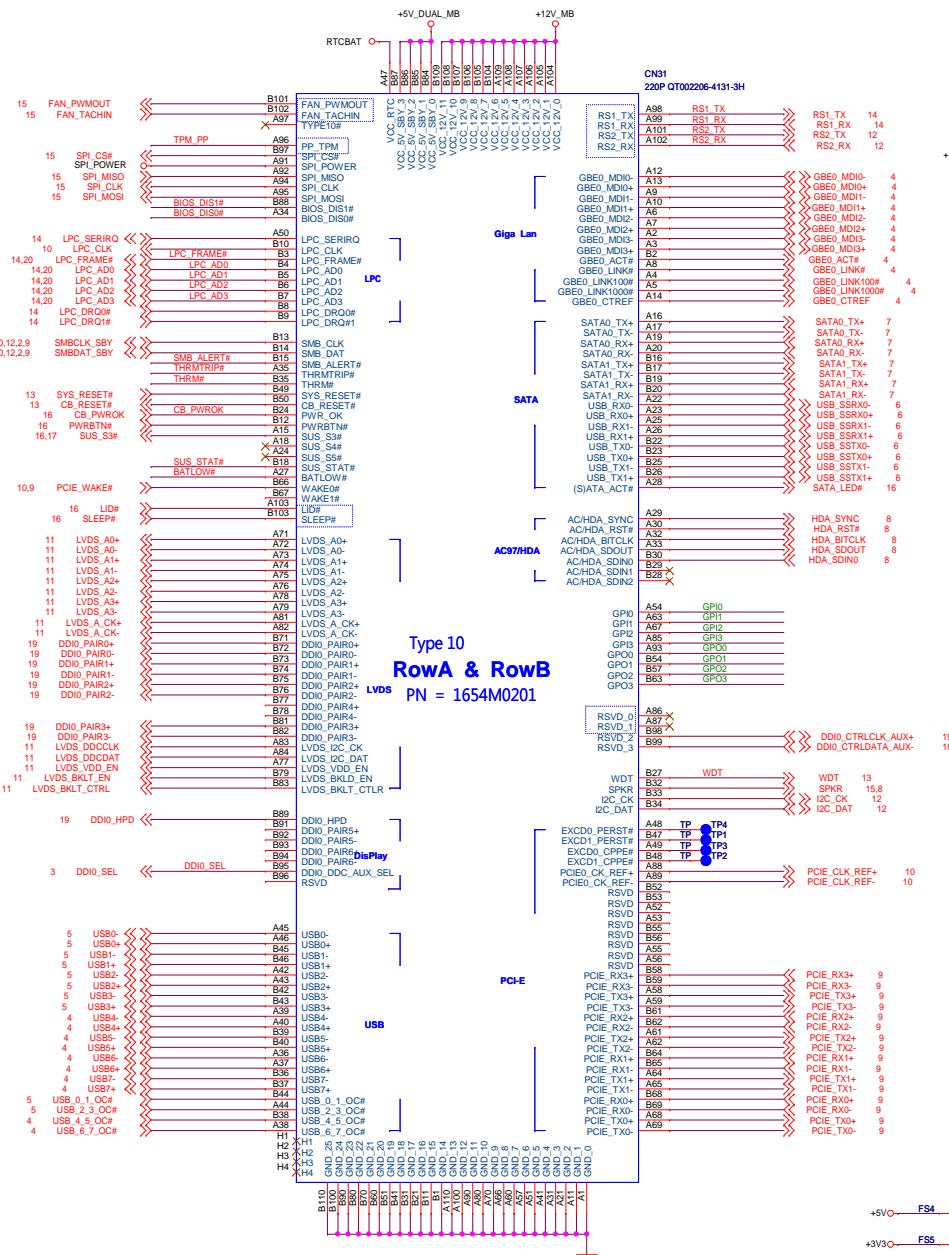
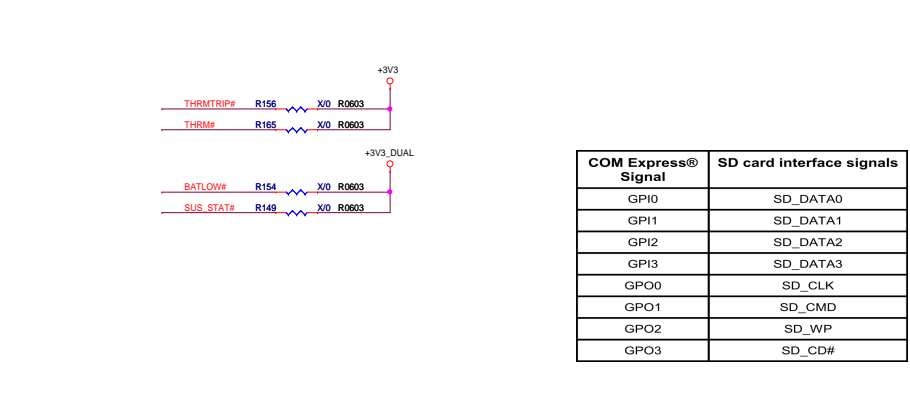
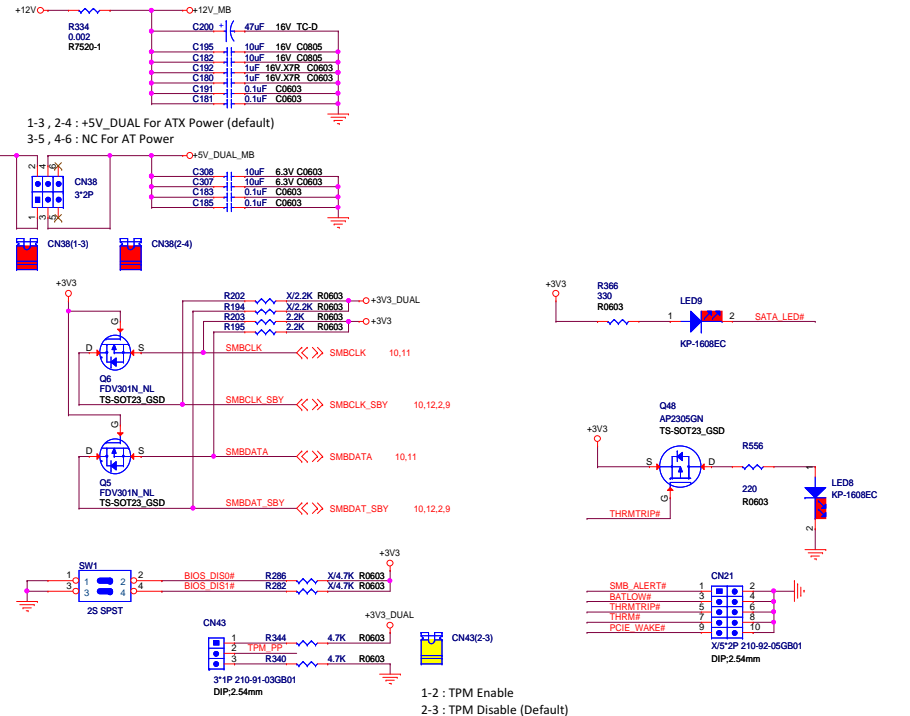


Page	Index
1	Cover Sheet
2	Row A/B
3	mounting holes
4	LAN-RJ45 + USB2.0
5	USB2.0 + USB3.0
6	USB3.0 Redriver
7	SATA
8	Audio
9	PCIe x4 Slots
10	MINI CARD_Clock Buffer
11	LVDS
12	CANBUS / SMBUS / I2C
13	RESET + PWROK
14	Serial port + LPC
15	SPI + Buzzer + FAN + RTC
16	ATX Power + Front Panel
17	+5V_DUAL / +3V3_DUAL
18	+12V / +5V / +3V3
19	DDIO
20	LPC 80H

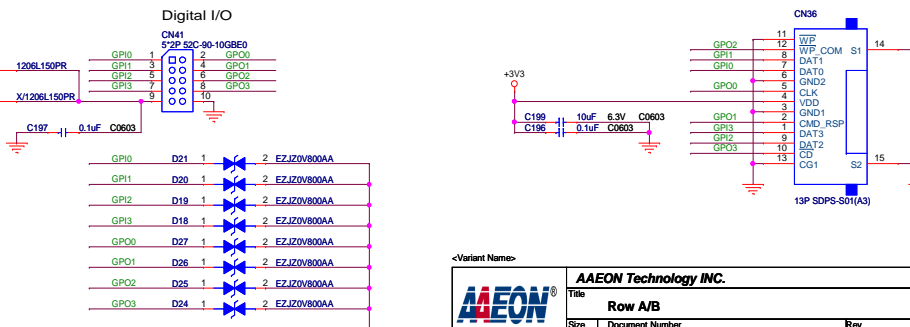


**Type 10  
Row A & Row B  
PN = 1654M0201**

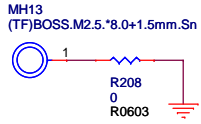
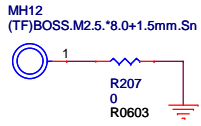
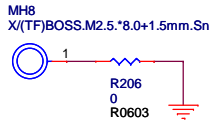
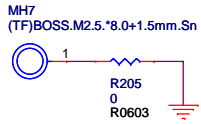
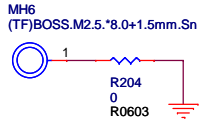
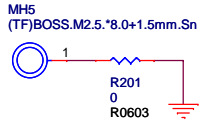
Power Rail	Module Pin	Nominal Input	Input Range	Derated Input	Max Input Ripple	Max Module Input Power (w. derated input)	Assumed Conversion Efficiency	Max Load Power
	(Amps)	(Volts)	(Volts)	(Volts)	(mV)	(Watts)		(Watts)
VCC_12V	12	12	11.4 - 12.6	11.4	+/- 100	137	85%	116
VCC_5V_SBY	2	5	4.75 - 5.25	4.75	+/- 50	9		
VCC_RTC	0.5	3	2.0 - 3.3		+/- 20			



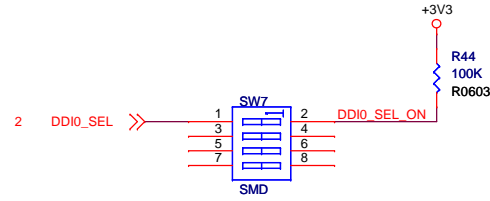
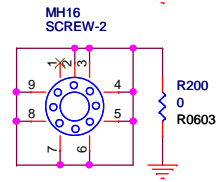
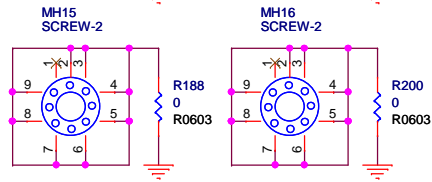
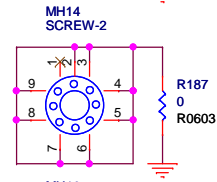
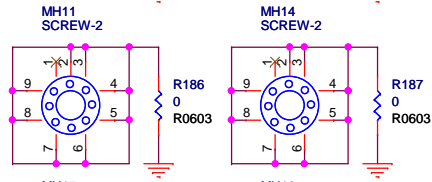
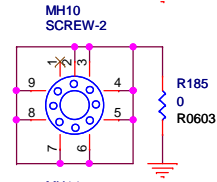
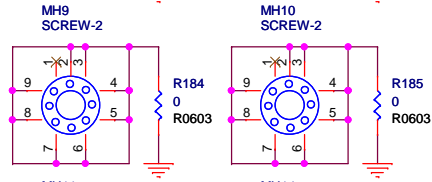
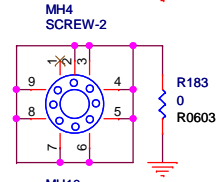
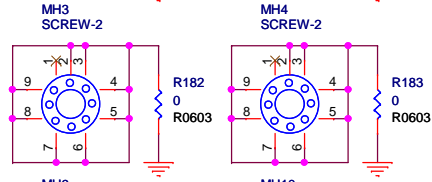
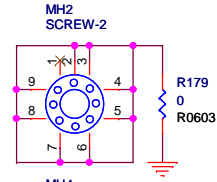
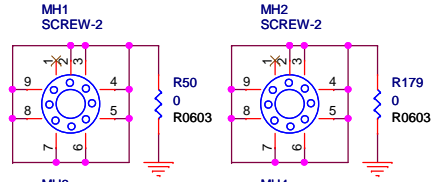
COM Express® Signal	SD card interface signals
GPIO0	SD_DATA0
GPIO1	SD_DATA1
GPIO2	SD_DATA2
GPIO3	SD_DATA3
GPO0	SD_CLK
GPO1	SD_CMD
GPO2	SD_WP
GPO3	SD_CD#




Basic / Compact Module  
mounting holes

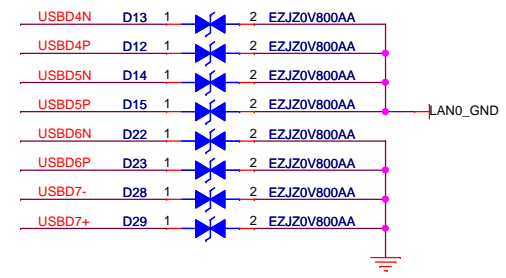
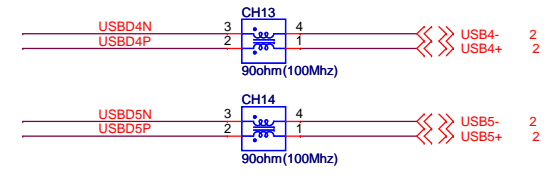
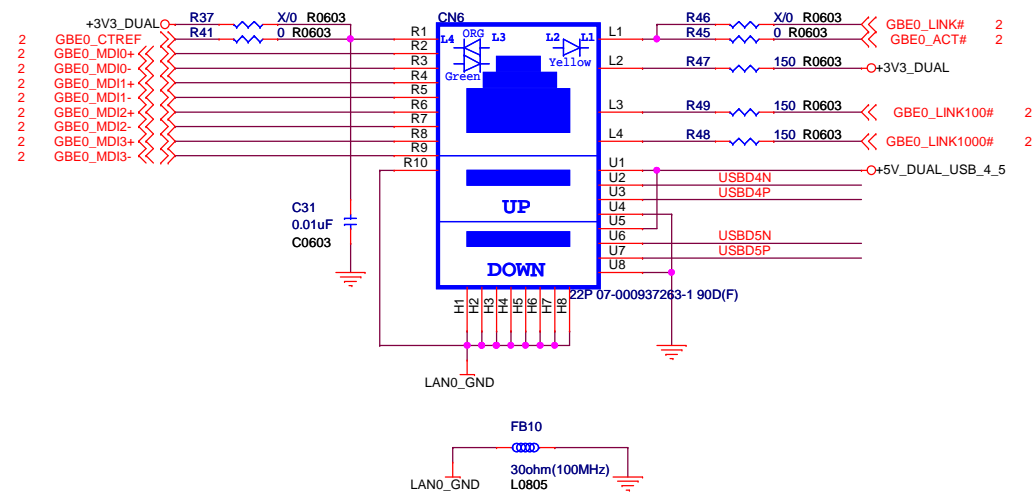
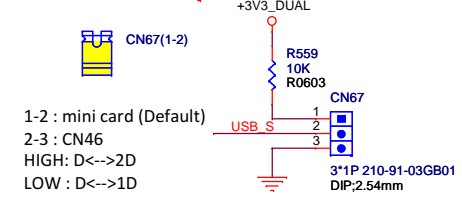
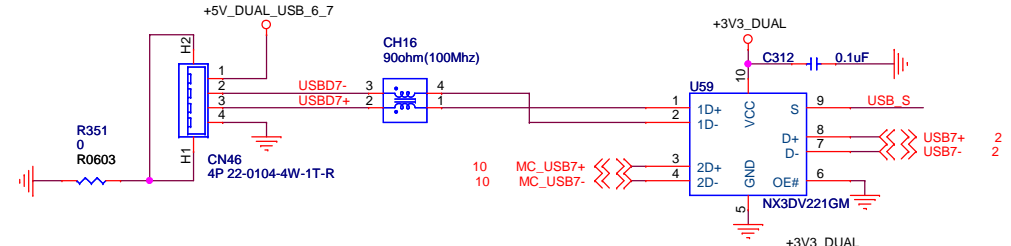
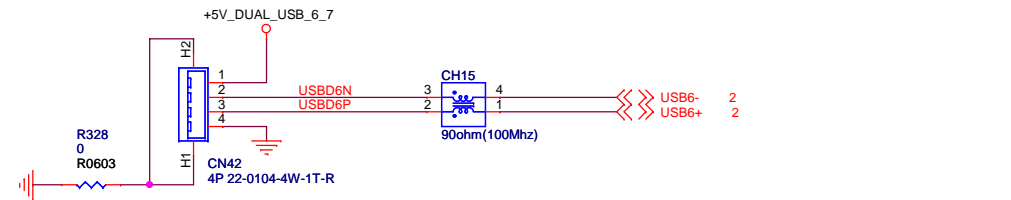
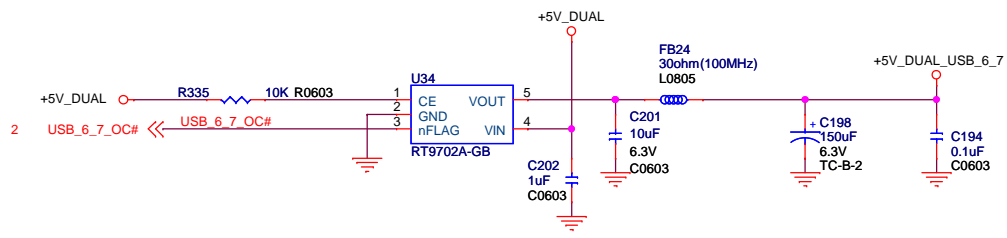
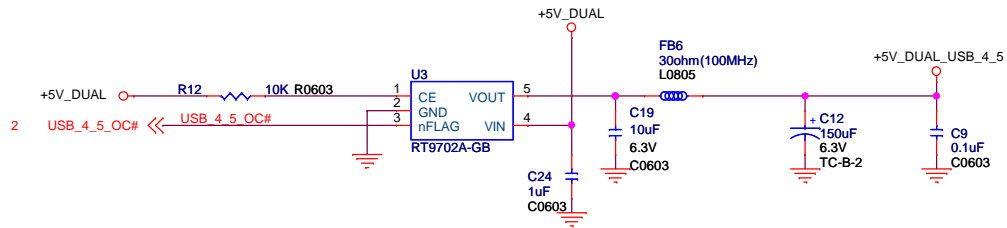


For ATX Board

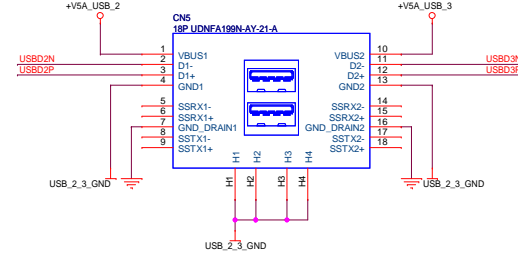
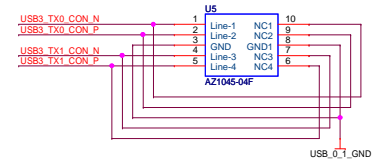
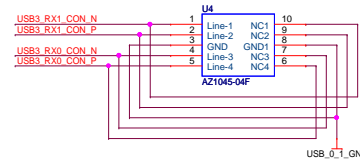
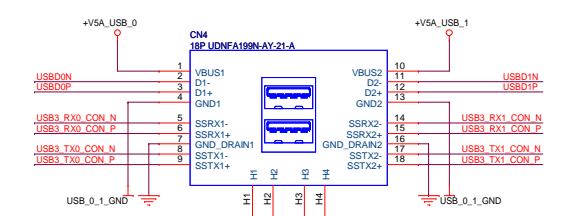
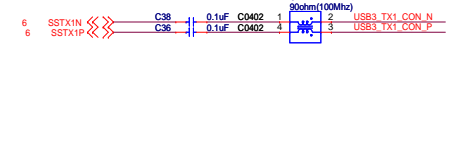
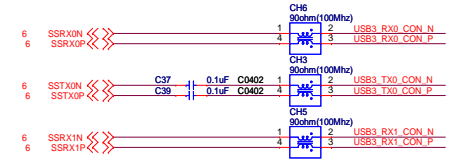
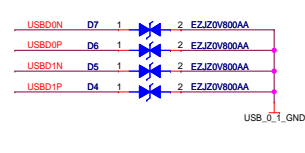
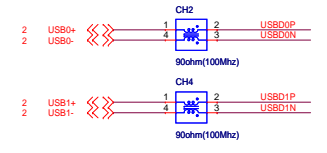
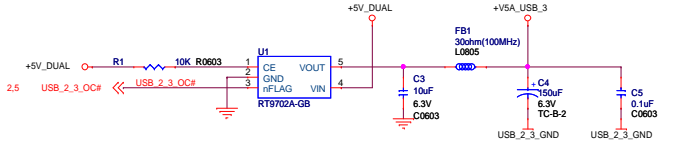
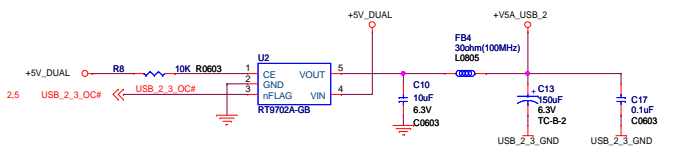
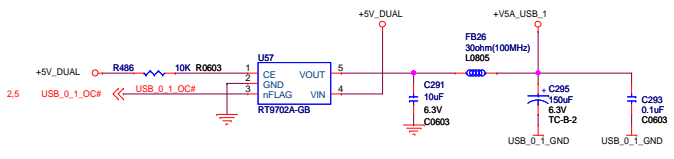
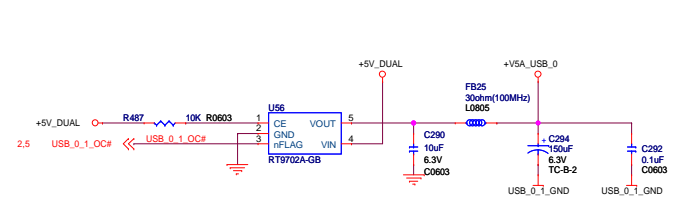


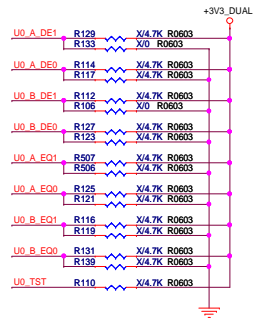
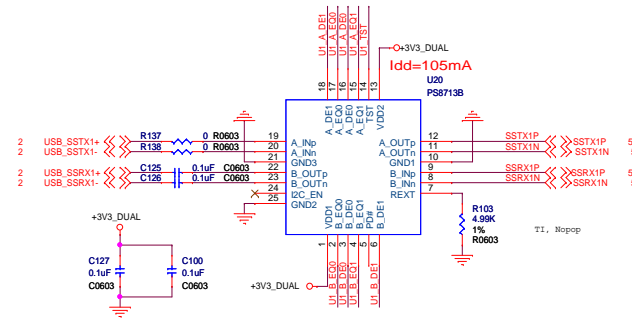
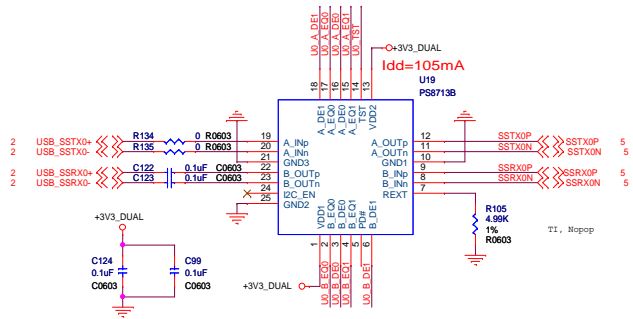
Position 1 Default : OFF

 An ASUS Company		AAEON Technology INC.	
		Title mounting holes	
Size B	Document Number ECB-920A	Rev A1.0_0_0	
Date: Thursday, September 11, 2014	Sheet 3	of 20	



		<b>AEEON Technology INC.</b> Title <b>LAN-RJ45 + USB2.0</b>	
		Size B Document Number <b>ECB-920A</b>	Rev <b>A1.0_0_0</b>
Date: Thursday, September 11, 2014		Sheet 4	of 20

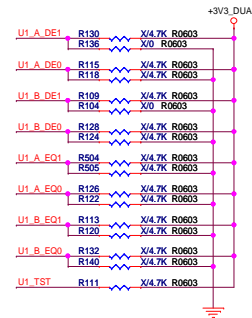




For TI A : DE-EMPHASSIS A : Equalizer  
 LL: -3.5dB (default) LL: 9.5dB (default)  
 LH: 0dB LH: 13dB  
 HL: -2.7dB HL: 4.5dB  
 HH: -5dB HH: 7.5dB

For TI B : DE-EMPHASSIS B : Equalizer  
 LL: -3.5dB (default) LL: 9.5dB (default)  
 LH: 0dB LH: 13dB  
 HL: -2.7dB HL: 4.5dB  
 HH: -5dB HH: 7.5dB

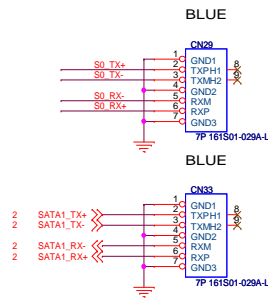
For TI LPPS swing adjust:  
 L: Normal (default)  
 H: Turn down LPPS swing



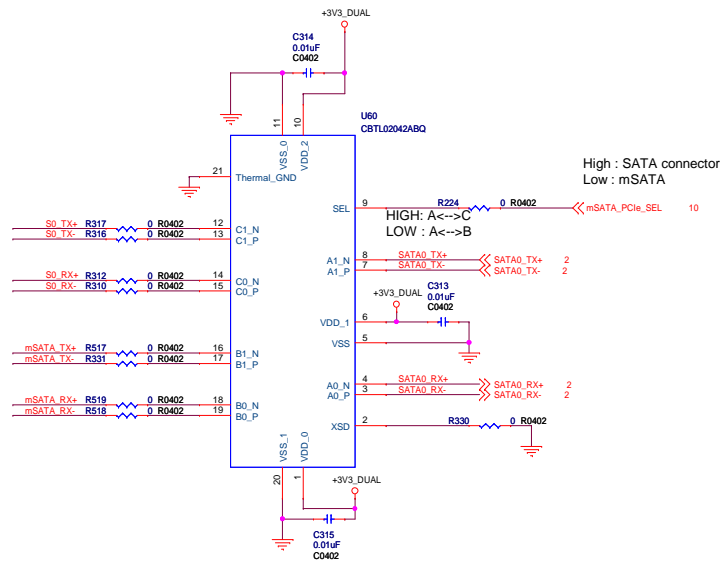
For TI A : DE-EMPHASSIS A : Equalizer  
 LL: -3.5dB (default) LL: 9.5dB (default)  
 LH: 0dB LH: 13dB  
 HL: -2.7dB HL: 4.5dB  
 HH: -5dB HH: 7.5dB

For TI B : DE-EMPHASSIS B : Equalizer  
 LL: -3.5dB (default) LL: 9.5dB (default)  
 LH: 0dB LH: 13dB  
 HL: -2.7dB HL: 4.5dB  
 HH: -5dB HH: 7.5dB

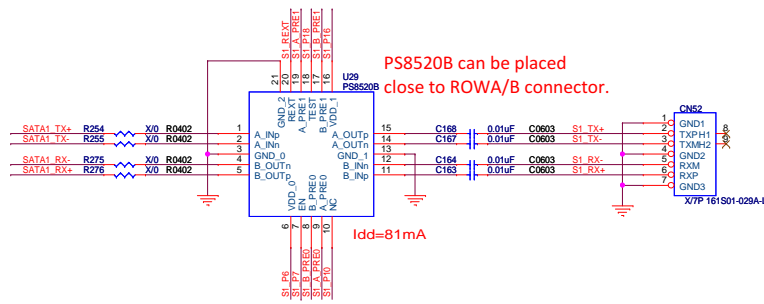
For TI LPPS swing adjust:  
 L: Normal (default)  
 H: Turn down LPPS swing



White

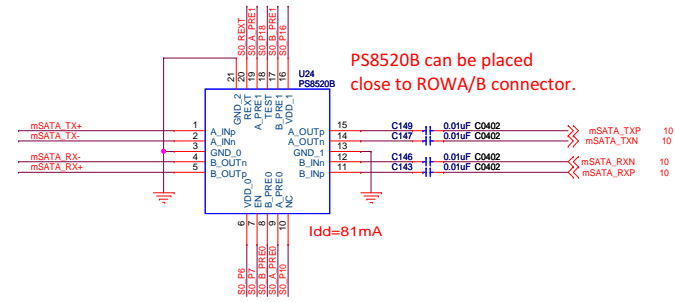
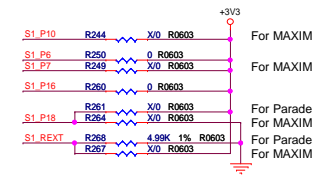


High : SATA connector  
Low : mSATA



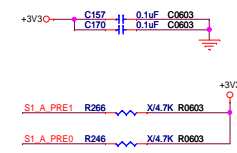
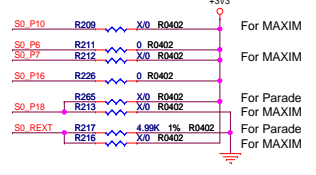
PS8520B can be placed close to ROWA/B connector.

Idd=81mA



PS8520B can be placed close to ROWA/B connector.

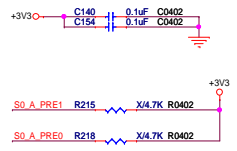
Idd=81mA



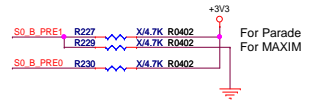
Pre-emphasis For CH A (A\_PRE1, 0)  
00: 0dB, no pre-emphasis  
01: 1.5dB pre-emphasis  
10: 2.5dB pre-emphasis  
11: 3.5dB pre-emphasis



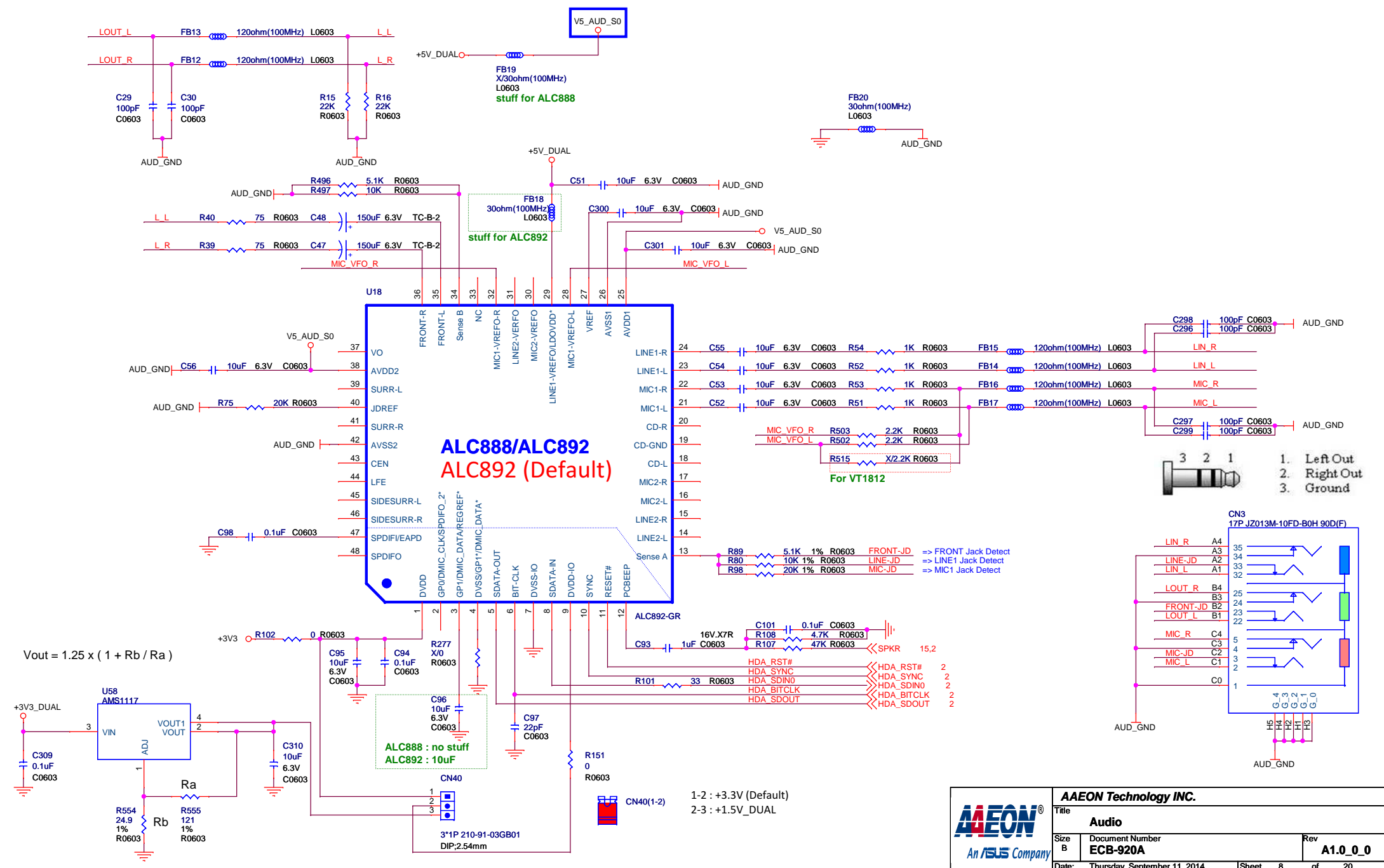
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01: 1.5dB pre-emphasis  
10: 2.5dB pre-emphasis  
11: 3.5dB pre-emphasis



Pre-emphasis For CH A (A\_PRE1, 0)  
00: 0dB, no pre-emphasis  
01: 1.5dB pre-emphasis  
10: 2.5dB pre-emphasis  
11: 3.5dB pre-emphasis



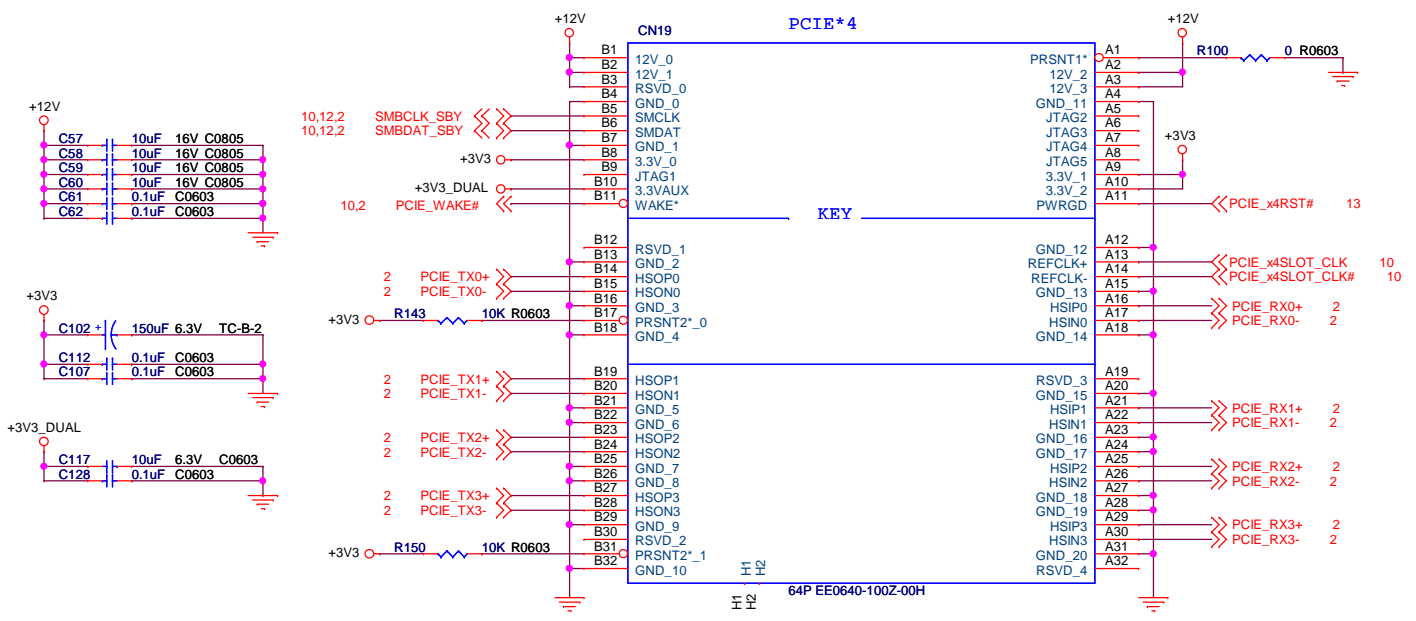
Pre-emphasis For CH B (B\_PRE1, 0)  
00: 0dB, no pre-emphasis  
01: 1.5dB pre-emphasis  
10: 2.5dB pre-emphasis  
11: 3.5dB pre-emphasis



<b>AAEON Technology INC.</b>		
Title <b>Audio</b>		
Size B	Document Number <b>ECB-920A</b>	Rev <b>A1.0_0_0</b>
Date: Thursday, September 11, 2014	Sheet 8	of 20







+12V==>2.1A  
+3V3==>3A  
+3V3\_DUAL==>375mA

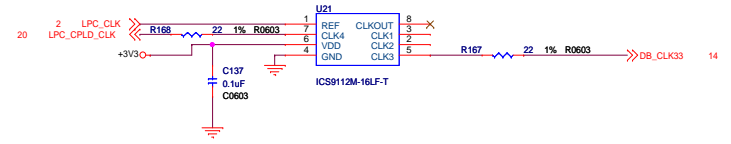
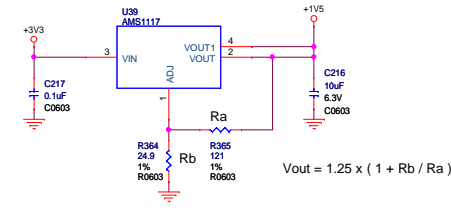
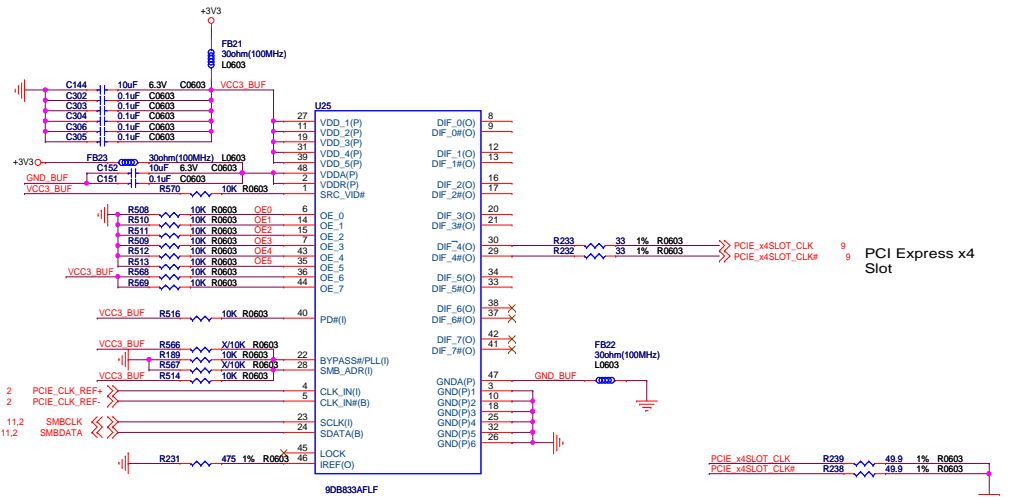
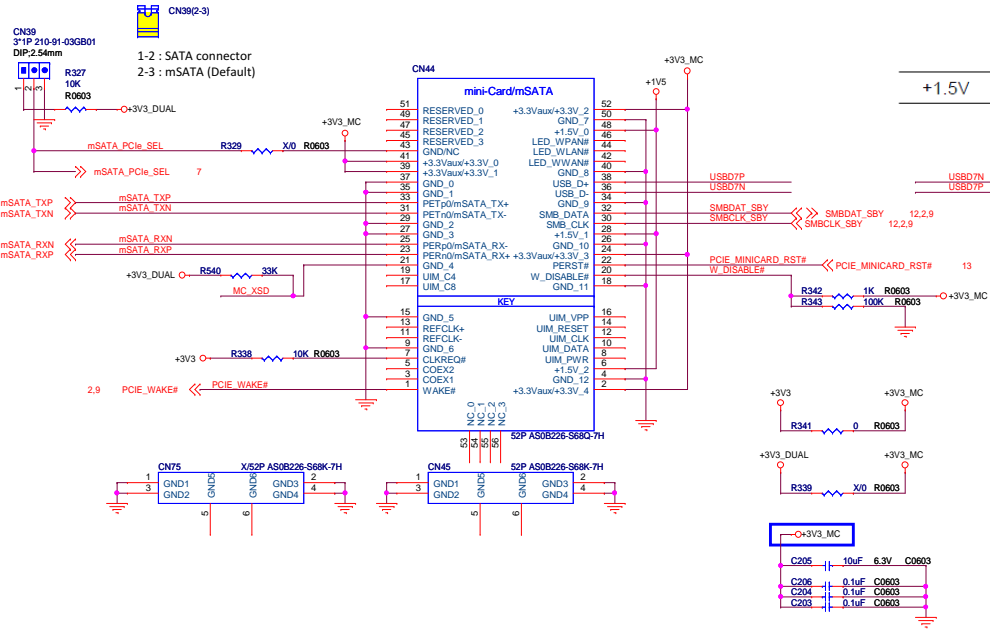
	X1		x4/x8	x16	
Standard height	10 W <sup>1</sup> (max)	25 W <sup>1</sup> (max)	25 W (max)	25 W <sup>2</sup> (max)	75 W <sup>2,4</sup> (max)
Low profile card <sup>3</sup>	10 W (max)		25 W (max)	25 W (max)	

Power Rail	10 W Slot	25 W Slot	75 W Slot
<b>+3.3V</b>			
Voltage tolerance	± 9% (max)	± 9% (max)	± 9% (max)
Supply Current	3.0 A (max)	3.0 A (max)	3.0 A (max)
Capacitive Load	1000 μF (max)	1000 μF (max)	1000 μF (max)
<b>+12V</b>			
Voltage tolerance	± 8%	± 8%	± 8%
Supply Current	0.5 A	2.1 A (max)	5.5 A (max)
Capacitive Load	300 μF (max)	1000 μF (max)	2000 μF (max)
<b>+3.3Vaux</b>			
Voltage tolerance	± 9% (max)	± 9% (max)	± 9% (max)
Supply Current			
Wakeup Enabled	375 mA (max)	375 mA (max)	375 mA (max)
Non-wakeup Enabled	20 mA (max)	20 mA (max)	20 mA (max)
Capacitive Load	150 μF (max)	150 μF (max)	150 μF (max)



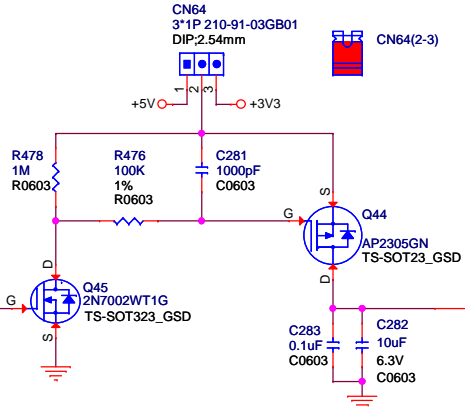
<b>AAEON Technology INC.</b>		
Title <b>PCIe x4 / x1 Slots</b>		
Size B	Document Number <b>ECB-920A</b>	Rev <b>A1.0_0_0</b>
Date: Thursday, September 11, 2014	Sheet 9	of 20

Power Rail	Voltage Tolerance	D0-D2, D3 <sub>Hot</sub> Power	
		Peak (max) mA	Normal (max) mA
3.3Vaux	±9%	2,750	1,100
+1.5V	±5%	500	375



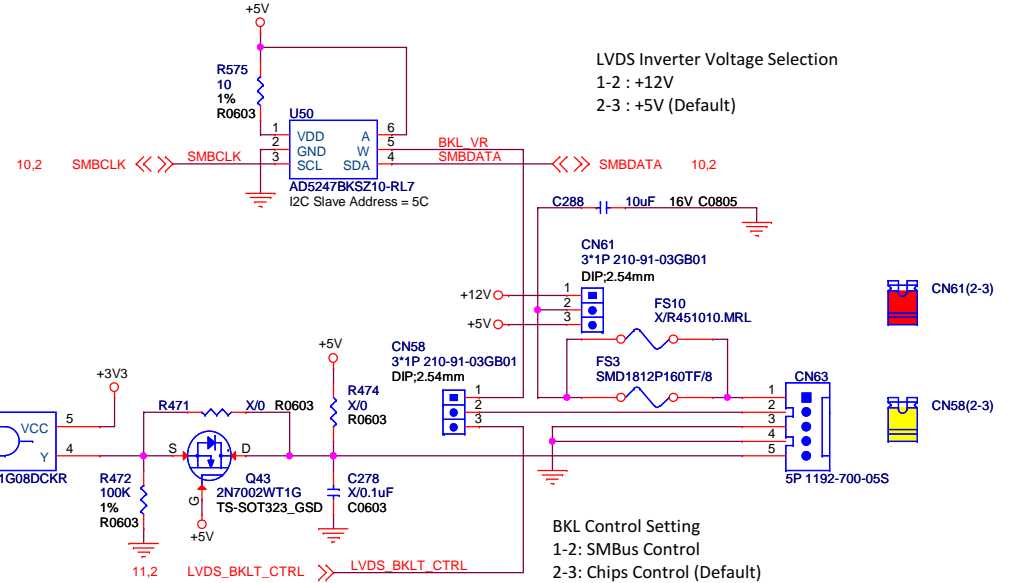
LVDS Operating Voltage Selection

- 1-2 : +5V
- 2-3 : +3.3V (Default)



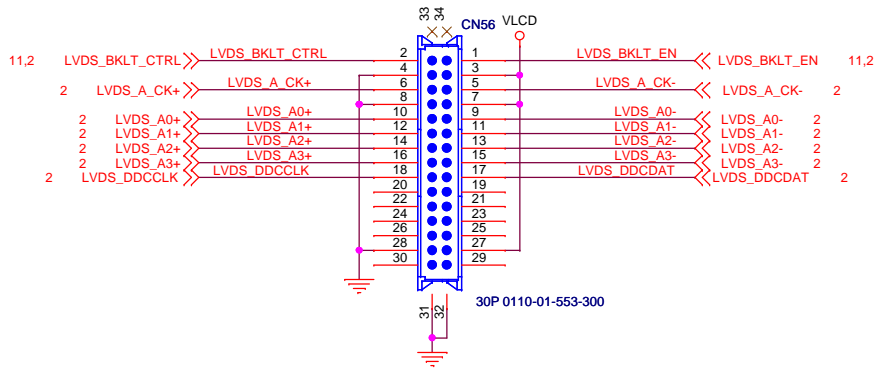
LVDS Inverter Voltage Selection


- 1-2 : +12V
- 2-3 : +5V (Default)



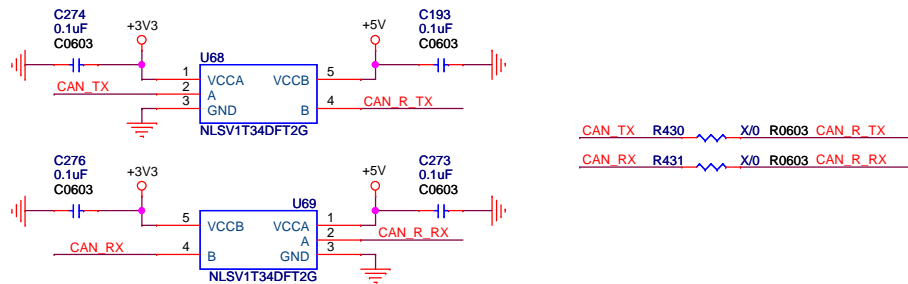
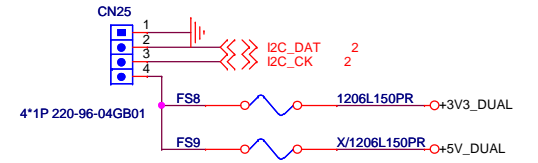
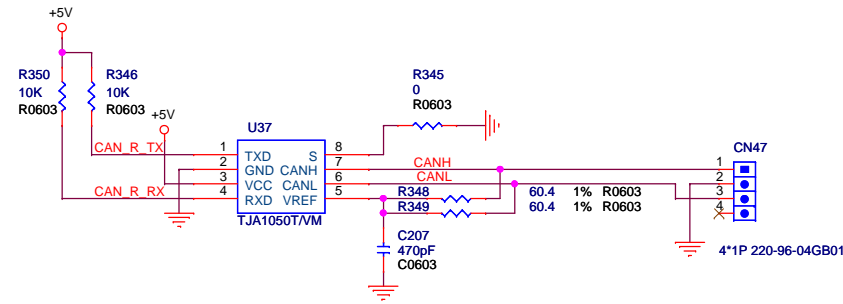
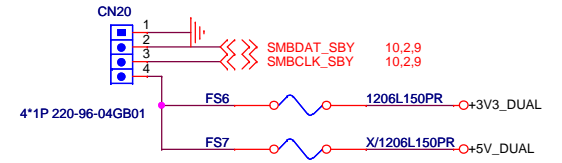
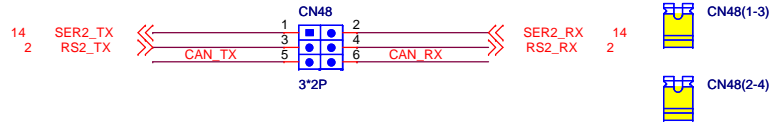
BKLT Control Setting


- 1-2: SMBus Control
- 2-3: Chips Control (Default)

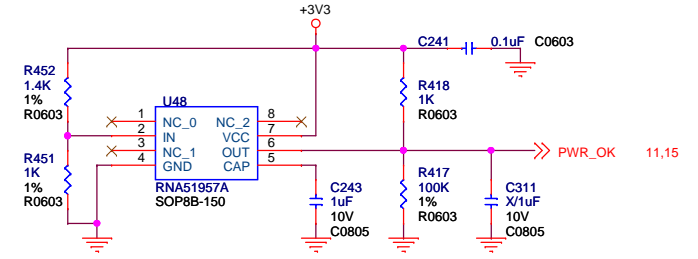
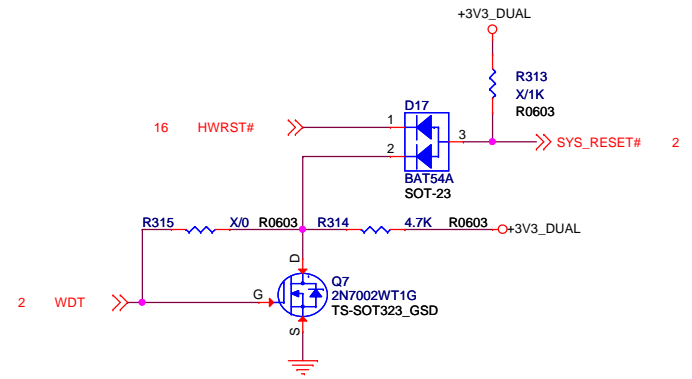
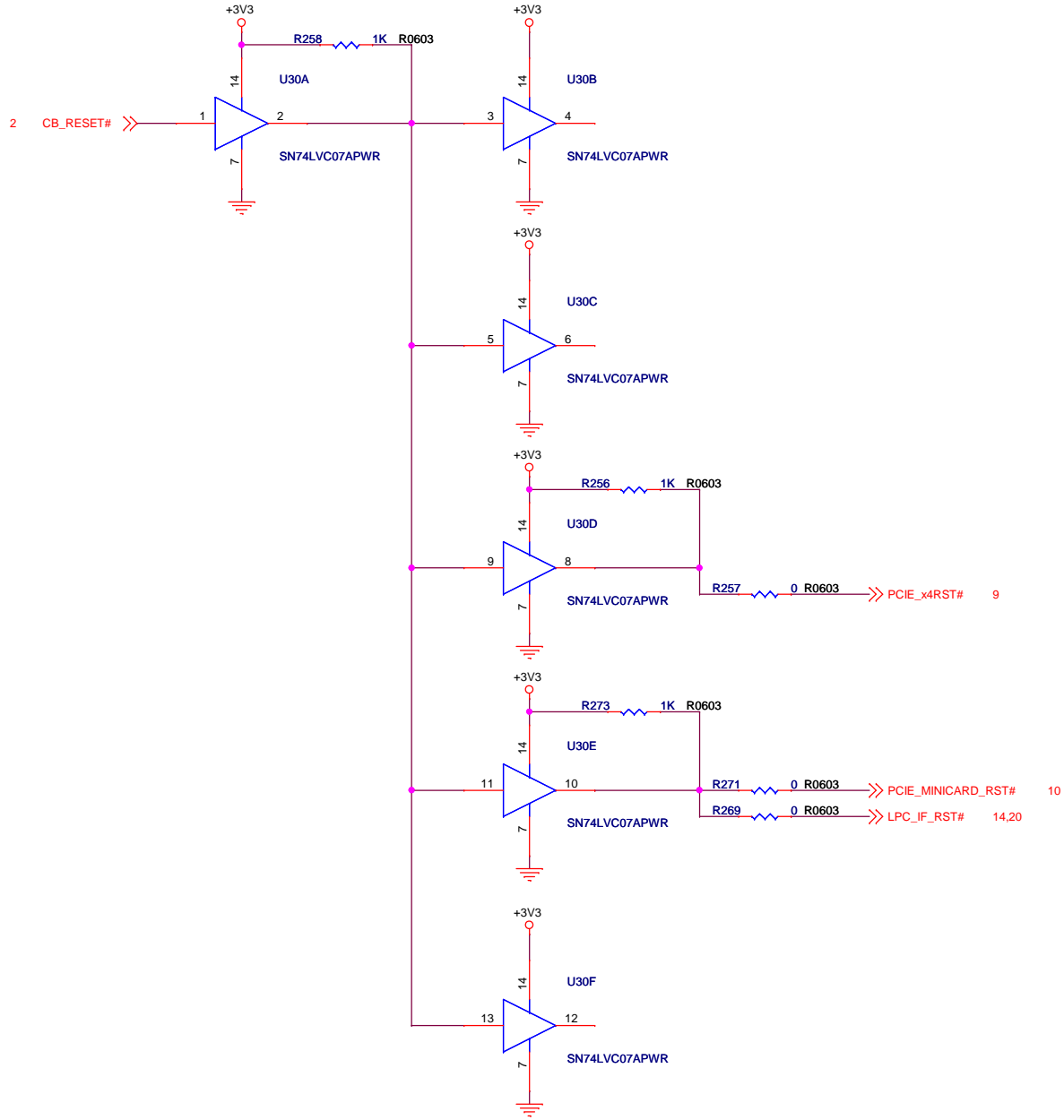



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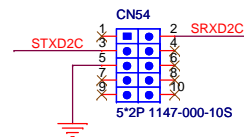
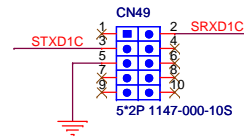
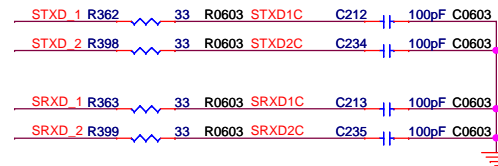
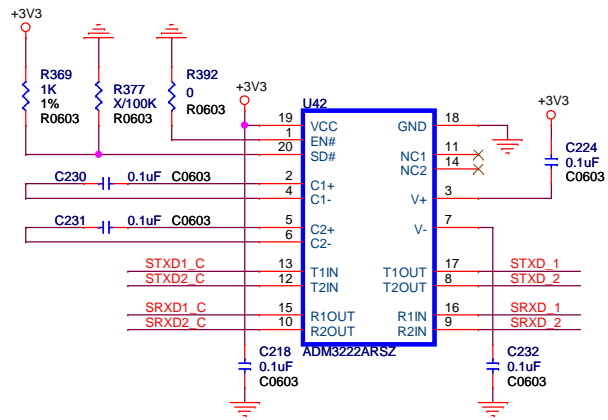
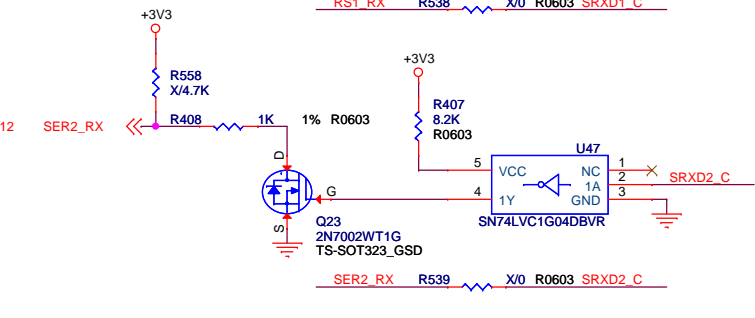
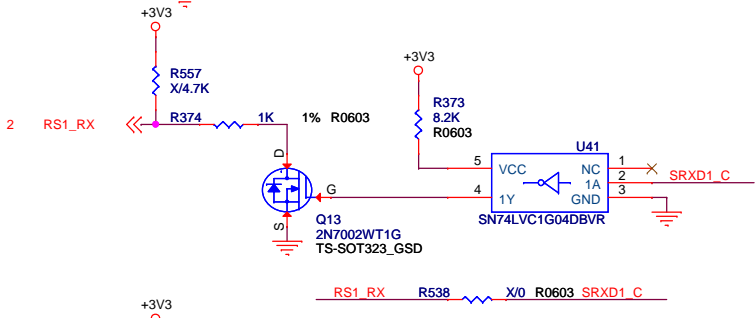
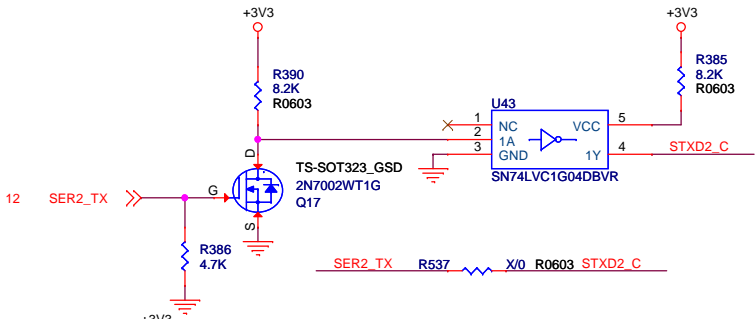
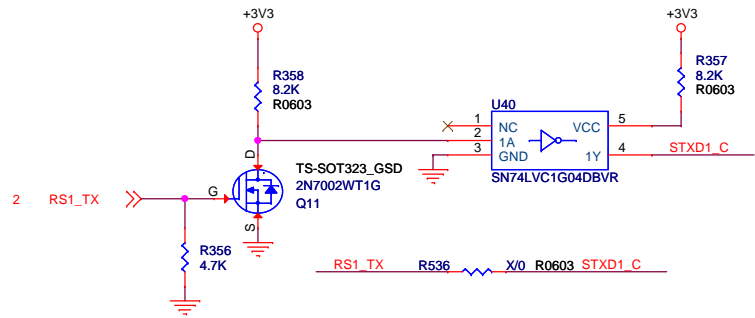
1-3, 2-4 : Serial port (default)  
 3-5, 4-6 : CAN BUS



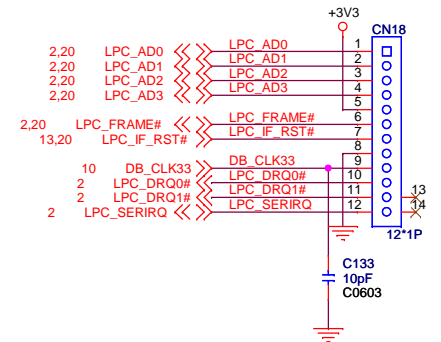
 An ASUS Company		AAEON Technology INC.	
		Title CANBUS / SMBUS / I2C	
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		<b>RESET + PWROK</b>	
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### LPC Debug Port & Expansion



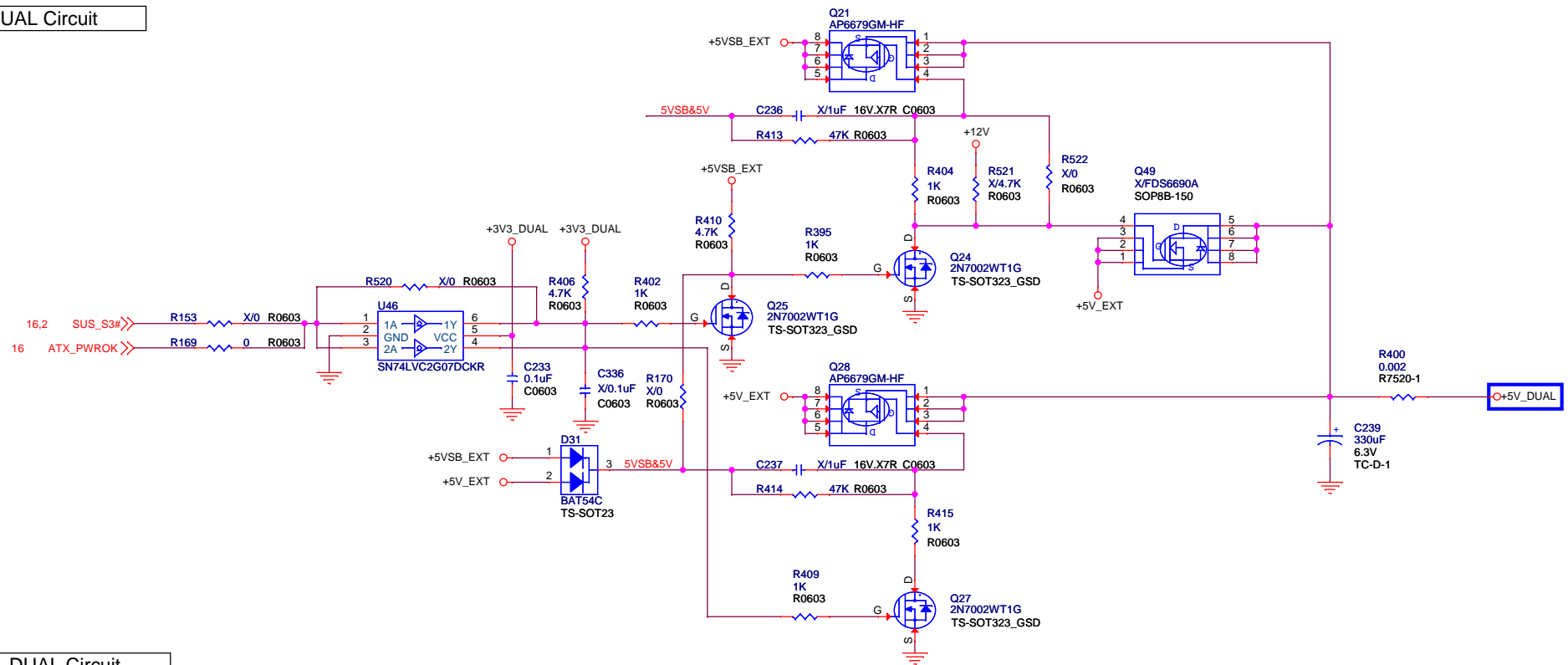
 <b>AEEON Technology INC.</b>		Title	
		Serial port + LPC	
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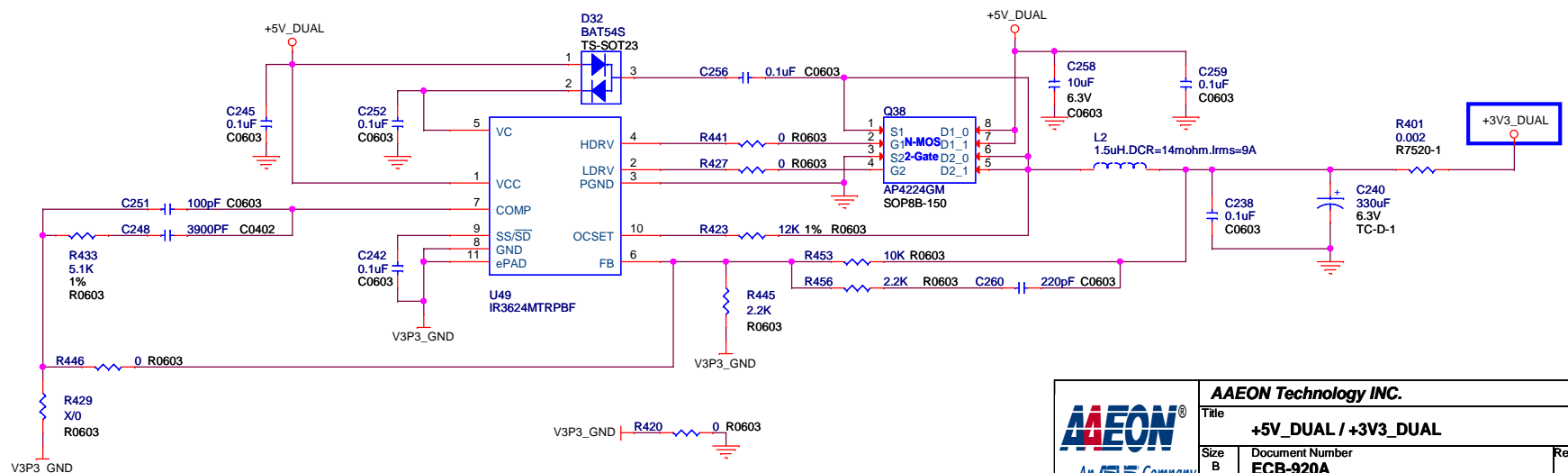





**+5V\_DUAL Circuit**

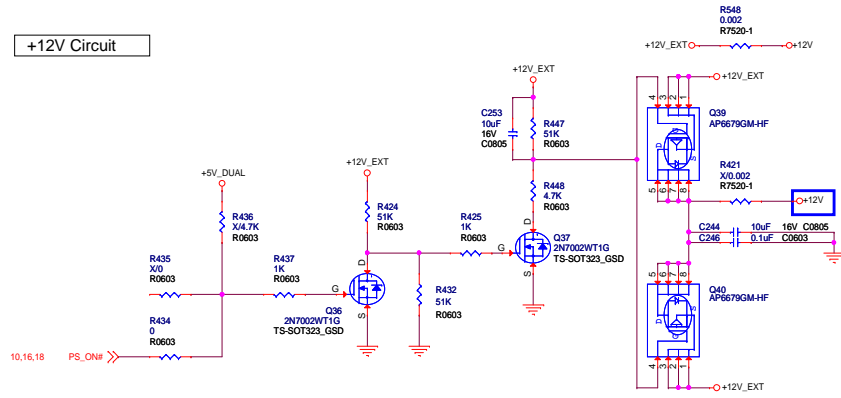


**+3V3\_DUAL Circuit**

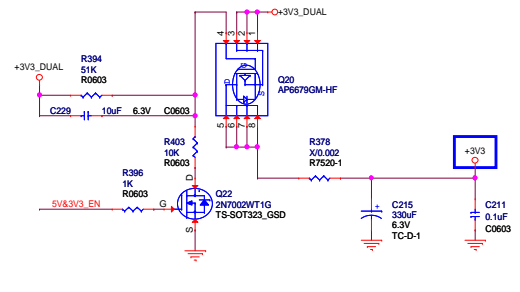
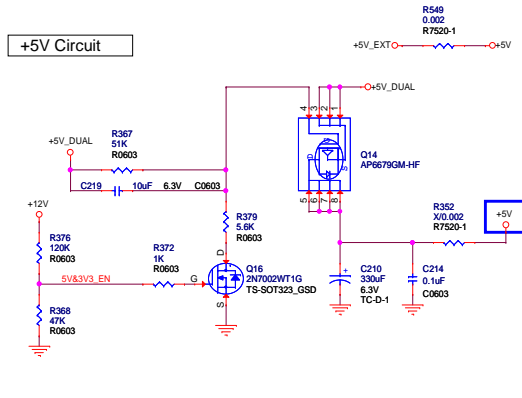


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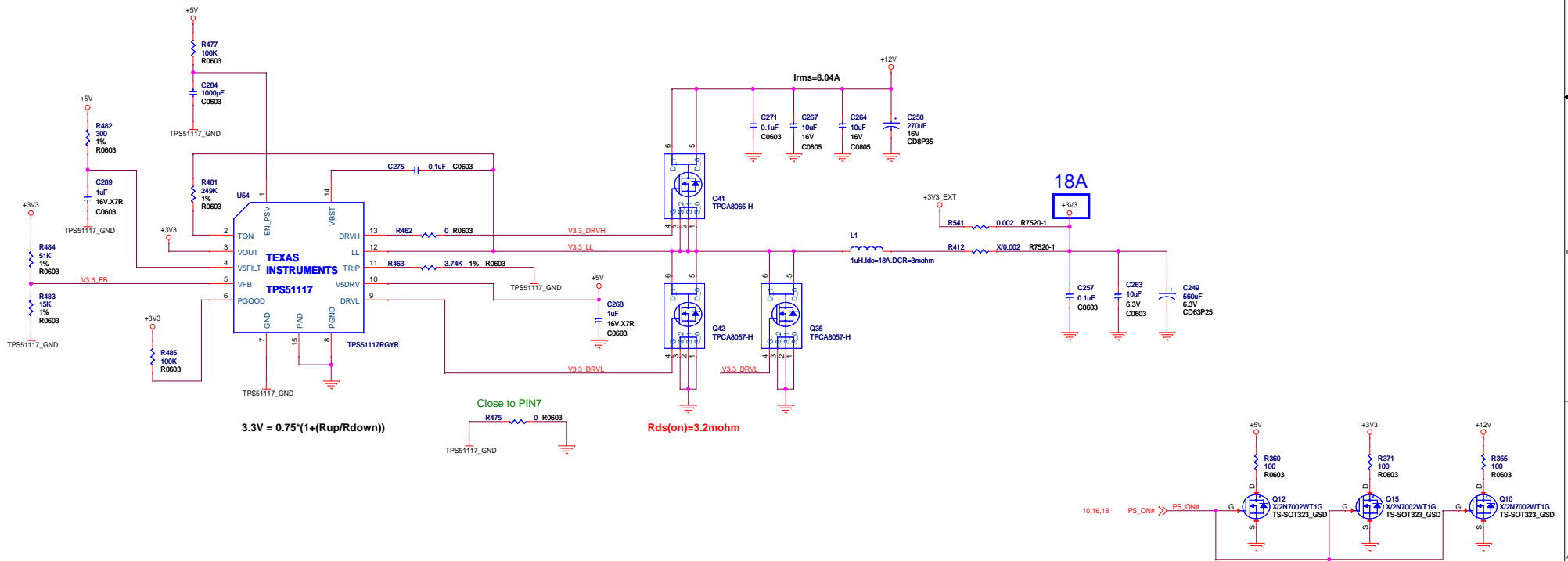
**+12V Circuit**

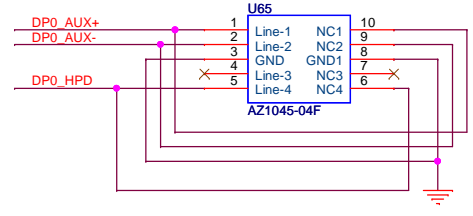
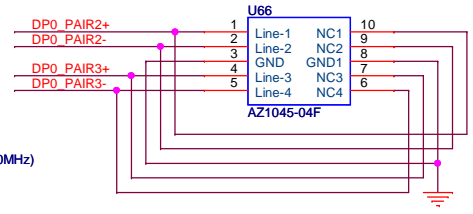
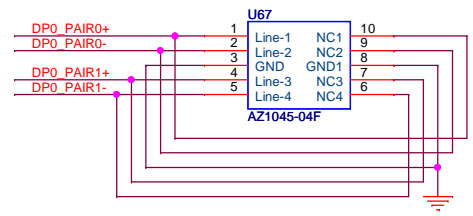
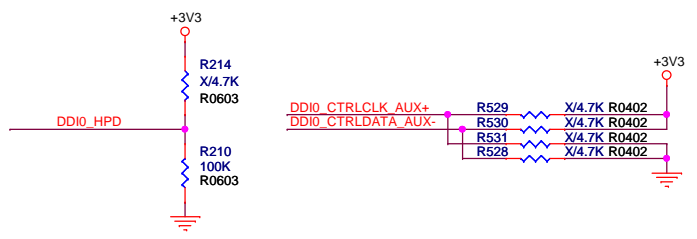
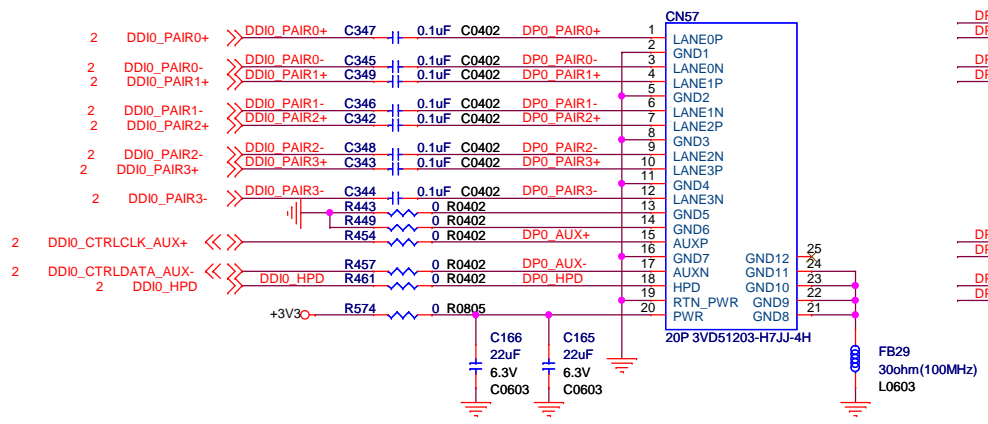



**+5V Circuit**

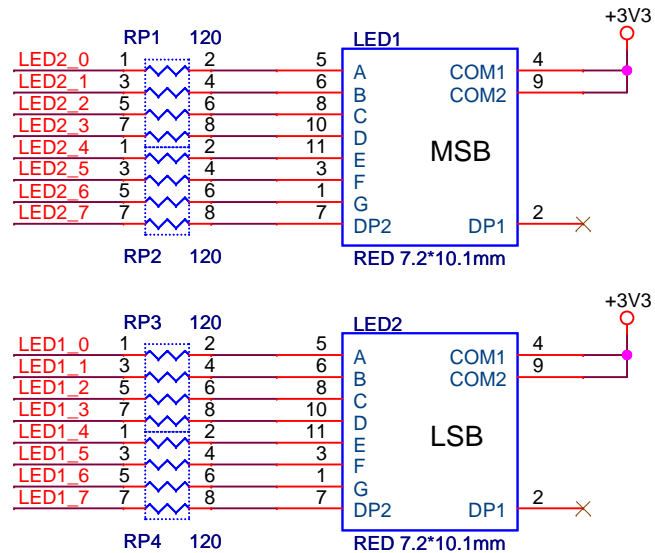
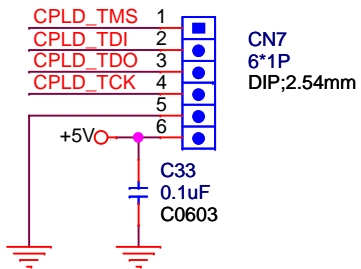
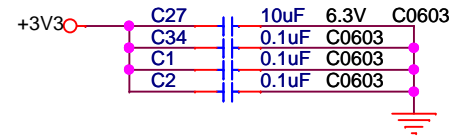
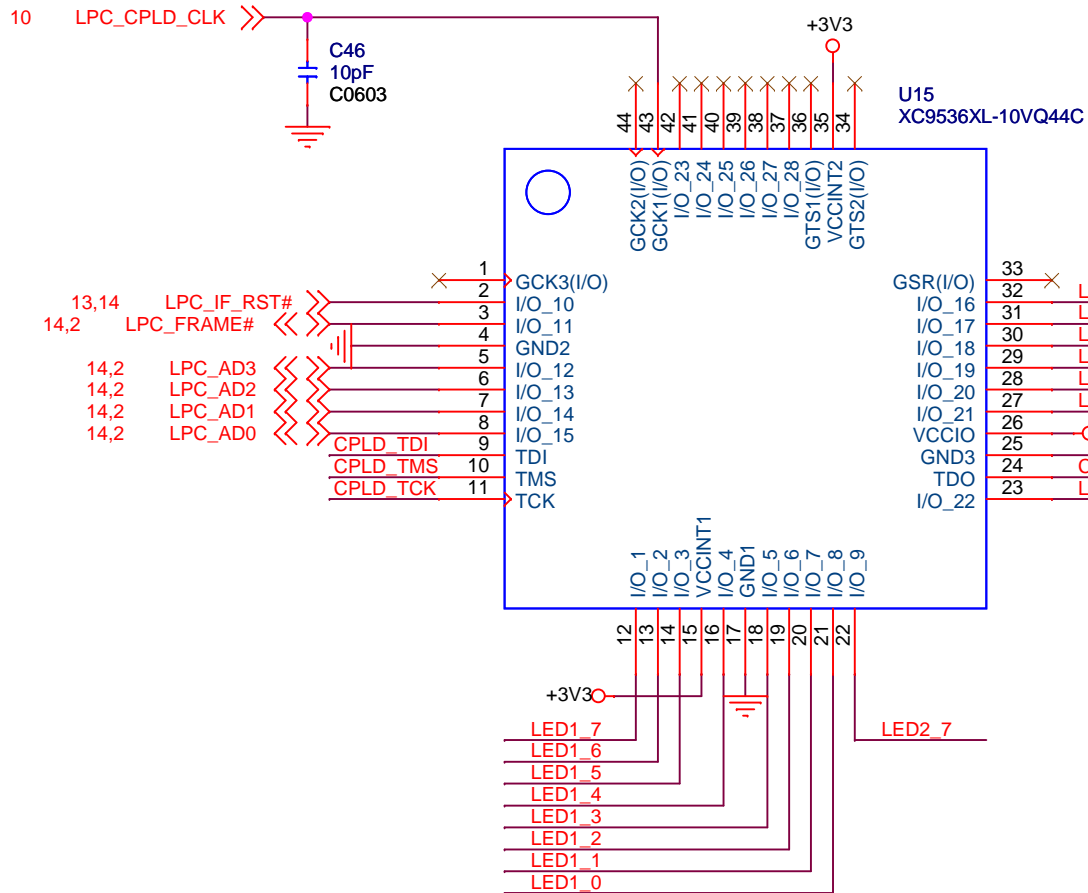



**+3V3 Circuit**





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		Title <b>LPC 80H</b>	
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