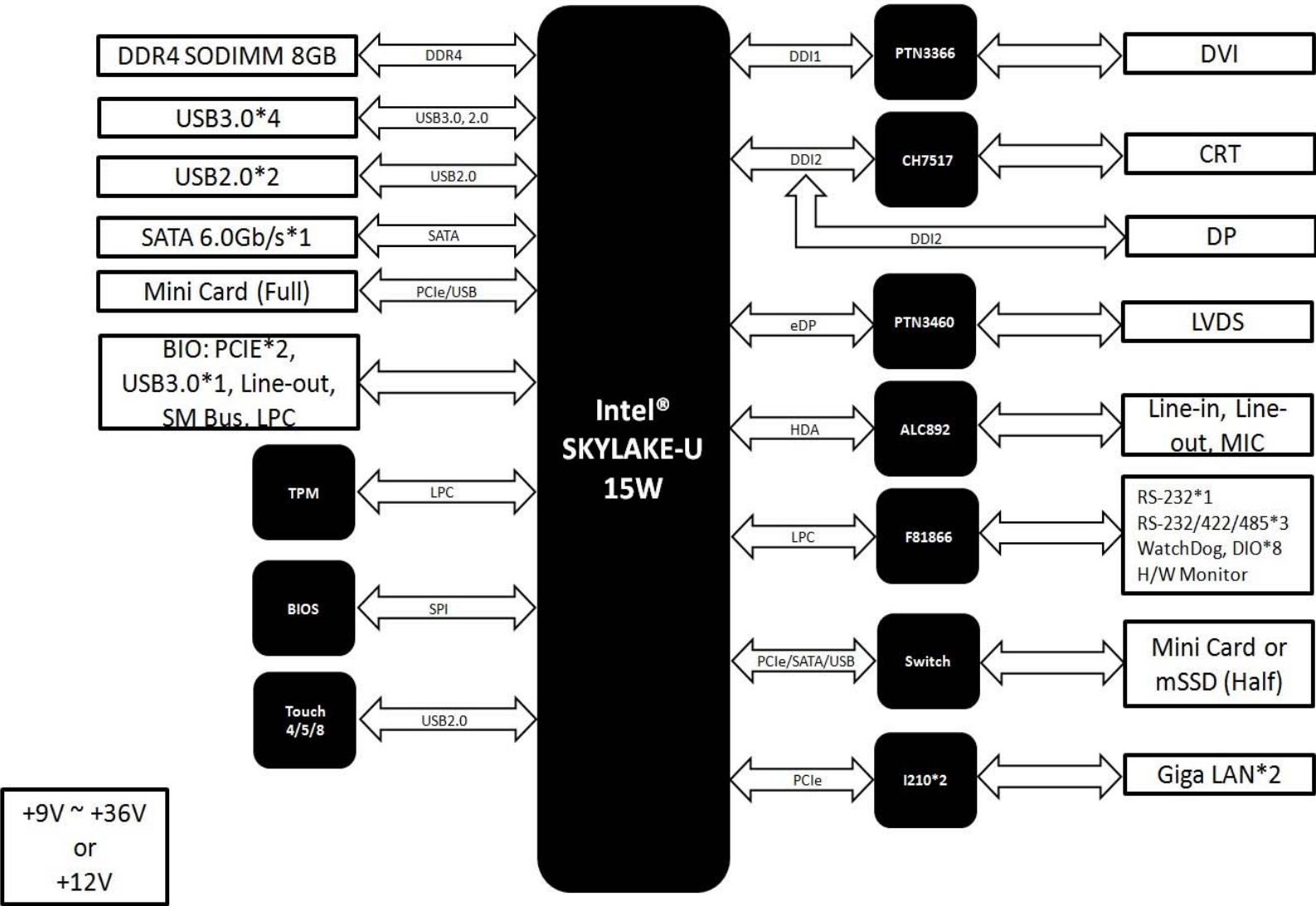
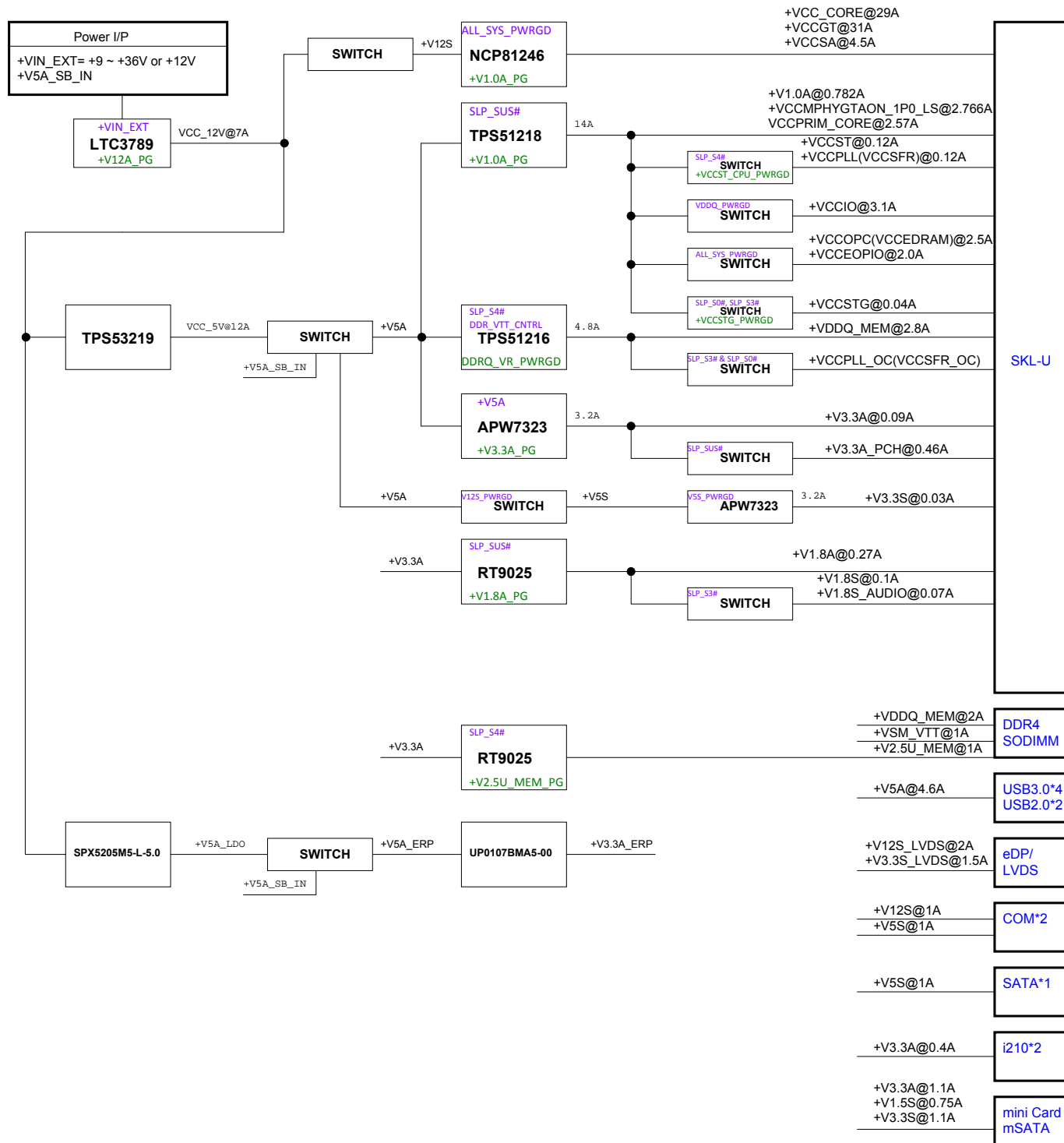
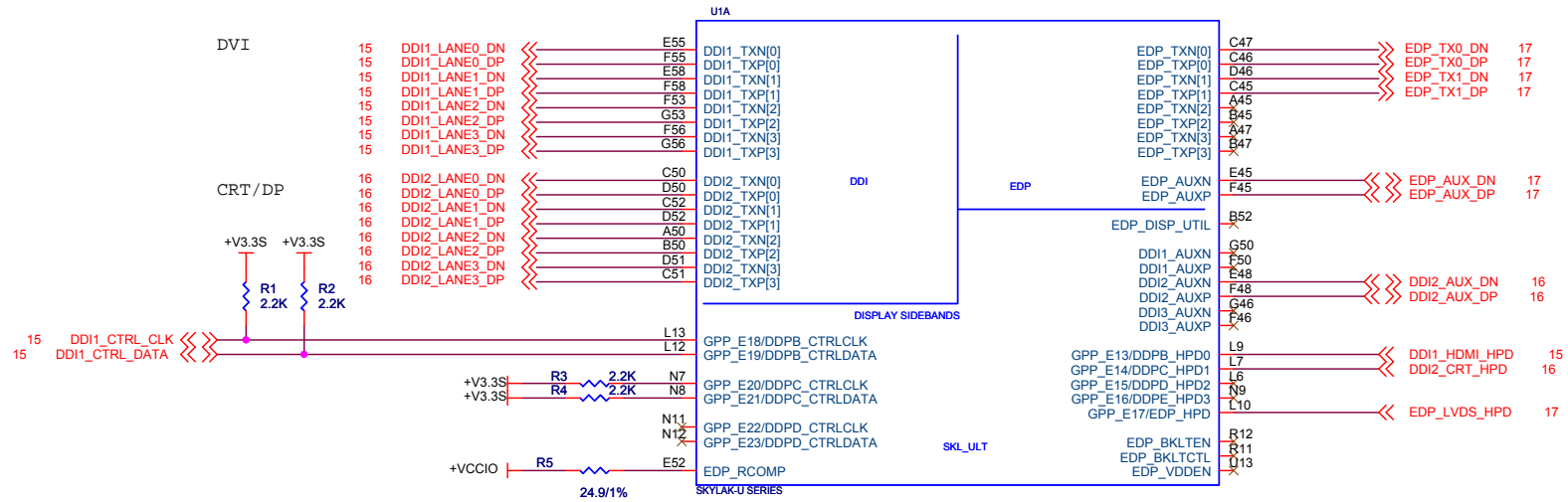


GENE-SKU6



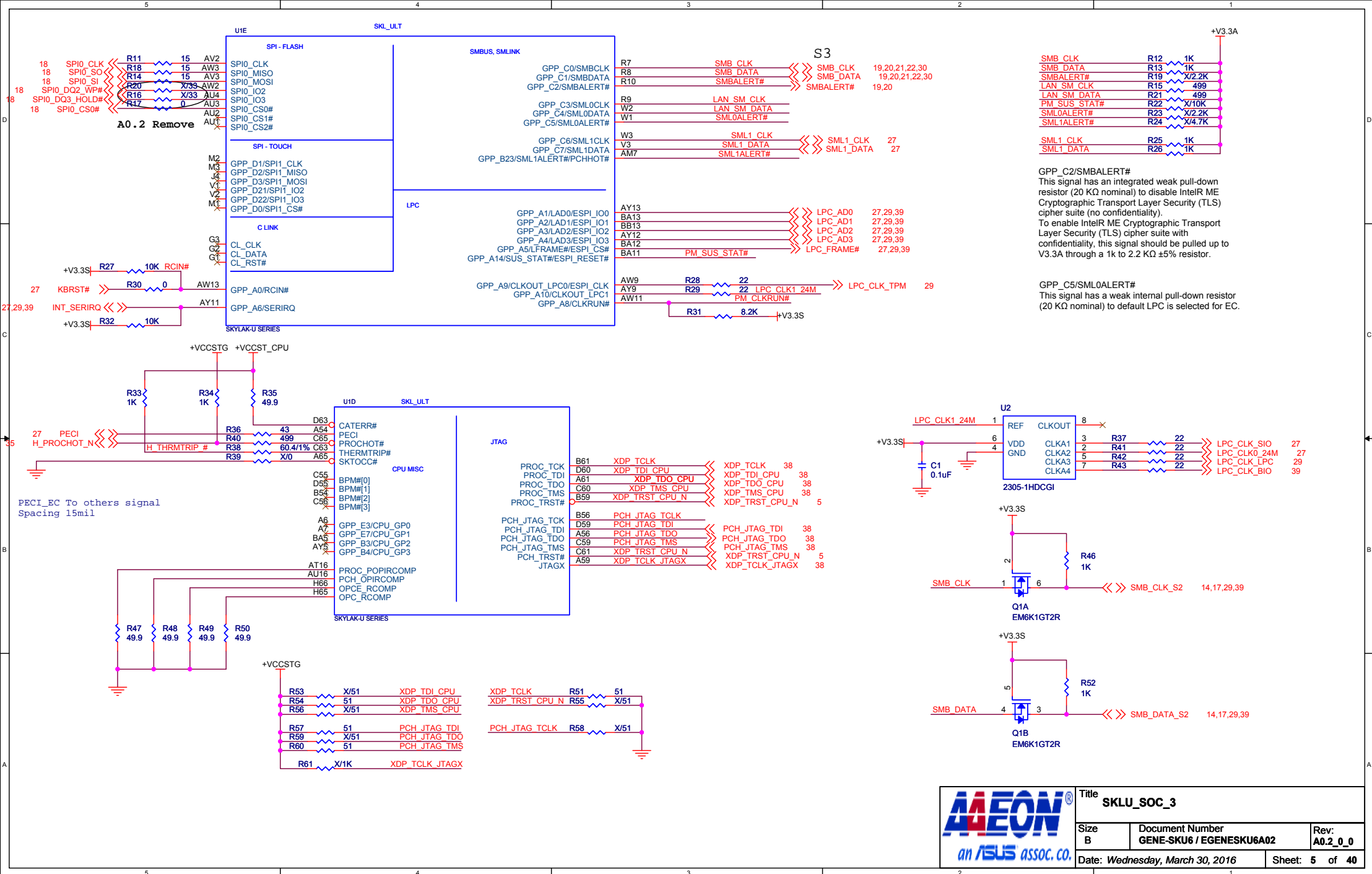
Title Block diagram		
Size B	Document Number GENE-SKU6 / EGENESKU6A02	Rev: A0.2_0_0
Date: Wednesday, March 30, 2016		Sheet: 1 of 40

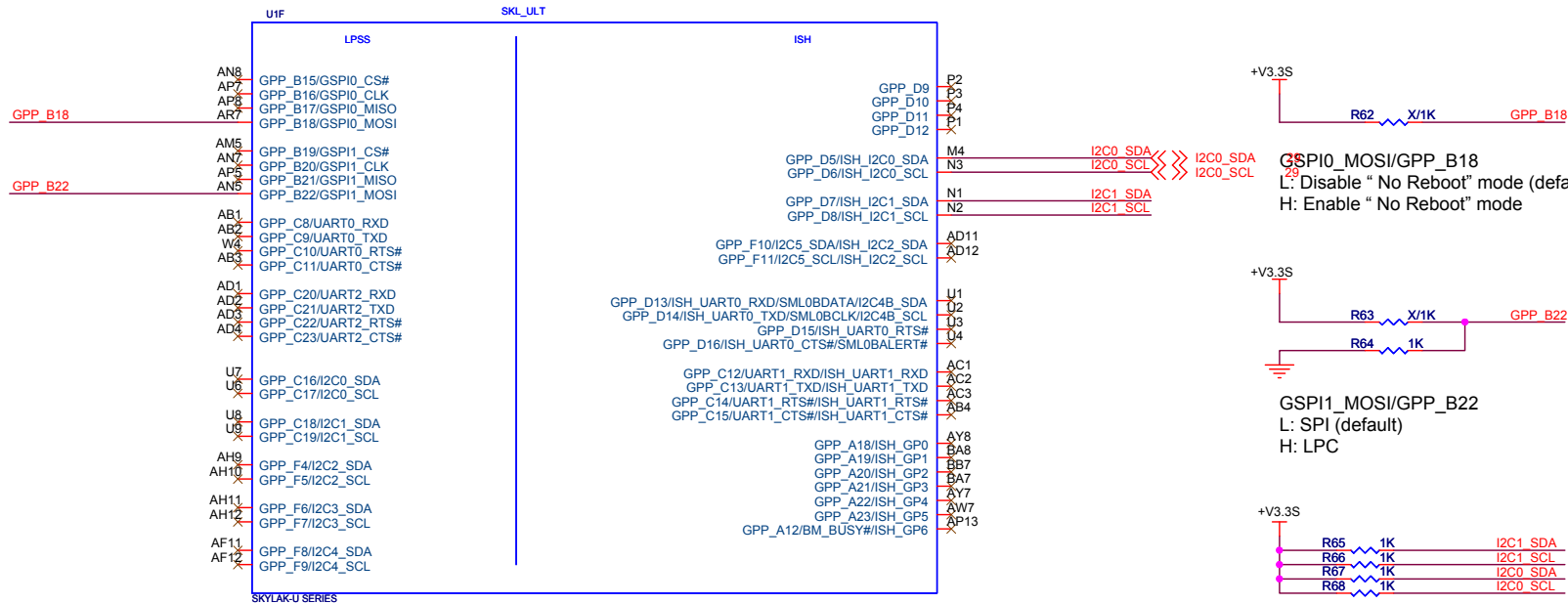




Title SKLU_SOC-1(DP/eDP)		
Size B	Document Number GENE-SKU6 / EGENESKU6A02	Rev: A0.2_0_0
Date: Wednesday, March 30, 2016		Sheet: 3 of 40



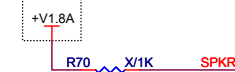




GSP10\_MOSI/GPP\_B18  
L: Disable "No Reboot" mode (default)  
H: Enable "No Reboot" mode

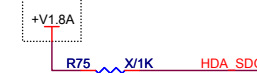
GSP11\_MOSI/GPP\_B22  
L: SPI (default)  
H: LPC

#### A0.2 modify power name

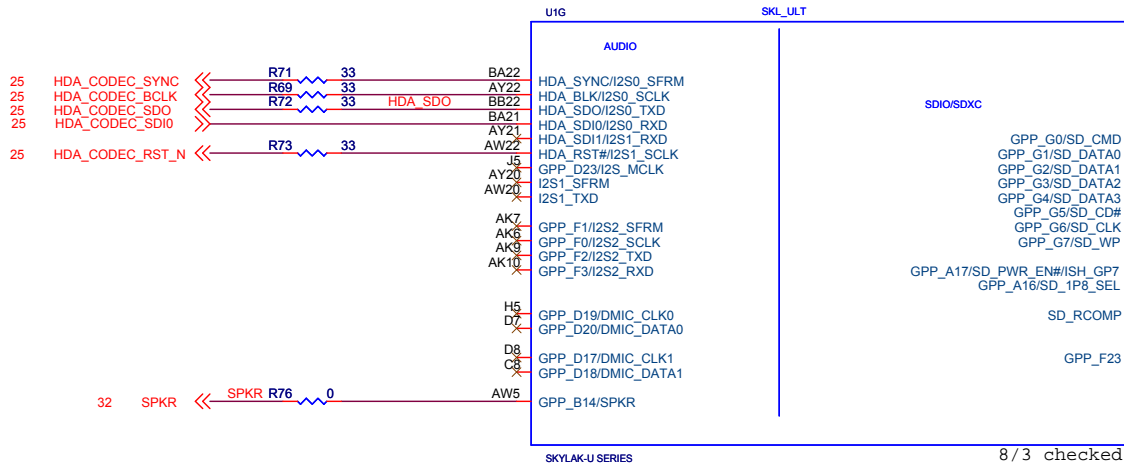


SPKR/GPP\_B14  
This signal has an integrated weak pull-down resistor (20 KΩ nominal) to disable Top-Block Sway by default.  
To enable Top-Block Swap, this signal should be pulled up to V3.3S through a 1k to 2.2 KΩ ±5% resistor.

#### A0.2 modify power name



FLASH DESCRIPTOR SECURITY OVERRIDE  
HIGH: OVERRIDEN  
LOW: SECURITY MEASURES NOT OVERRIDEN  
WEAK INTERNAL PD



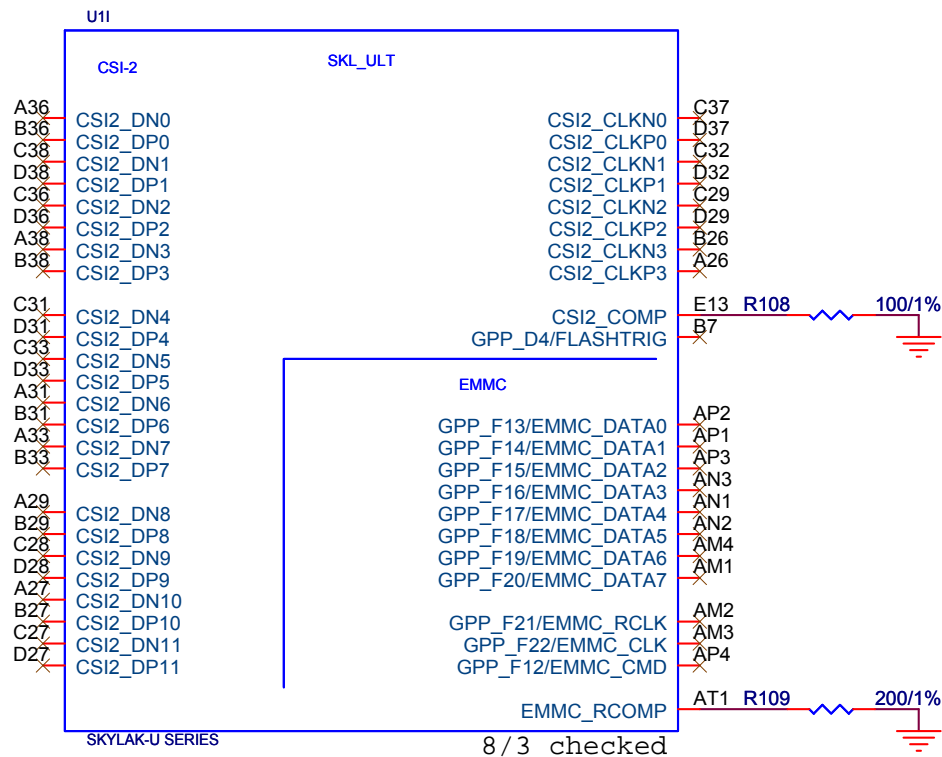
8/3 checked



Title SKLU_SOC_4		
Size B	Document Number GENE-SKU6 / EGENESKU6A02	Rev: A0.2_0_0
Date: Wednesday, March 30, 2016		Sheet: 6 of 40

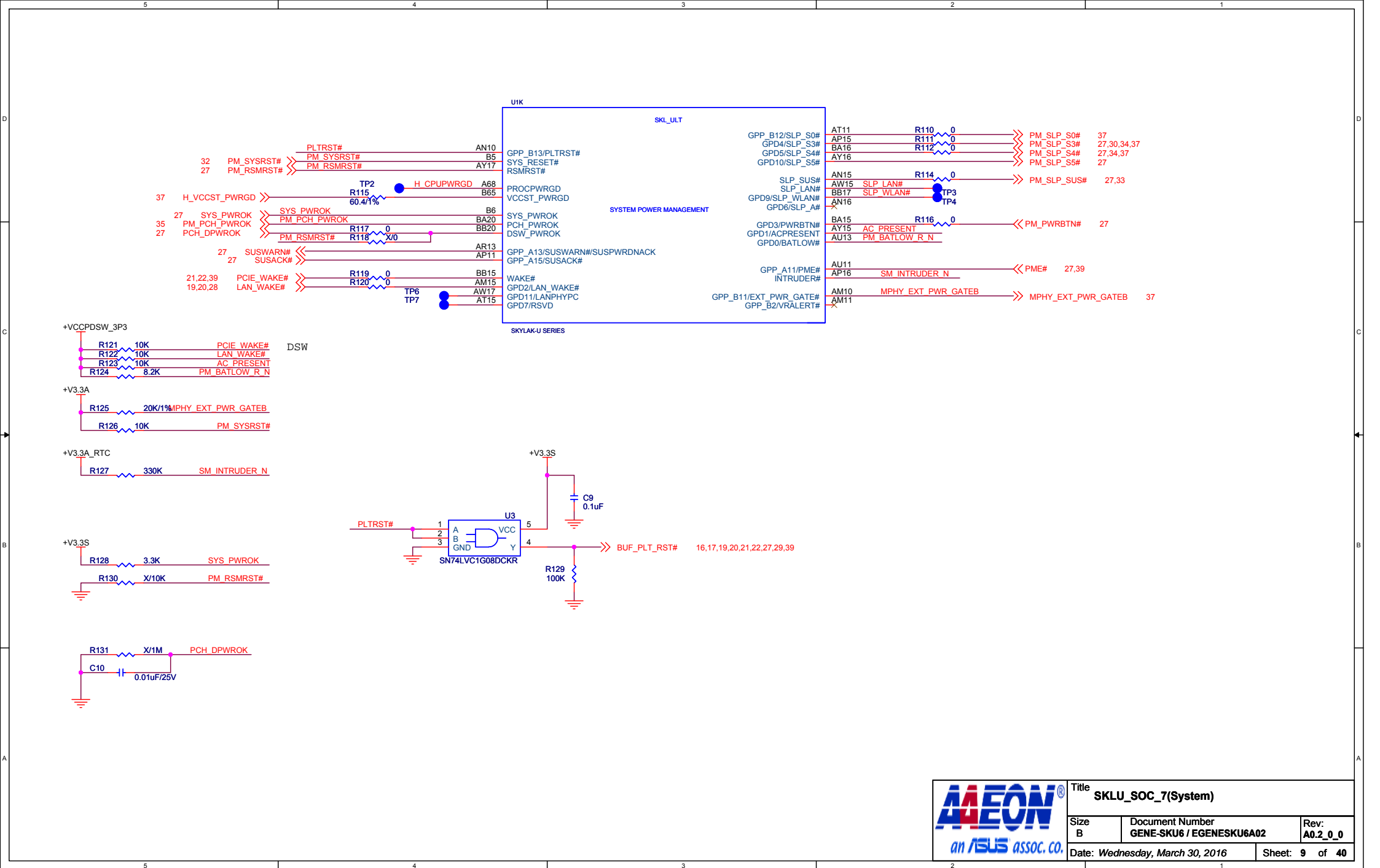






Title <b>SKLU_SOC_6(eMMC)</b>		
Size A	Document Number <b>GENE-SKU6 / EGENESKU6A02</b>	Rev: <b>A0.2_0_0</b>
Date: <i>Wednesday, March 30, 2016</i>		Sheet: <b>8</b> of <b>40</b>

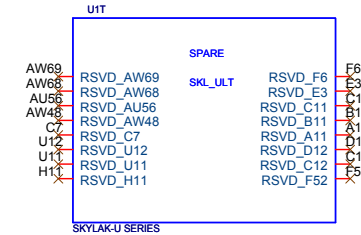
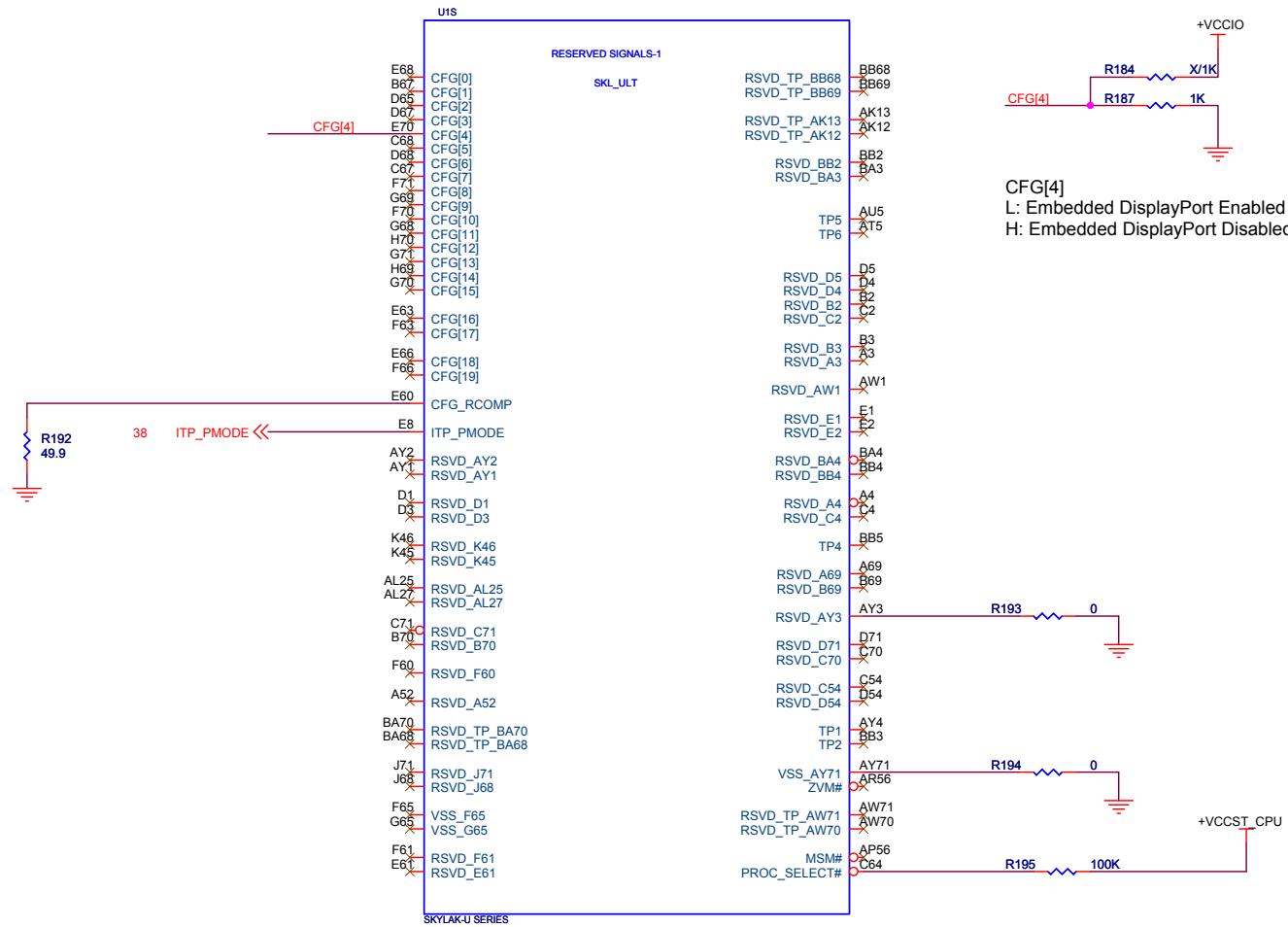






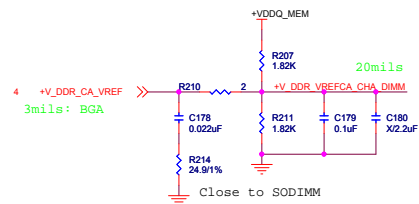
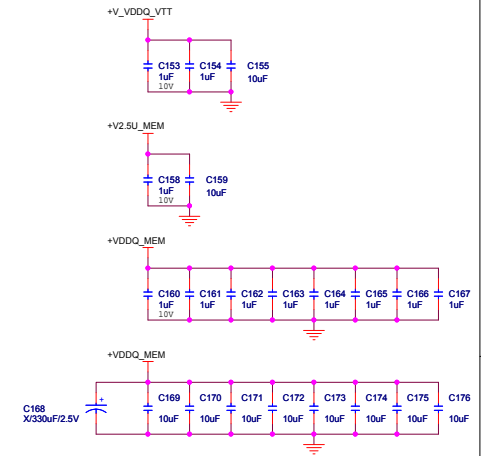
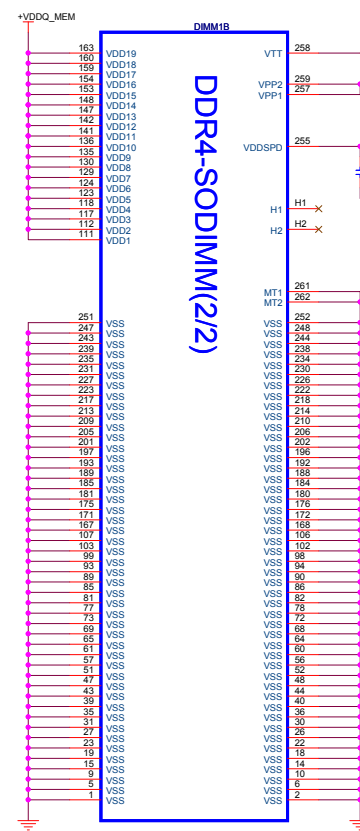
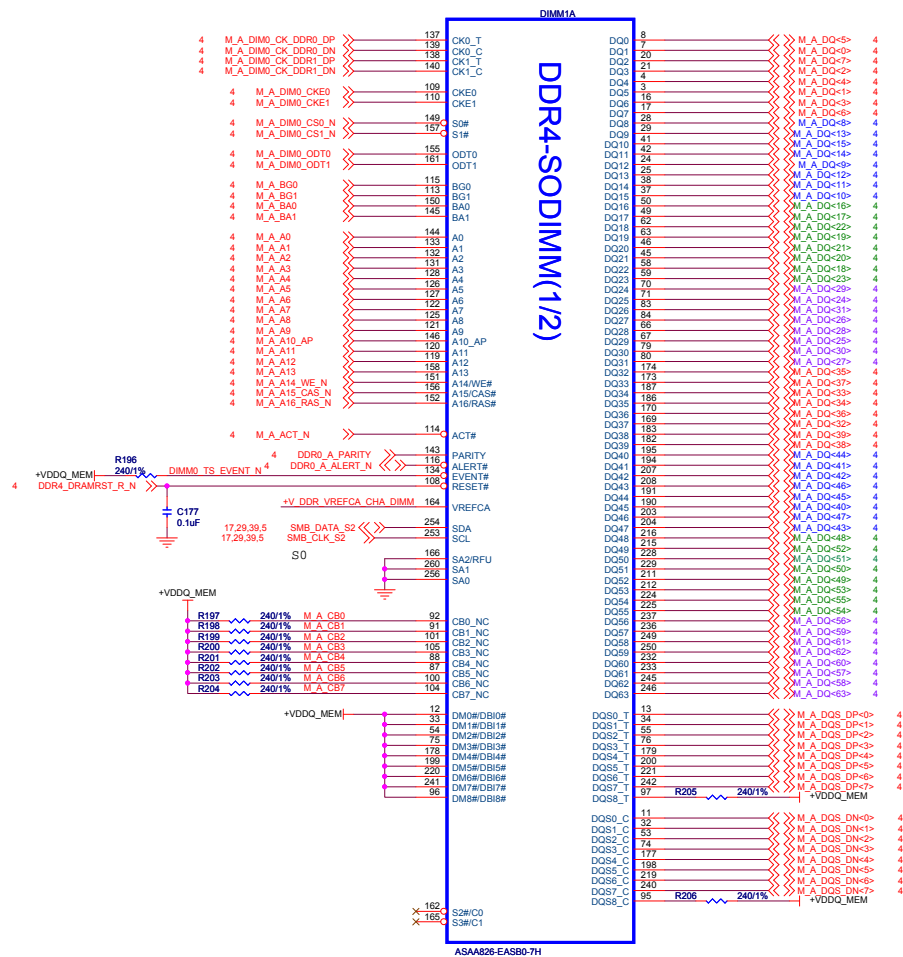


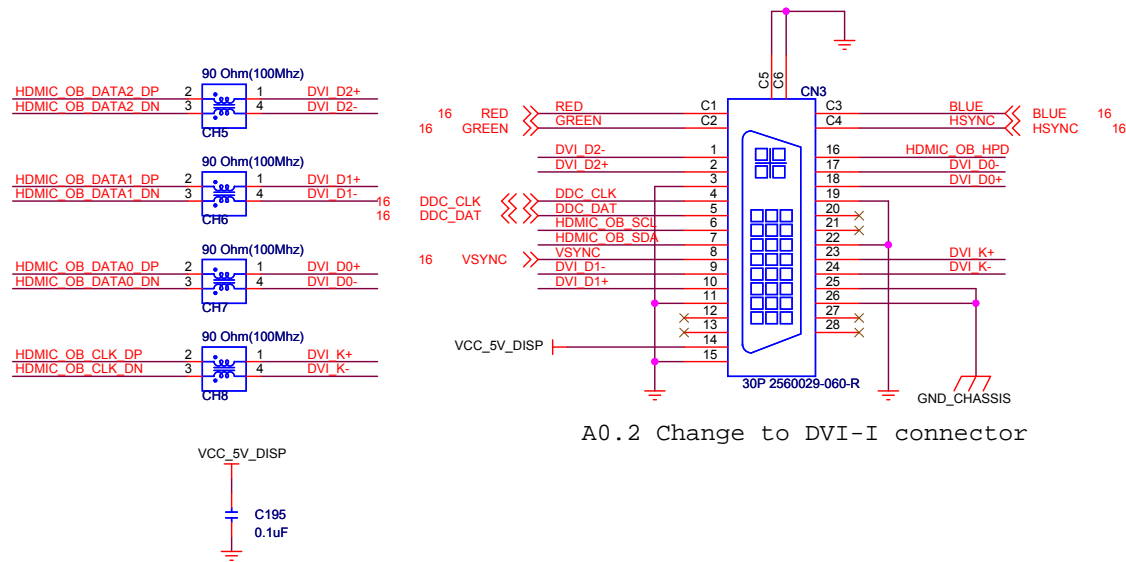
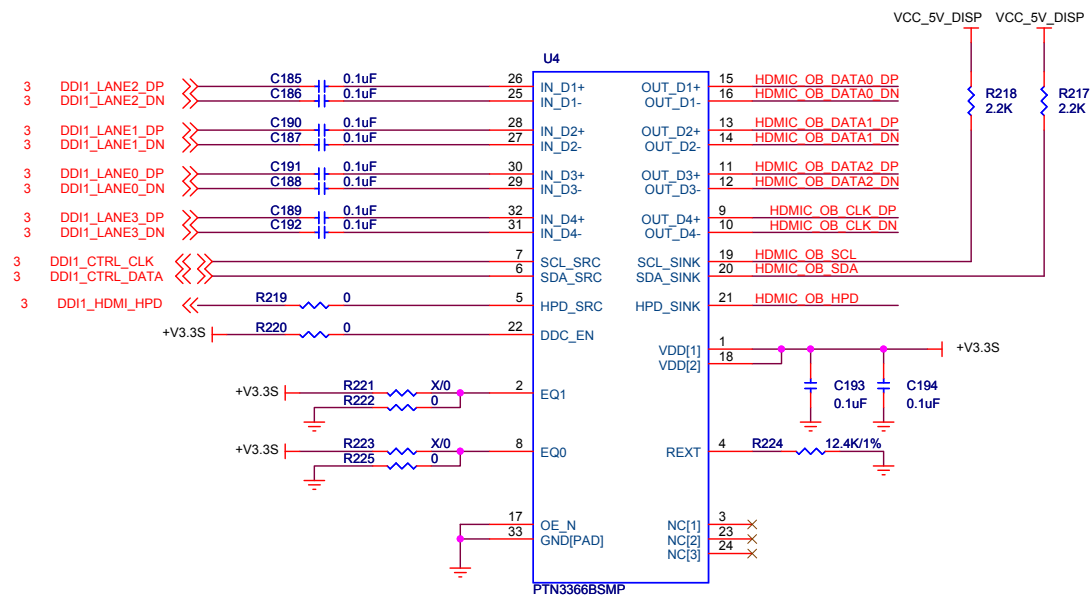




Title SKLU_SOC_11(RSVD)		
Size B	Document Number GENE-SKU6 / EGENESKU6A02	Rev: A0.2_0_0
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## DDR4 SODIMM





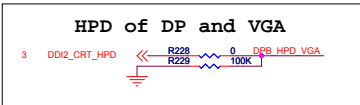
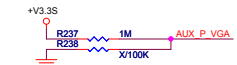
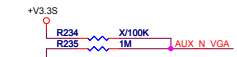
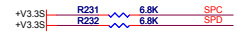
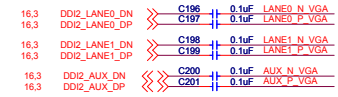
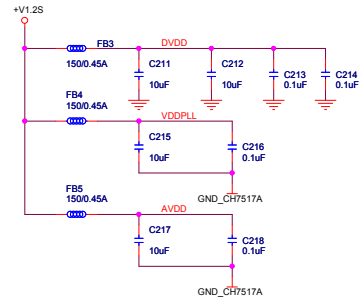
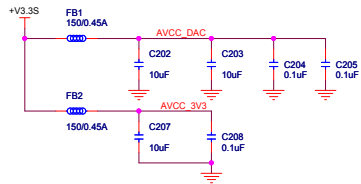
A0.2 Change to DVI-I connector



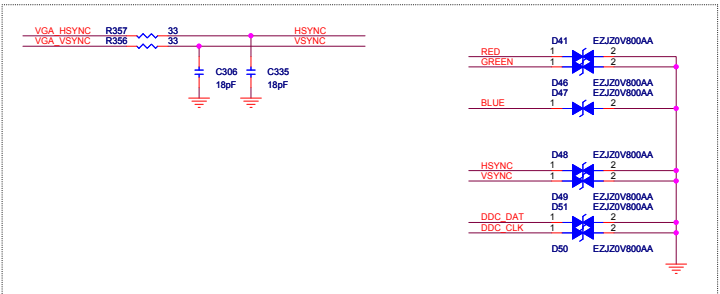
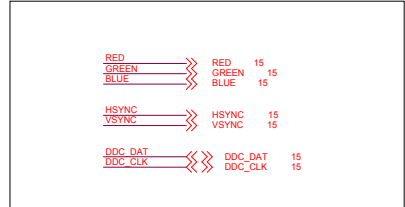
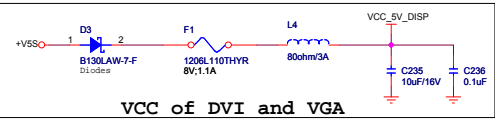
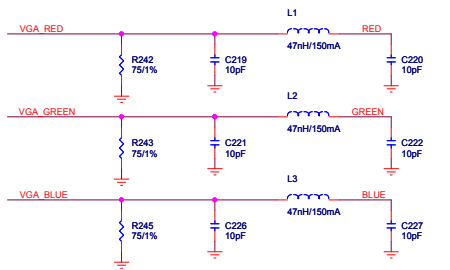
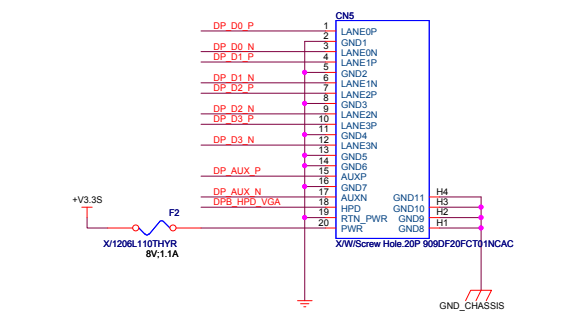
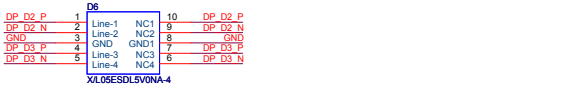
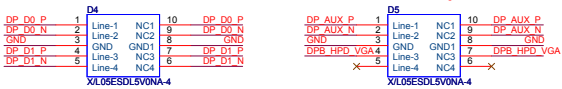
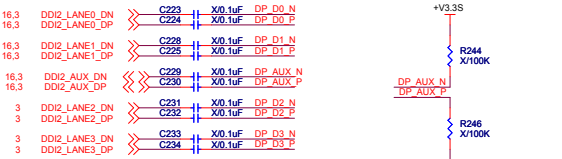
Title <b>HDMI</b>		
Size B	Document Number <b>GENE-SKU6 / EGENESKU6A02</b>	Rev: <b>A0.2_0_0</b>
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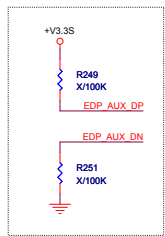
Note:  
1. VDD12 (DVDD, AVDD, VDDPLL): +1V +1.2V +1.32V (113mA)  
2. VDD33 (AVCC): +2.97V +3.3V +3.63V (78mA)



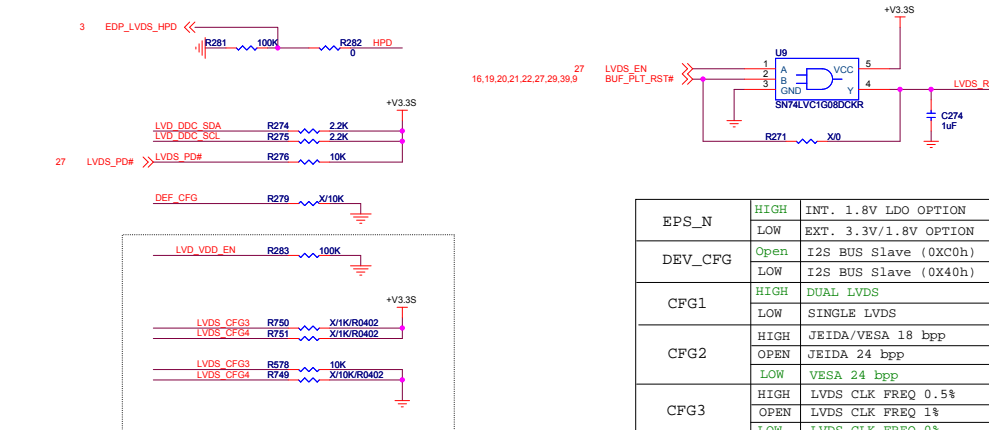
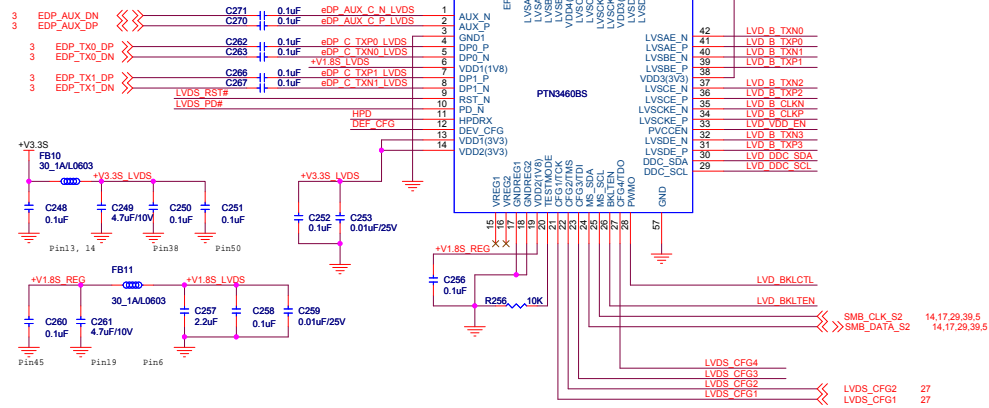
## Display Port



Change to ESD Diode



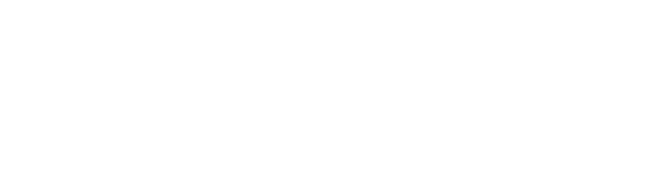
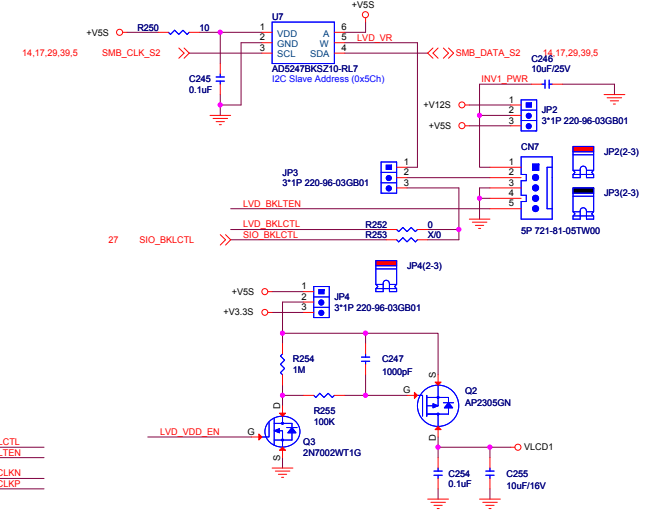
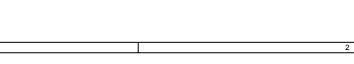
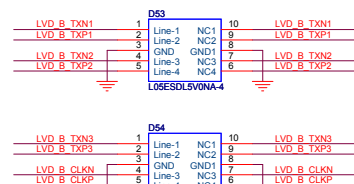
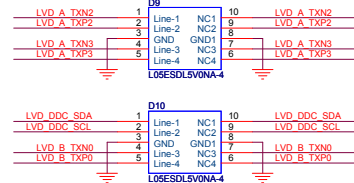
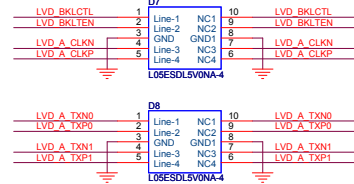
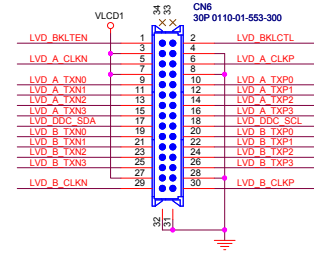
A0.2 modify

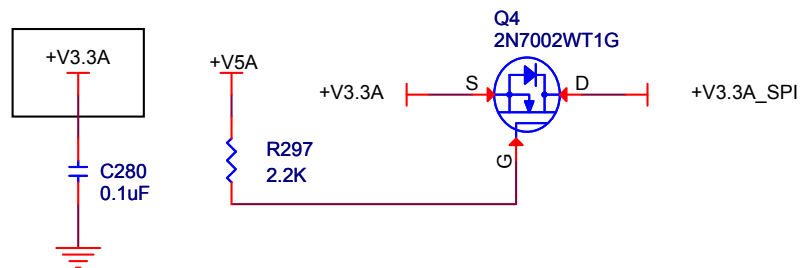
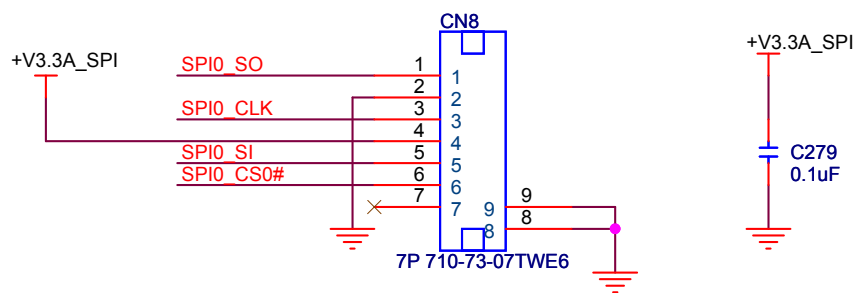
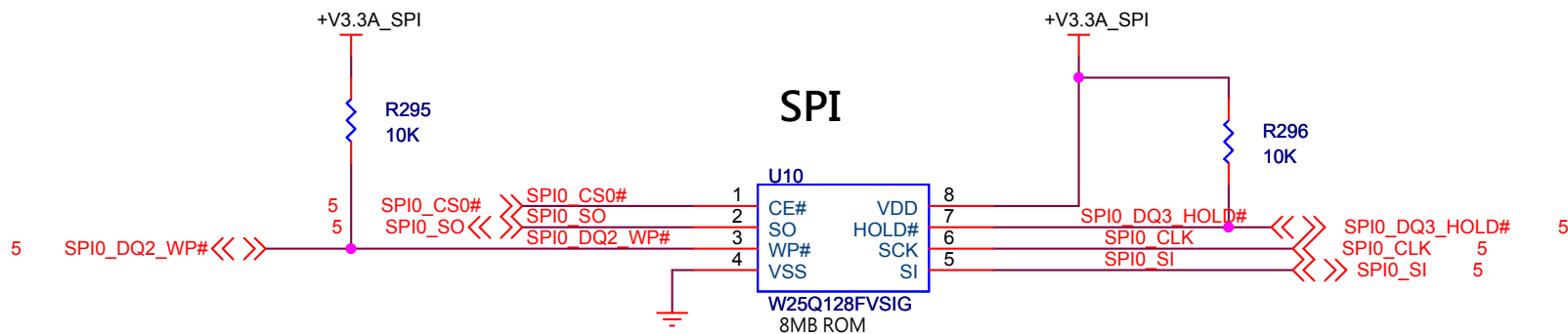


A0.2 Add

EPS_N	HIGH	INT. 1.8V LDO OPTION
	LOW	EXT. 3.3V/1.8V OPTION
DEV_CFG	Open	I2S BUS Slave (0XC0h)
	LOW	I2S BUS Slave (0X40h)
CFG1	HIGH	DUAL LVDS
	LOW	SINGLE LVDS
CFG2	HIGH	JEIDA/VESA 18 bpp
	OPEN	JEIDA 24 bpp
	LOW	VESA 24 bpp
CFG3	HIGH	LVDS CLK FREQ 0.5%
	OPEN	LVDS CLK FREQ 1%
	LOW	LVDS CLK FREQ 0%
CFG4	HIGH	SWING 400mV
	OPEN	SWING 300mV
	LOW	SWING 250mV

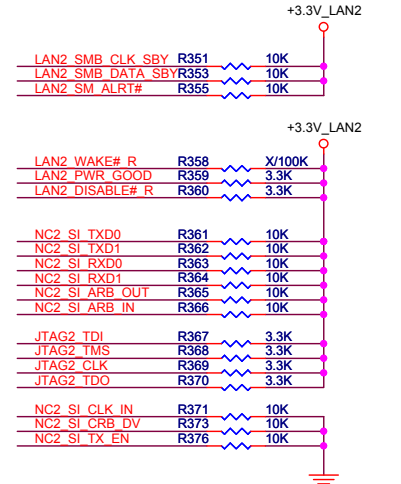
## A0.2 Chagne to only LVDS



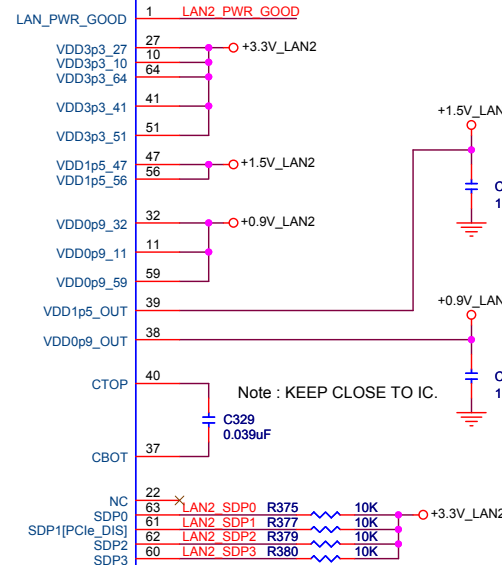
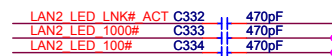


Title <b>BIOS_TPM_LV Shift_LCLK BUFF</b>		
Size A	Document Number <b>GENE-SKU6 / EGENESKU6A02</b>	Rev: <b>A0.2_0_0</b>
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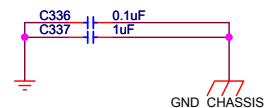
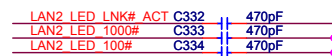
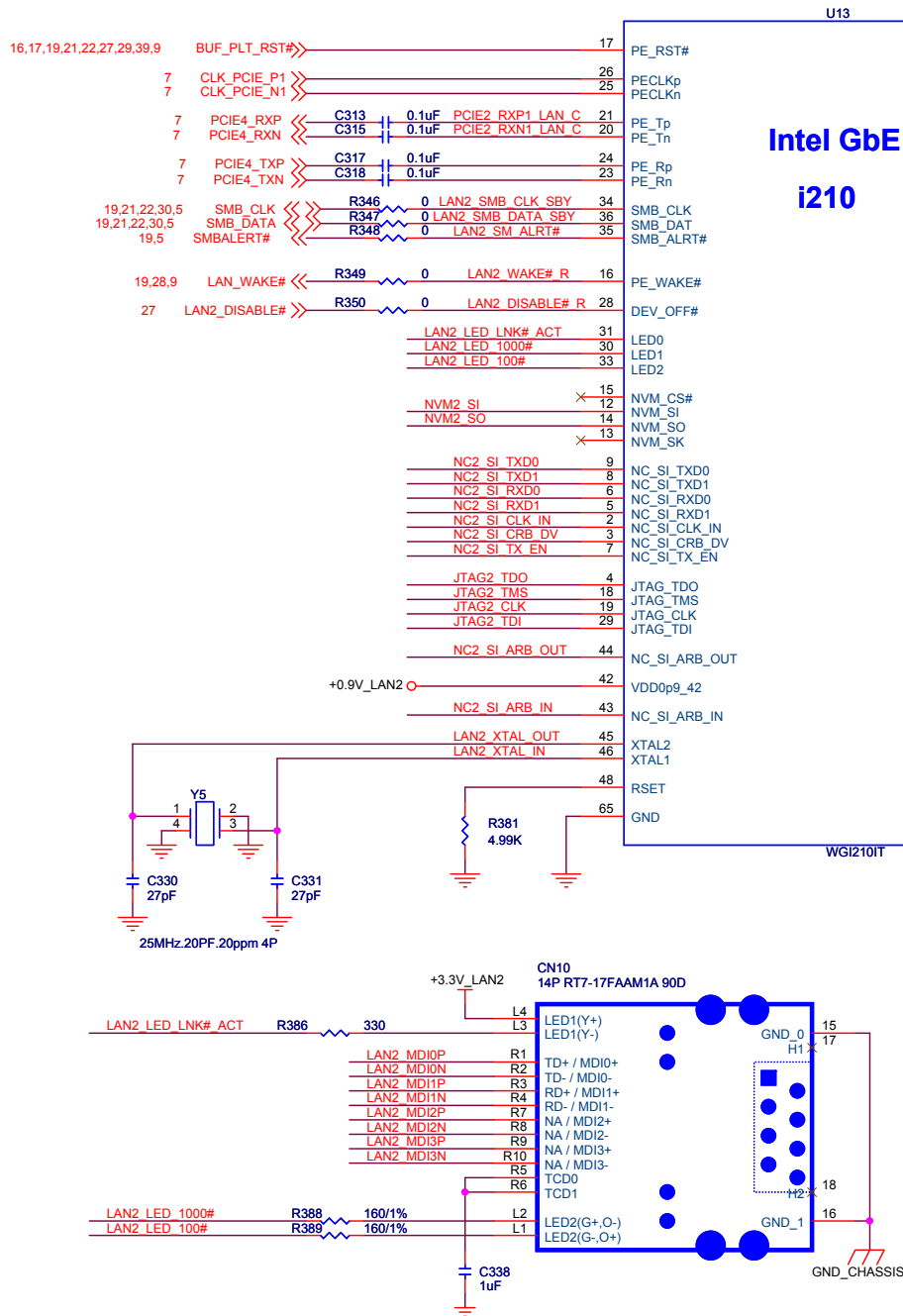


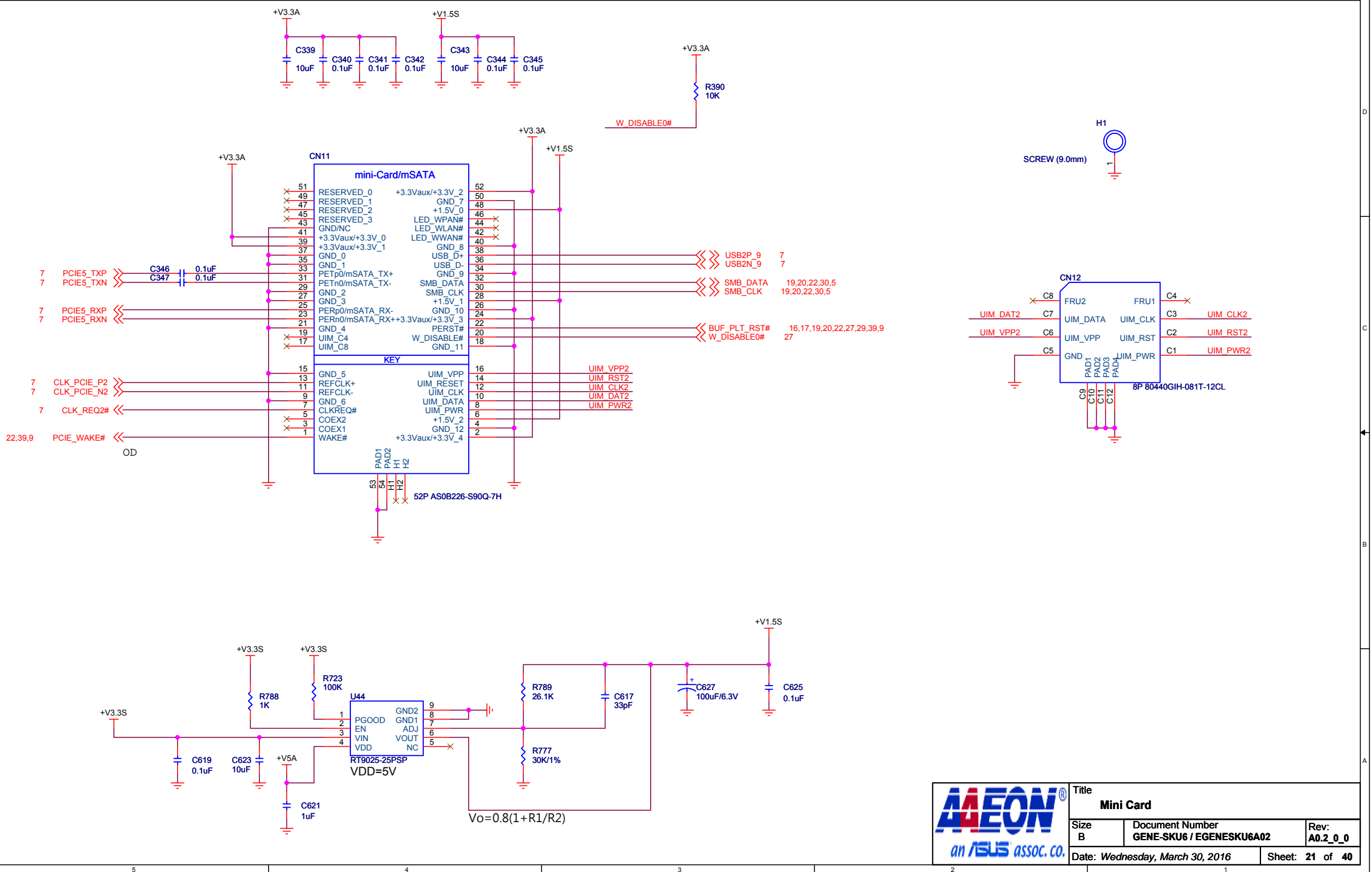


Connect a 3.3 K pull-down in order to disable NVM security. This may be necessary for testing unsigned firmware for i210.

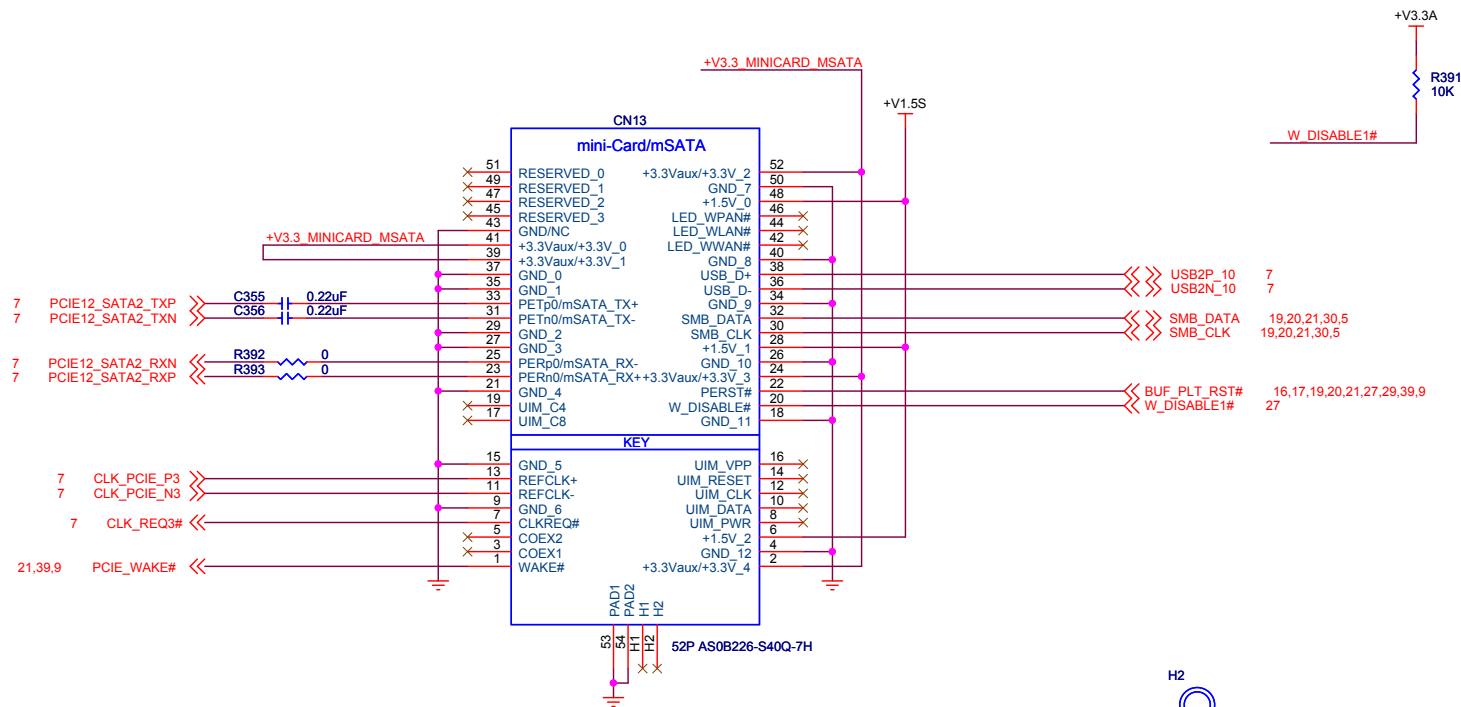
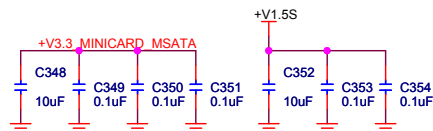
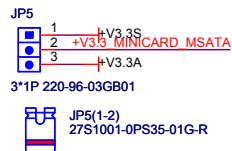


# Intel GbE i210



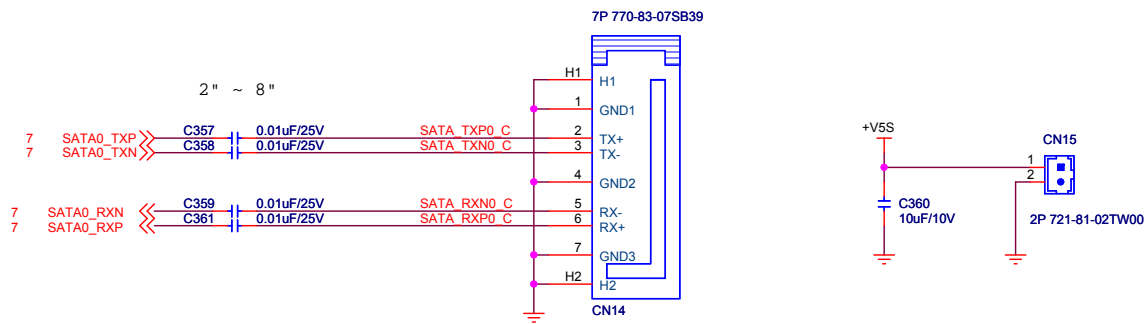


Title Mini Card		
Size B	Document Number GENE-SKU6 / EGENESKU6A02	Rev: A0.2_0_0
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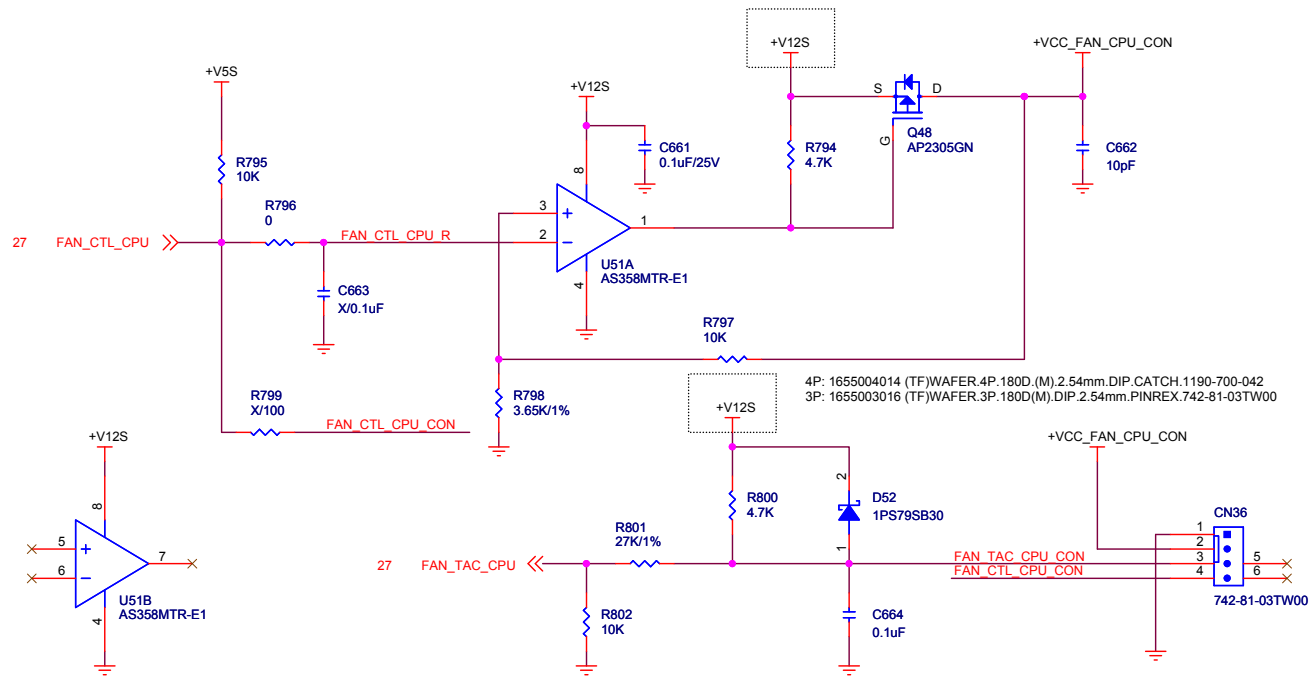


Title <b>mSATA</b>		
Size B	Document Number <b>GENE-SKU6 / EGENESKU6A02</b>	Rev: <b>A0.2_0_0</b>
Date: <b>Wednesday, March 30, 2016</b>		Sheet: <b>22 of 40</b>



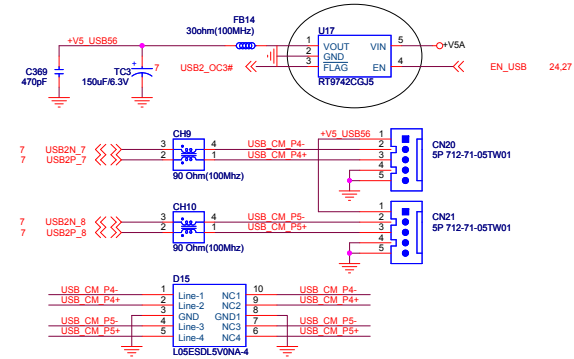


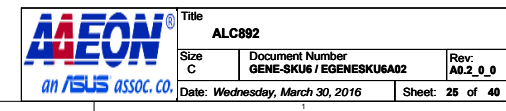
## CPU FAN

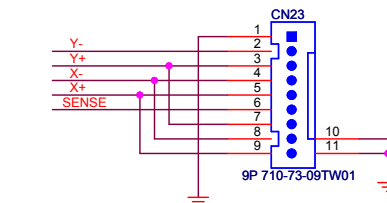
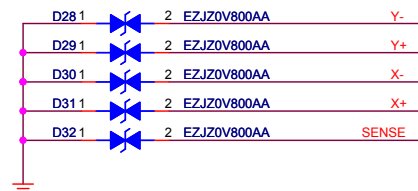
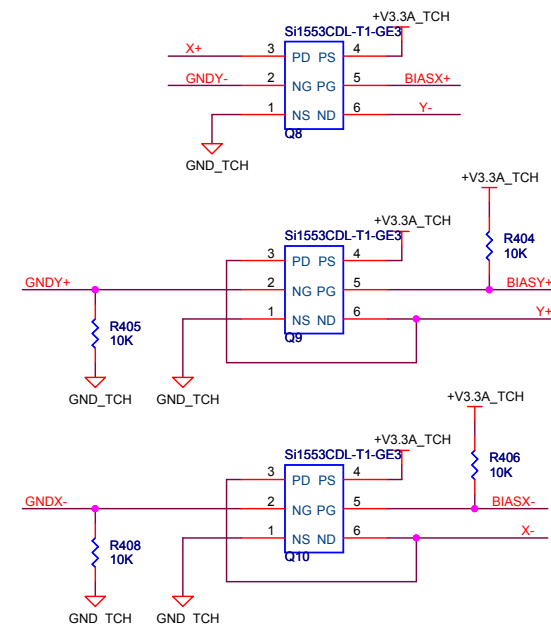
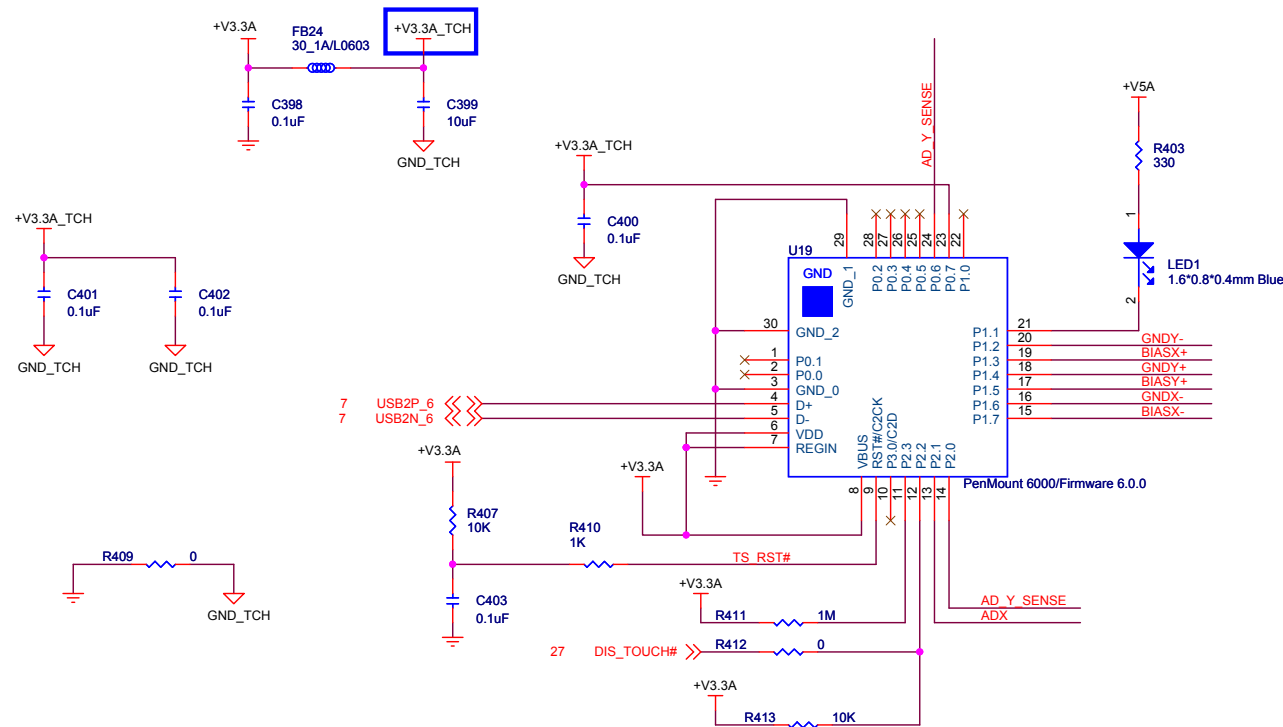


Title <b>SATA, FAN</b>		
Size B	Document Number <b>GENE-SKU6 / EGENESKU6A02</b>	Rev: <b>A0.2_0_0</b>
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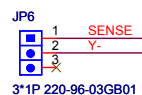
A0.2 Change to RT9742



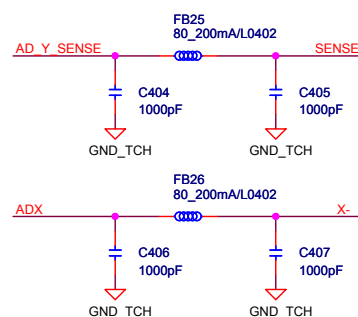




CN	Touch Screen Lines		
	8-Wire	4-Wire	5-Wire
PIN9	Right Sense	N/A	N/A
PIN8	Left Sense	N/A	N/A
PIN7	Bottom Sense	N/A	N/A
PIN6	TOP Sense	N/A	Sense(S)
PIN5	Right Excite	Right	LR(X)
PIN4	Left Excite	Left	LL(L)
PIN3	Bottom Excite	Bottom	UR(H)
PIN2	Top Excite	Top	UL(Y)
PIN1	GND	GND	GND



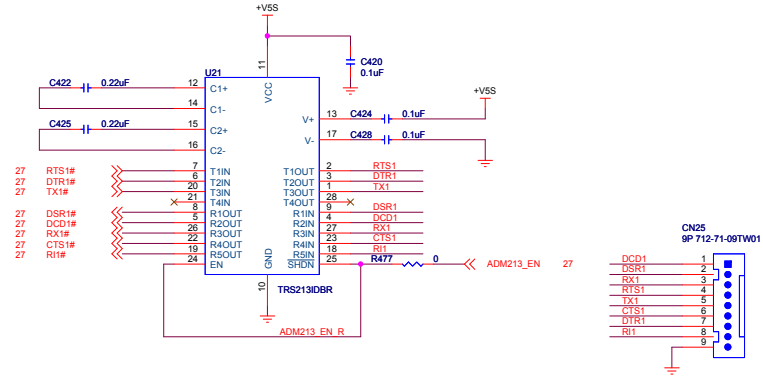
4,5,8 Wire Selection		
1-2	4,8 wire	Default
2-3	5 wire	



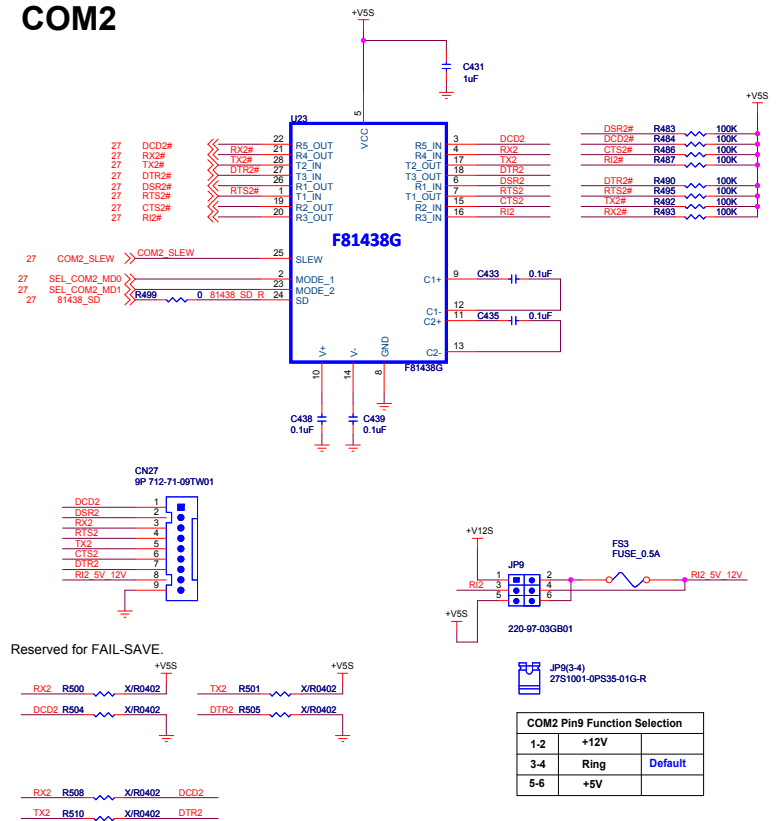
Title		
Touch		
Size B	Document Number GENE-SKU6 / EGENESKU6A02	Rev: A0.2_0_0
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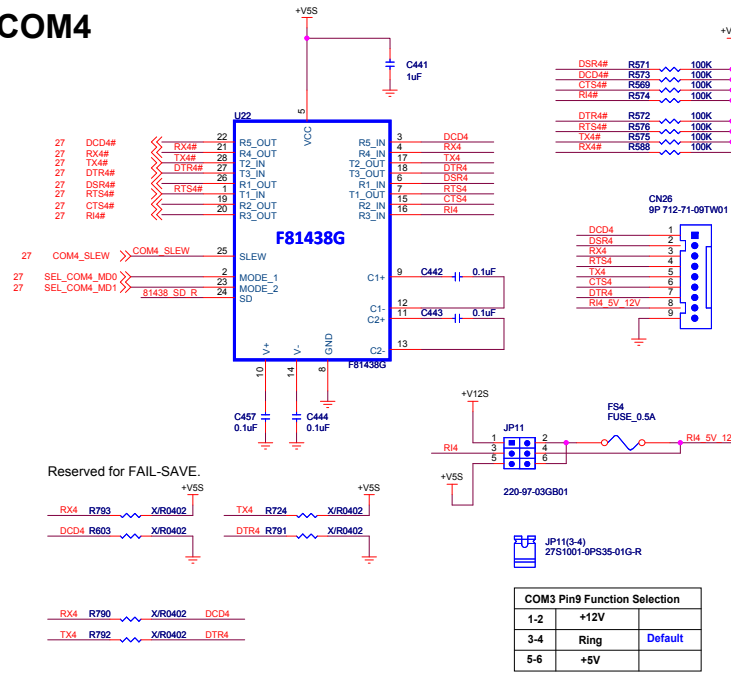
## COM1



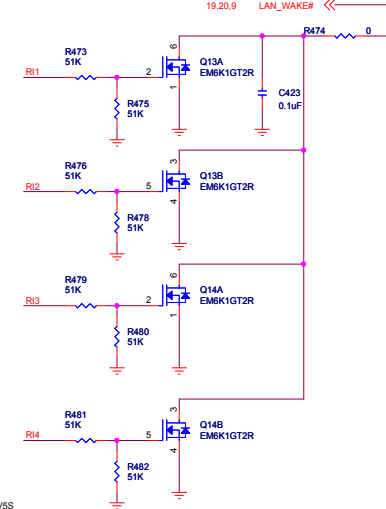
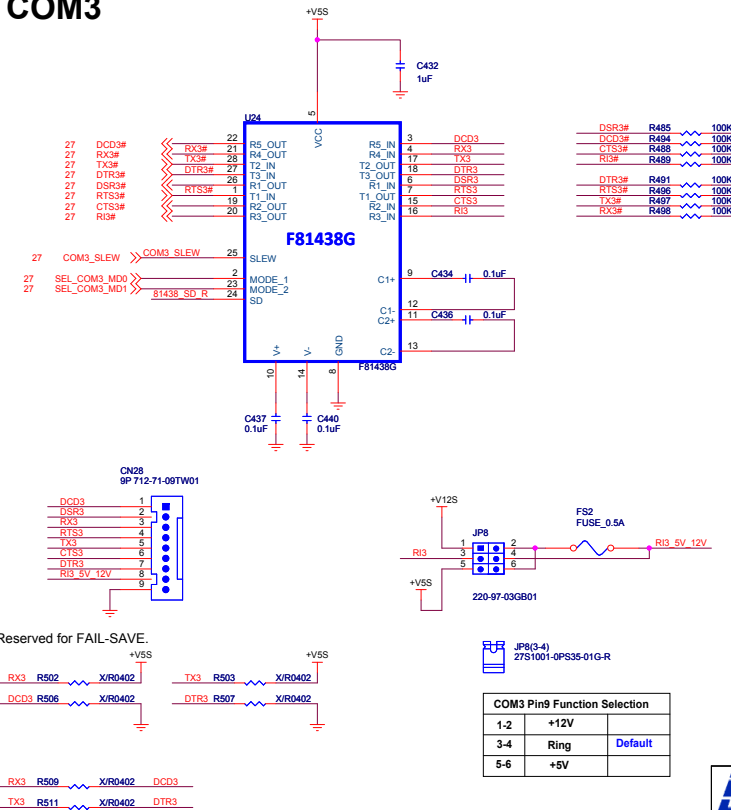
## COM2



## COM4



## COM3

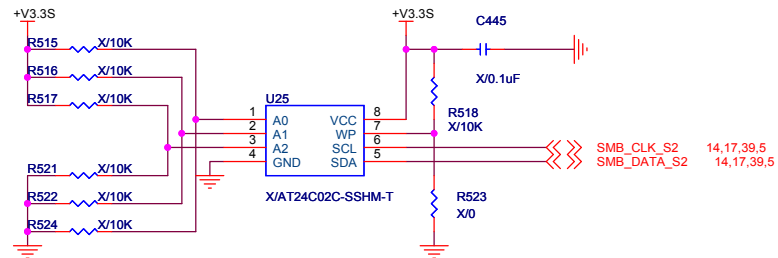


COM3 Pin9 Function Selection	
1-2	+12V
3-4	Ring
5-6	+5V

Maximum Slew rate control			
SLEW	RS-232	RS-485/RS-422	
0	1Mbps	10Mbps	
1	250Kbps	250Kbps	

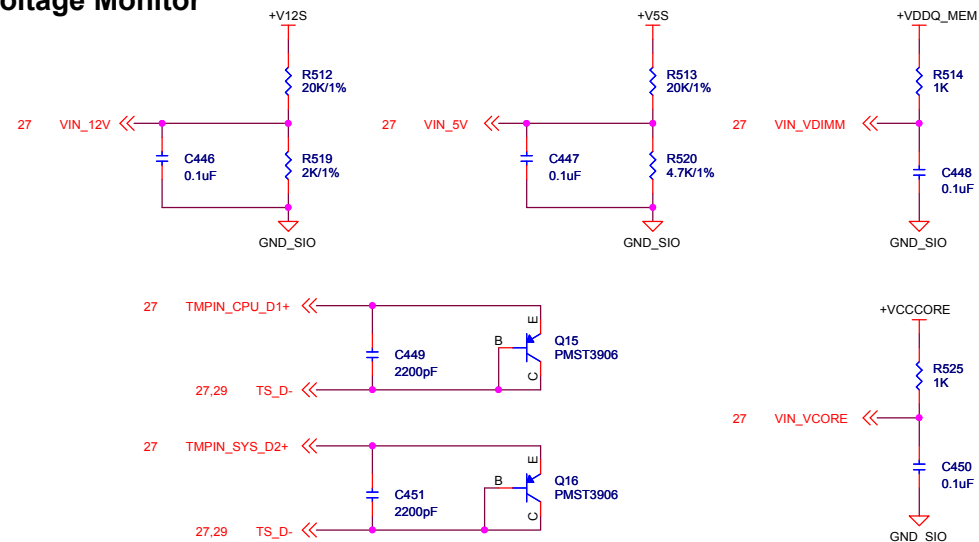
Pin Mapping			
	RS-232	RS-485	RS-422
R1_IN	DSR		
T1_OUT	RTS		
T2_OUT	TX		RS422_RX+ (A)
T3_OUT	DTR		RS422_RX- (B)
R2_IN	CTS		
R3_IN	RI		
R4_IN	RX	RS485_D+ (A)	RS422_TX+ (A)
R5_IN	DCD	RS485_D- (B)	RS422_TX- (B)

Serial Port 2 Mode Selection			
SD	MODE_1	MODE_2	MODE
0	0	0	RS-422
0	0	1	RS-232
0	1	0	RS-485 (Driver Half Duplex)
0	1	1	RS-485 (Receiver Half Duplex)
1	X	X	Shutdown MODE

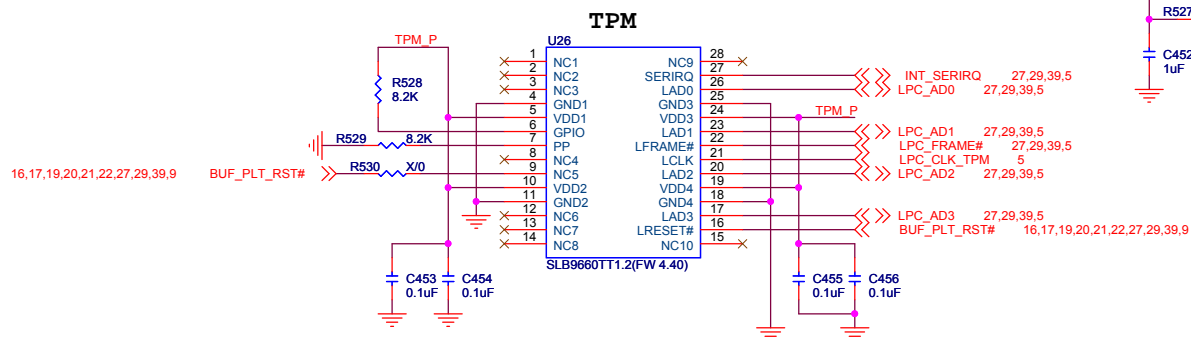
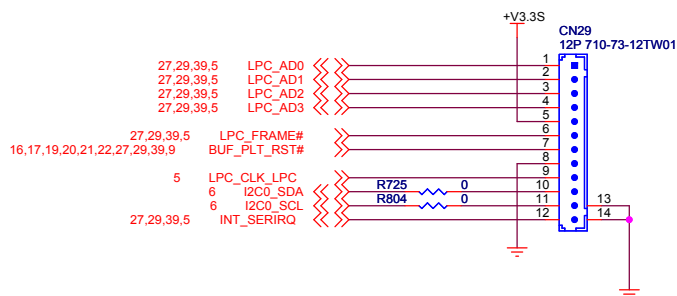


SM BUS ADDRESS 0XAC

## Voltage Monitor

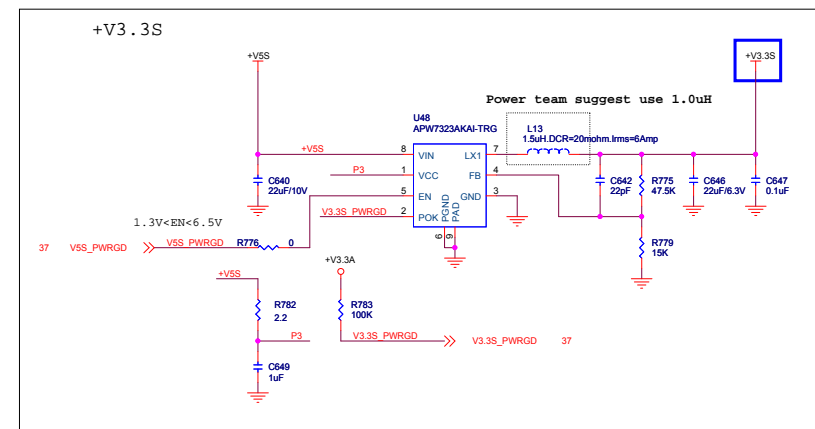
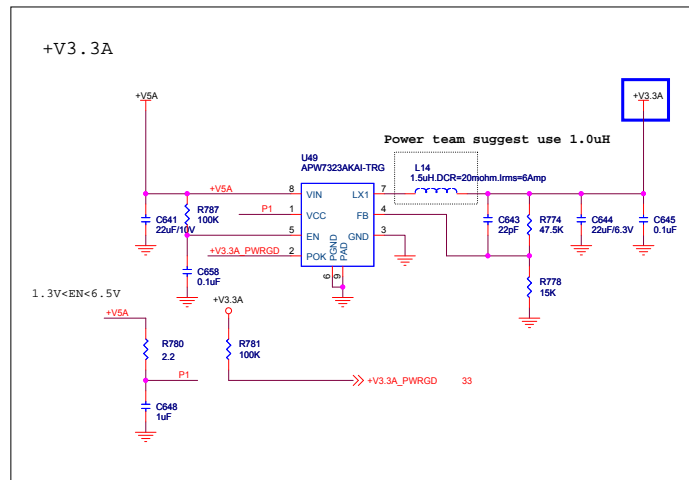
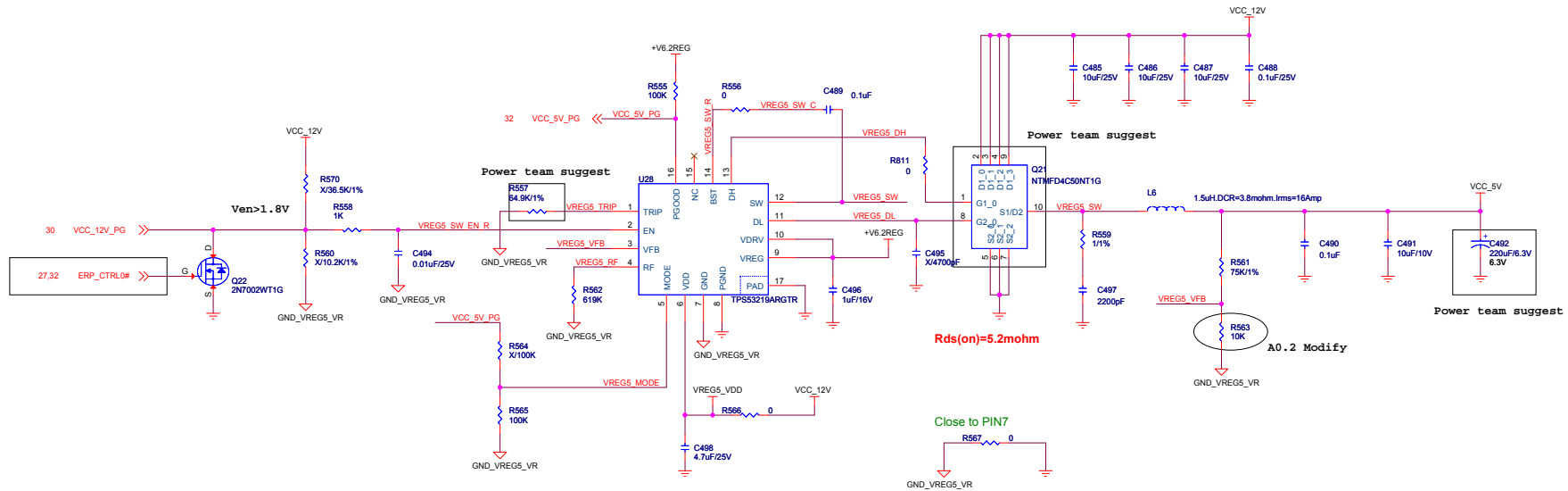


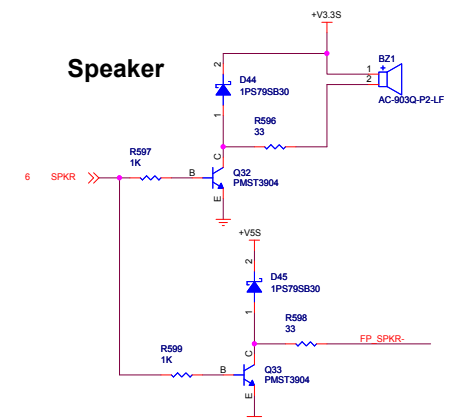
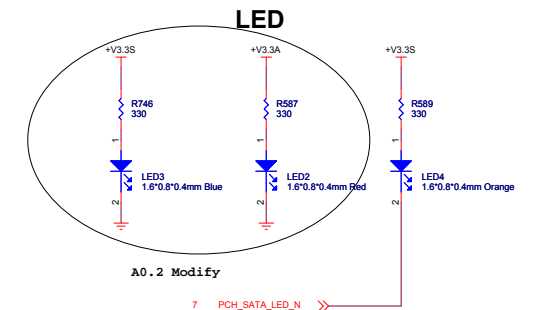
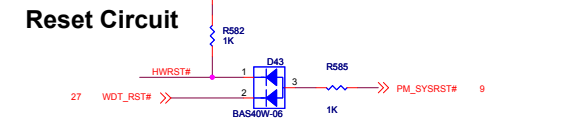
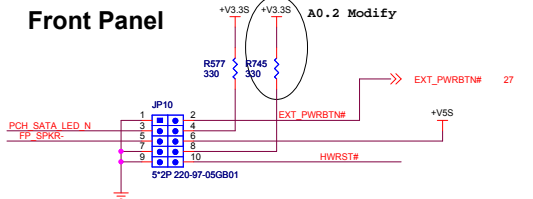
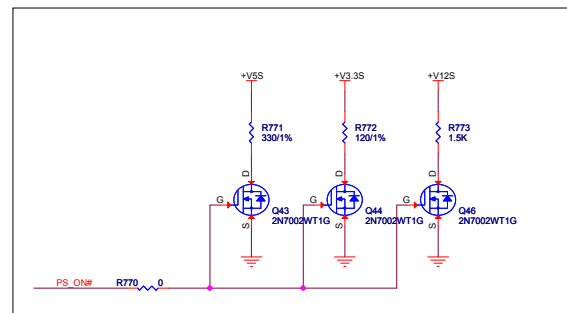
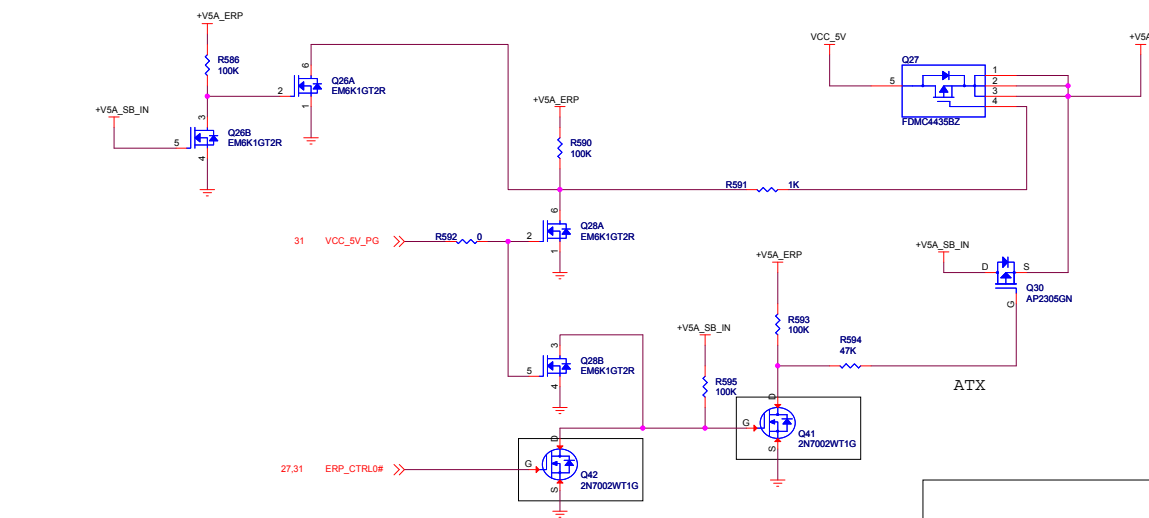
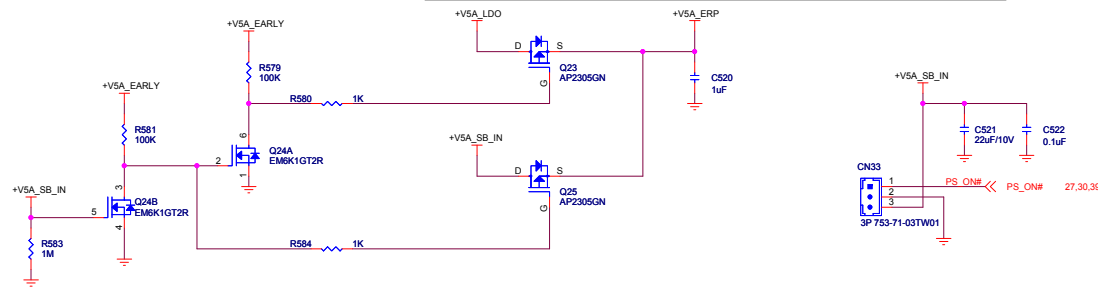
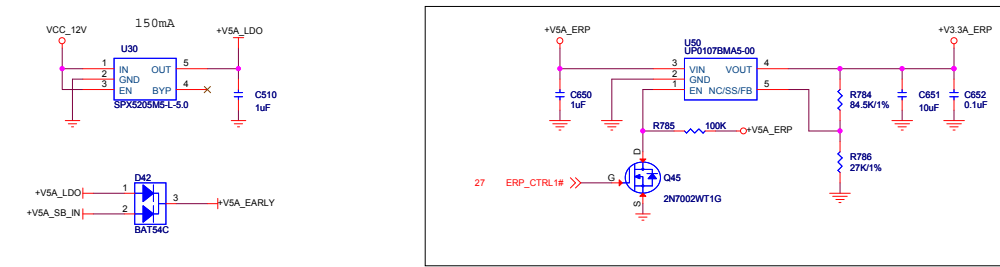
## LPC Connector













A0.2 Add

27,30,37,9 PM\_SLP\_S3#  
DDR\_VTT\_CTRL  
27,34,37,9 PM\_SLP\_S4#

+V3.3A

R616  
100K

R740  
X/0

R618  
0

R617  
0

R619  
X/0

R620  
10K

C546  
0.1uF

R621  
20.5K/1%

C550  
0.01uF/25V

R622  
100K

R623  
56K/1%

C553  
0.22uF

R624  
0

300KHz

Iout = 5A

Put on the clean GND area

51216 GND

Thermal\_GND

TPS51216RUK

21

PGOOD

S3

S5

VREF

REFIN

MODE

TRIP

VTTREF

GND

V5IN

DRVH

VBST

SW

DRVH

PGND

VDDQS

VTTIN

VTT

VTT

VTTGND

VTTGND

VTTGND

VTTGND

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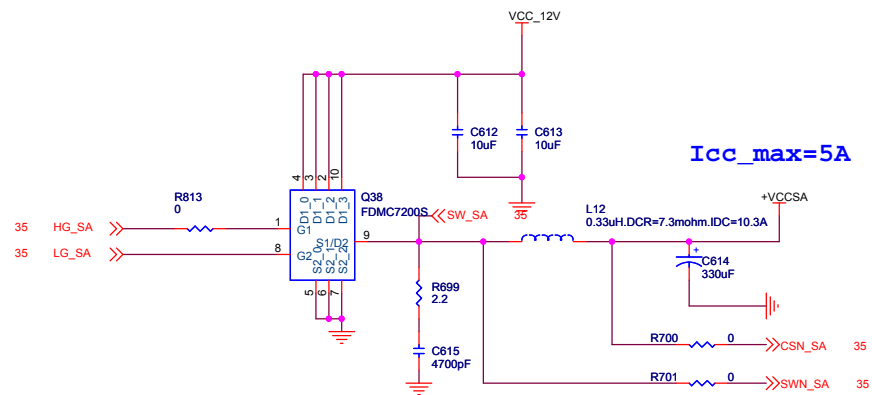
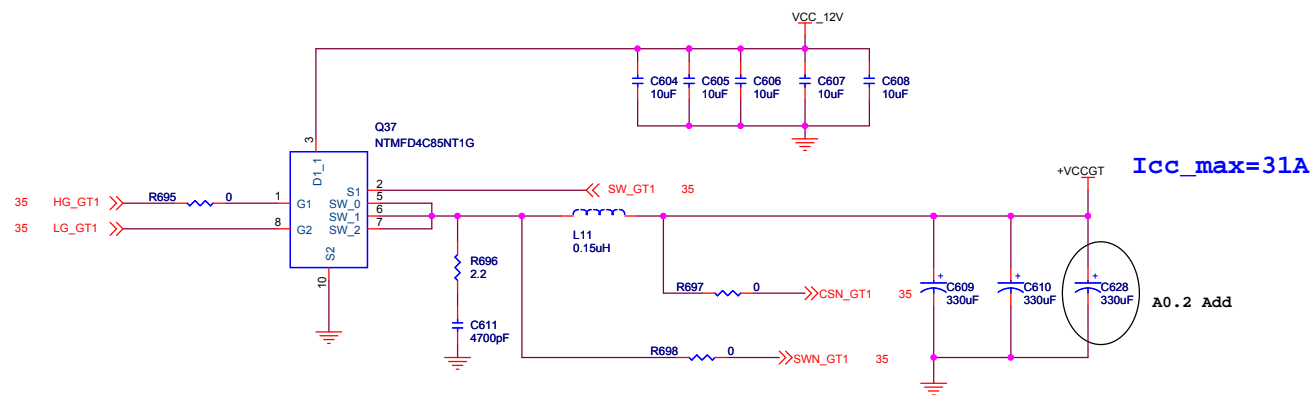
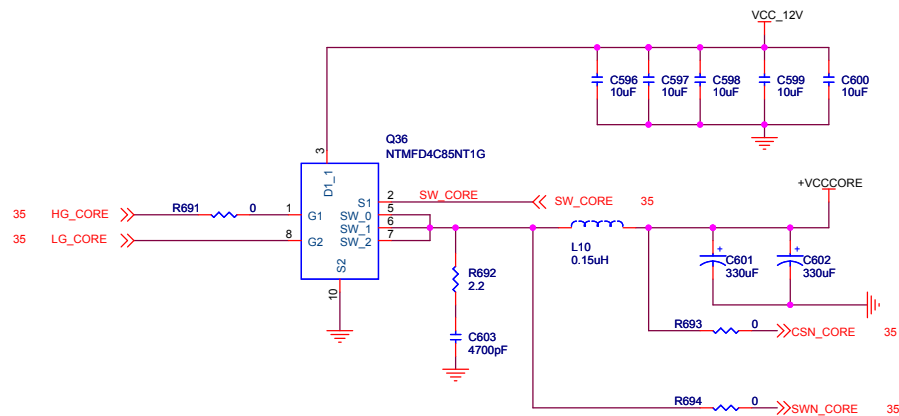
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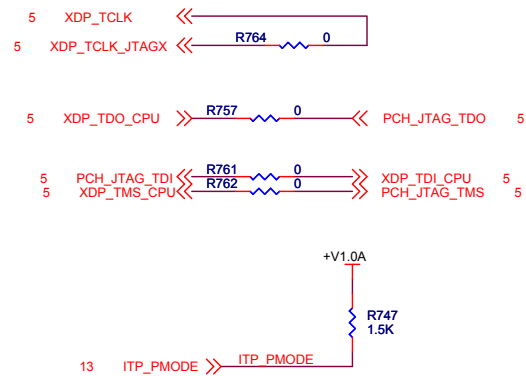




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Custom	GENE-SKU6 / EGENESKU6A02	A0.2_0_0
Date: Wednesday, March 30, 2016	Sheet: 36 of 40	





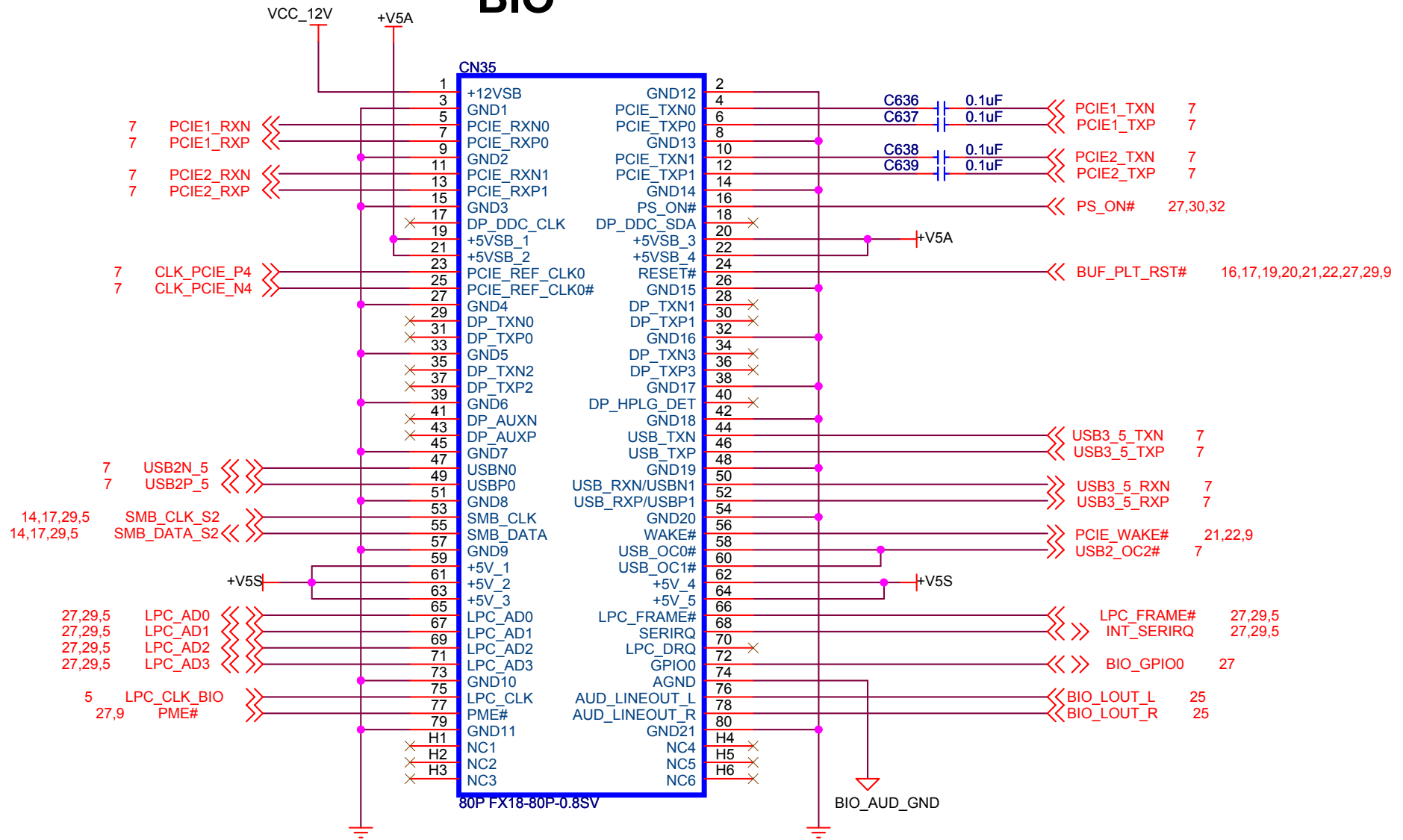


No XDP need keep  
R764, R757, R761, R762, R747



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Date: <i>Wednesday, March 30, 2016</i>		Sheet: <b>38</b> of <b>40</b>

# BIO



Title <b>BIO</b>		
Size A	Document Number <b>GENE-SKU6 / EGENESKU6A02</b>	Rev: <b>A0.2_0_0</b>
Date: <i>Wednesday, March 30, 2016</i>		Sheet: <b>39</b> of <b>40</b>

