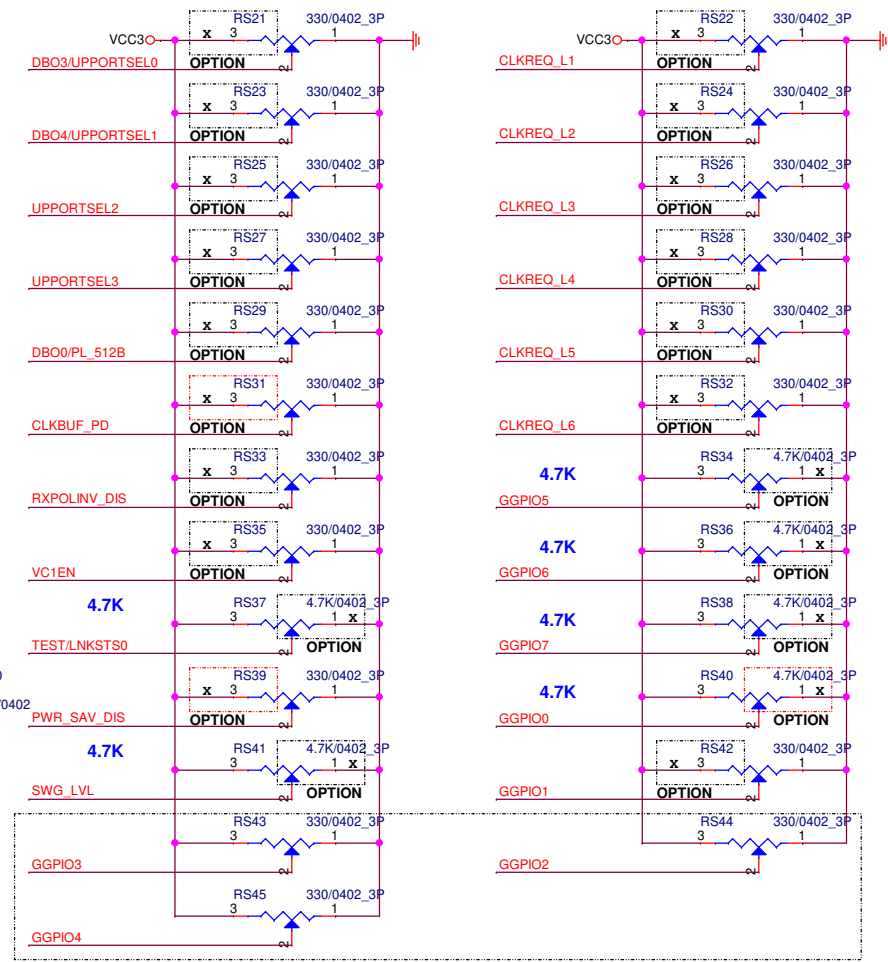
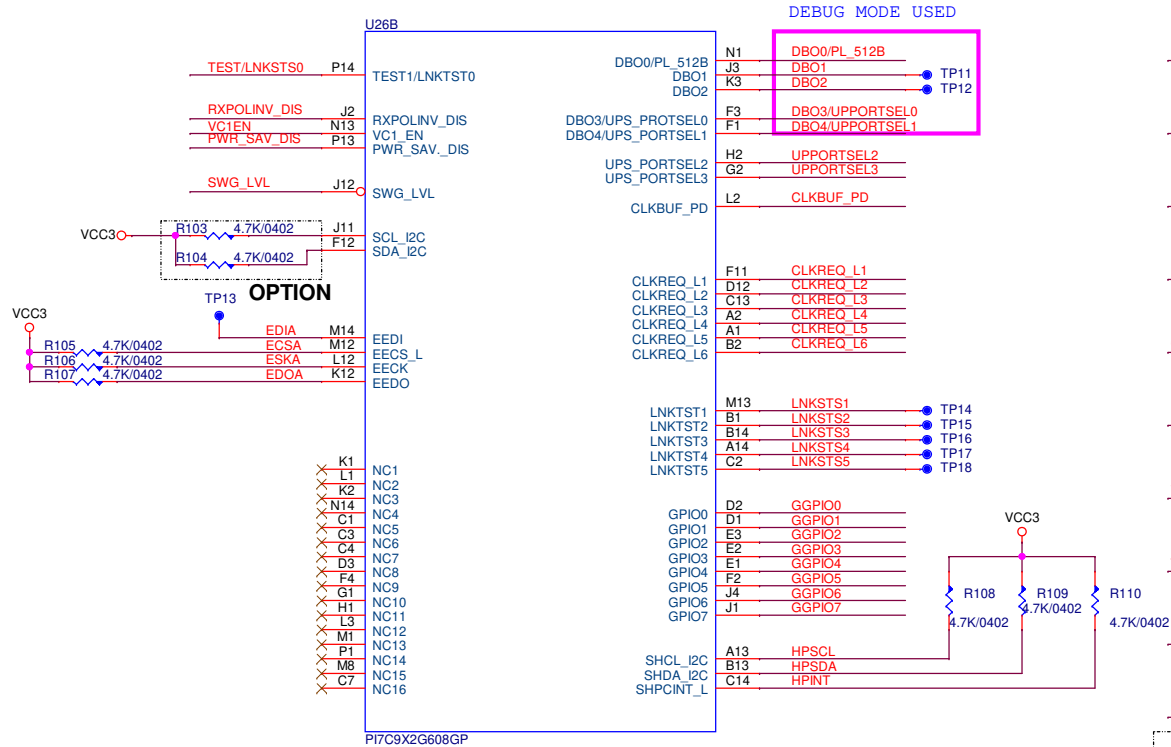
Size Document Number
DM446

Date: Friday, July 30, 2021

Sheet 8 of 20

Rev
1.0

PCIe Bridge-1



PULL VCC3=4.7K
PULL GND=330

X=NO MOUNT

PORT-LANE MAPPING

GPIO[1]	GPIO[0]	Functional Mode
0	0	505 mode,5Port-5Lane Configuration
0	1	606 mode,6Port-6Lane Configuration
1	0	508 mode,5Port-8Lane Configuration

Part # PLCSEL = 606GP 01

"CLKBUF_PD" PULL GND
=Integrated Reference Clock

DMP ELECTRONICS INC.

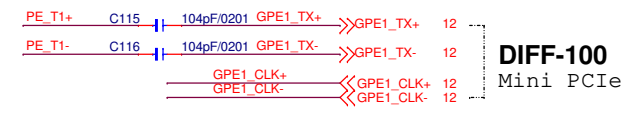
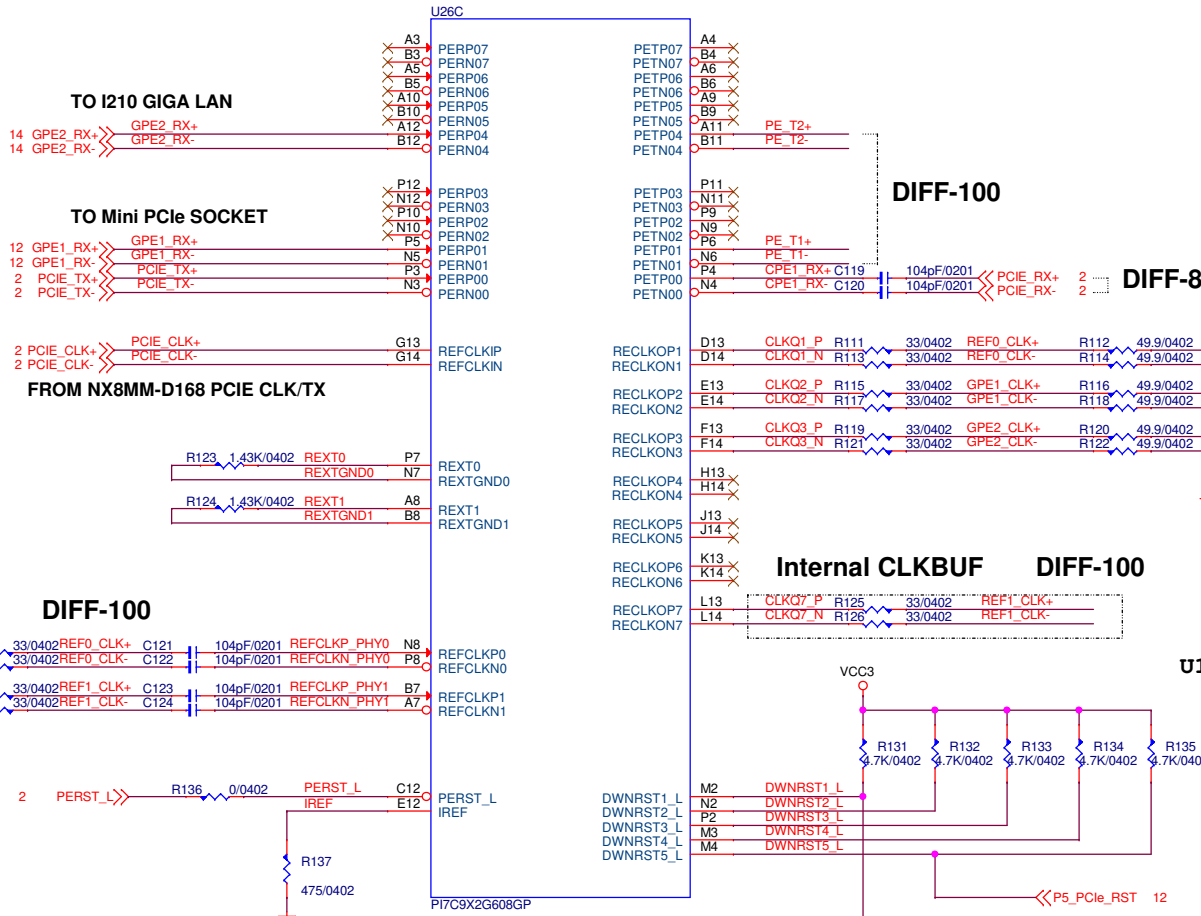
Title: PCIe Bridge P7C9X2G608GP

Size: Document Number DM446 Rev 1.0

Date: Friday, July 30, 2021 Sheet 9 of 20

PCIe Bridge-2

508	606	505
Port [4]	Port [4]	Port [4]
Port [3]	Port [3]	Port [3]
Port [2]	Port [2]	Port [2]
Port [1]	Port [1]	Port [1]
Port [0]		
Port [0]		
Port [0]	Port [5]	
Port [0]	Port [0]	Port [0]



DIFF-100
DIFF-85

DIFF-100

DIFF-85 FROM NX8MM-D168 PCIE RX

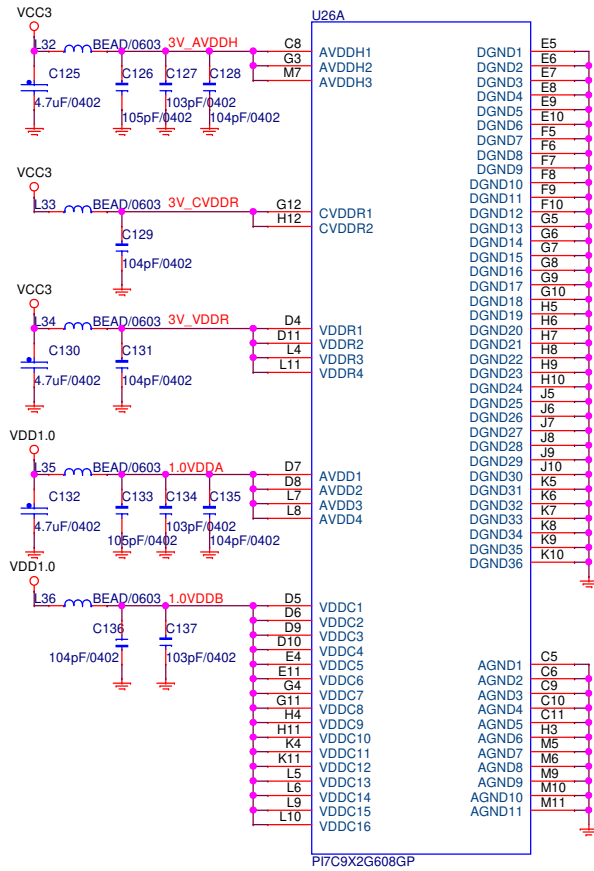
DIFF-100

Internal CLKBUF DIFF-100

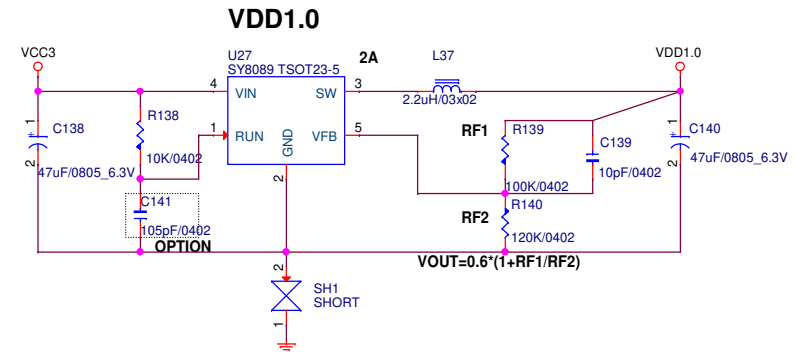
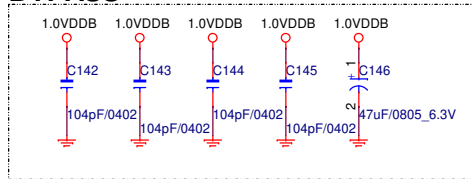
GPIO[1:0]	Functional Mode					
	606	606	606	606	606	606
UPS_PORTSEL[3:0]	0000	0001	0010	0011	0100	0101
Lane0	P0	P1	P2	P3	P4	P5
Lane1	P5	P5	P5	P5	P5	P0
Lane2	-	-	-	-	-	-
Lane3	-	-	-	-	-	-
Lane4	P1	P0	P1	P1	P1	P1
Lane5	P2	P2	P0	P2	P2	P2
Lane6	P3	P3	P3	P0	P3	P3
Lane7	P4	P4	P4	P4	P0	P4

Note:
*
P0:Upstream port
P1~P5:downstream port

PCIe Bridge-3 Power



BYPASS



Power Sequence: +3.3V=>+1.0V

DMP ELECTRONICS INC.

Title: PCIe Bridge Power

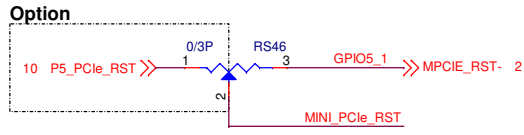
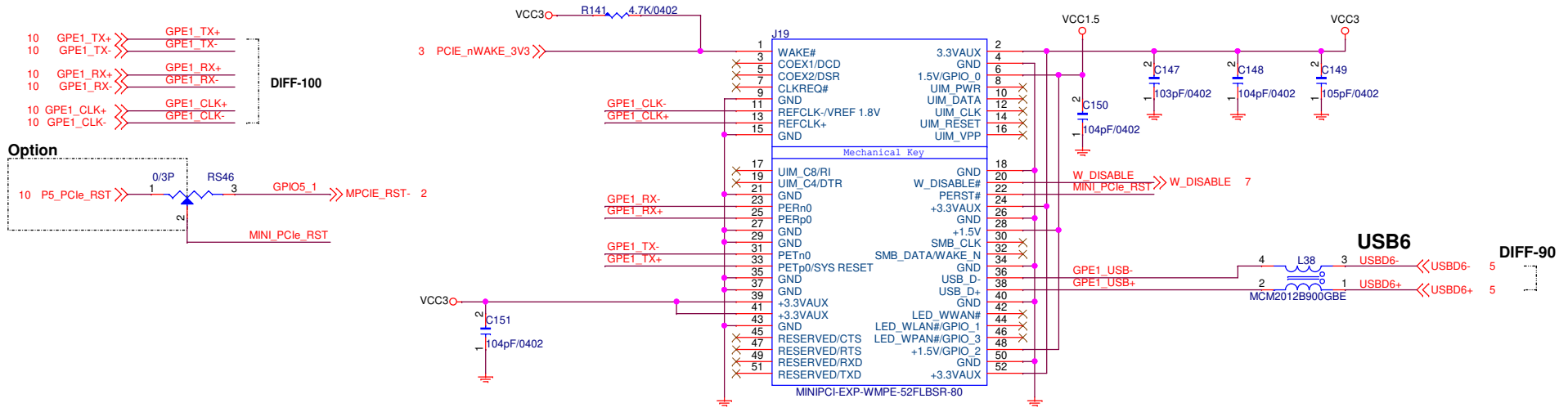
Size: Document Number DM446

Date: Friday, July 30, 2021

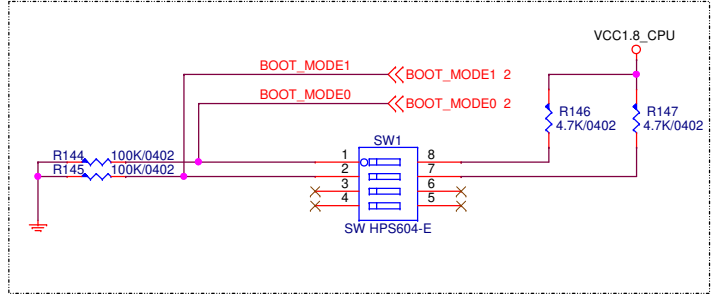
Sheet 11 of 20

Rev 1.0

MINI PCIe

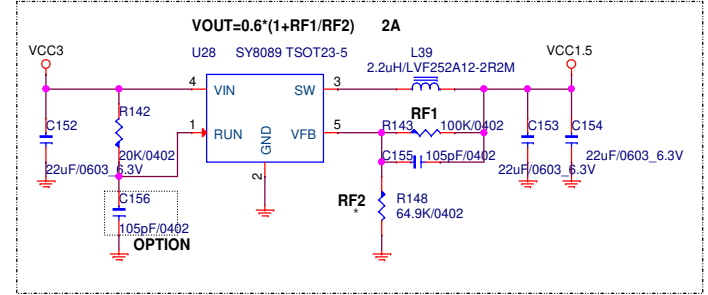


BOOT_MODE SW



i.MX8M MINI		
MODE0	MODE1	Boot Source
0	0	Boot from fuses
1	0	Serial downloader
0	1	Internal boot
1	1	Reserved

VCC 1.5V



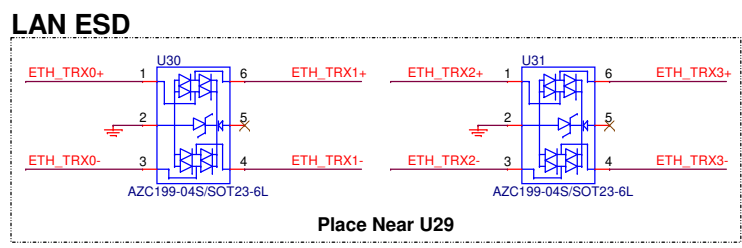
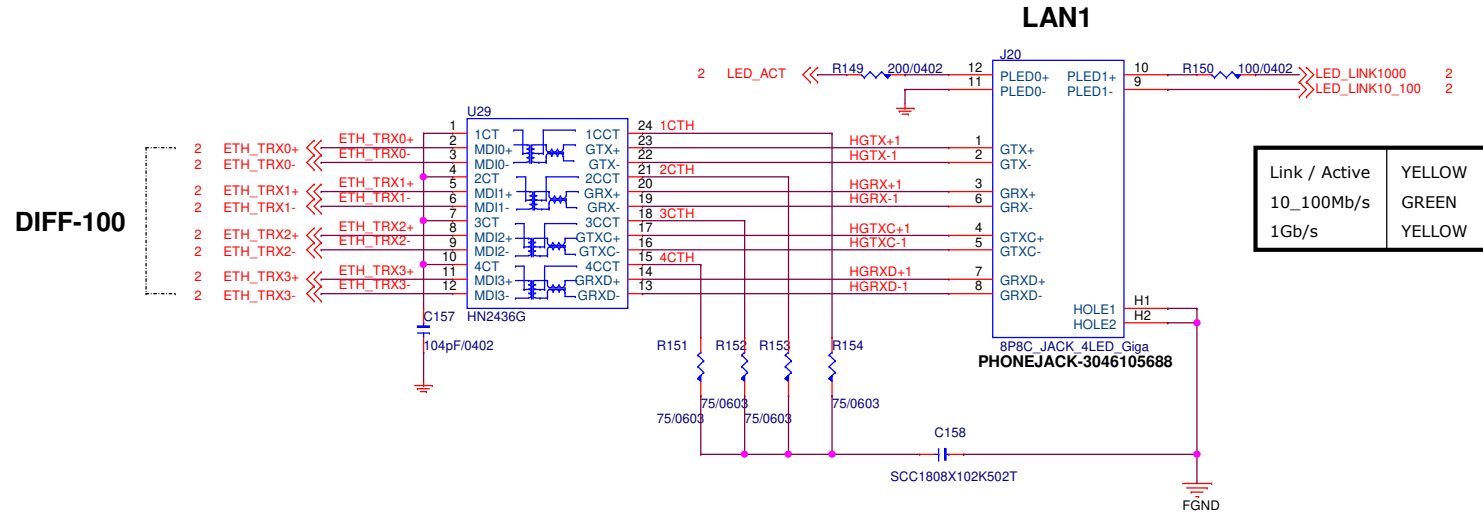
DMP ELECTRONICS INC.

Title: MINIPCI-EXP52,BOOT_MODE SW

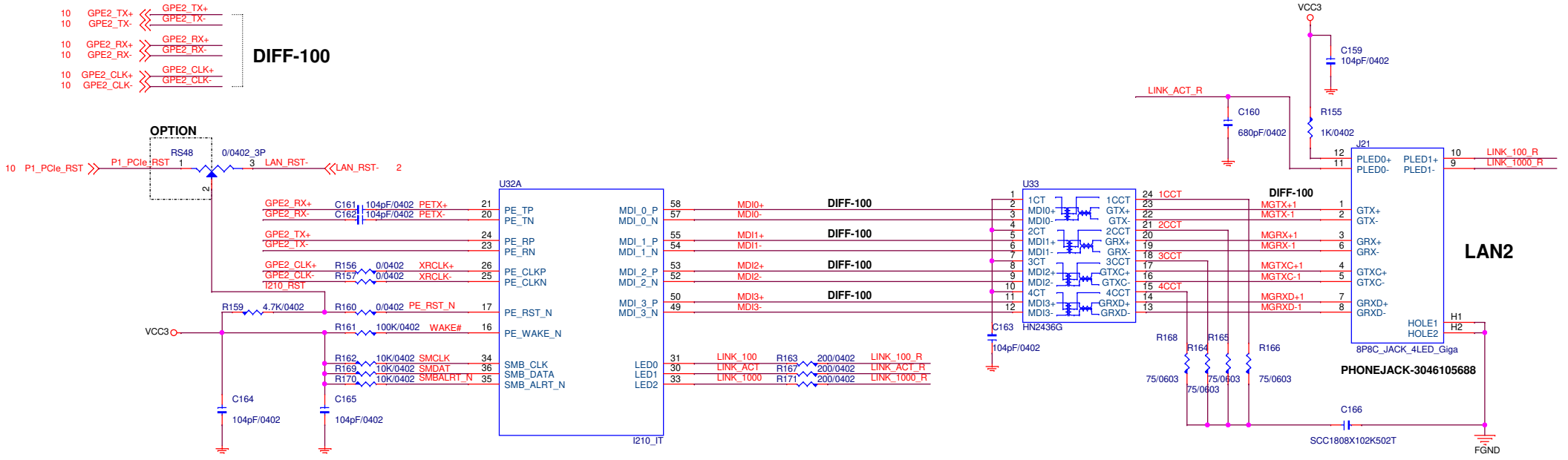
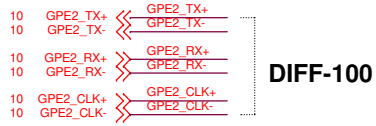
Size: Document Number DM446 Rev 1.0

Date: Friday, July 30, 2021 Sheet 12 of 20

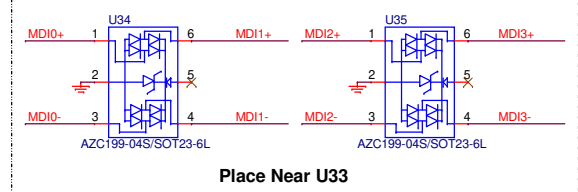
RGMII 10/100/1000Mbps LAN-1



Intel I210 Giga LAN-2

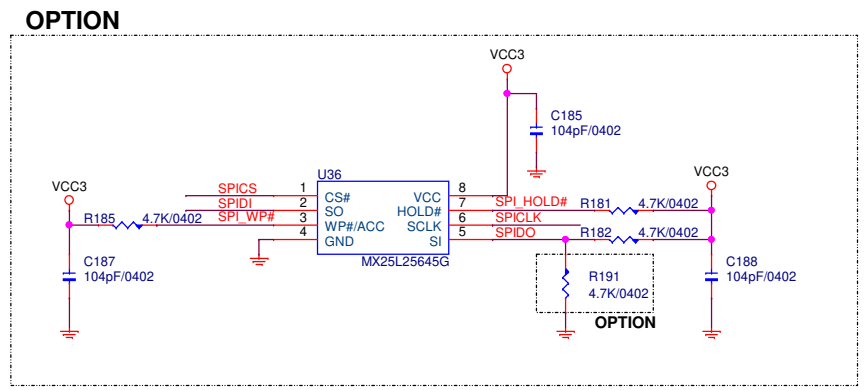
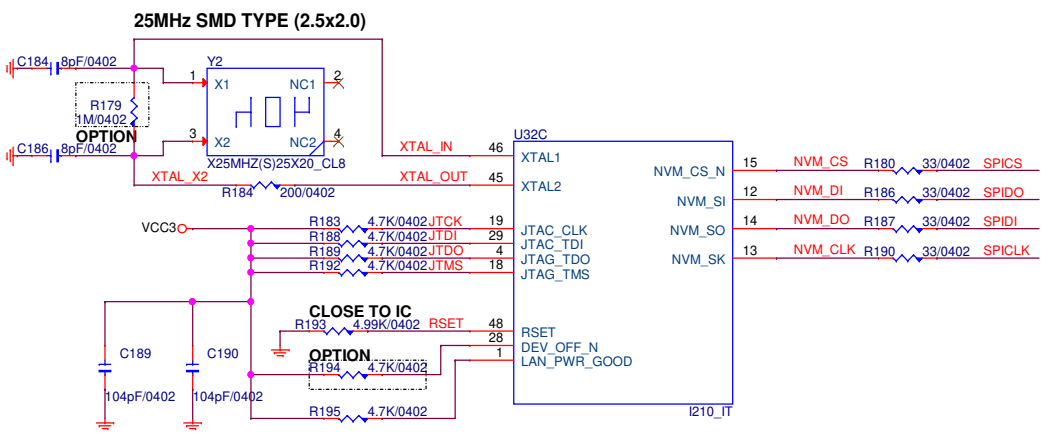
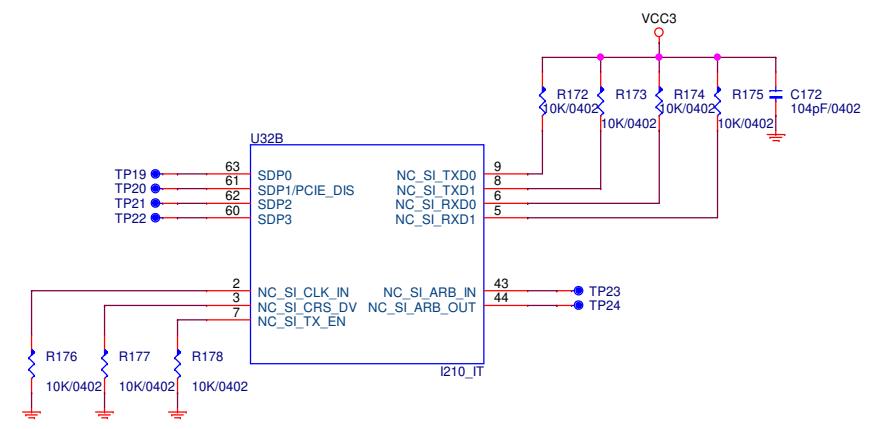
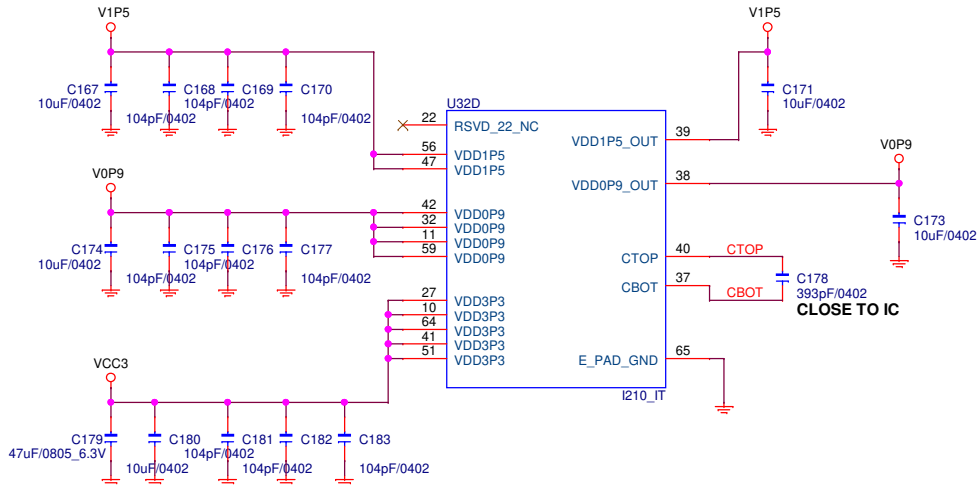


LAN ESD



DMP ELECTRONICS INC.		
Title: LAN2 I210 GIGA LAN		
Size: Document Number	DM446	Rev: 1.0
Date: Friday, July 30, 2021	Sheet: 14	of 20

I210 POWER



DMP ELECTRONICS INC.

Title: LAN2 I210 POWER

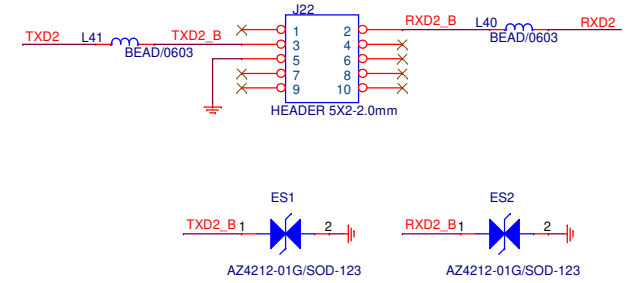
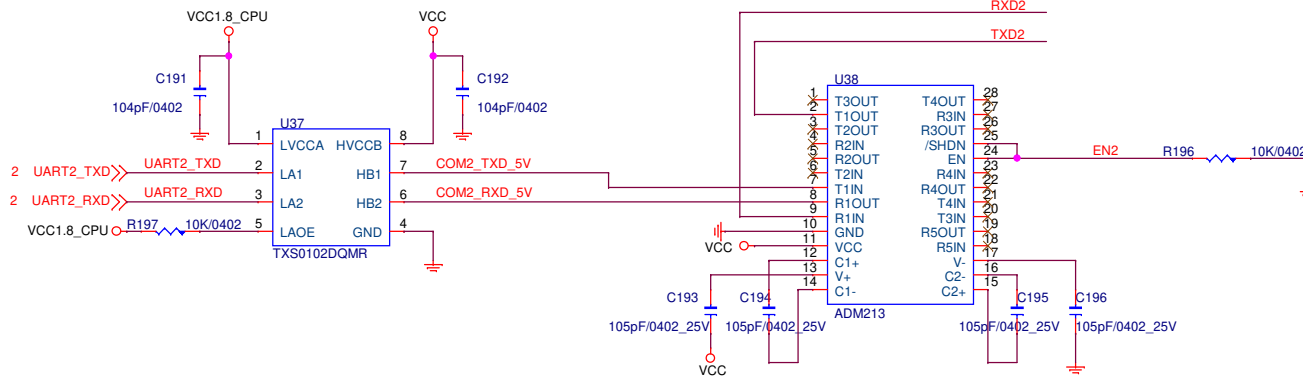
Size: Document Number DM446 Rev 1.0

Date: Friday, July 30, 2021 Sheet 15 of 20

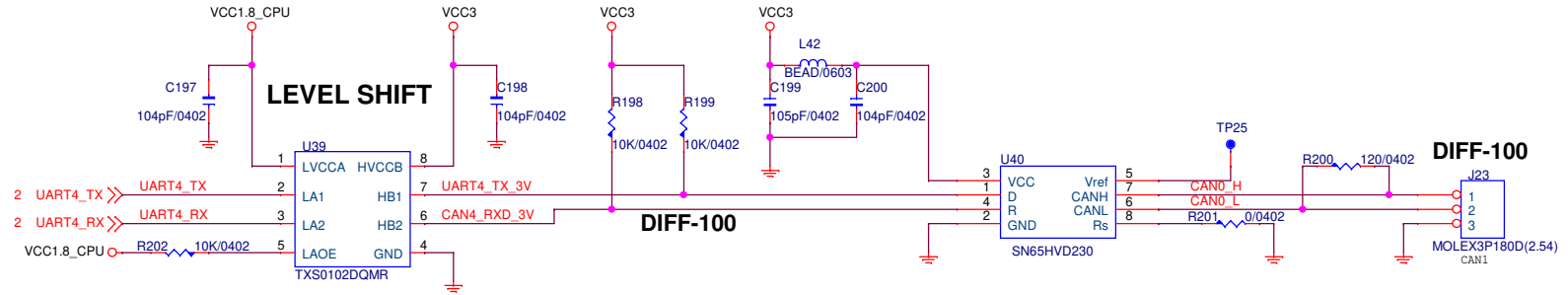
COM2

RS232

COM2 LEVEL SHIFT

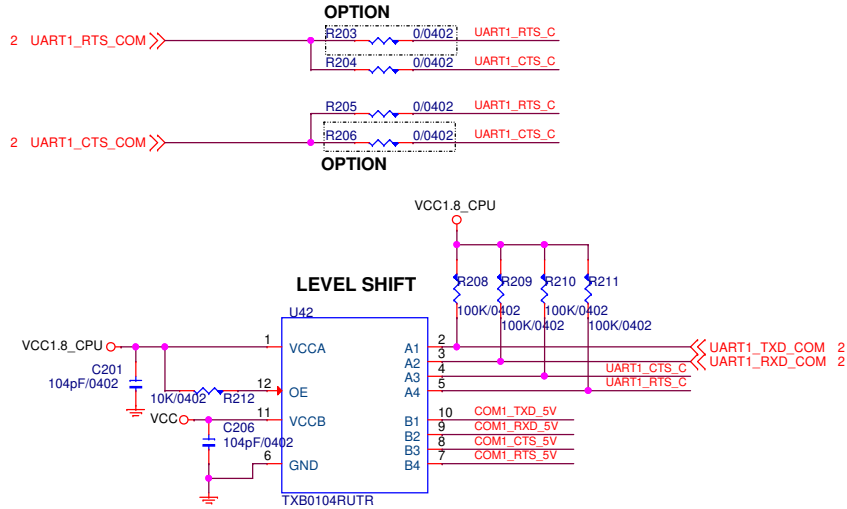


COM4 CAN BUS

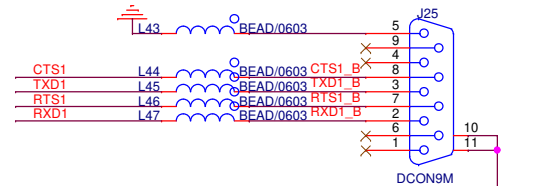
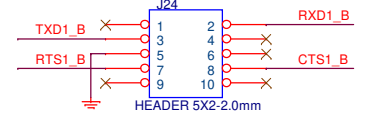
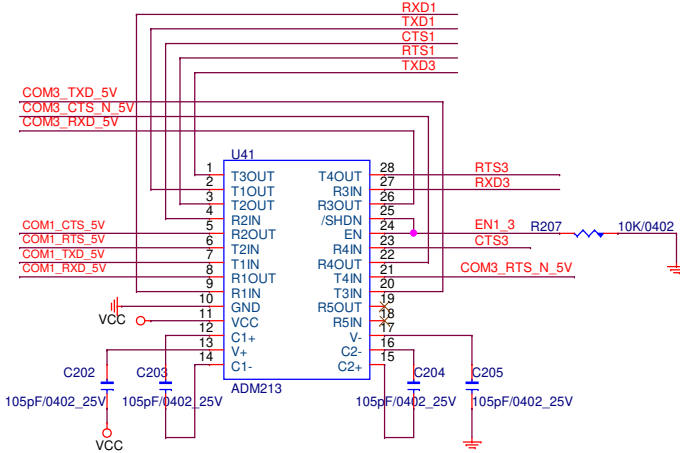


DMP ELECTRONICS INC.		
Title COM2&COM4 CAN		
Size	Document Number DM446	Rev 1.0
Date:	Friday, July 30, 2021	Sheet 16 of 20

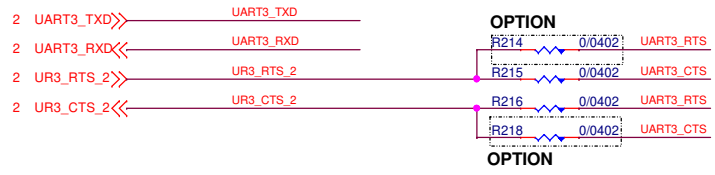
COM1/RS232



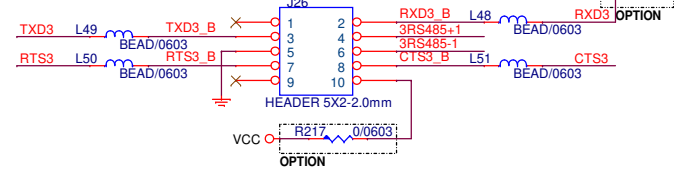
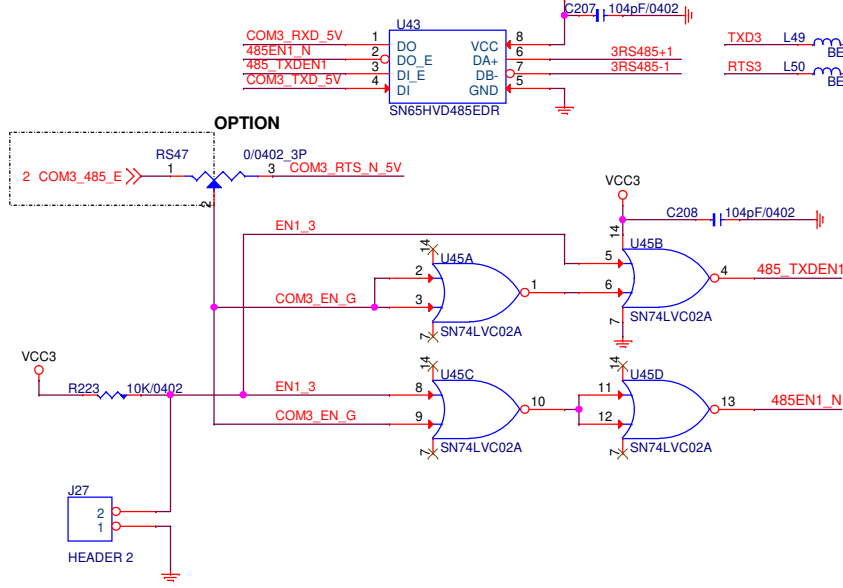
RS232



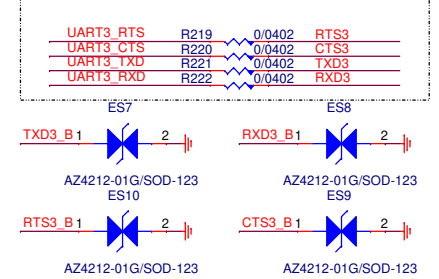
COM3 RS232/485



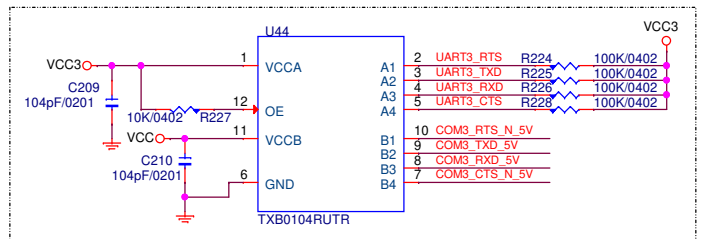
RS485



OPTION 2 TTL 3.3V level



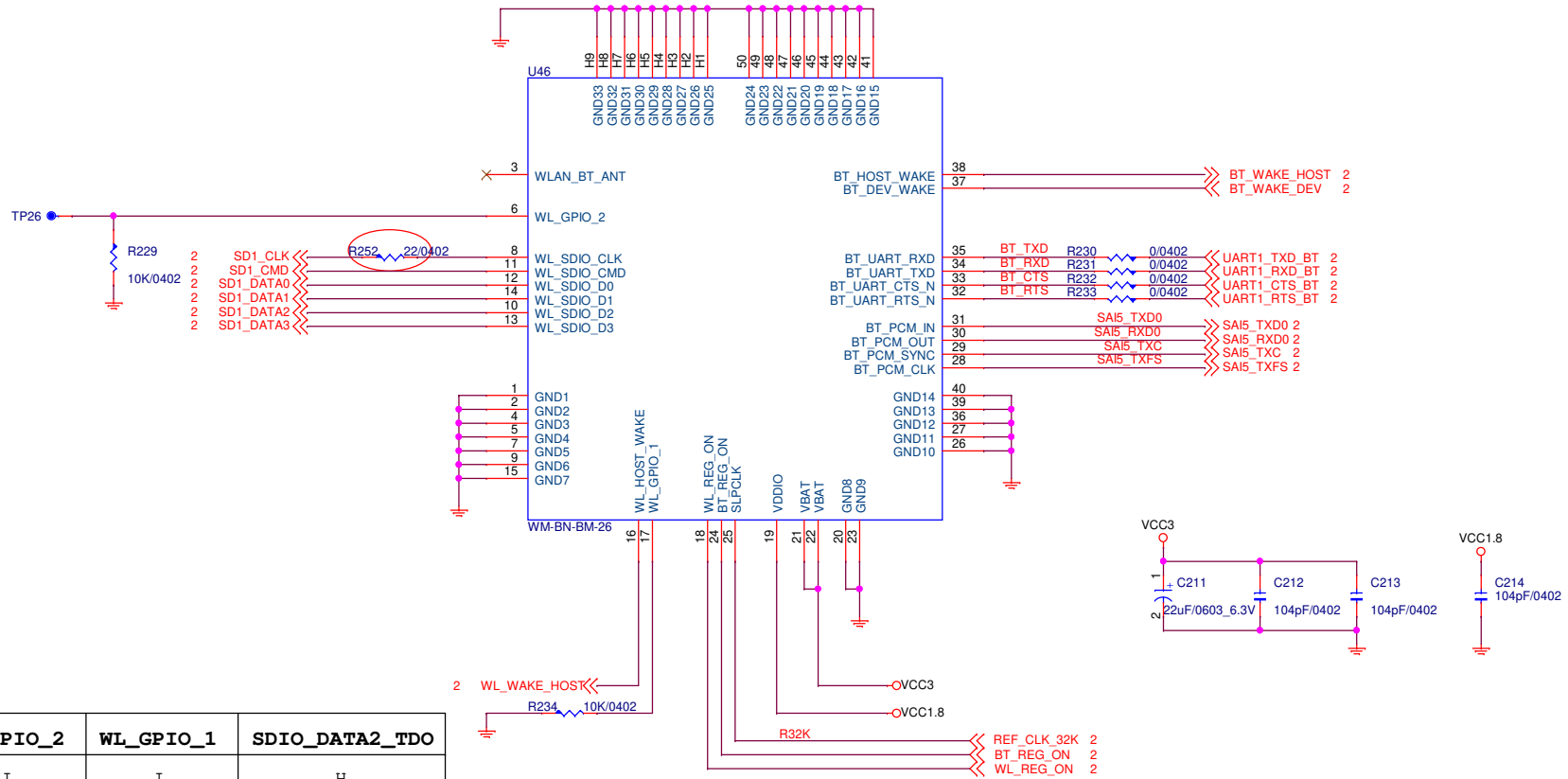
OPTION1(Default) COM3 LEVEL SHIFT



OPEN : ENABLE RS232 COM3
CLOSE : ENABLE RS485 3

DMP ELECTRONICS INC.		
Title COM1&COM3/UART/RS485		
Size	Document Number DM446	Rev 1.0
Date	Friday, July 30, 2021	Sheet 17 of 20

2.4G WIFI Module



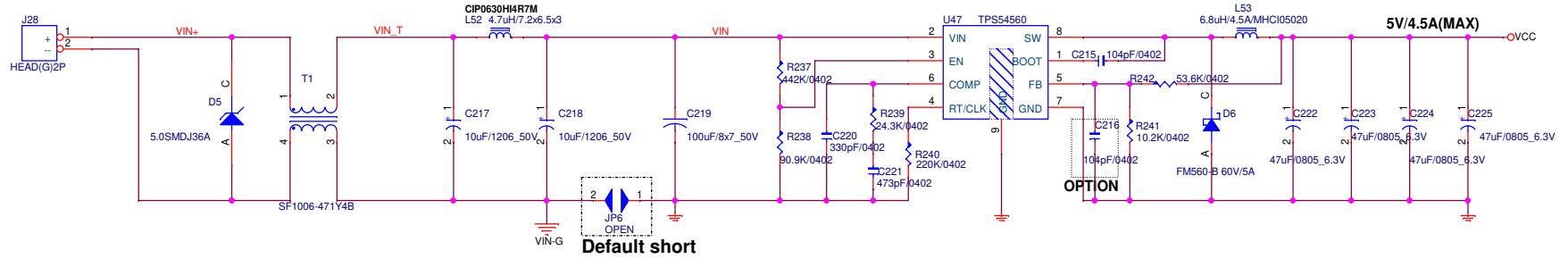
Option	WL_GPIO_2	WL_GPIO_1	SDIO_DATA2_TDO
SDIO	L	L	H
JTAG over SDIO (Default)	L	H	H
JTAG over BT PCM	H	L	H
SWD over GPIO[2:1]	H	H	H
gSPI	X	X	L

DMP ELECTRONICS INC.

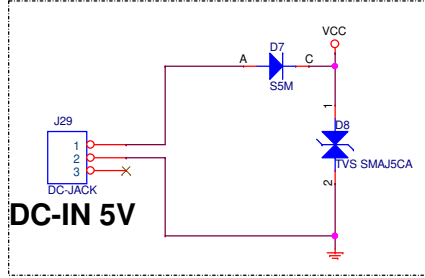
Title			Rev 1.0
WIFI&Bluetooth			
Size	Document Number DM446		
Date:	Friday, July 30, 2021	Sheet	18 of 20

DC/DC

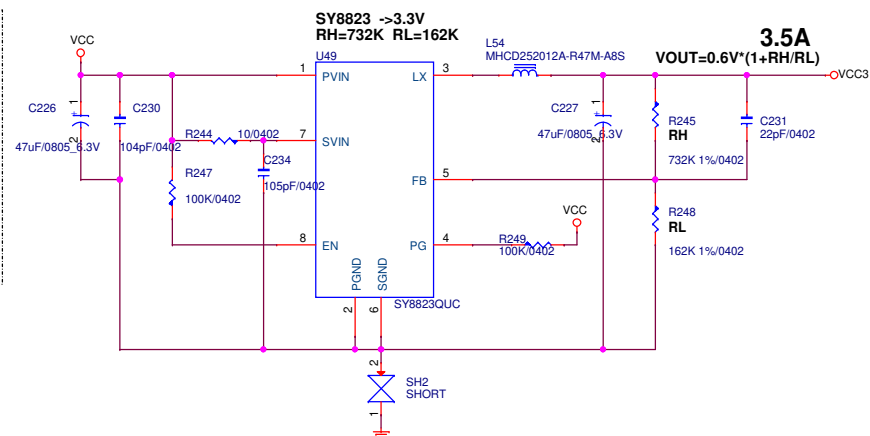
DC-IN 12~36V



OPTION

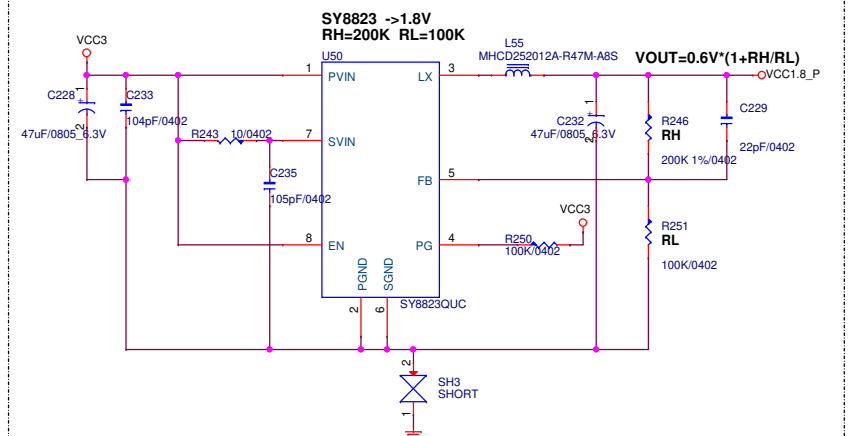


VCC 3.3V



OPTION2 Enable when the VCC1.8_P is enable

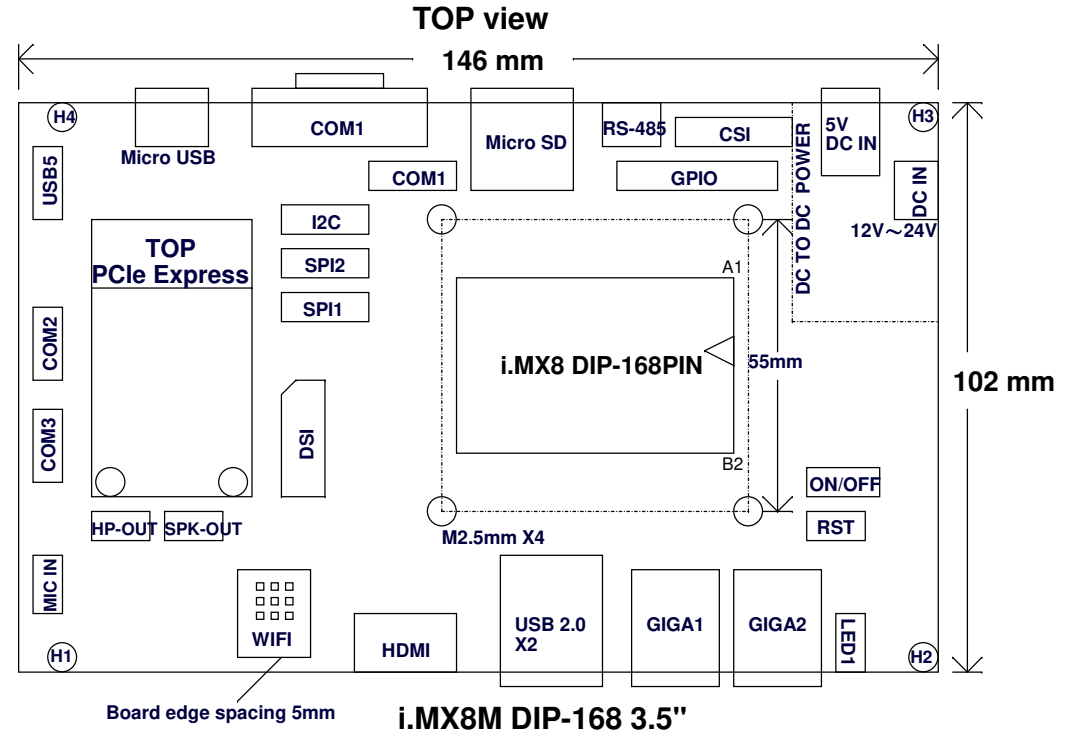
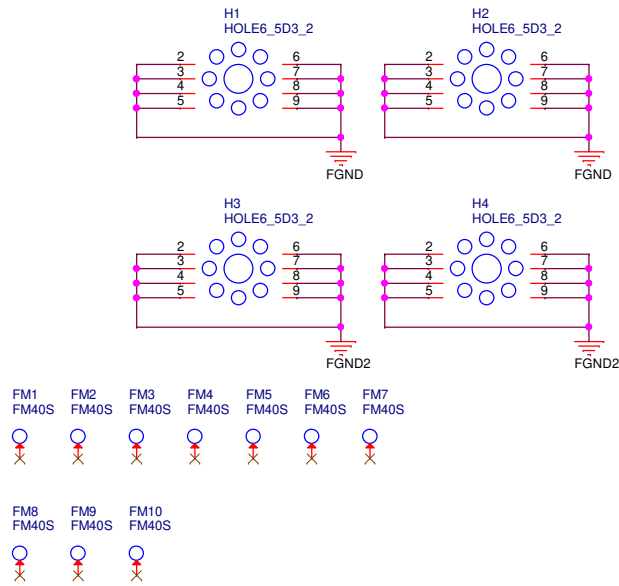
VCC 1.8V



DMP ELECTRONICS INC.

Title	DC INPUT	
Size	Document Number DM446	Rev 1.0
Date:	Friday, July 30, 2021	Sheet 19 of 20

Placement



DMP ELECTRONICS INC.		
Title Placement		
Size	Document Number DM446	Rev 1.0
Date:	Friday, July 30, 2021	Sheet 20 of 20