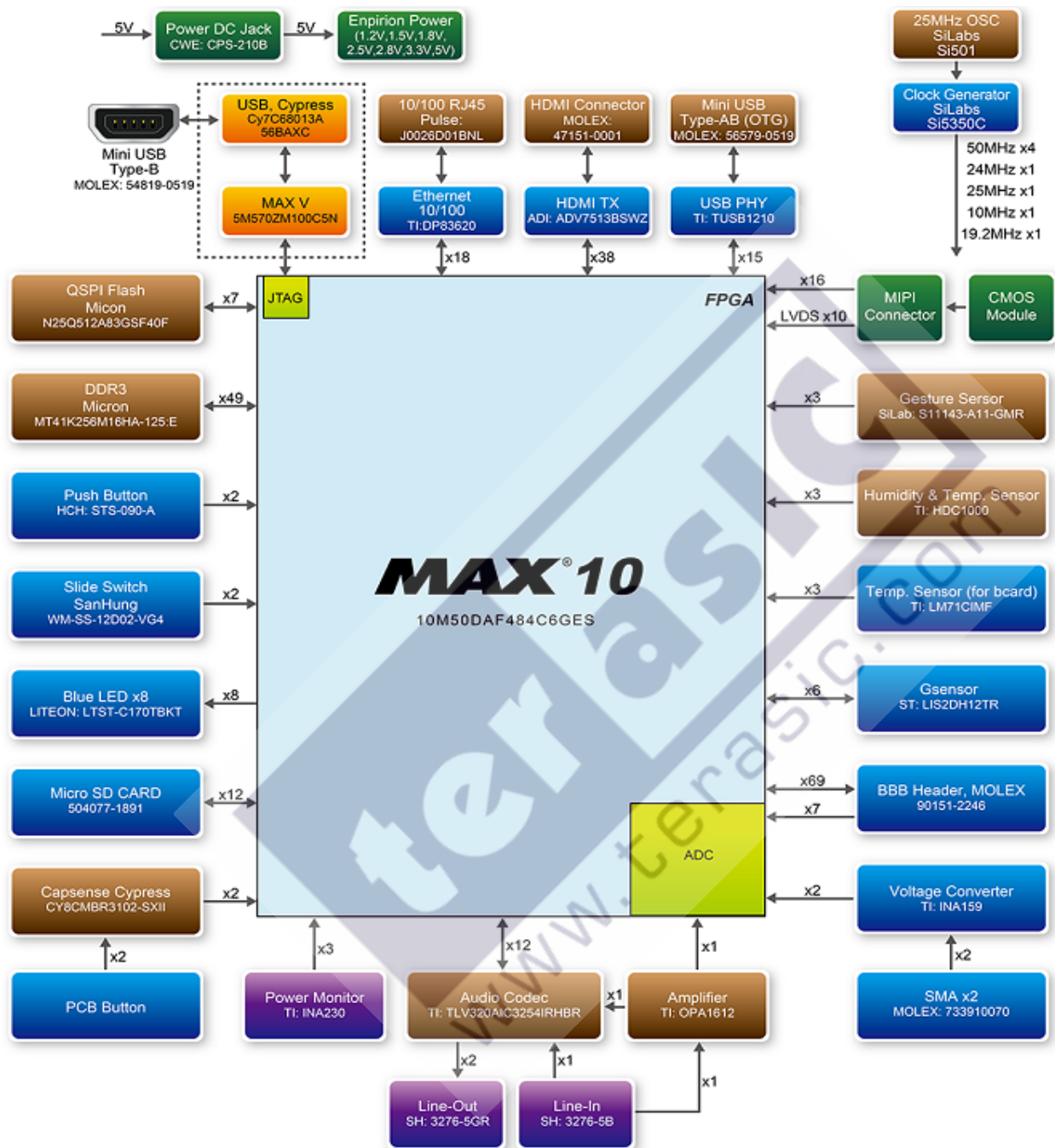


DECA

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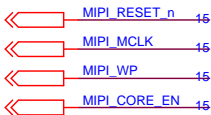


CAD Notes:
1. Put all the 1pF caps close to each MAX10 analog pin.
2. Route the analog input signal adjacent to the REFGND.

MIPI Interface



MIPI Control Interface



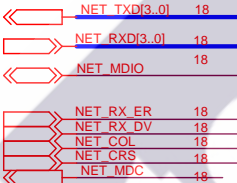
MIPI I2C Interface



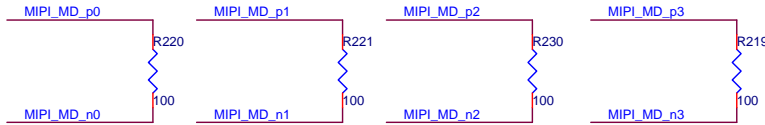
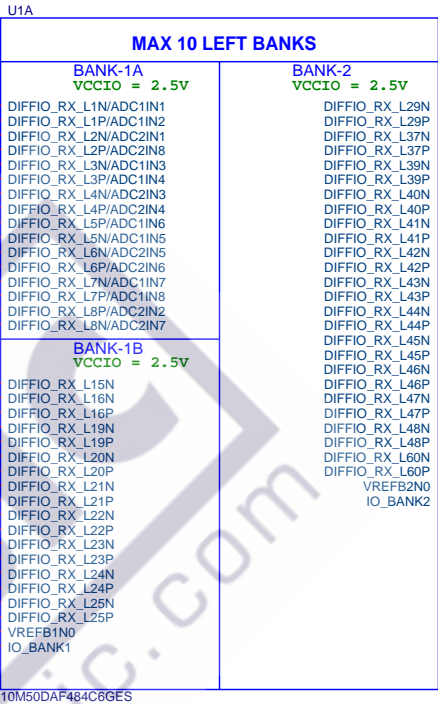
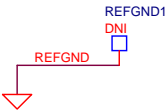
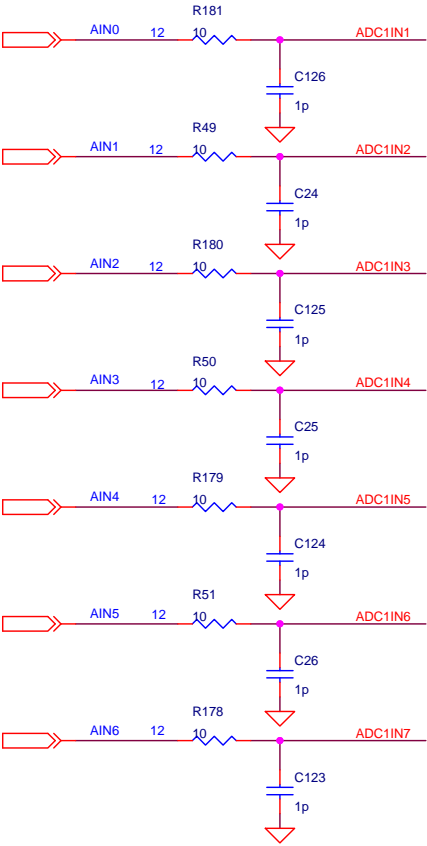
Audio LINE-IN to MAX10 ADC



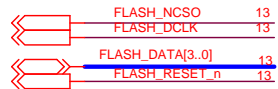
Ethernet



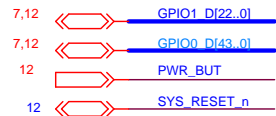
Header Analog Input



QSPI Flash



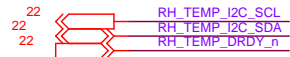
Header GPIO



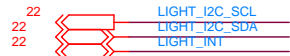
Temperature Sensor



Humidity and Temperature Sensor



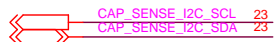
Gesture Sensor



Power Monitor



CapSense Buttons

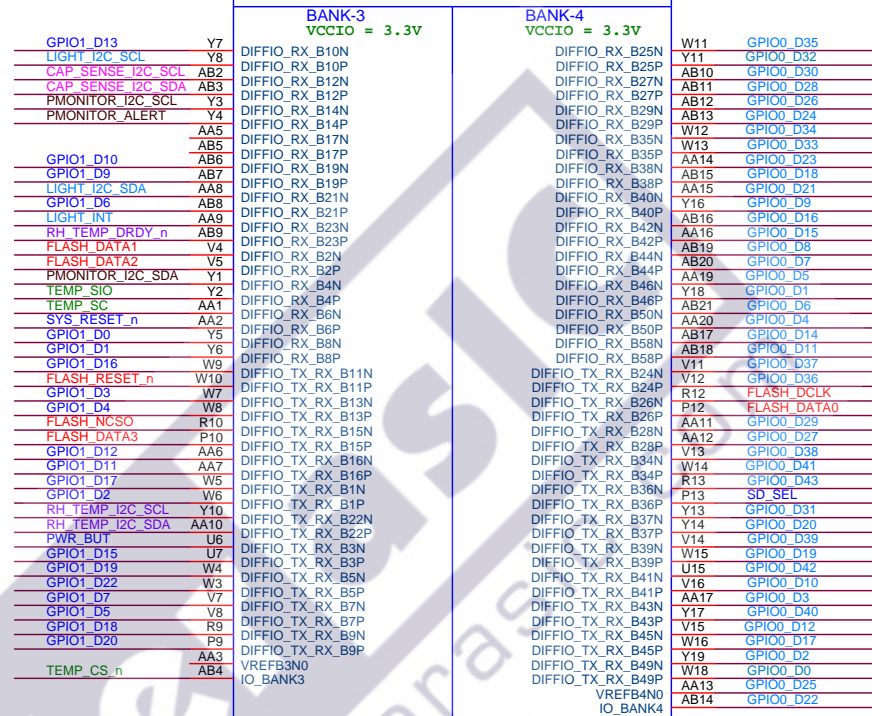


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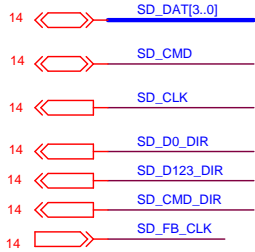
U1B

MAX 10 BOTTOM BANKS

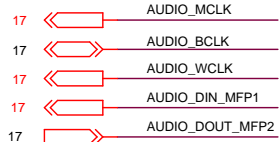


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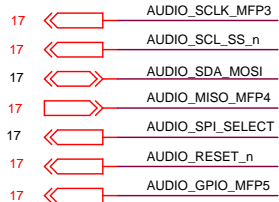
Micro SD Card



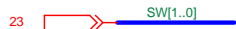
Audio CODEC Interface



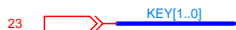
Audio Control Interface



SWITCH



KEY



VCC1P5_DDR3

U1C

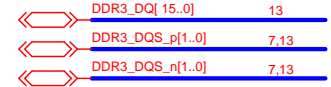
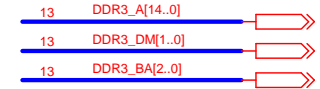
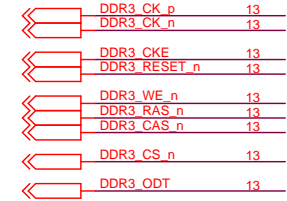
MAX 10 RIGHT BANKS

BANK-5
VCCIO = 1.5V

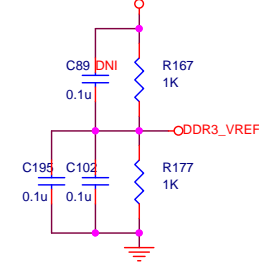
BANK-6
VCCIO = 1.5V

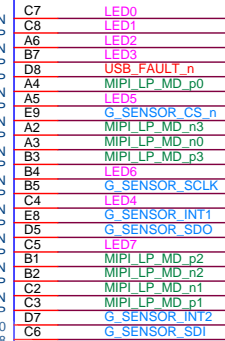
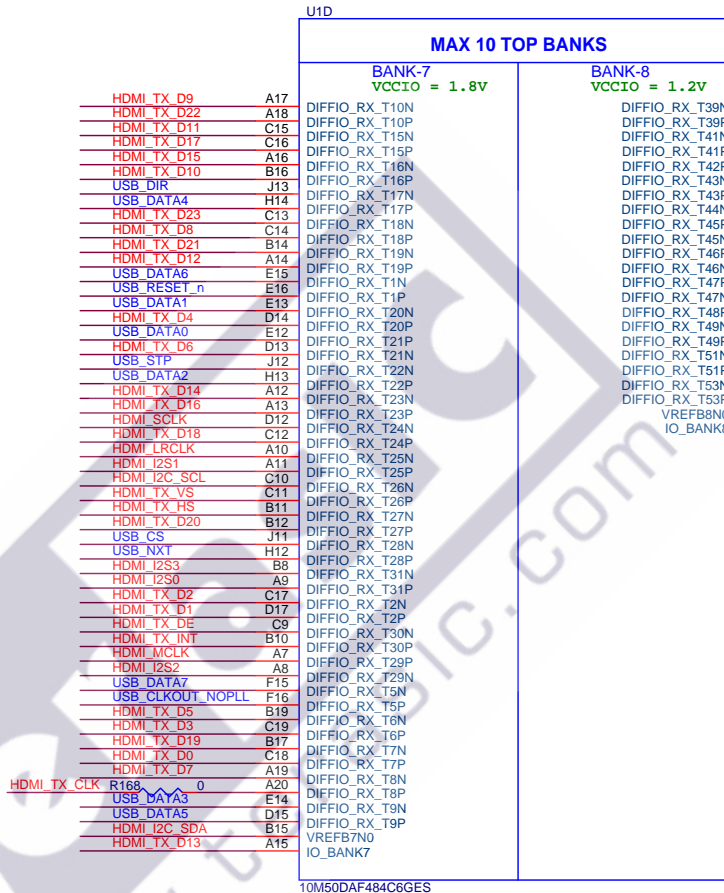
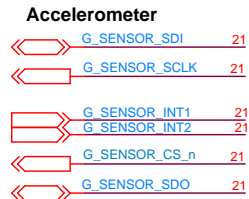
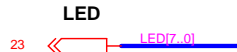
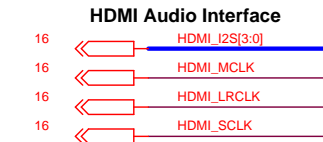
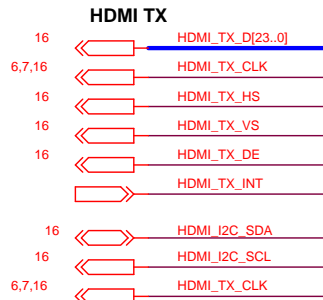
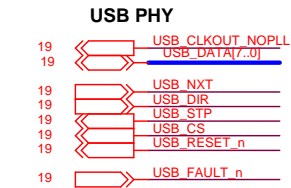
DDR3_RESET_n	U19	DIFFIO_RX_R19N	DIFFIO_RX_R39N
DDR3_A6	V18	DIFFIO_RX_R19P	DIFFIO_RX_R39P
	U18	DIFFIO_RX_R1P/RUP	DIFFIO_RX_R41N
DDR3_A9	W22	DIFFIO_RX_R1N/RDN	DIFFIO_RX_R41P
DDR3_A11	Y22	DIFFIO_RX_R20N	DIFFIO_RX_R42N
DDR3_A14	W20	DIFFIO_RX_R20P	DIFFIO_RX_R42P
DDR3_BA1	W19	DIFFIO_RX_R21N	DIFFIO_RX_R43N
DDR3_A4	Y21	DIFFIO_RX_R21P	DIFFIO_RX_R43P
DDR3_A8	Y20	DIFFIO_RX_R22N	DIFFIO_RX_R44N/DQ2R
DDR3_A7	U20	DIFFIO_RX_R22P	DIFFIO_RX_R44P/DQ2R
DDR3_A1	V20	DIFFIO_RX_R23N	DIFFIO_RX_R45N
DDR3_A13	V22	DIFFIO_RX_R23P	DIFFIO_RX_R45P
DDR3_A2	V21	DIFFIO_RX_R24N	DIFFIO_RX_R46N/DQ2R
AUDIO_BCLK	R14	DIFFIO_RX_R24P	DIFFIO_RX_R46P/DQ2R
AUDIO_WCLK	R15	DIFFIO_RX_R25N/DQ1R	DIFFIO_RX_R47P/DQ2R
SD_D0_DIR	T22	DIFFIO_RX_R25P/DQ1R	DIFFIO_RX_R47N/DQ2R
SD_CMD	T21	DIFFIO_RX_R26N	DIFFIO_RX_R48N
SD_DAT1	T18	DIFFIO_RX_R26P	DIFFIO_RX_R48P
SD_DAT2	T19	DIFFIO_RX_R27N/DQ1R	DIFFIO_RX_R49N
SD_DAT3	R20	DIFFIO_RX_R27P/DQ1R	DIFFIO_RX_R49P
SD_CLK	T20	DIFFIO_RX_R28N/DQ1R	DIFFIO_RX_R51N/DQ2R
SD_CMD_DIR	U22	DIFFIO_RX_R28P/DQ1R	DIFFIO_RX_R51P/DQ2R
SD_D123_DIR	U21	DIFFIO_RX_R29N	DIFFIO_RX_R52N/DQ2R
	AA22	DIFFIO_RX_R29P	DIFFIO_RX_R52P/DQ2R
	AA21	DIFFIO_RX_R2N	DIFFIO_RX_R53N
AUDIO_MCLK	P14	DIFFIO_RX_R2P	DIFFIO_RX_R53P
AUDIO_DIN_MFP1	P15	DIFFIO_RX_R30N/DQ1R	DIFFIO_RX_R54N
AUDIO_SPI_SELECT	N22	DIFFIO_RX_R30P/DQ1R	DIFFIO_RX_R54P
AUDIO_SDA_MOSI	P21	DIFFIO_RX_R31N	DIFFIO_RX_R55N/DQS3R
AUDIO_DOUT_MFP2	P18	DIFFIO_RX_R31P	DIFFIO_RX_R55P/DQS3R
SD_DAT0	R18	DIFFIO_RX_R32N/DQS1R	DIFFIO_RX_R56N
AUDIO_SCL_SS_n	P20	DIFFIO_RX_R32P/DQS1R	DIFFIO_RX_R56P
AUDIO_SCLK_MFP3	P19	DIFFIO_RX_R33N/DQ1R	DIFFIO_RX_R57N/DQ3R
	L22	DIFFIO_RX_R33P/DQ1R	DIFFIO_RX_R57P/DQ3R
AUDIO_RESET_n	M21	DIFFIO_RX_R34N	DIFFIO_RX_R58N/DQ3R
AUDIO_GPIO_MFP5	M22	DIFFIO_RX_R34P	DIFFIO_RX_R58P/DQ3R
AUDIO_MISO_MFP4	N21	DIFFIO_RX_R35N	DIFFIO_RX_R59N
	P22	DIFFIO_RX_R35P	DIFFIO_RX_R59P
DDR3_VREF	R22	VREFB5N0	DIFFIO_RX_R60N
SD_FB_CLK		IO_BANK5	DIFFIO_RX_R60P

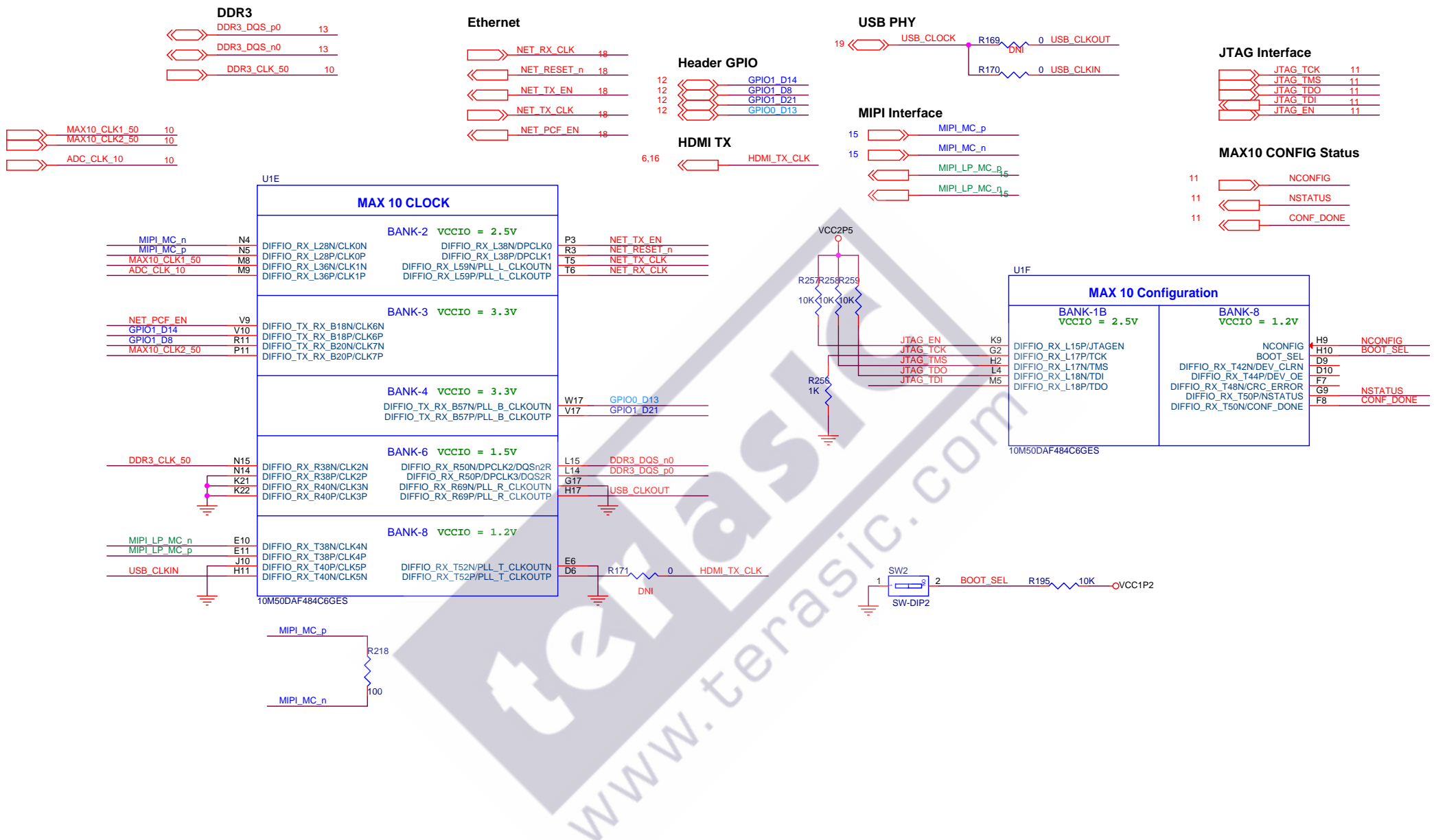
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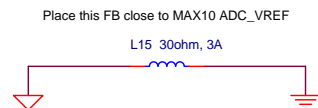
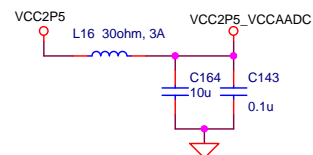


VCC1P5_DDR3

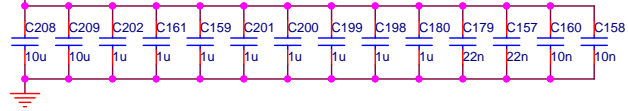




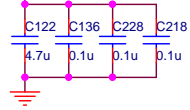




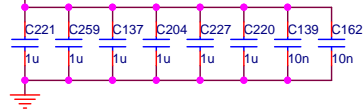
VCC1P2_VCC



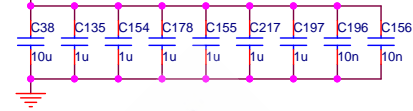
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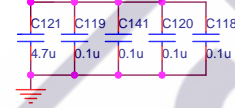
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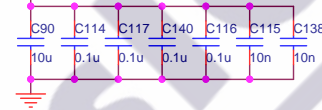
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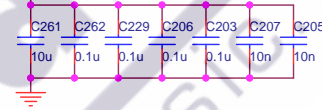
VCC1P2



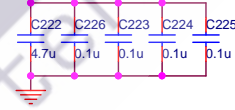
VCC1P8




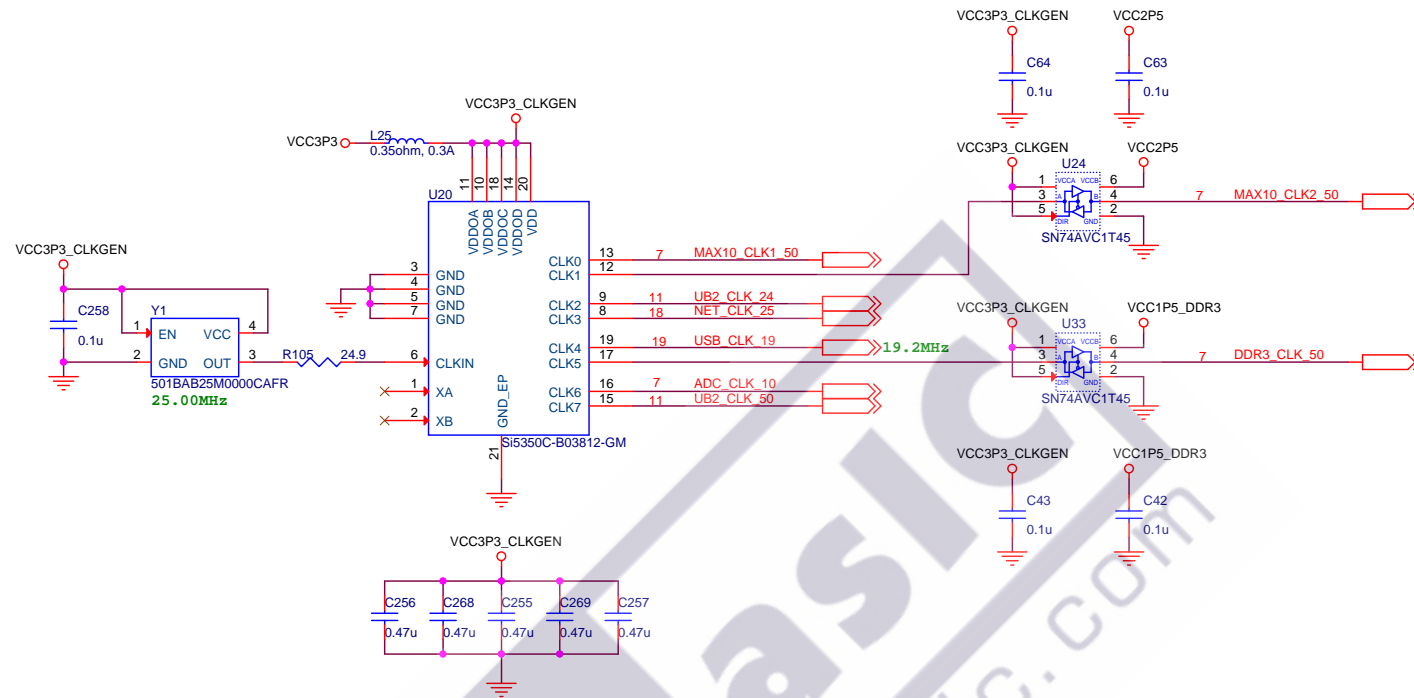
VCC2P5




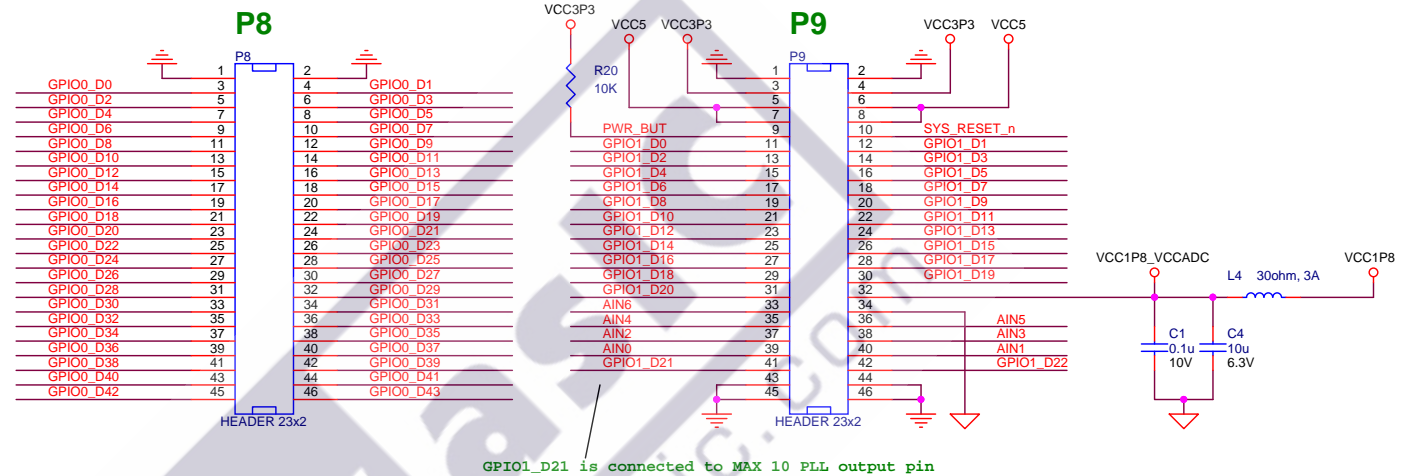
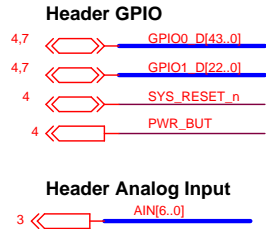
VCC3P3

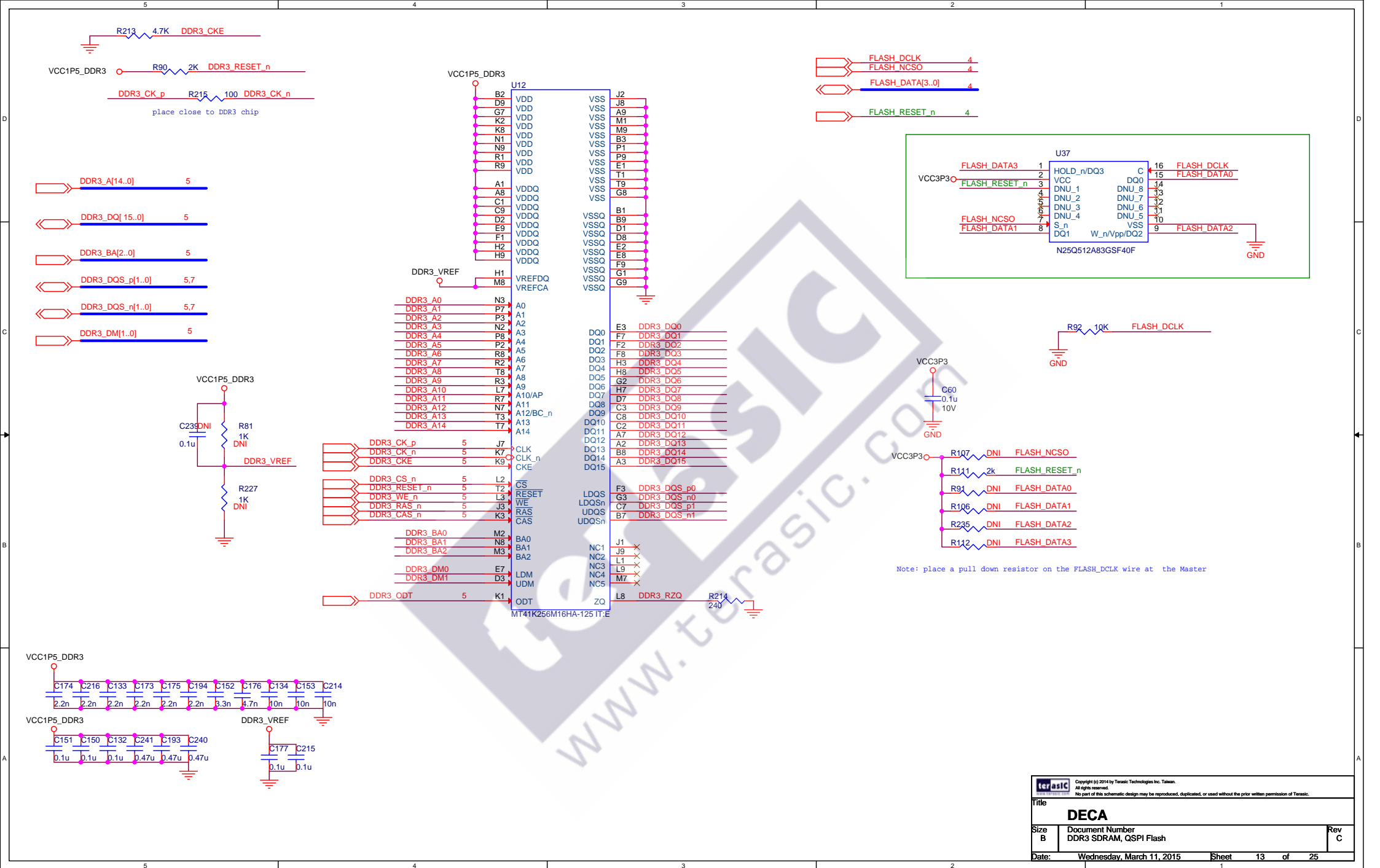


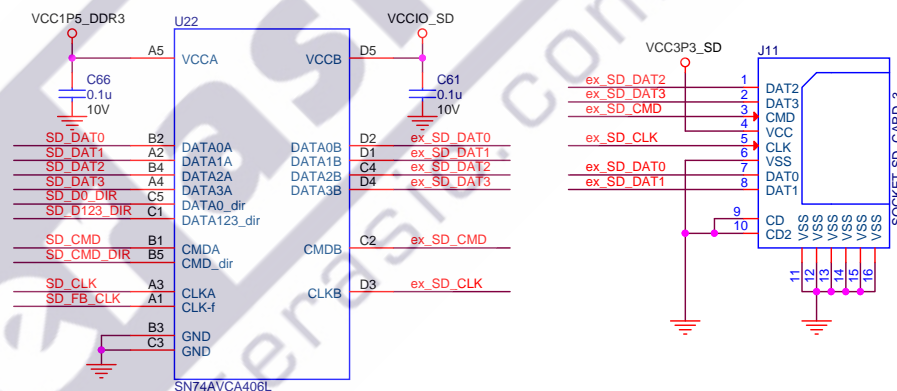
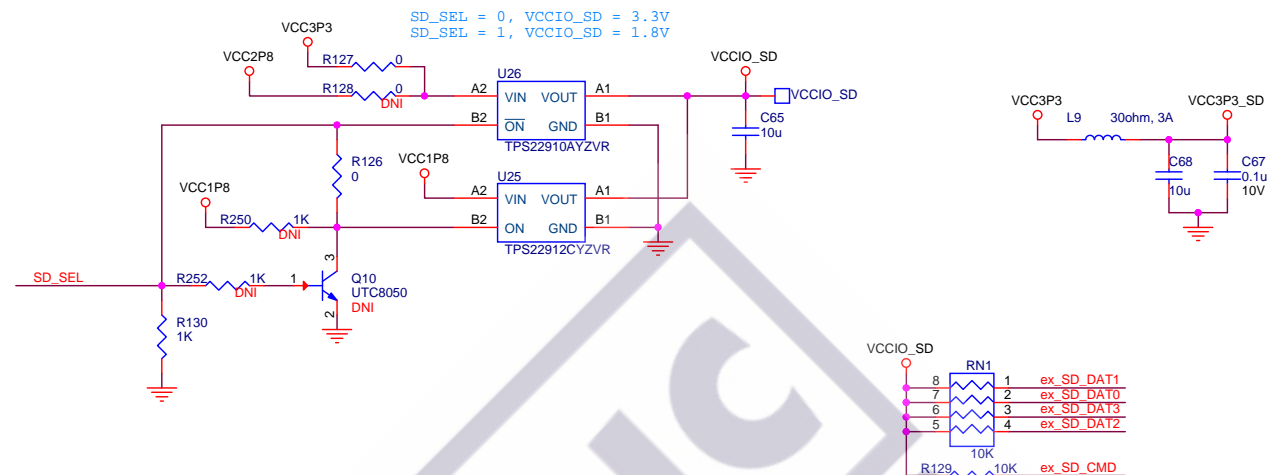
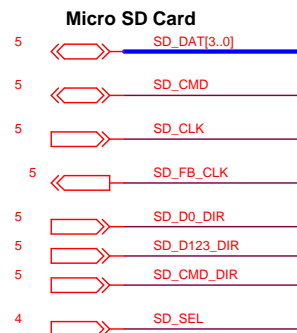
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Size	Document Number		Rev		
B	MAX10 Decoupling		C		
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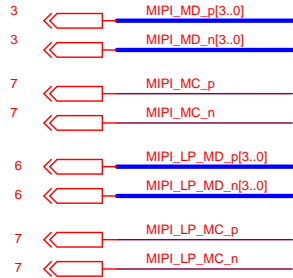
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Size	Document Number	Rev
B	Oscillator, Clock Generator	C
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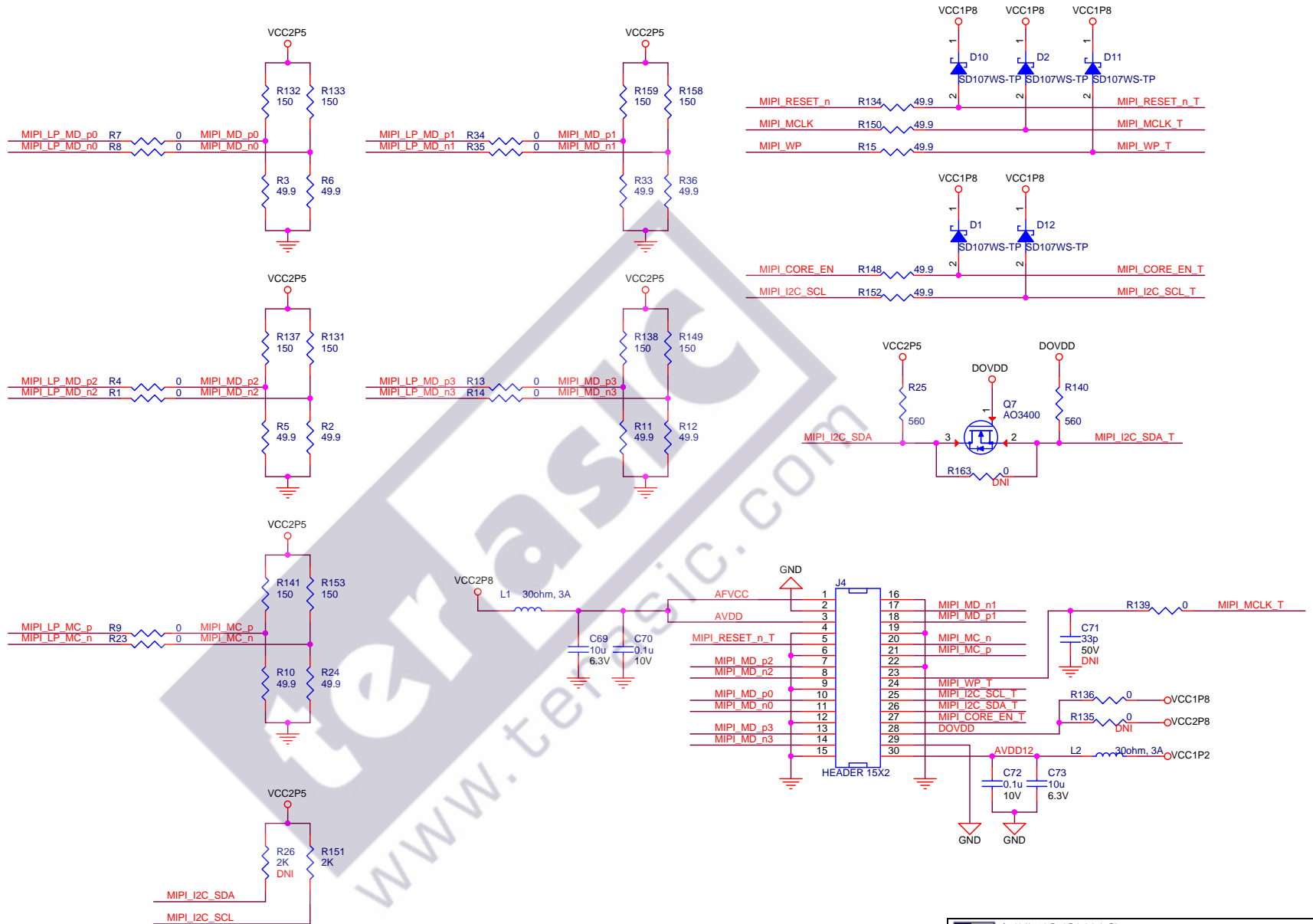
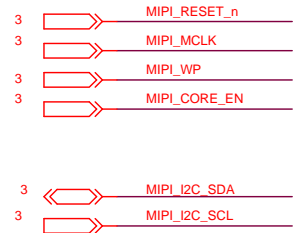




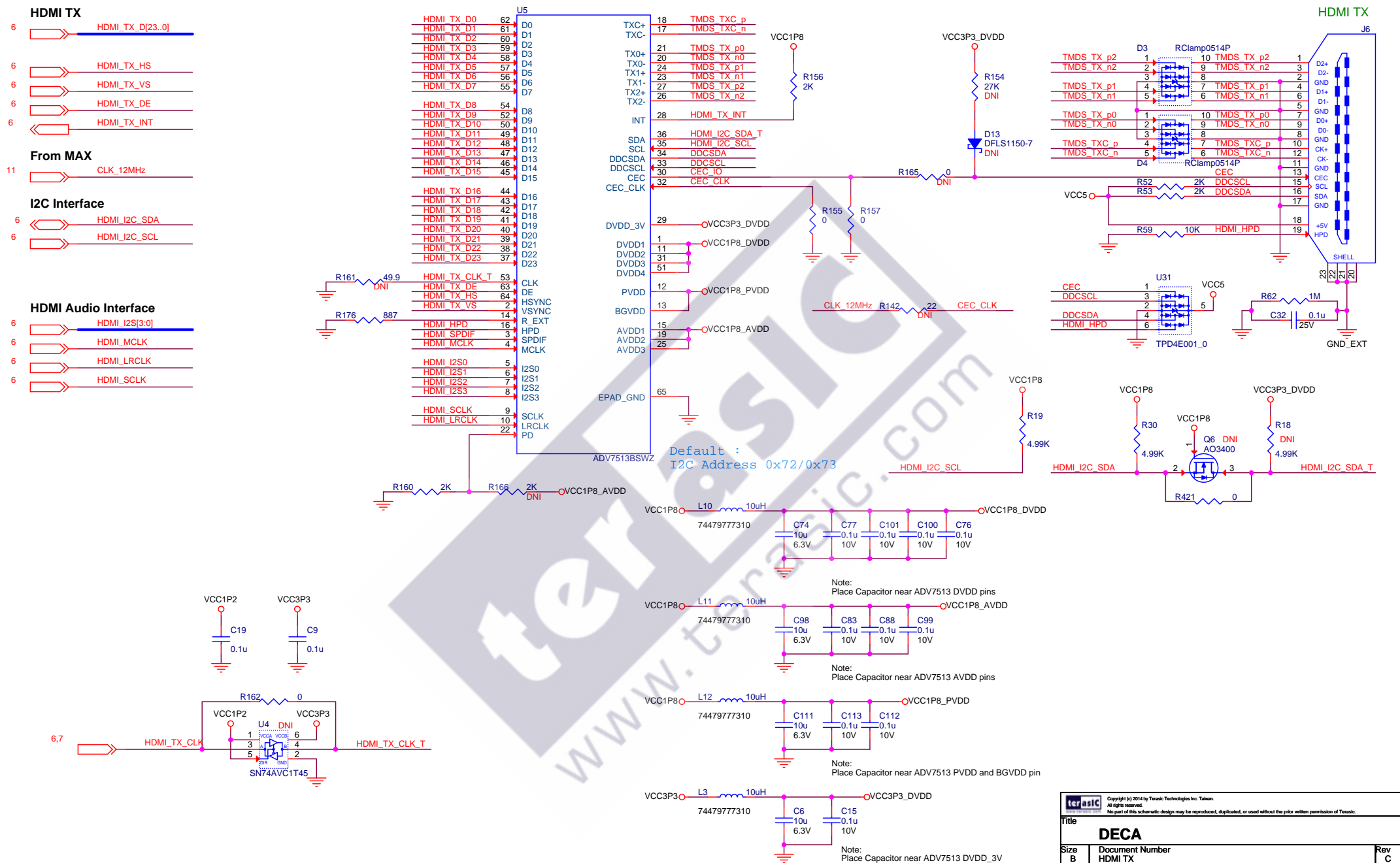
MIPI Interface

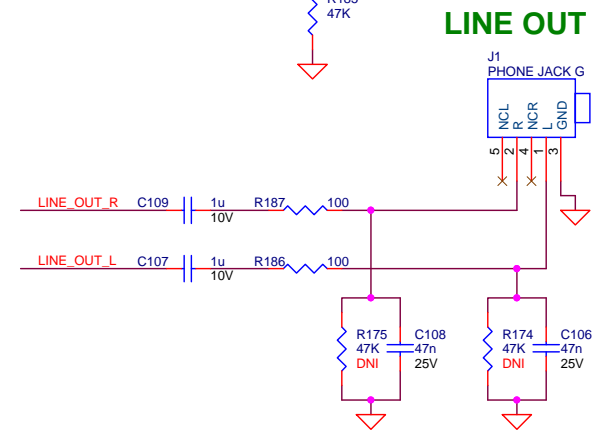
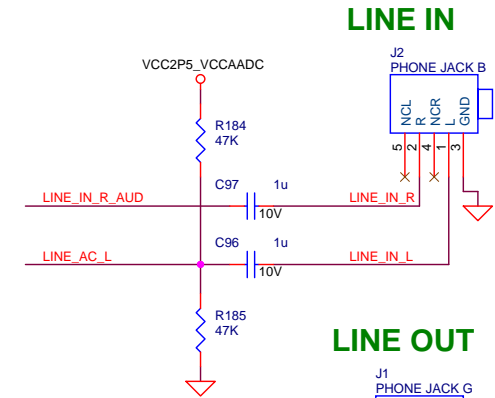
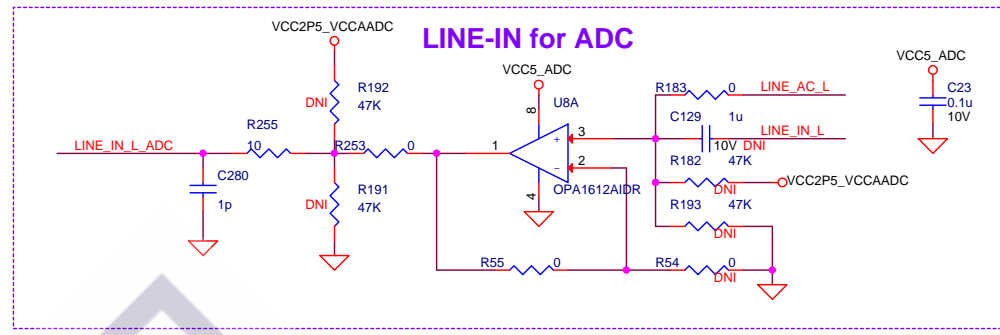
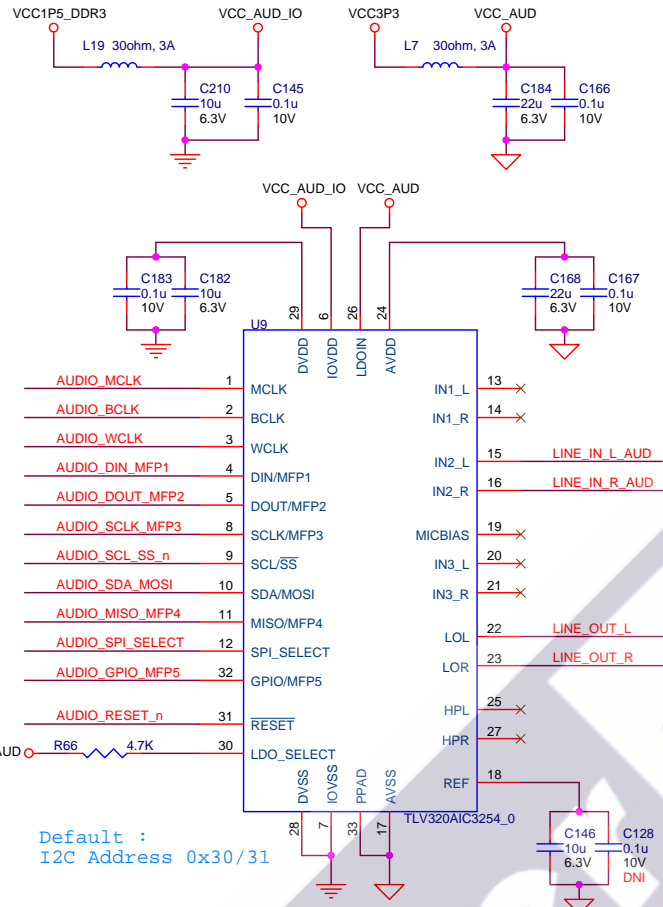
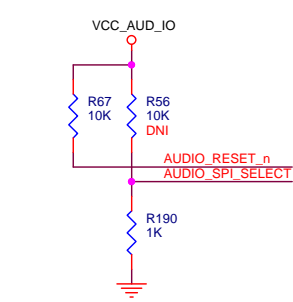
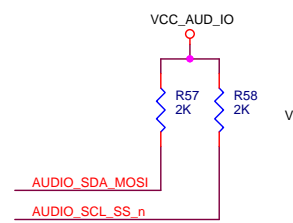
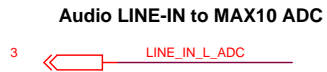
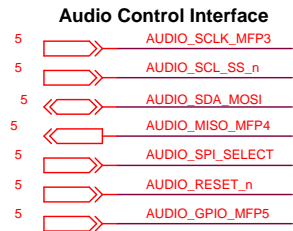
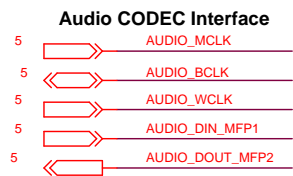


MIPI Control Interface



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D
C
B
A

7

A

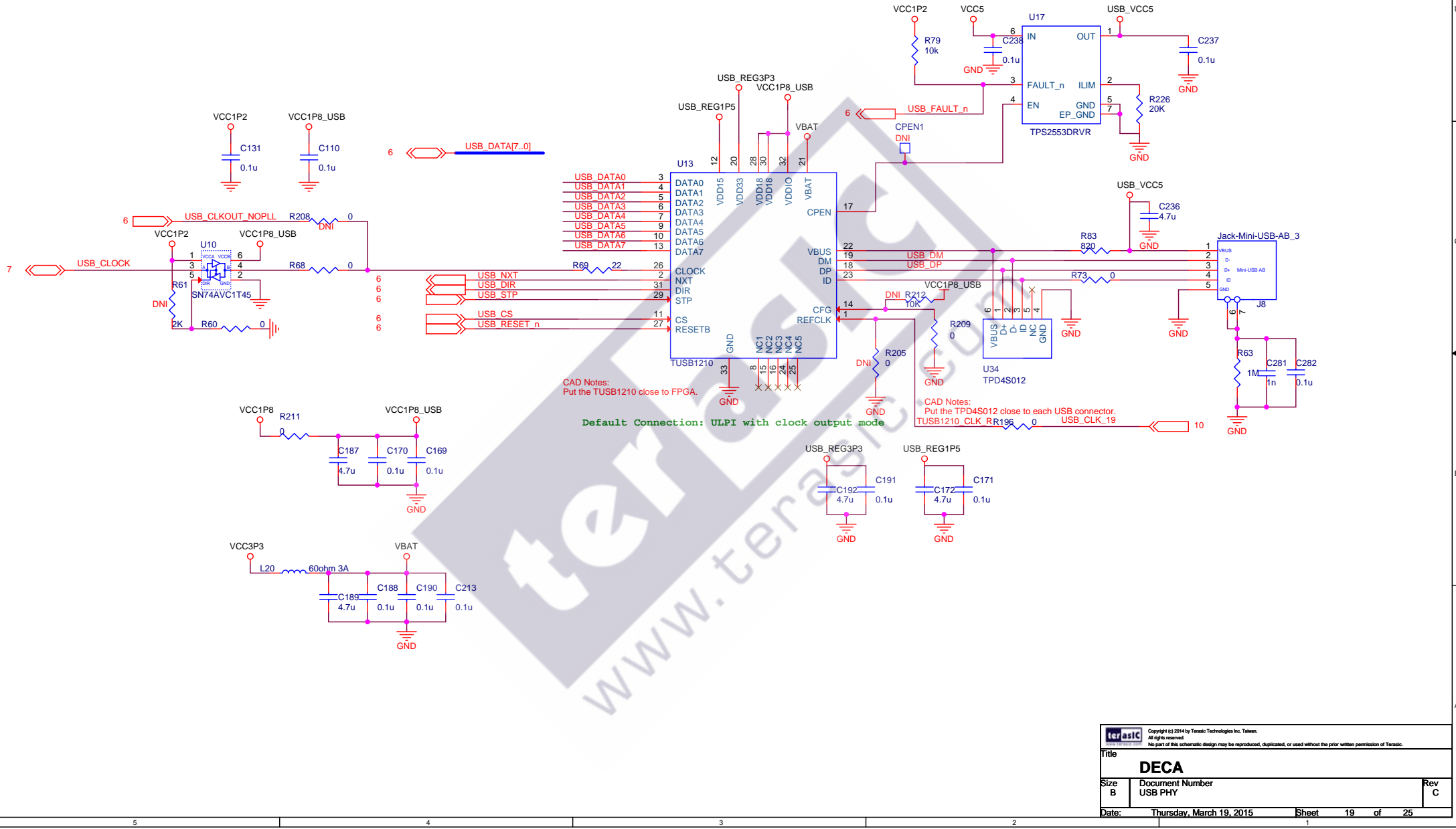
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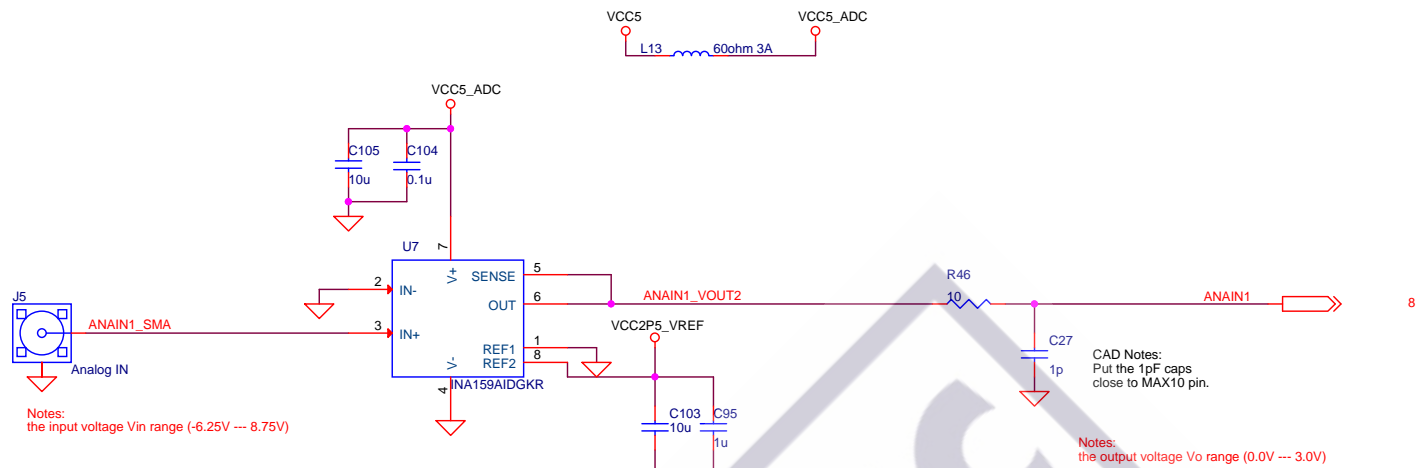
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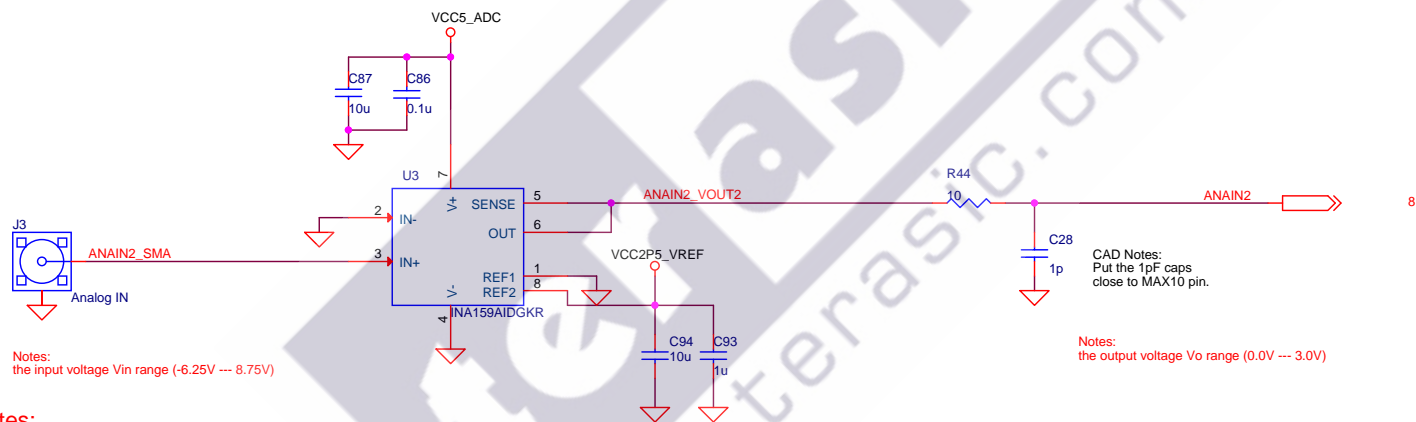
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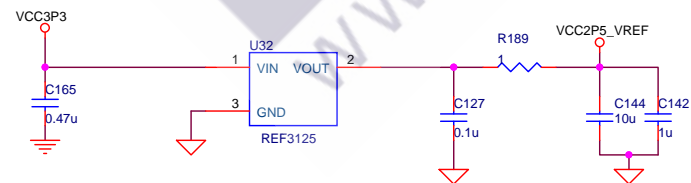
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Title		
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Notes:
Amplifier output voltage $V_o = (6.25 + V_{in})/5$



Notes:
Amplifier output voltage $V_o = (6.25 + V_{in})/5$

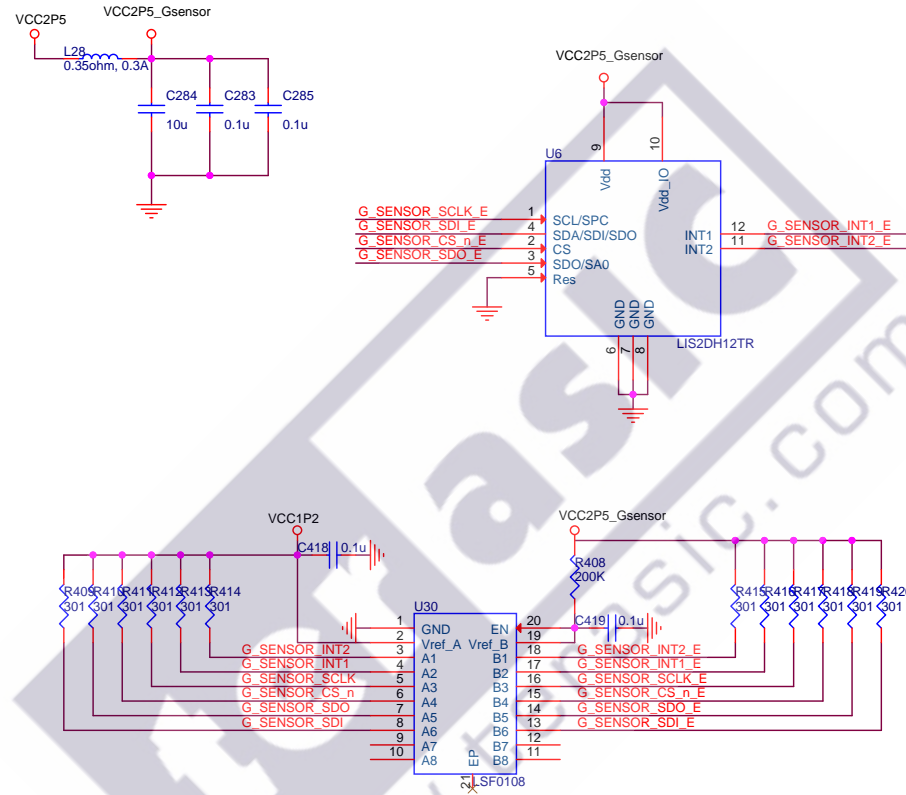


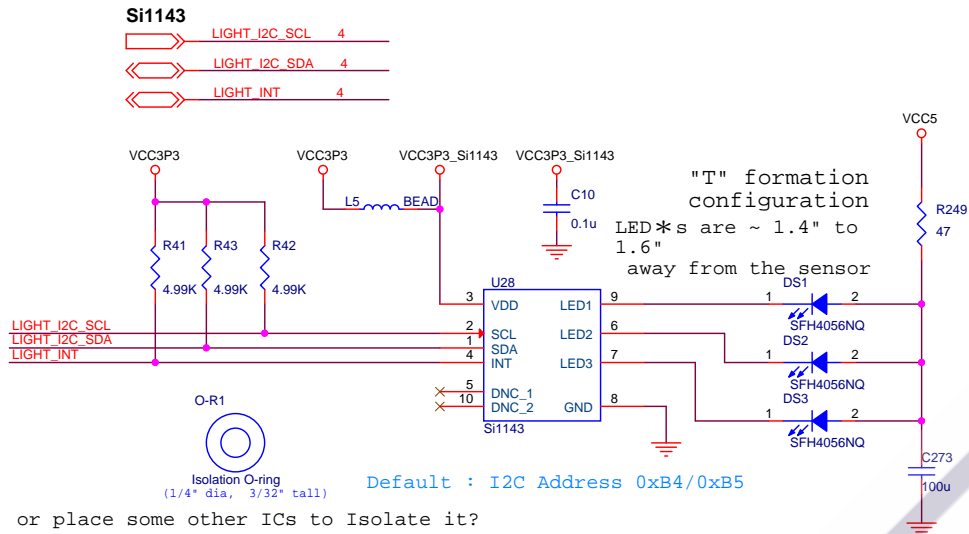
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Title	DECA	
Size B	Document Number SMA Connectors & Difference Amplifier	Rev C
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Digital Gsensor

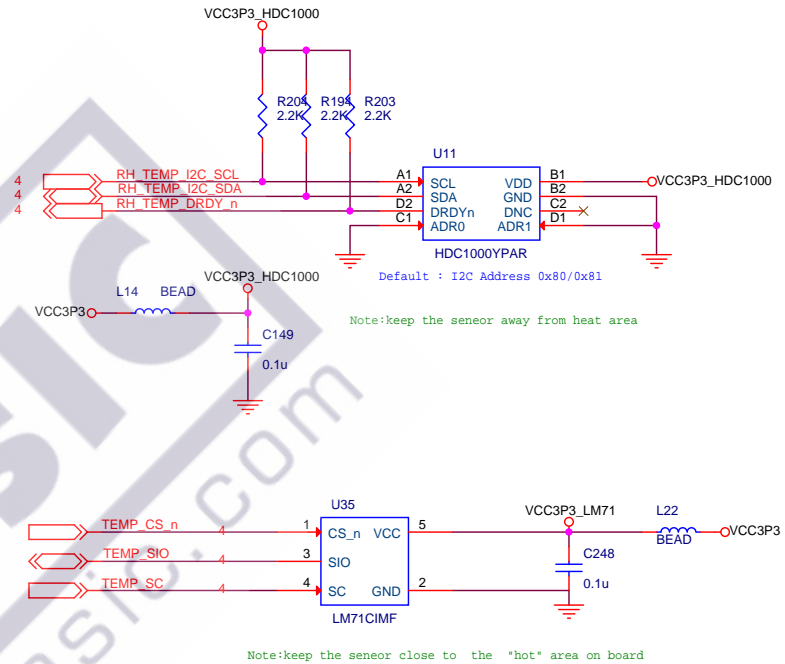
Accelerometer

G_SENSOR_SDI	6
G_SENSOR_SCLK	6
G_SENSOR_INT1	6
G_SENSOR_INT2	6
G_SENSOR_CS_n	6
G_SENSOR_SDO	6





Proximity/Ambient Light Sensor



Power up Sequence:
 5V -->3.3V--->1.5V--->1.8V
 --->2.5V--->1.2V--->2.8V

