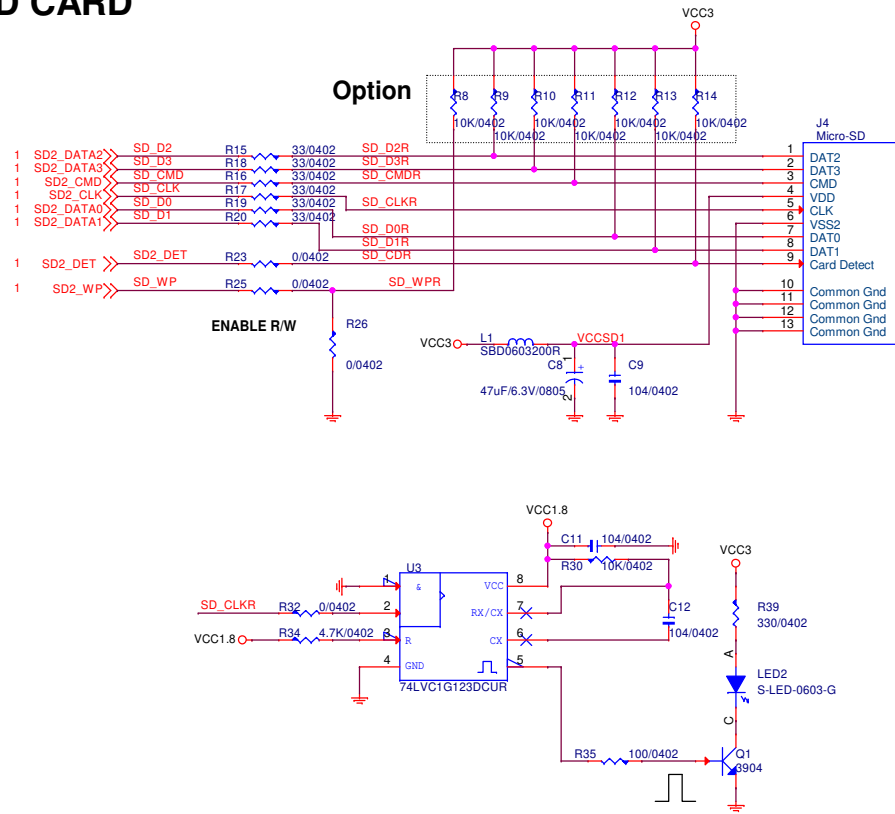
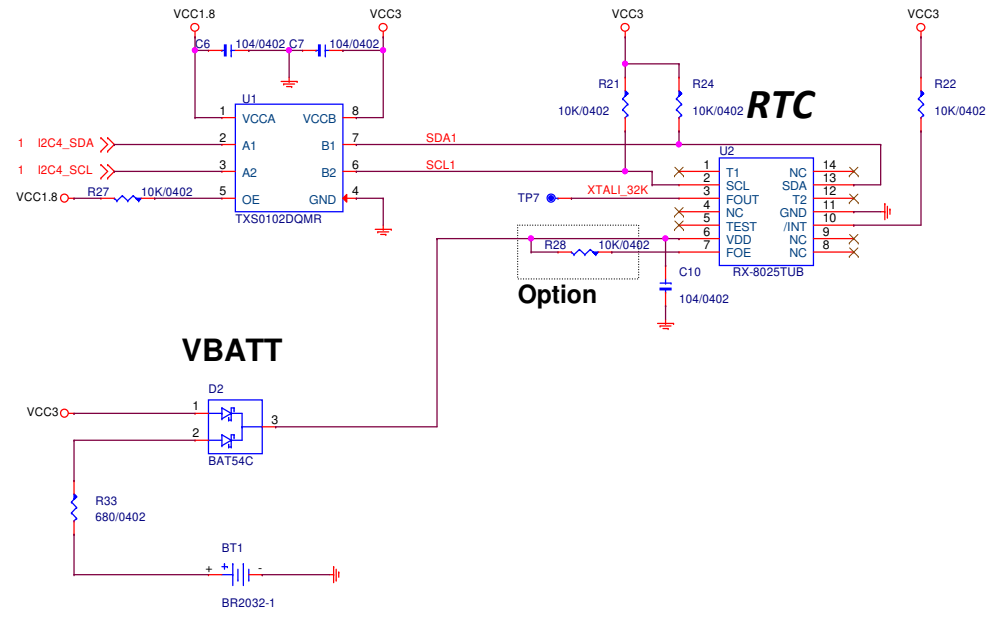


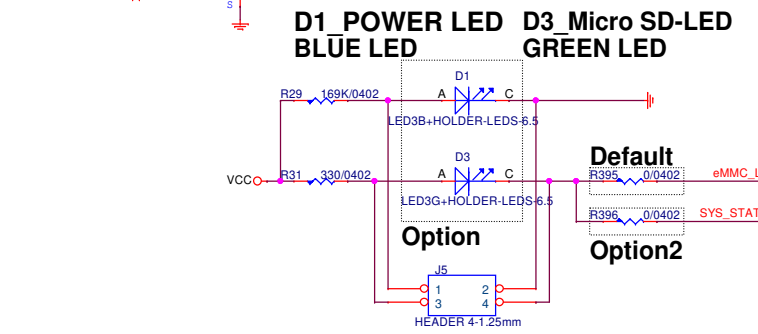
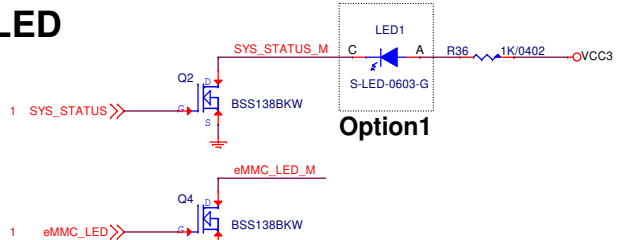
SD CARD



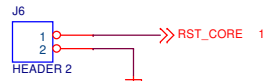
RTC/VBATT



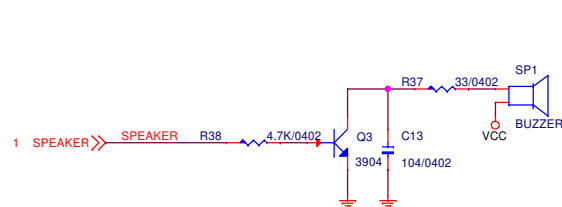
LED



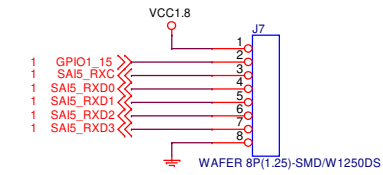
H/W RST



SPEAKER

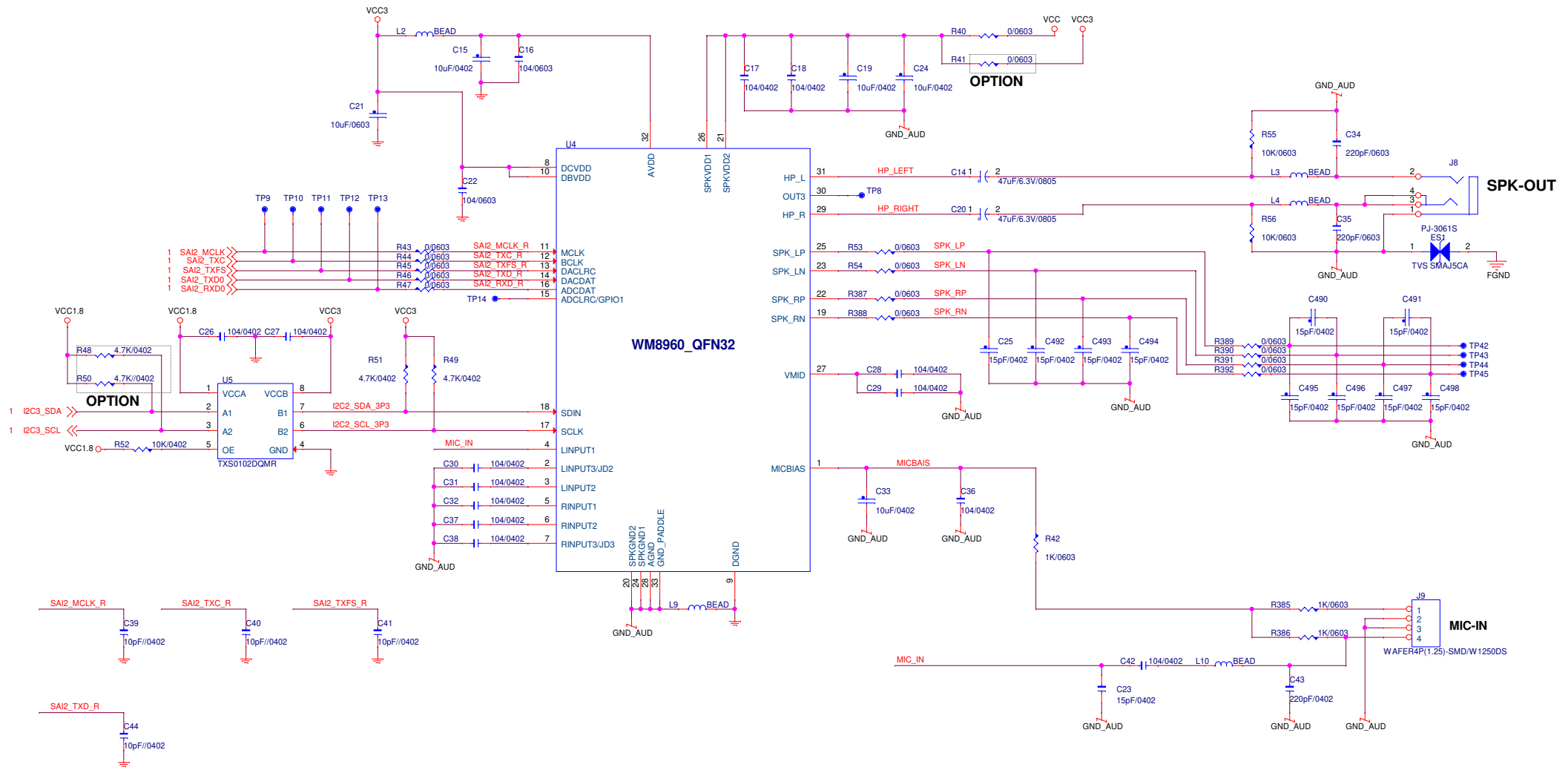


MIC Array



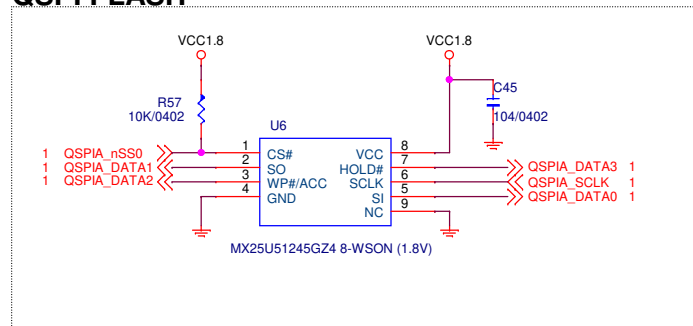
DMP ELECTRONICS INC.		
Title SD Card/SPAKER/RTC VBAT/RST/MIC Array		
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Date: Tuesday, February 18, 2020	Sheet 3 of 15	

Audio CODEC



QSPI

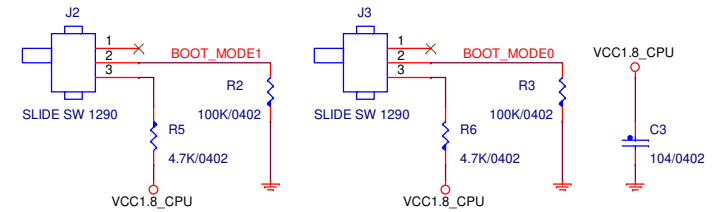
QSPI FLASH



OPTION

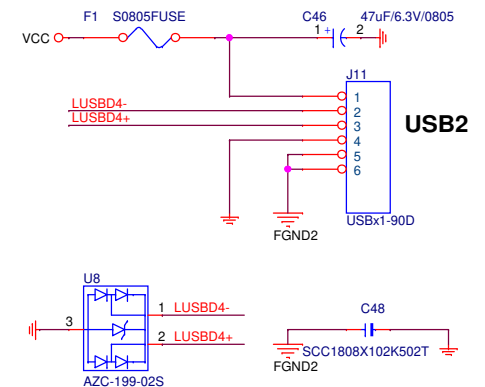
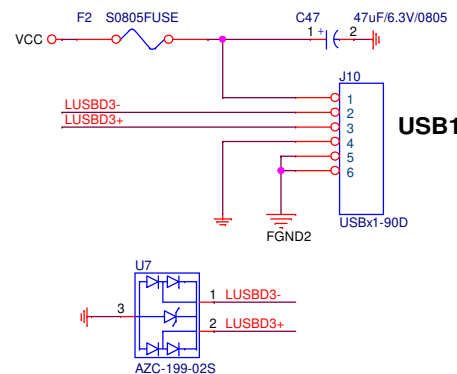
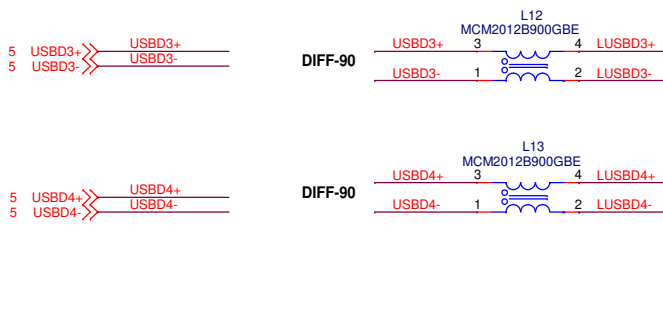
Boot Mode

- 1 BOOT_MODE0 >> BOOT_MODE0
- 1 BOOT_MODE1 >> BOOT_MODE1



BOOT_MODE1	BOOT_MODE0	Boot Source
0	0	Boot from fuses
0	1	Serial downloader
1	0	Internal boot
1	1	Reserved

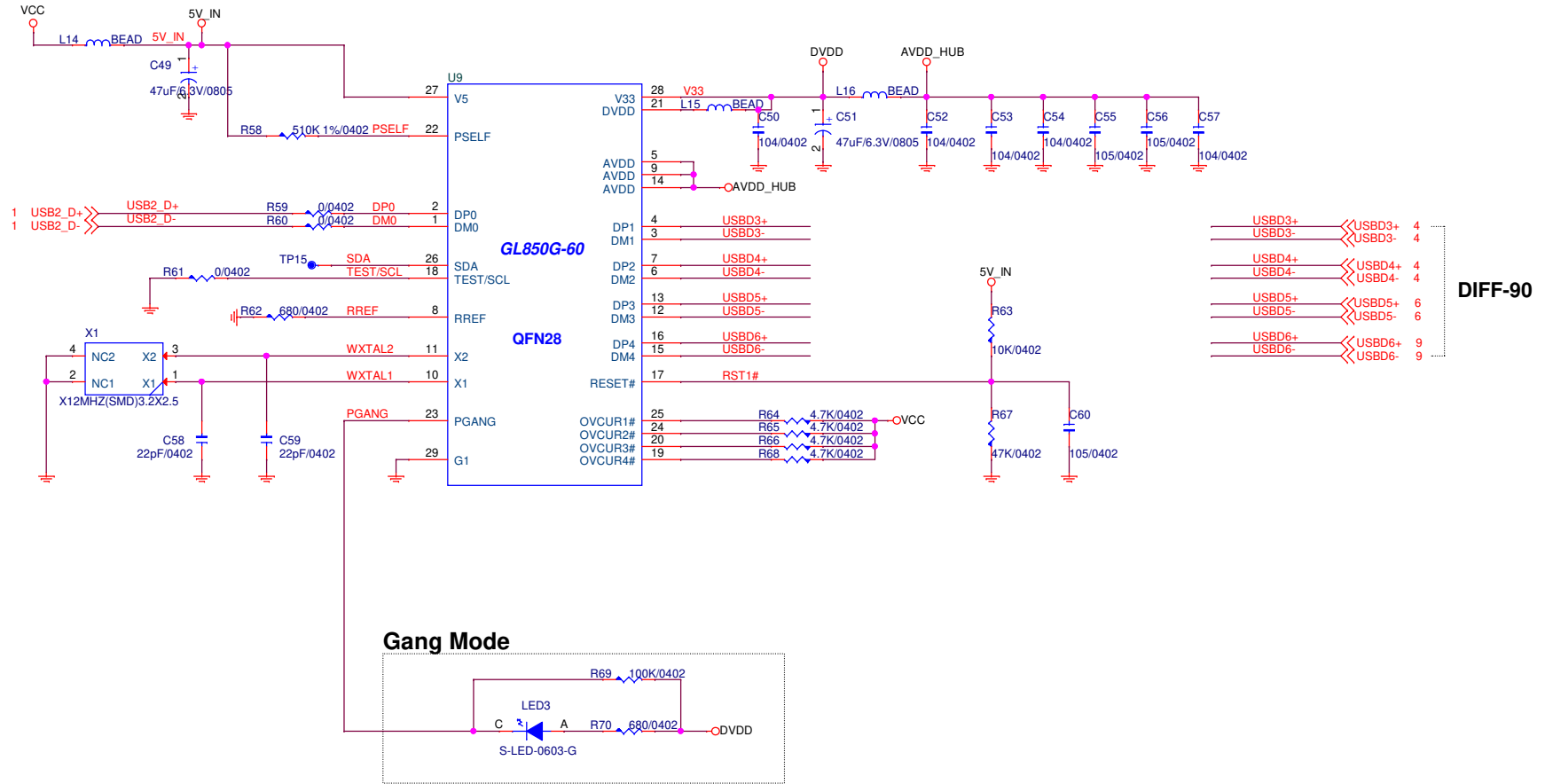
USB



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Title			USB, QSPI, MODE		
Size	Document Number				Rev
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USB HUB



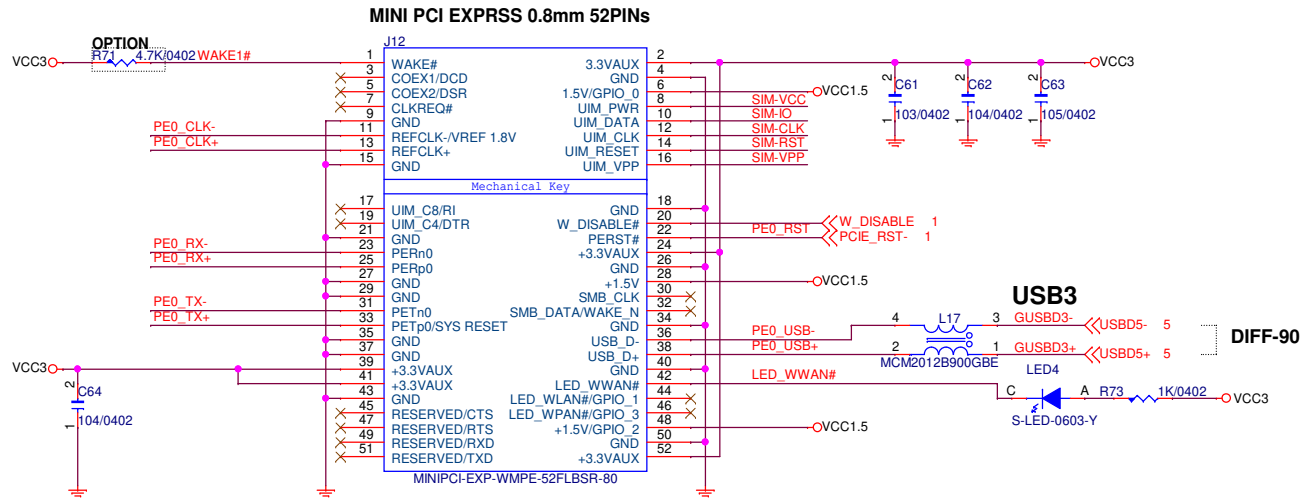
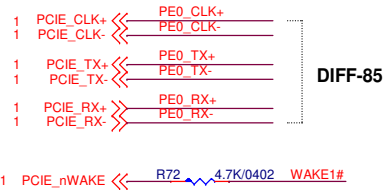
DMP ELECTRONICS INC.

Title: USB HUB

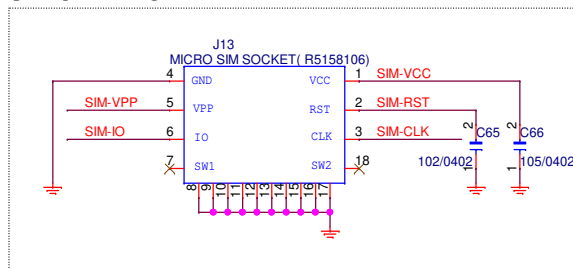
Size: Document Number DM421 Rev 1.0

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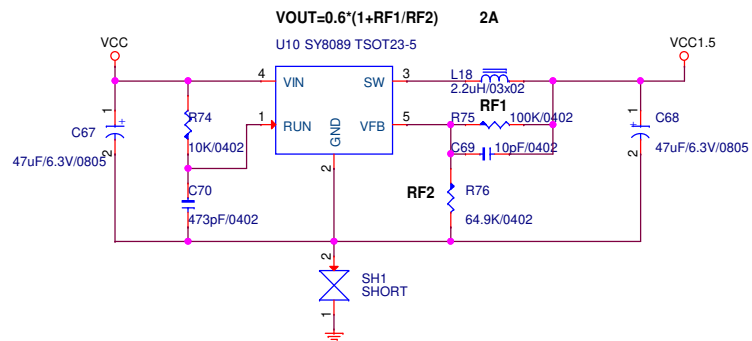
MINI PCI EXPRESS 1



SIM CARD HOLDER



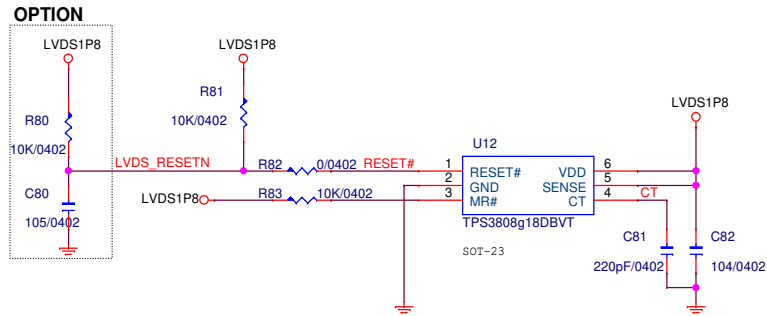
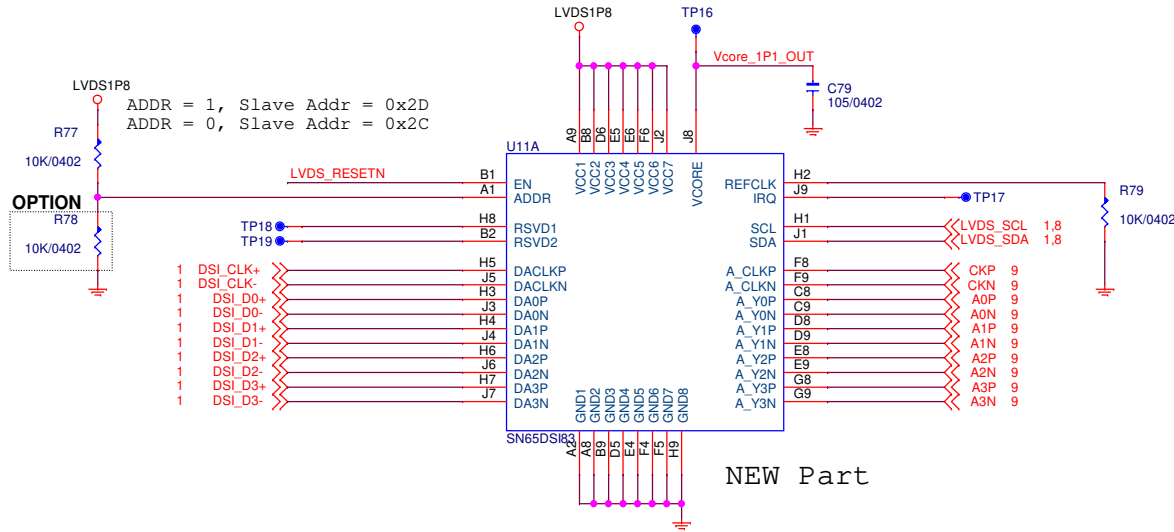
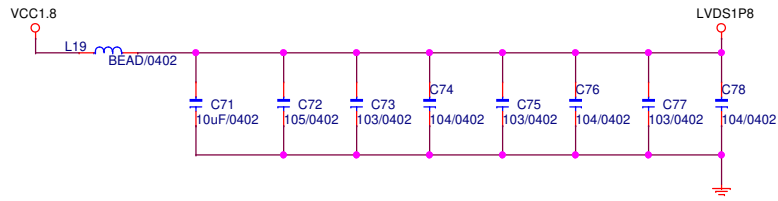
VCC 1.5V



DMP ELECTRONICS INC.

Title			MINI PCI EXPRESS 1		
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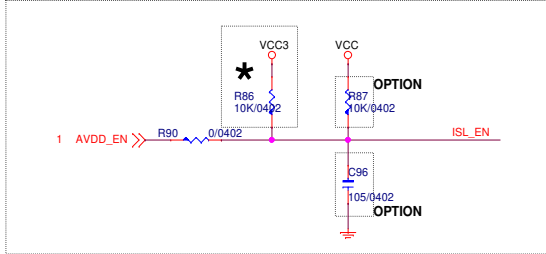
MIPI TO LVDS



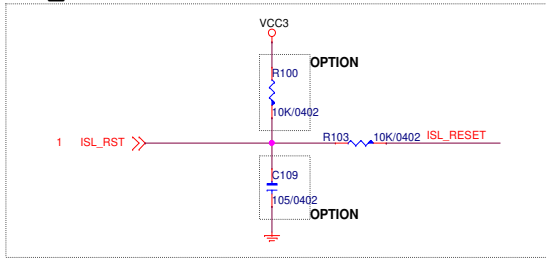
DMP ELECTRONICS INC.		
Title MIPI TO LVDS		
Size	Document Number DM421	Rev 1.0
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LCD / GAMMA_POWER

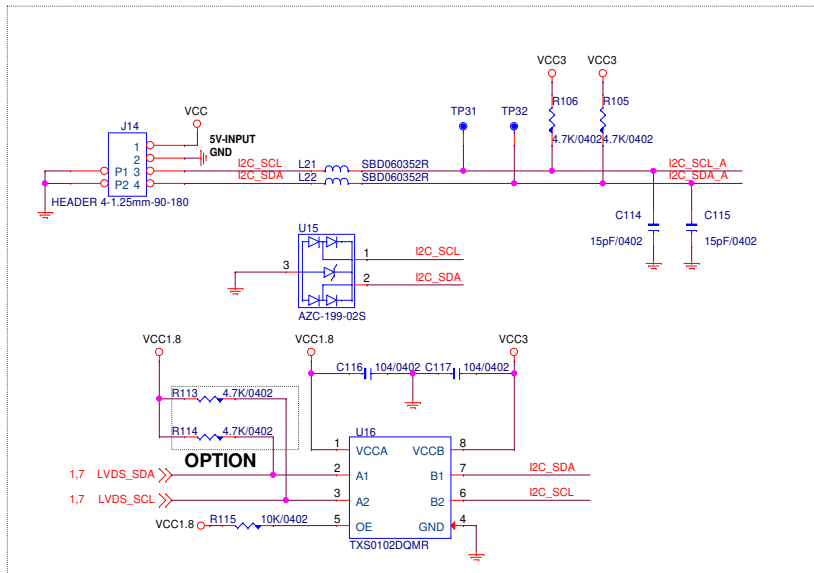
AVDD_EN



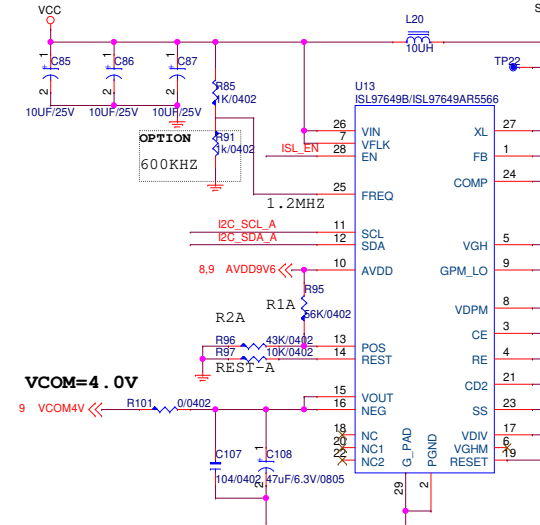
* ISL_RESET



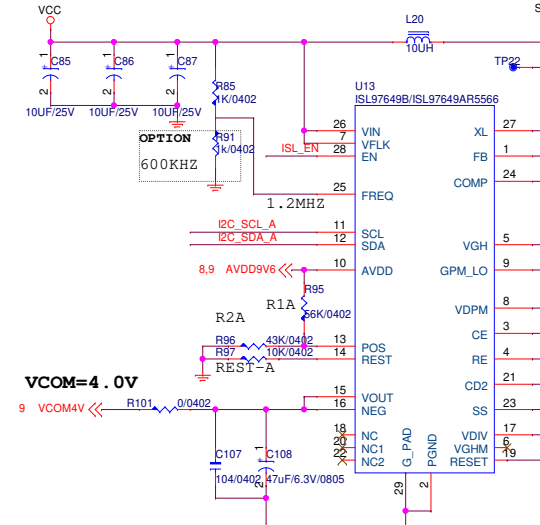
* I2C EXT INPUT



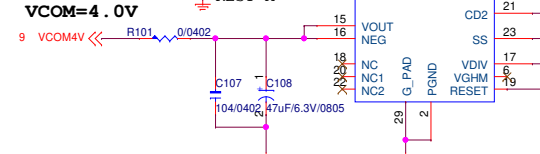
VCC=5V



LCD TFT POWER

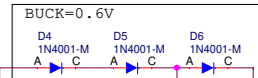
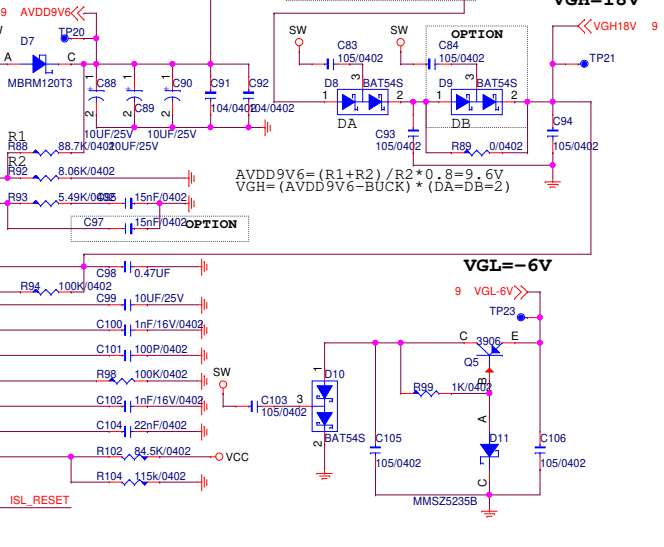


VCOM=4.0V

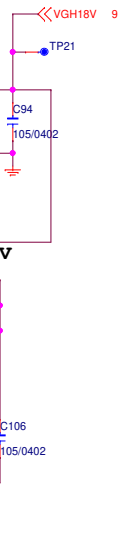


$VCOM4.0V = AVDD9V6 * [R2A / (R1A + R2A)]$

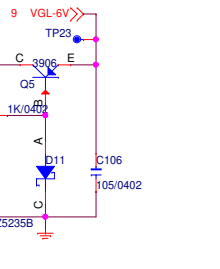
AVDD9V6=9.6V



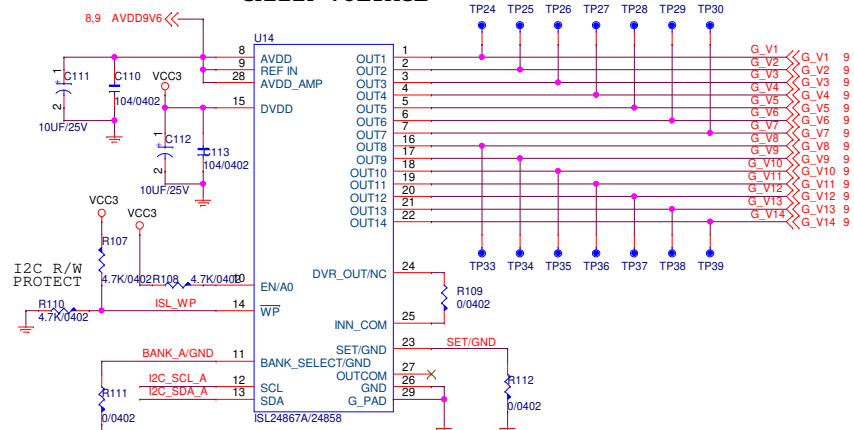
VGH=18V



VGL=-6V



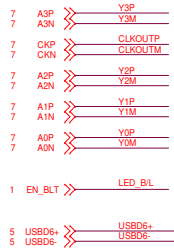
GAMMA VOLTAGE



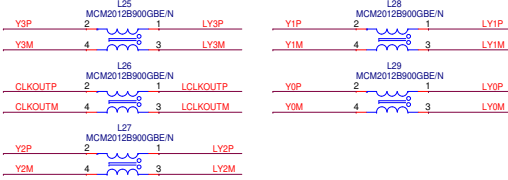
GV1=8.54V	GV8=3.32V
GV2=8.43V	GV9=3.22V
GV3=6.94V	GV10=2.66V
GV4=6.48V	GV11=2.25V
GV5=6.16V	GV12=1.75V
GV6=5.79V	GV13=0.27V
GV7=5.70V	GV14=0.22V

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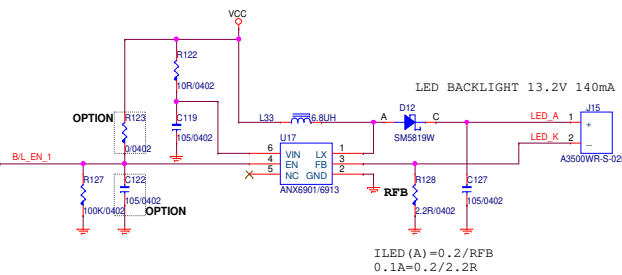
9",5.7" LCD LVDS



DIFF-100



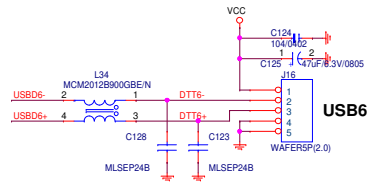
LED BACKLIGHT DRIVER



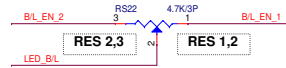
$$I_{LED} (A) = 0.2 / R_{FB}$$

$$0.1A = 0.2 / 2.2R$$

FOR TOUCH SCREEN



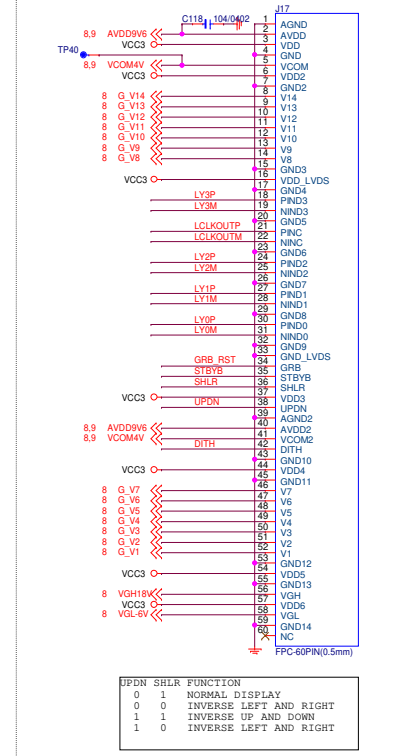
LCD PANEL STRAP



OPTION	LED BACKLIGHT SELECTION
RES 1,2	9" LCD
RES 2,3	5.7" LCD

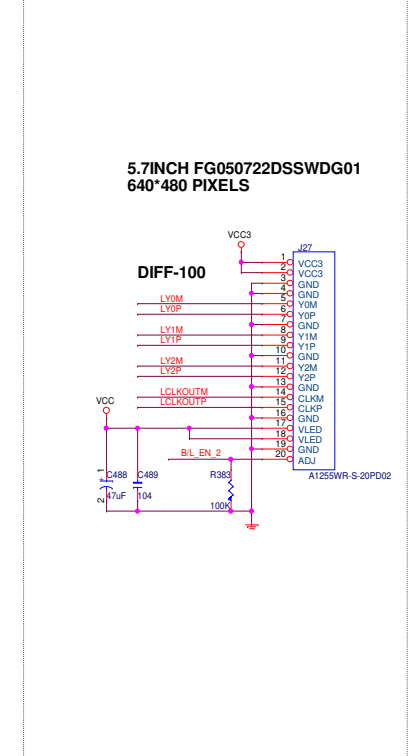
NOTE: J17 & J27 must be Dual-Lay for OPTION1 & OPTION2's Function Request

OPTION1

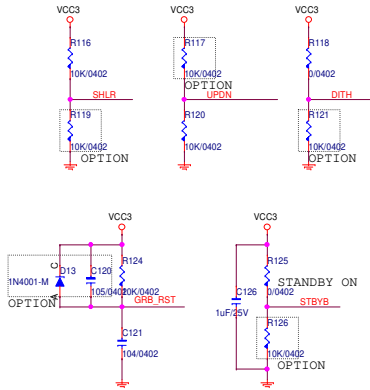


9" LCD_LVDS 24bit
9INCH CLAA090NA02CW 1024*600PIXELS

OPTION2



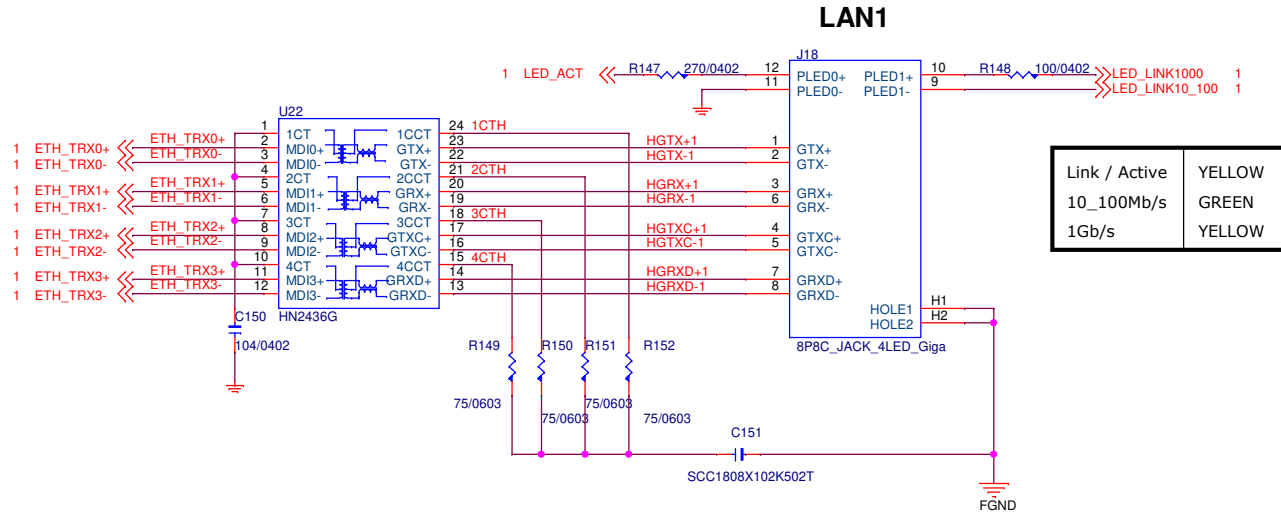
5.7" LCD_LVDS 18bit



J17DN SHLR FUNCTION

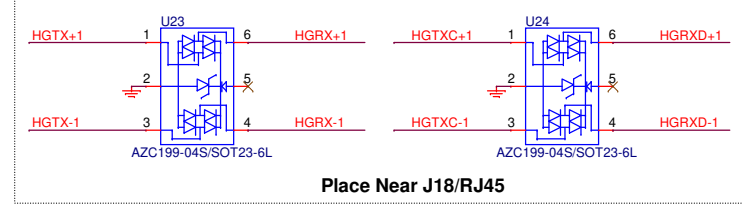
0	1	NORMAL DISPLAY
0	0	INVERSE LEFT AND RIGHT
1	1	INVERSE UP AND DOWN
1	0	INVERSE LEFT AND RIGHT

RGMII 10/100/1000Mbps LAN-1



Link / Active	YELLOW
10_100Mb/s	GREEN
1Gb/s	YELLOW

LAN ESD



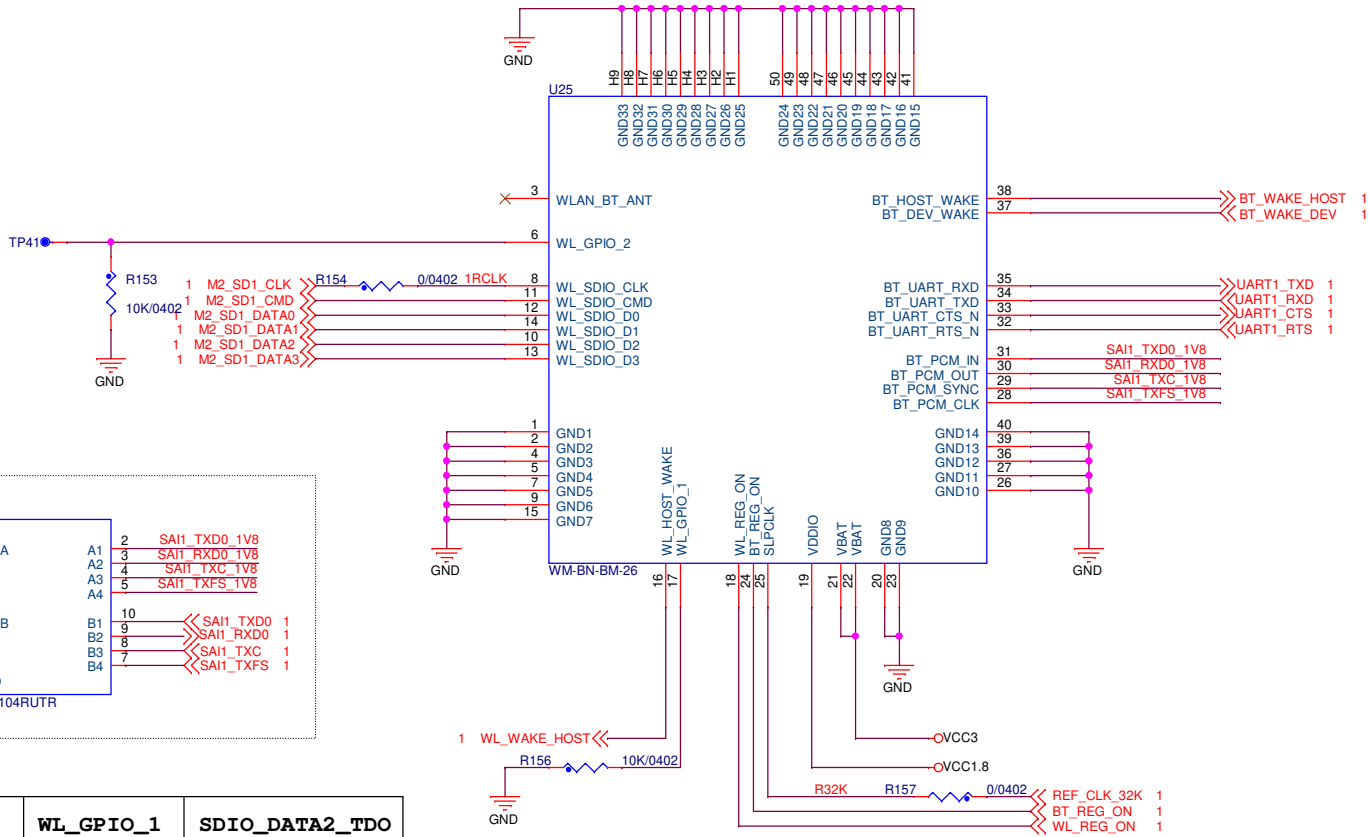
DMP ELECTRONICS INC.

Title: LAN1

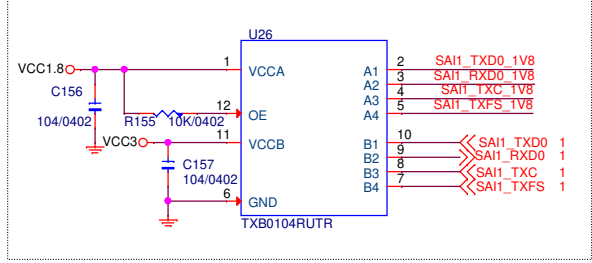
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2.4G WIFI Module



LEVEL SHIFT



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: **WiFi&Bluetooth**

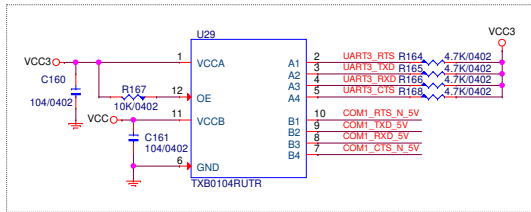
Size: Document Number **DM421** Rev **1.0**

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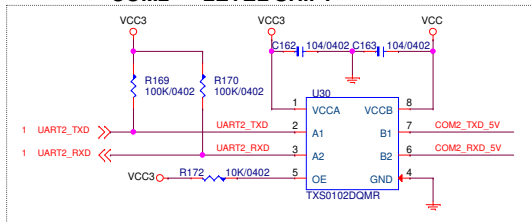
COM1/COM2



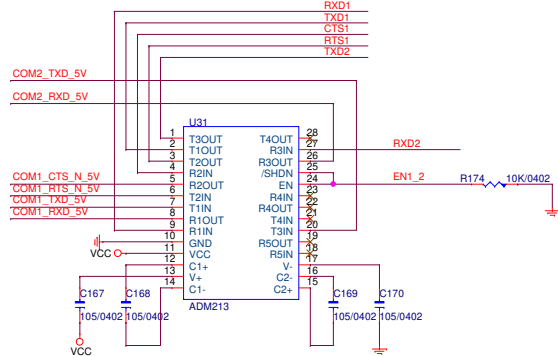
COM1 LEVEL SHIFT



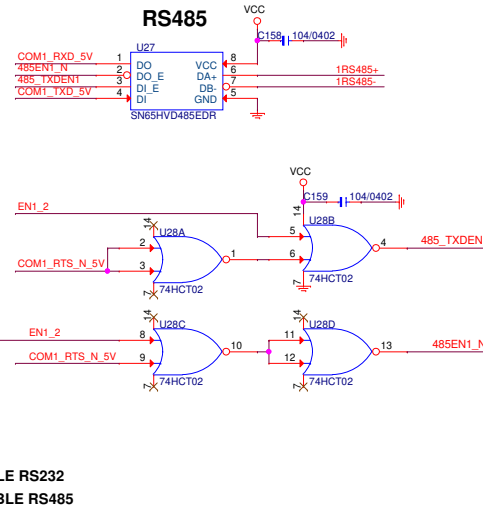
COM2 LEVEL SHIFT



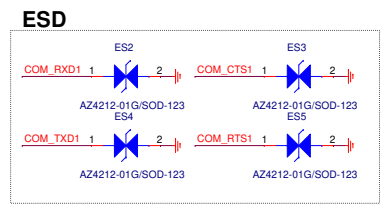
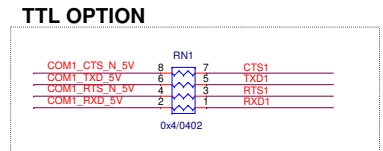
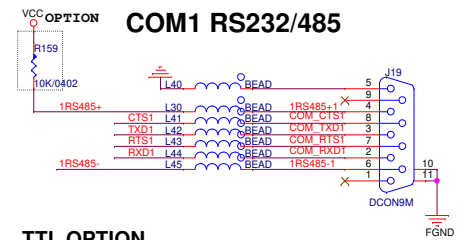
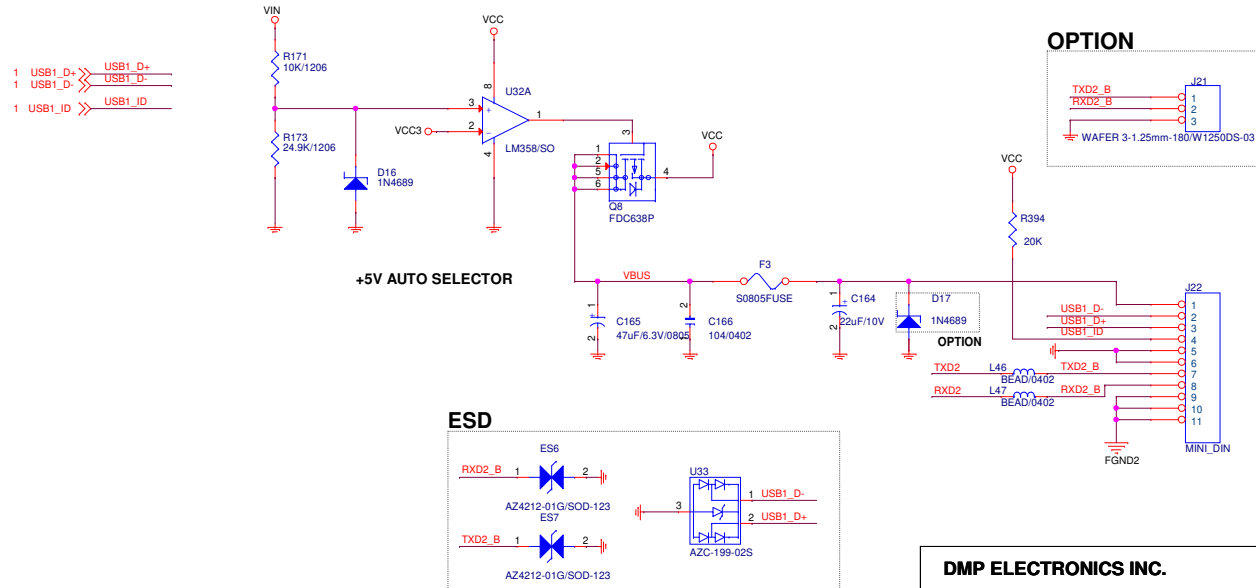
RS232



COM1 RS232/RS485



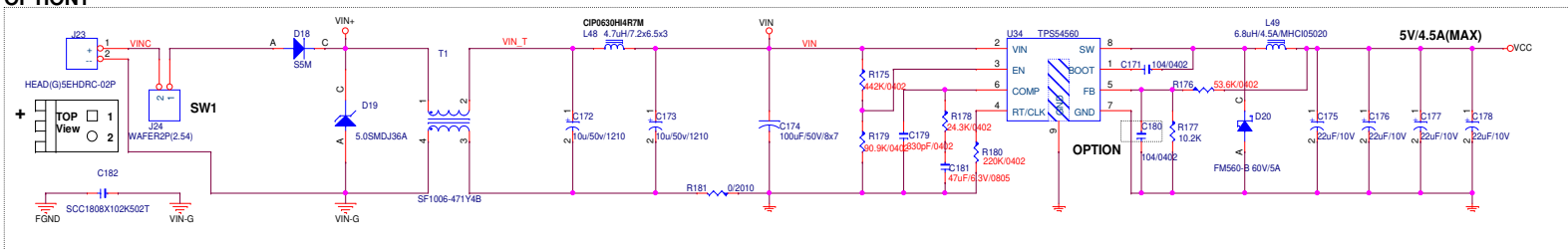
COM2 RS232/USB1



DC POWER

DC-IN 12V~36V

OPTION1

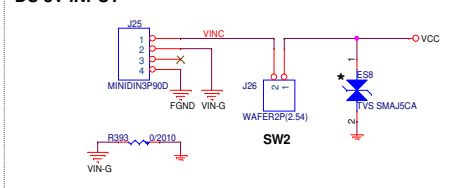


SW1, SW2 Reference DM307A Layout

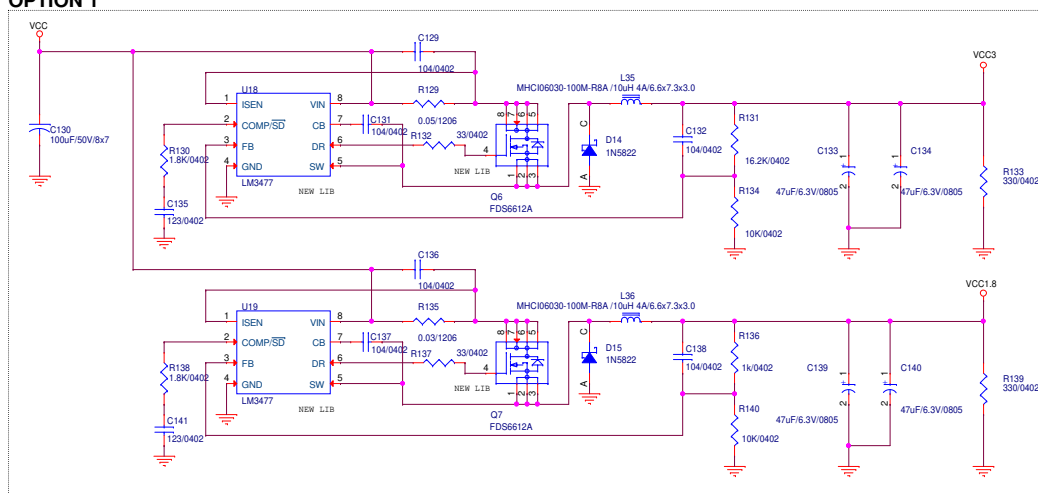
POWER CONNECTOR

OPTION2

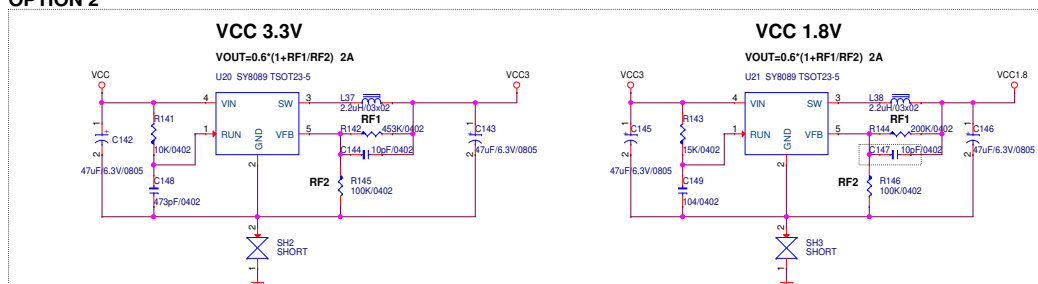
DC 5V INPUT



OPTION 1



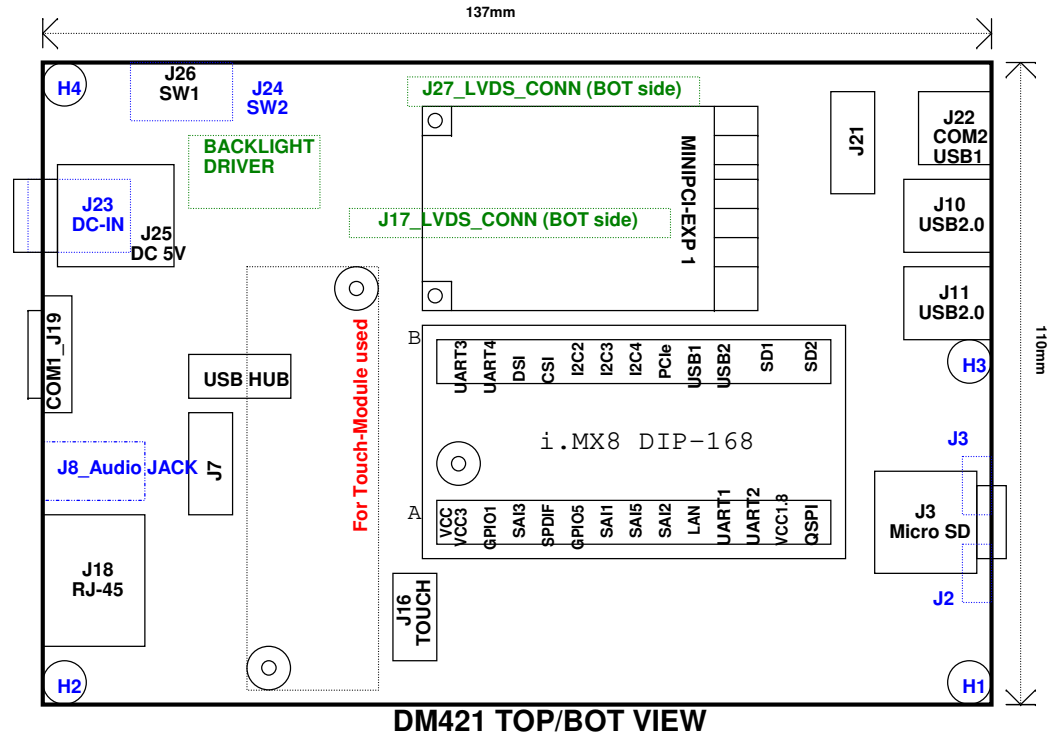
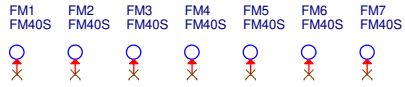
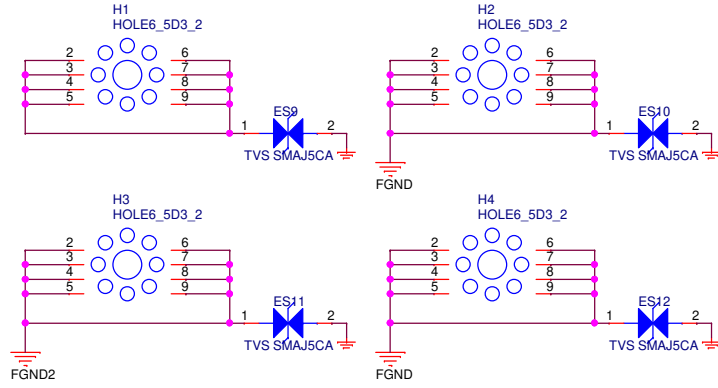
OPTION 2



DMP ELECTRONICS INC.

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Placement



DMP ELECTRONICS INC.



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