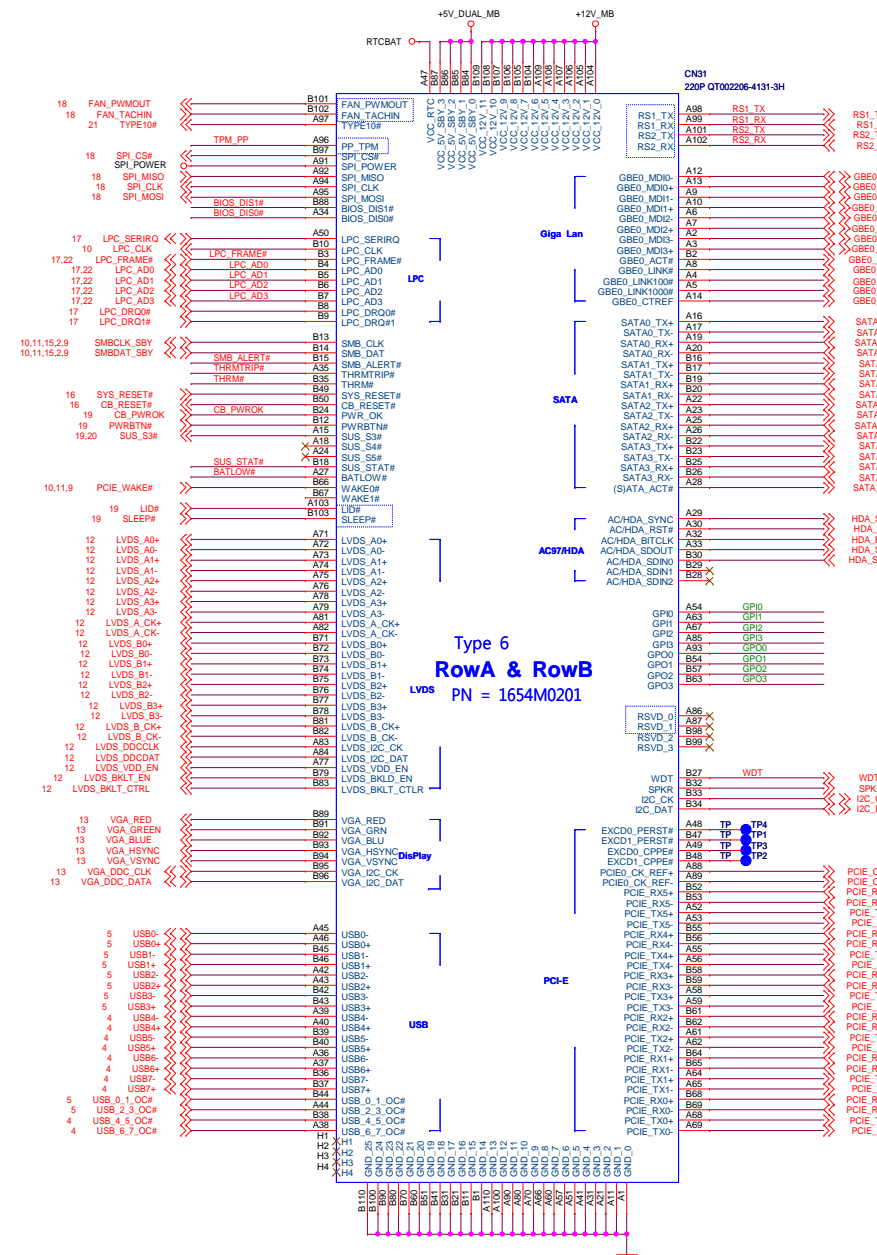
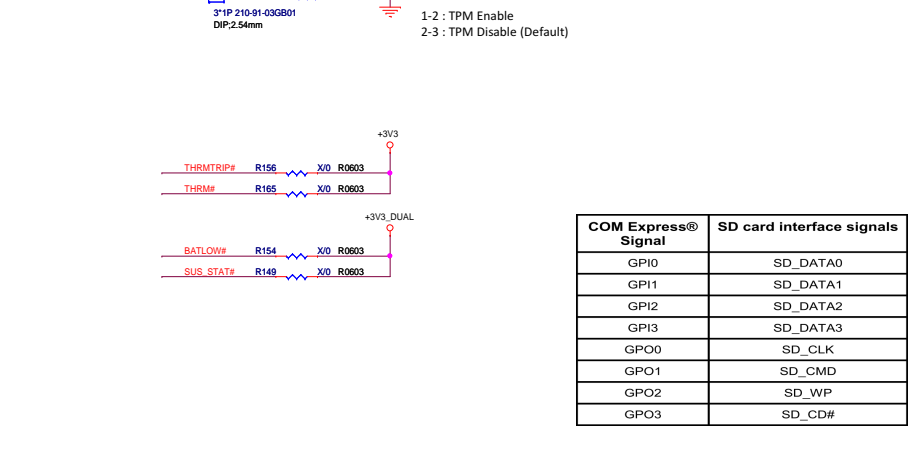
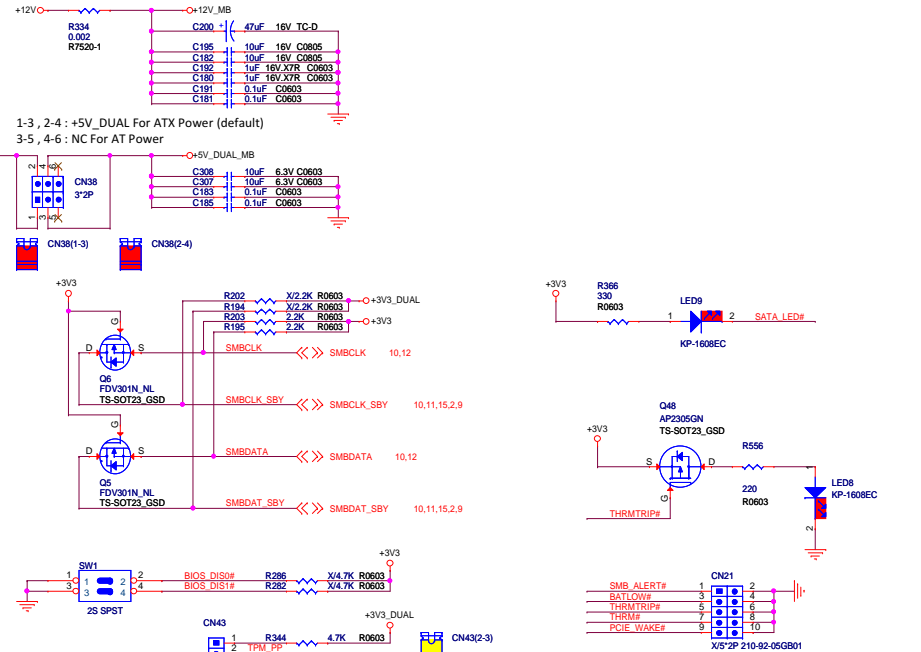


Page	Index
1	Cover Sheet
2	Row A/B
3	Row C/D
4	LAN-RJ45 + USB2.0
5	USB2.0 + USB3.0
6	USB3.0 Redriver
7	SATA
8	Audio
9	PCIe x4 / x1 Slots
10	MINI CARD_Clock Buffer
11	PCI Express Graphic
12	LVDS
13	VGA + DDI1
14	DP Port
15	CANBUS / SMBUS / I2C
16	RESET + PWROK
17	Serial port + LPC
18	SPI + Buzzer + FAN + RTC
19	ATX Power + Front Panel
20	+5V_DUAL / +3V3_DUAL
21	+12V / +5V / +3V3
22	LPC 80H

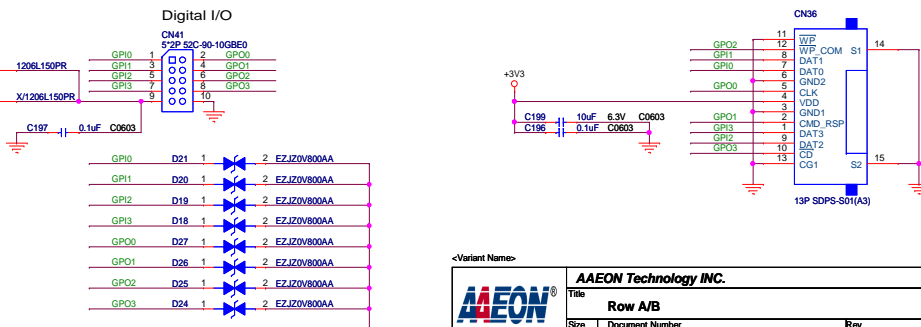


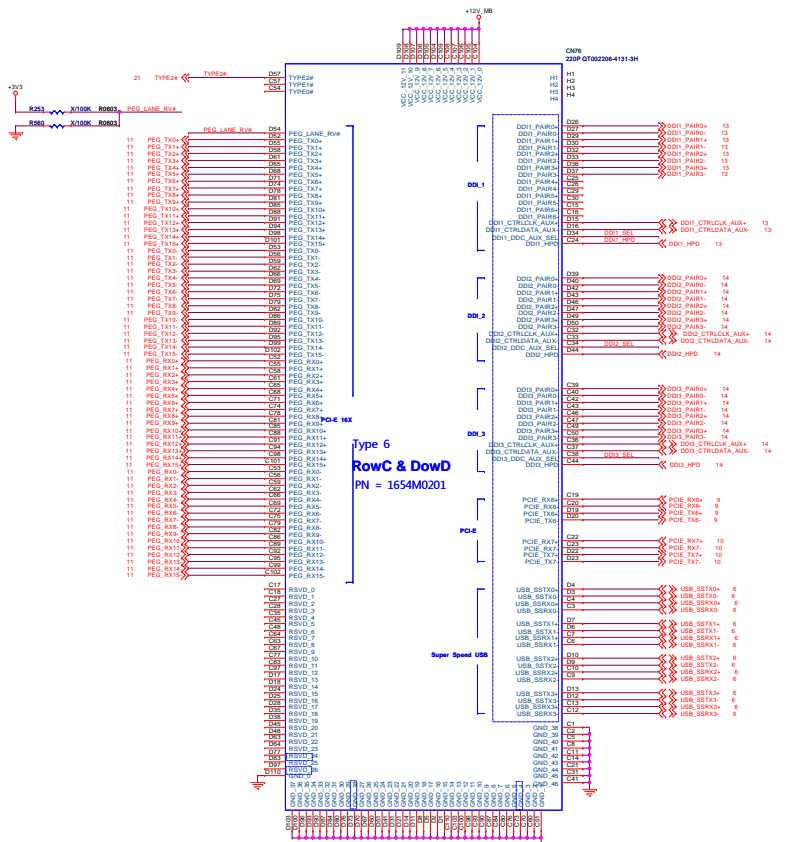
**Type 6
RowA & RowB
PN = 1654M0201**

Power Rail	Module Pin Current Capability (Amps)	Nominal Input (Volts)	Input Range (Volts)	Derated Input (Volts)	Max Input Ripple (mV)	Max Module Input Power (w. derated input) (Watts)	Assumed Conversion Efficiency	Max Load Power (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			

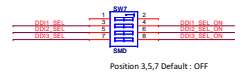
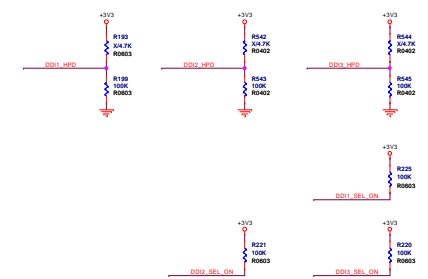
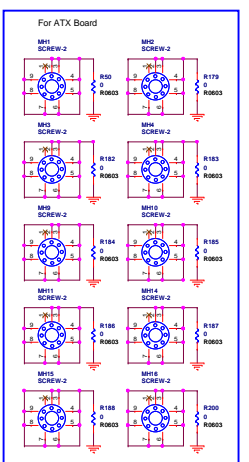
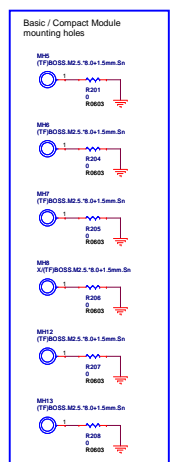


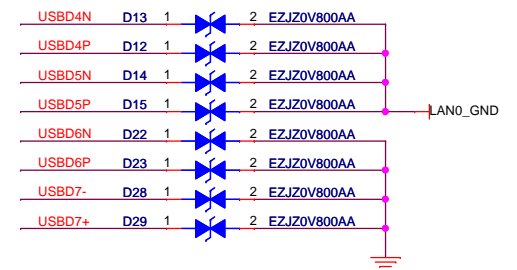
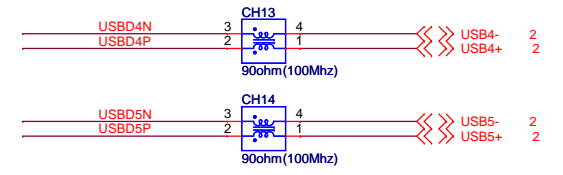
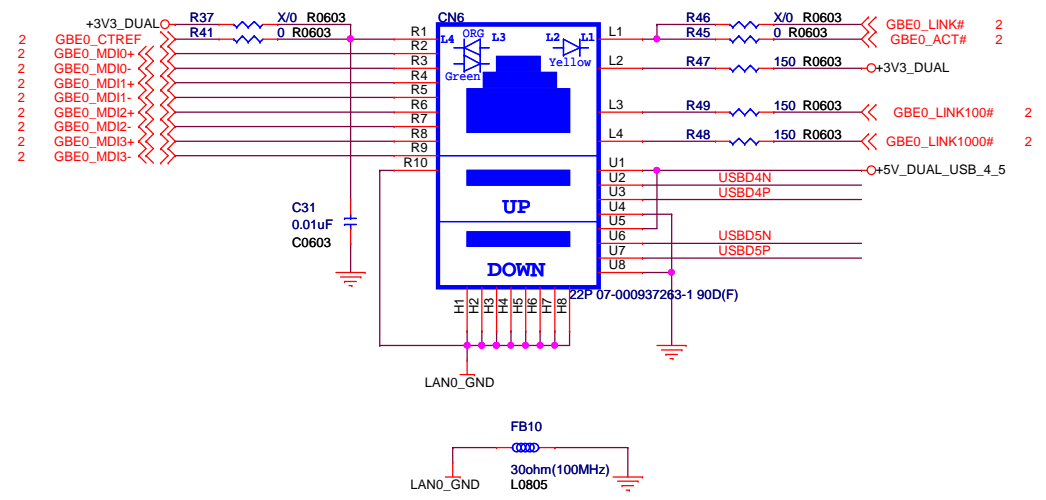
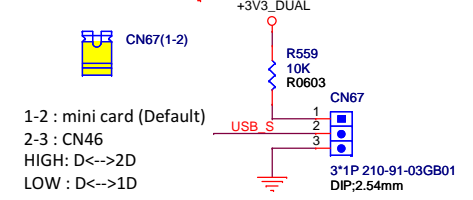
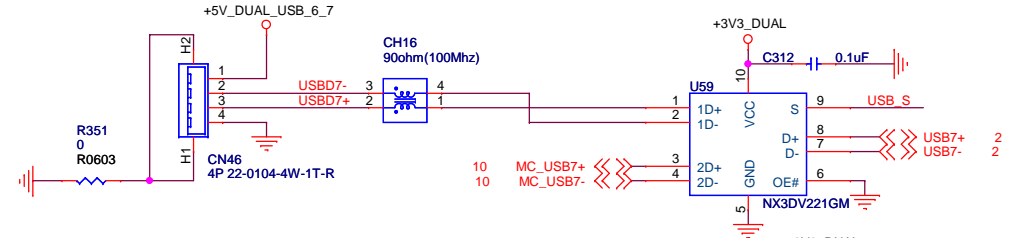
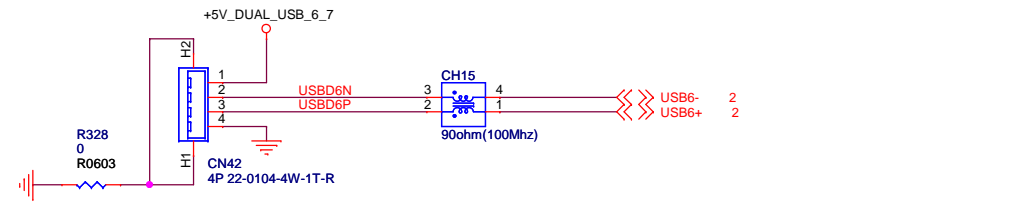
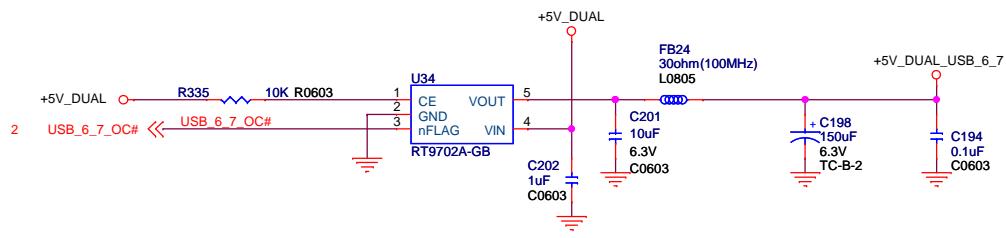
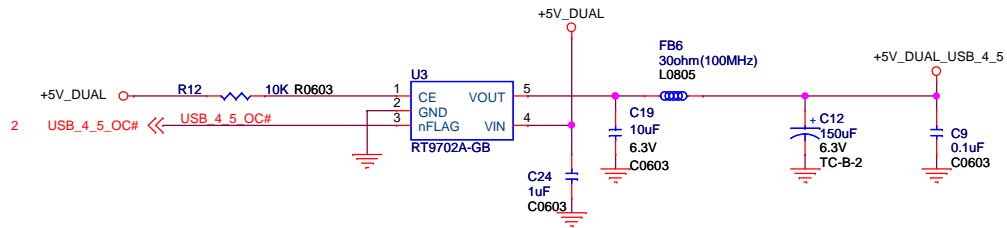
COM Express® Signal	SD card interface signals
GPI0	SD_DATA0
GPI1	SD_DATA1
GPI2	SD_DATA2
GPI3	SD_DATA3
GPO0	SD_CLK
GPO1	SD_CMD
GPO2	SD_WP
GPO3	SD_CD#



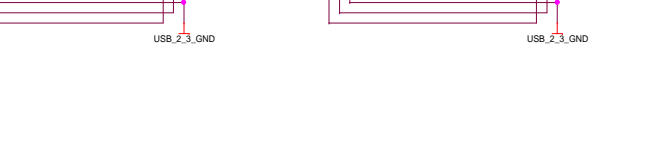
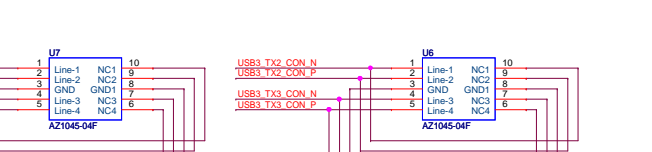
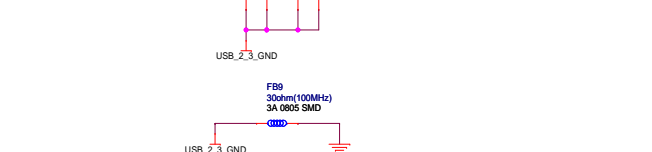
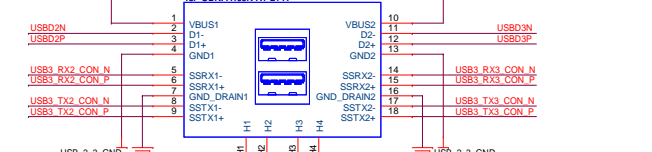
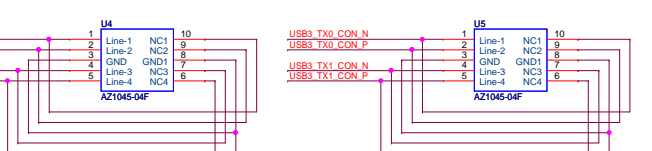
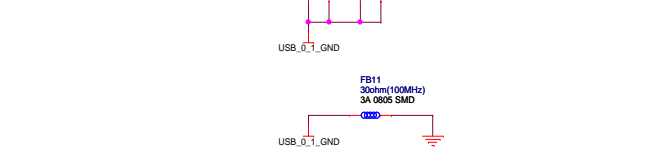
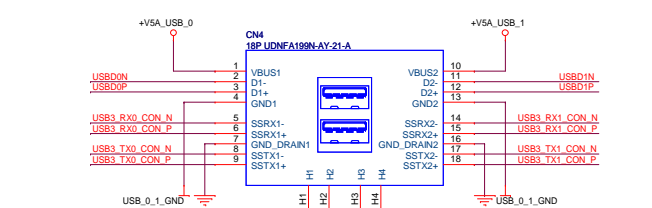
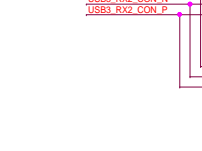
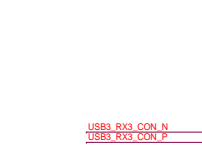
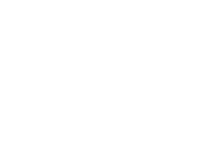
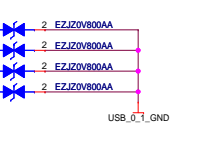
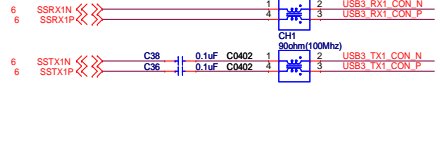
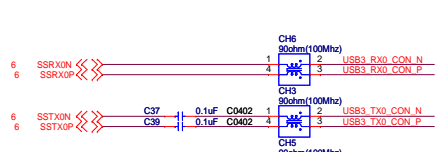
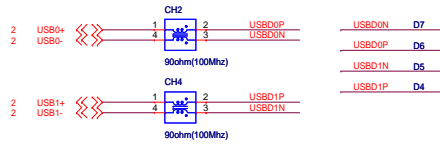
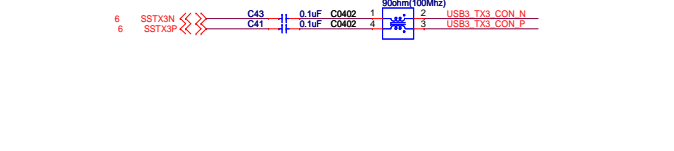
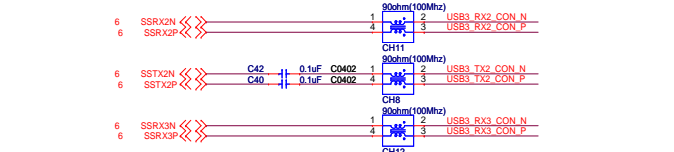
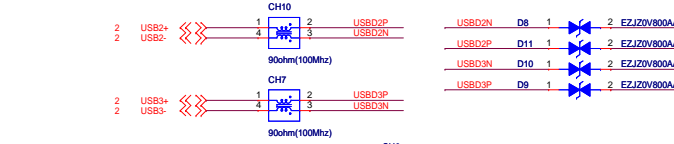
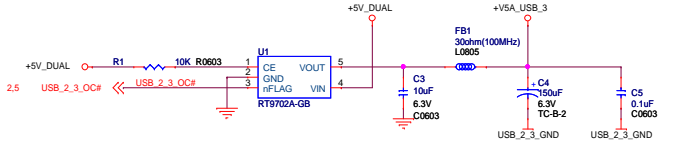
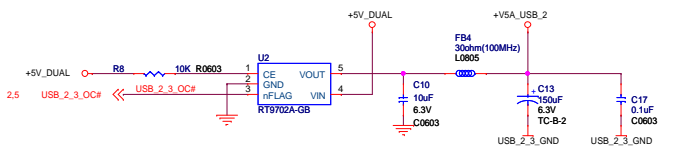
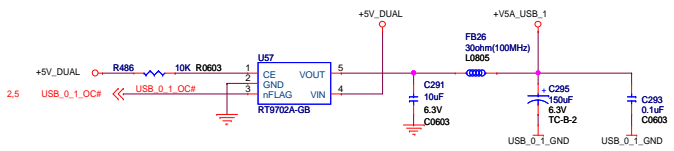
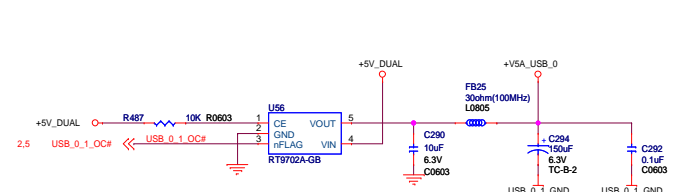


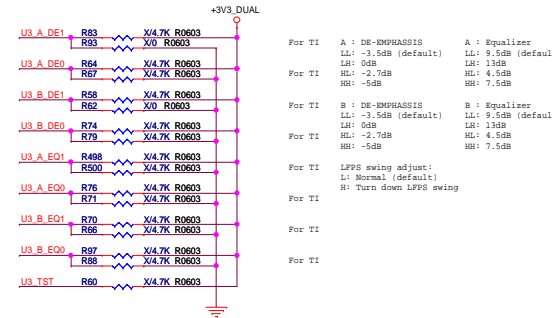
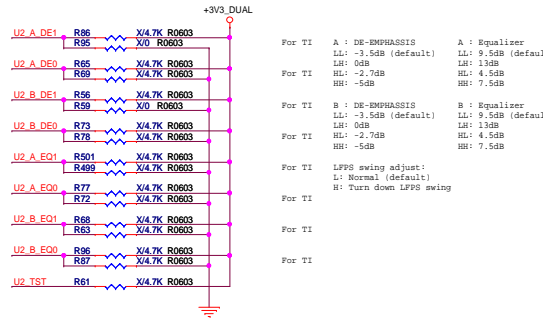
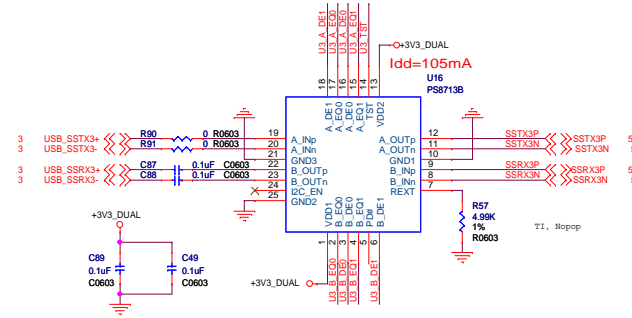
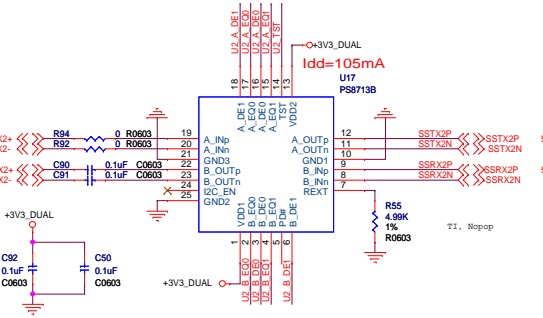
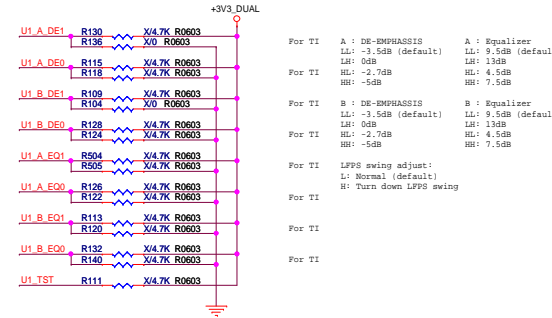
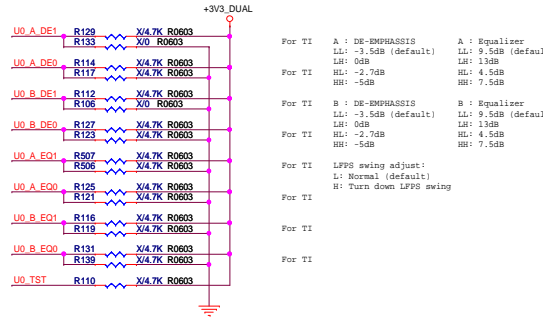
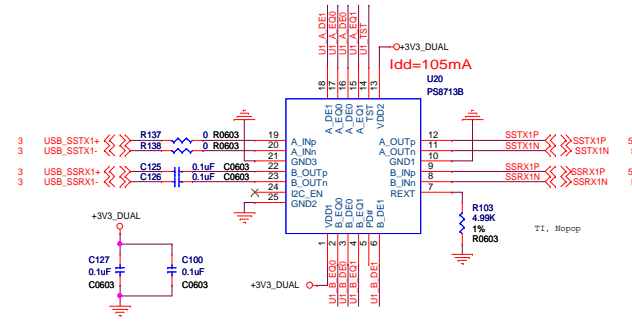
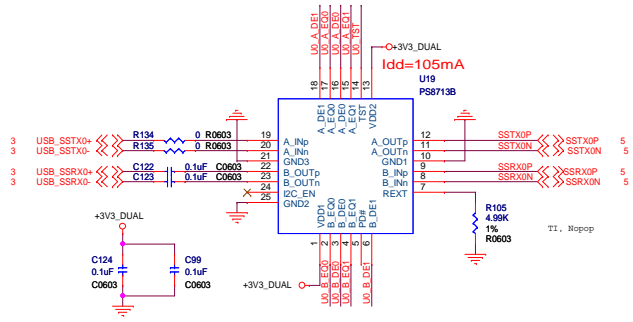
Type 6
RowC & DowD
PN = 1654M0201

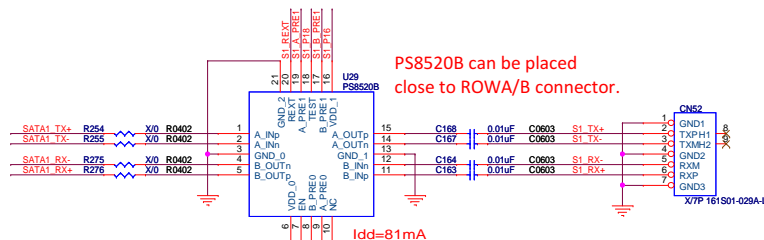
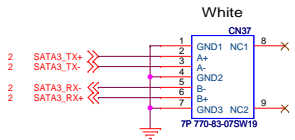
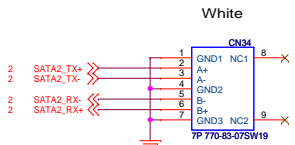
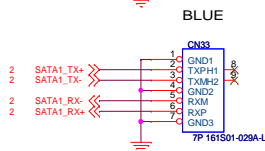
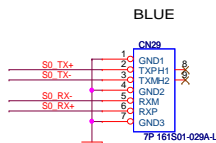




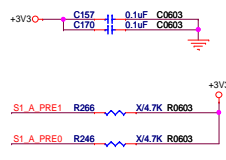
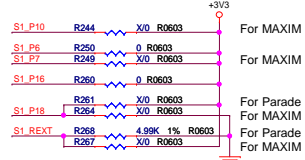
		AEEON Technology INC. Title LAN-RJ45 + USB2.0	
		Size B Document Number ECB-920A	Rev A1.0_0_0
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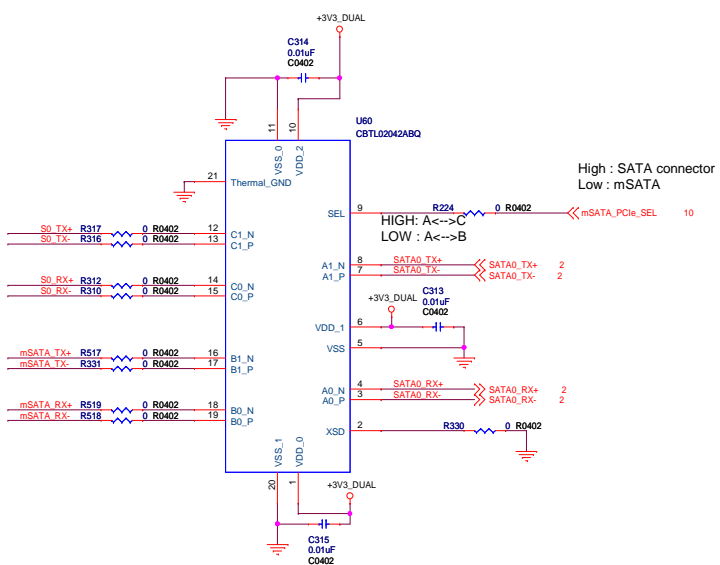
PS8520B can be placed close to ROWA/B connector.



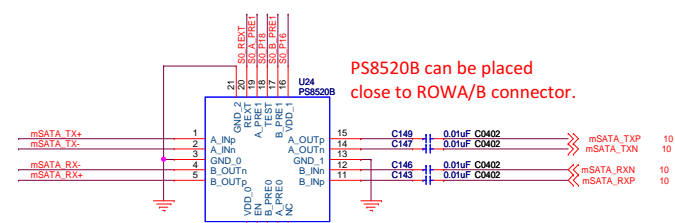
Pre-emphasis For CH A (A_PRE1, 0)
 00: 0dB, no pre-emphasis
 01: 1.5dB pre-emphasis
 10: 2.5dB pre-emphasis
 11: 3.5dB pre-emphasis



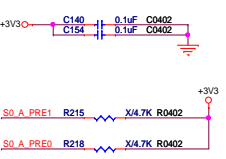
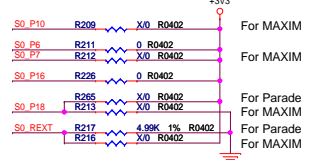
Pre-emphasis For CH B (B_PRE1, 0)
 00: 0dB, no pre-emphasis
 01: 1.5dB pre-emphasis
 10: 2.5dB pre-emphasis
 11: 3.5dB pre-emphasis



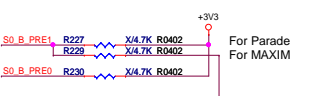
High : SATA connector
 Low : mSATA



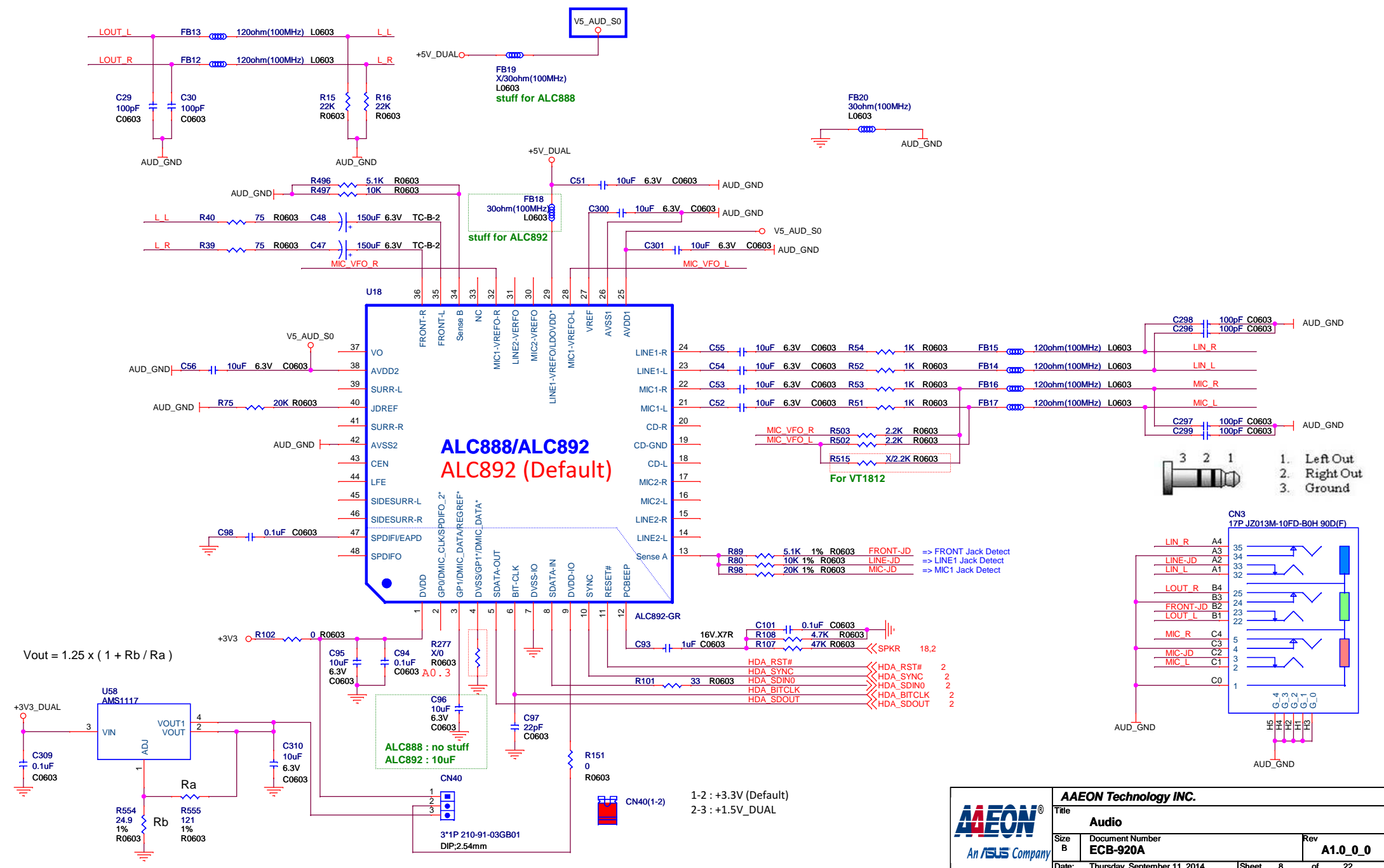
PS8520B can be placed close to ROWA/B connector.



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

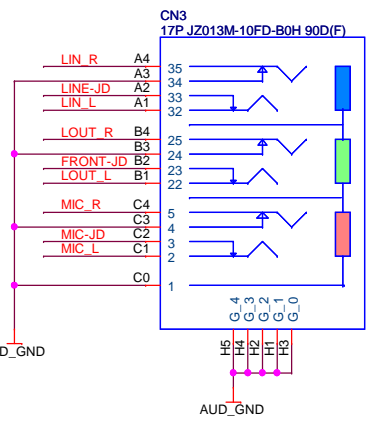
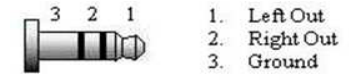


Pre-emphasis For CH B (B_PRE1, 0)
 00: 0dB, no pre-emphasis
 01: 1.5dB pre-emphasis
 10: 2.5dB pre-emphasis
 11: 3.5dB pre-emphasis



$$V_{out} = 1.25 \times (1 + R_b / R_a)$$

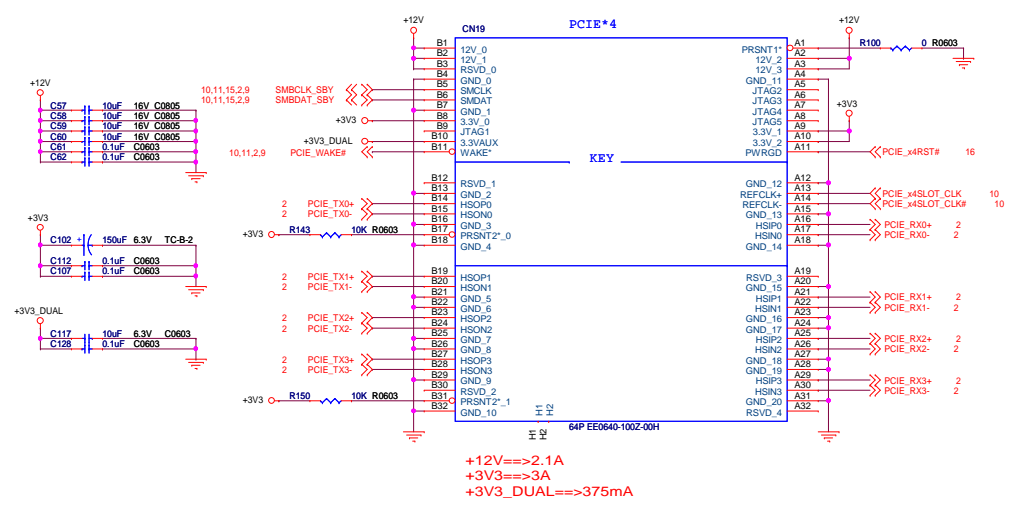
ALC888/ALC892
ALC892 (Default)



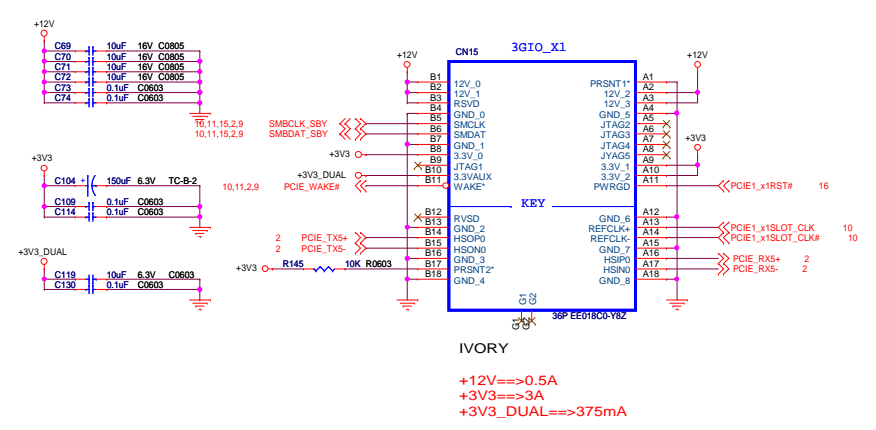
AAEON Technology INC.		
Title Audio		
Size B	Document Number ECB-920A	Rev A1.0_0_0
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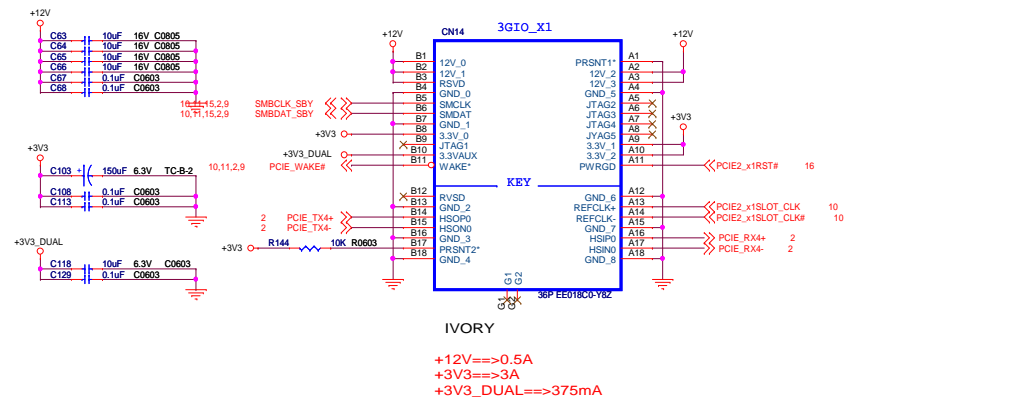
1-2 : +3.3V (Default)
 2-3 : +1.5V_DUAL



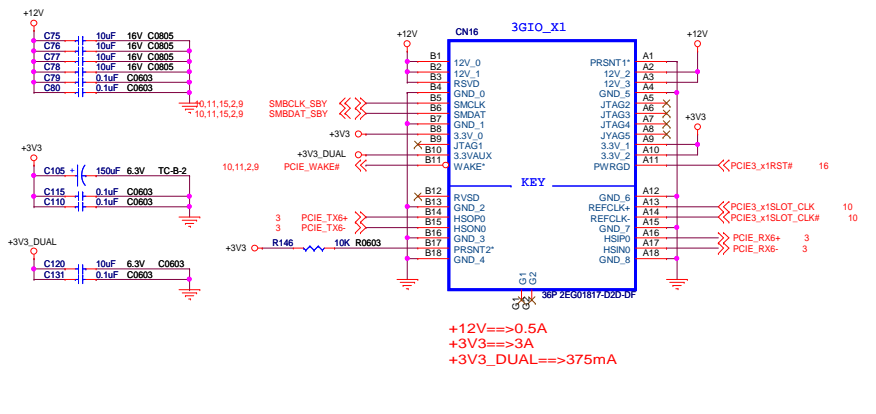
+12V==>2.1A
+3V3==>3A
+3V3_DUAL==>375mA



+12V==>0.5A
+3V3==>3A
+3V3_DUAL==>375mA



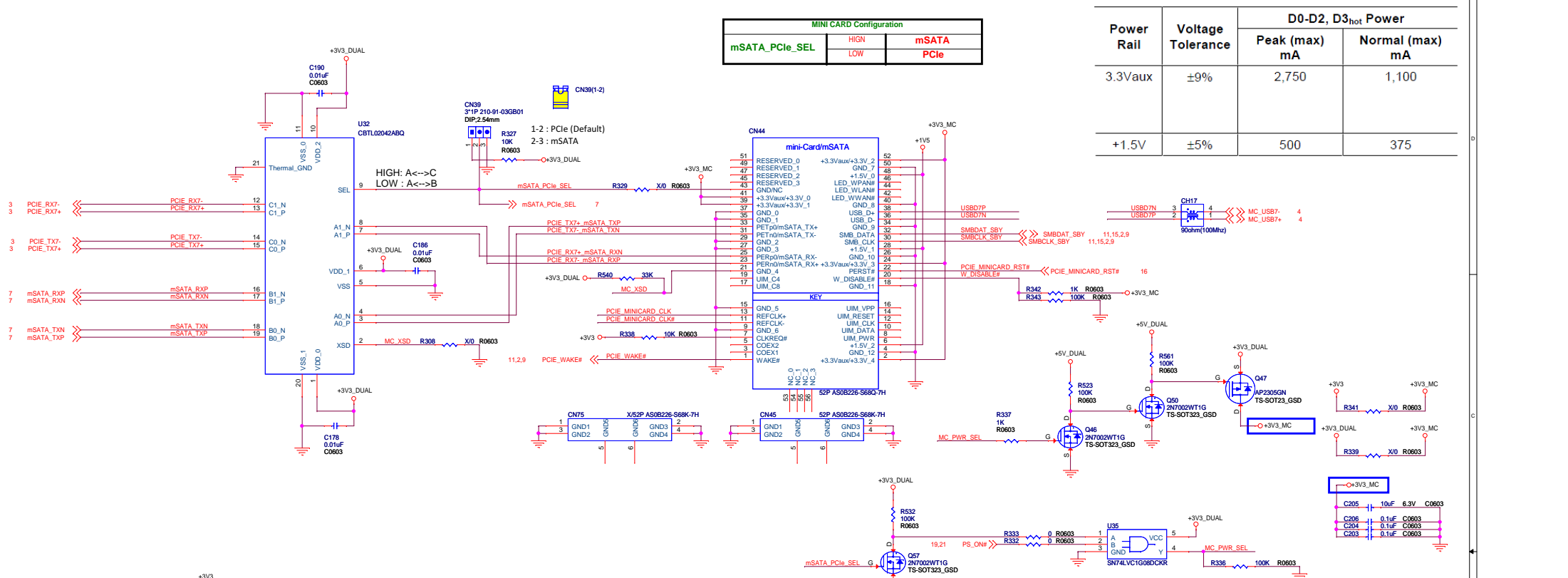
+12V==>0.5A
+3V3==>3A
+3V3_DUAL==>375mA



+12V==>0.5A
+3V3==>3A
+3V3_DUAL==>375mA

	X1		x4/x8	x16	
Standard height	10 W ¹	25 W ¹ (max)	25 W (max)	25 W ²	75 W ^{2,4} (max)
Low profile card ³	10 W (max)	25 W (max)	25 W (max)	25 W (max)	

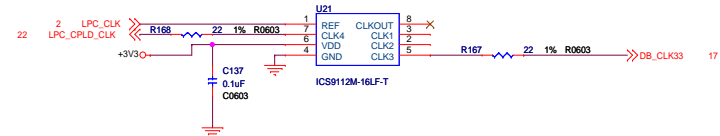
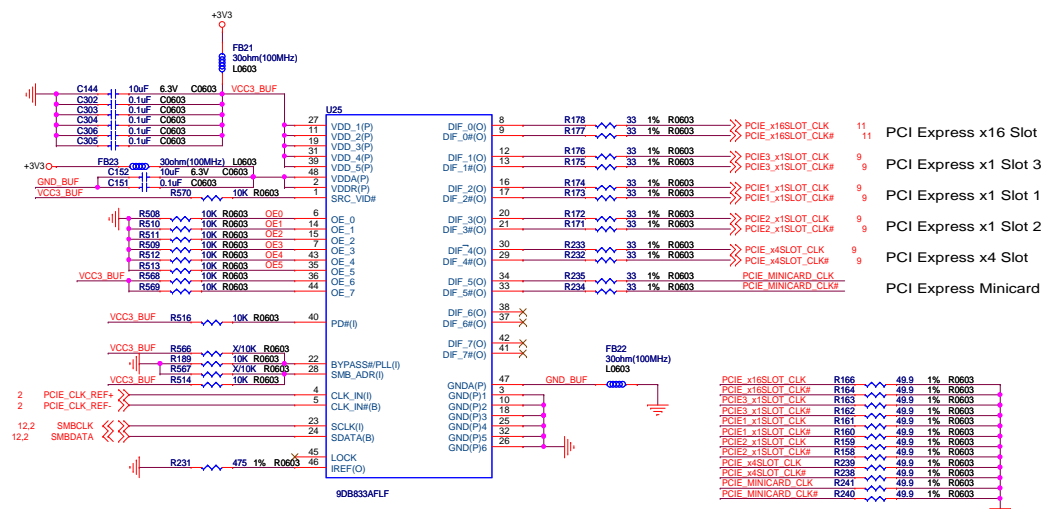
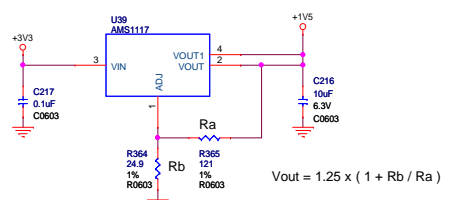
Power Rail	10 W Slot	25 W Slot	75 W Slot
+3.3V			
Voltage tolerance	± 9% (max)	± 9% (max)	± 9% (max)
Supply Current	3.0 A (max)	3.0 A (max)	3.0 A (max)
Capacitive Load	1000 µF (max)	1000 µF (max)	1000 µF (max)
+12V			
Voltage tolerance	± 8%	± 8%	± 8%
Supply Current	0.5 A	2.1 A (max)	5.5 A (max)
Capacitive Load	300 µF (max)	1000 µF (max)	2000 µF (max)
+3.3Vaux			
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)

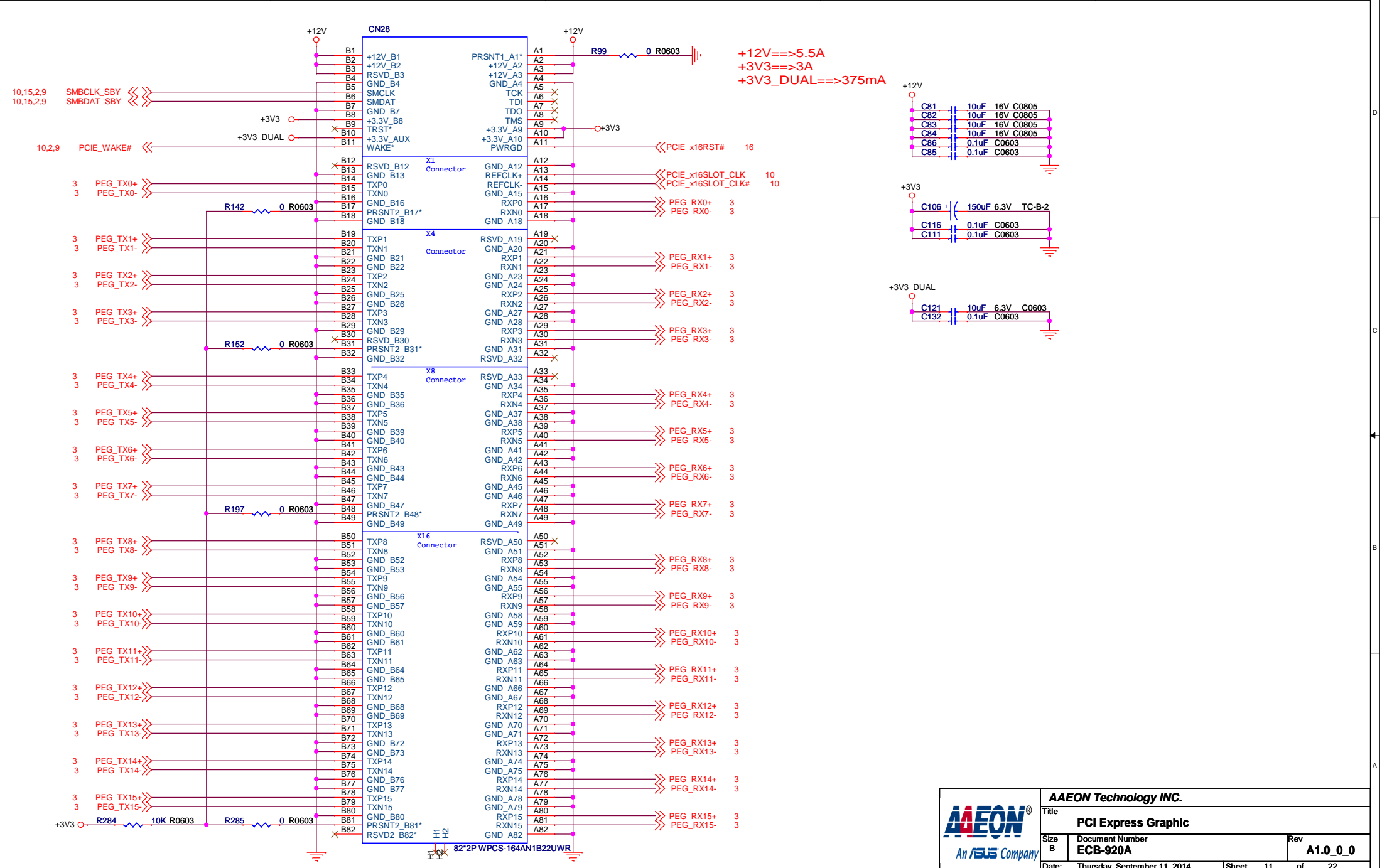


MINI CARD Configuration		
mSATA_PCl_e_SEL	HIGH	mSATA
	LOW	PCIe

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

MINI CARD POWER Configuration		
+3V3_MC	mSATA	+3V3
	PCIe	+3V3_DUAL

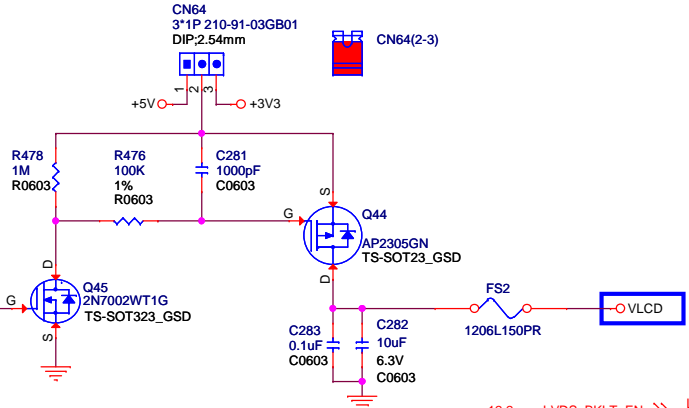




AAEON Technology INC.		
Title		
PCI Express Graphic		
Size	Document Number	Rev
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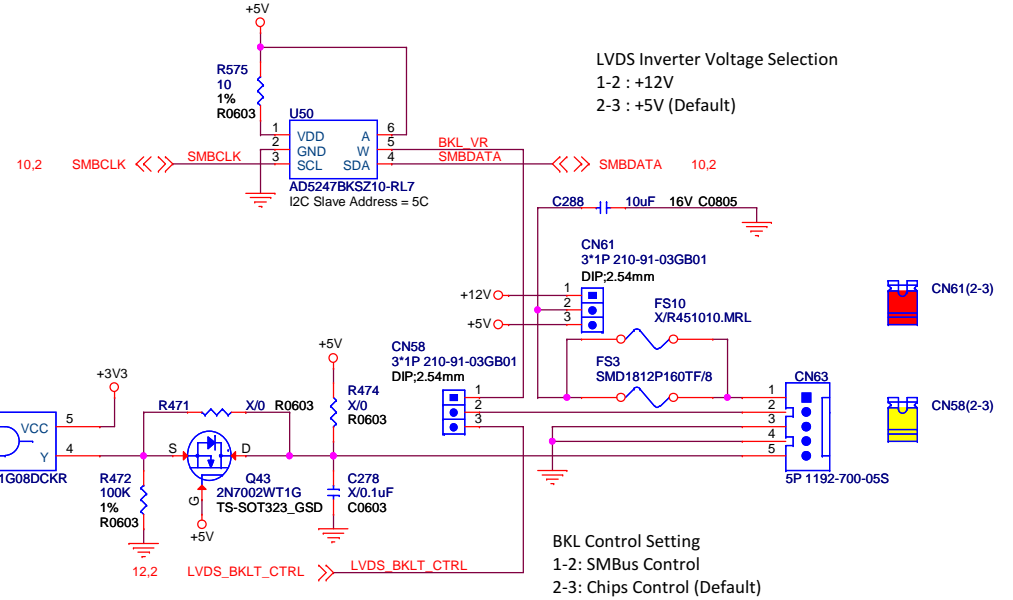
LVDS Operating Voltage Selection

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



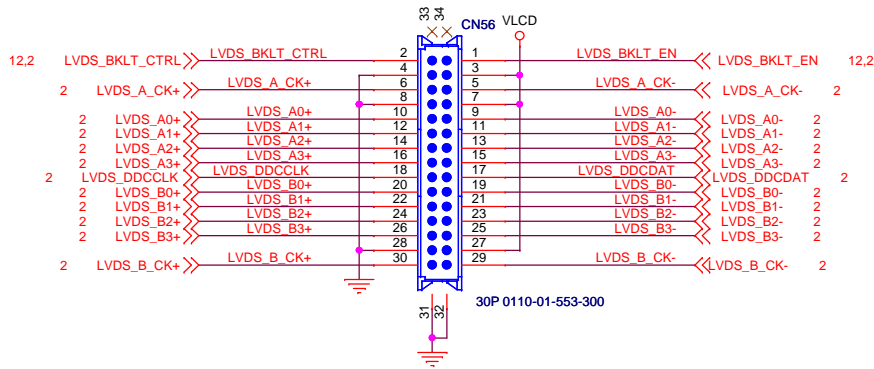
LVDS Inverter Voltage Selection


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



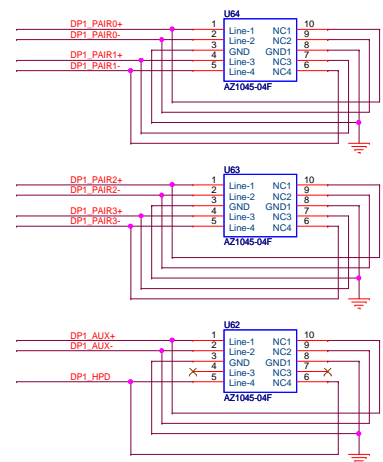
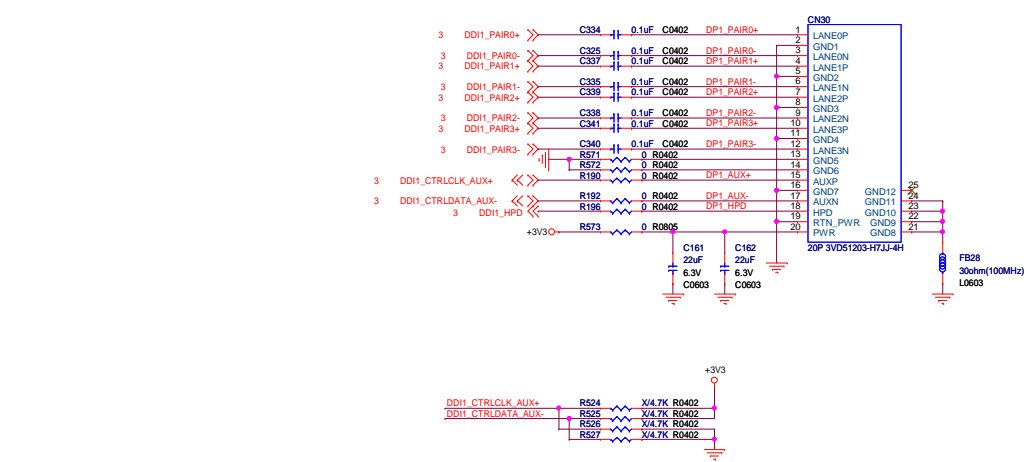
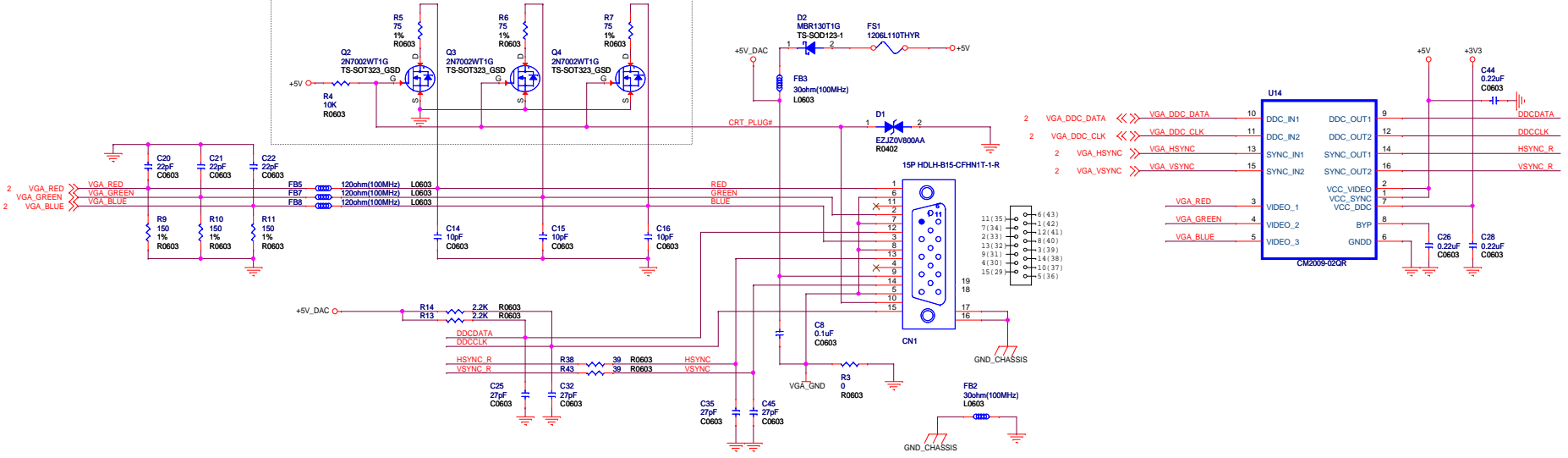
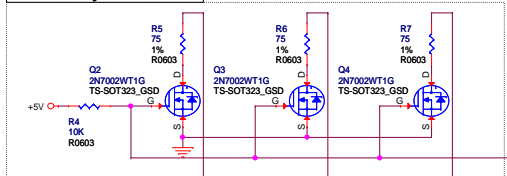
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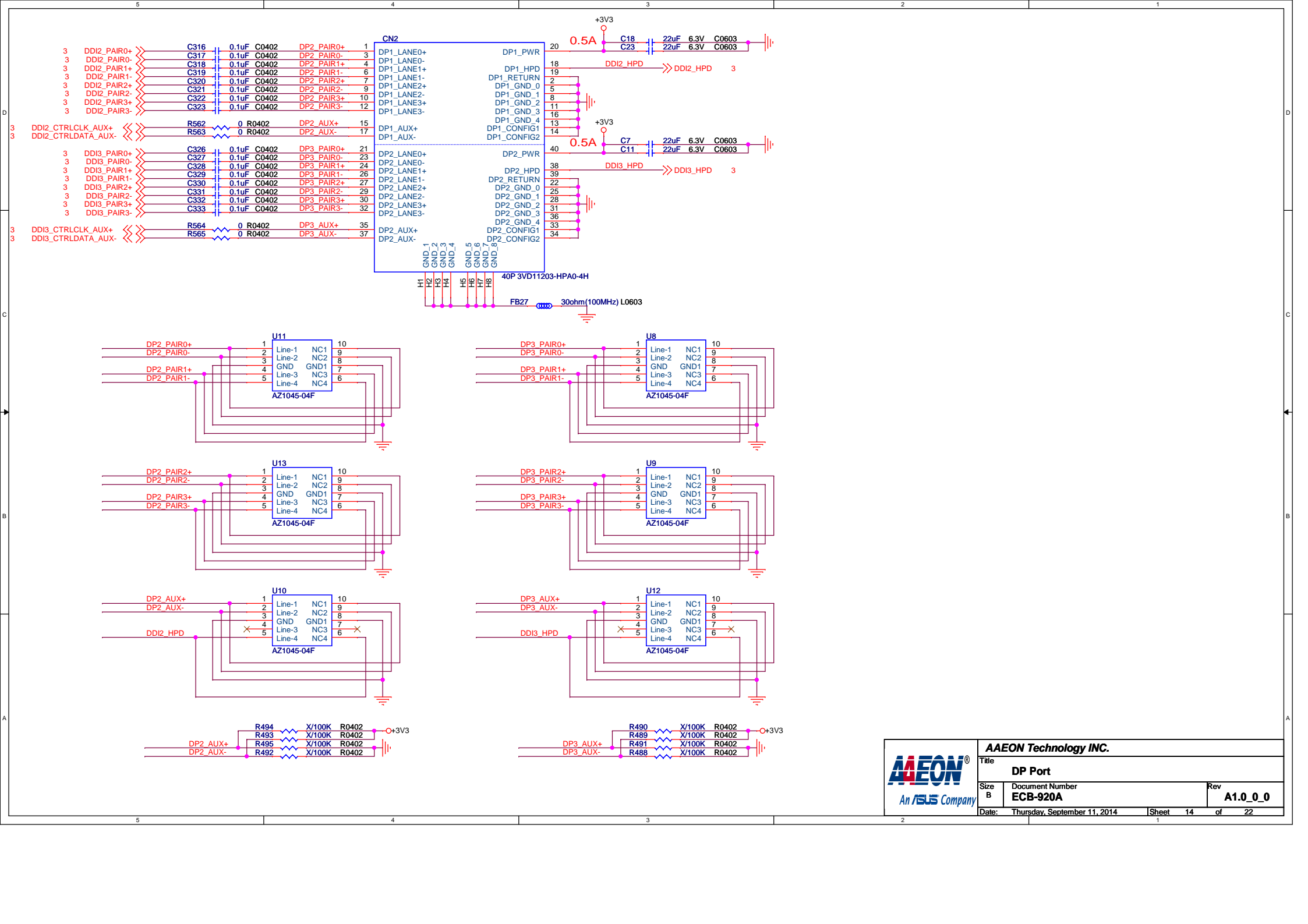
- 1-2: SMBus Control
- 2-3: Chips Control (Default)



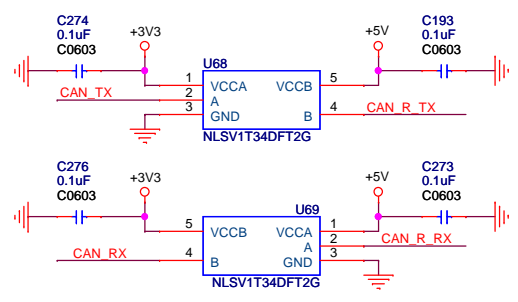
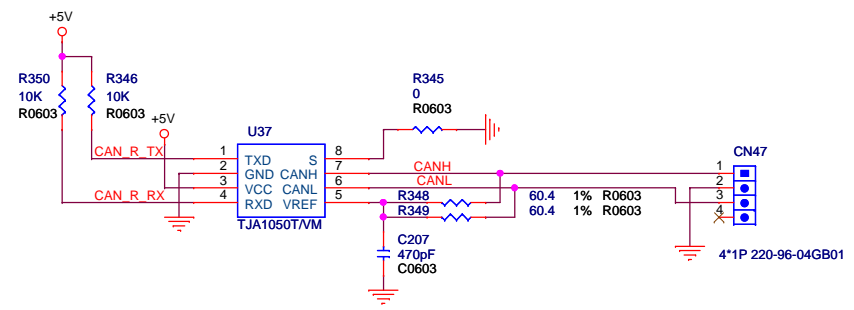
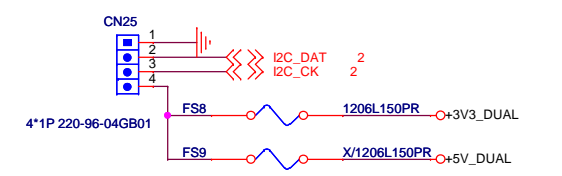
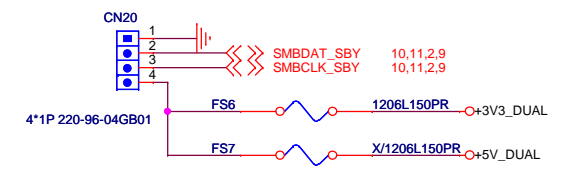
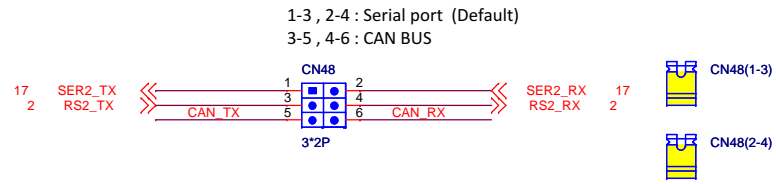
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		Title LVDS	
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CRT Always On Circuit

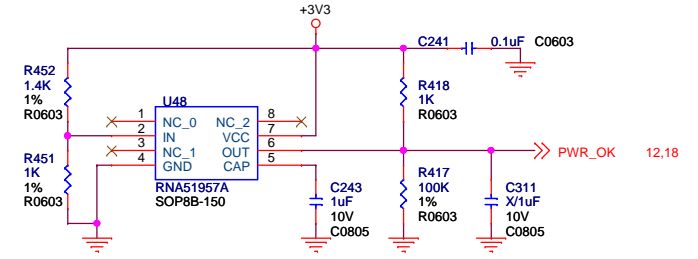
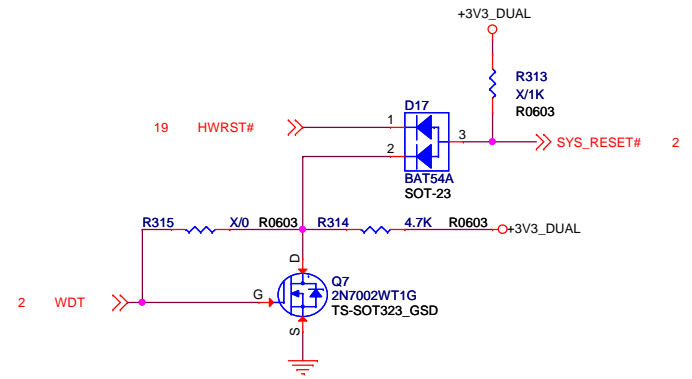
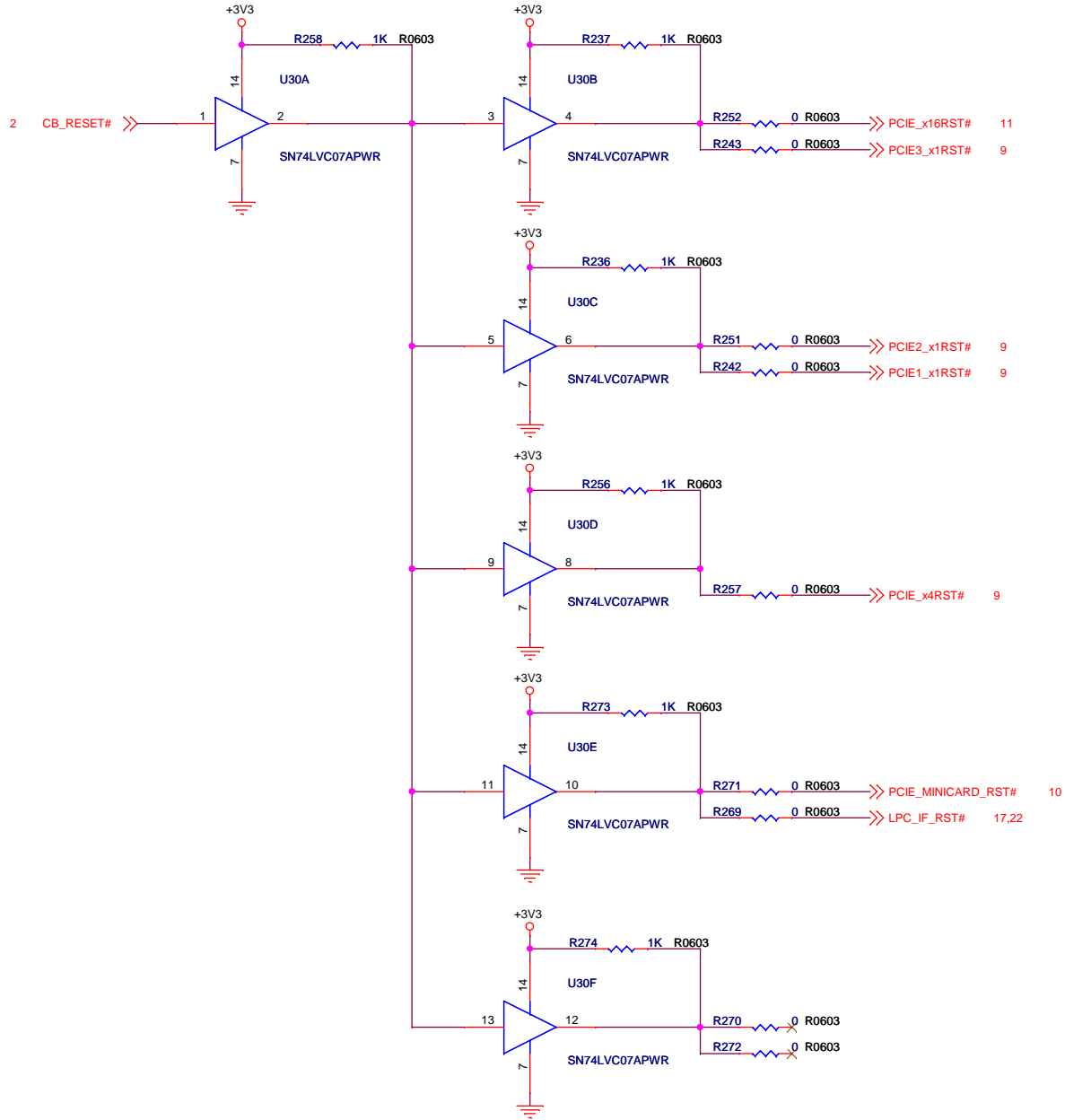




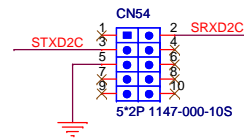
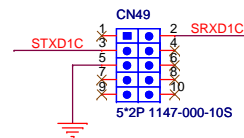
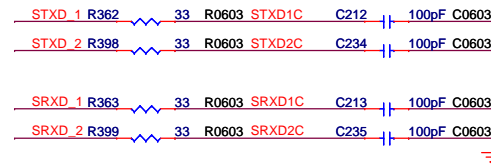
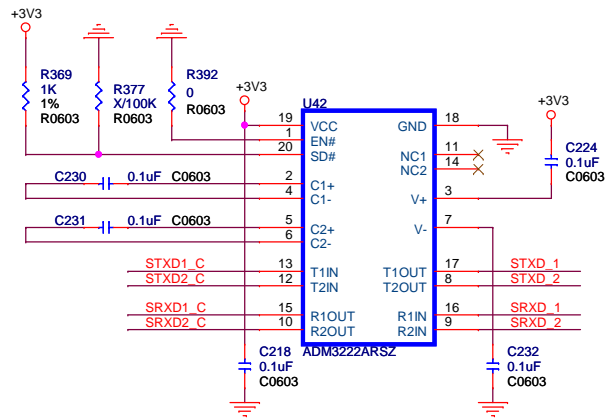
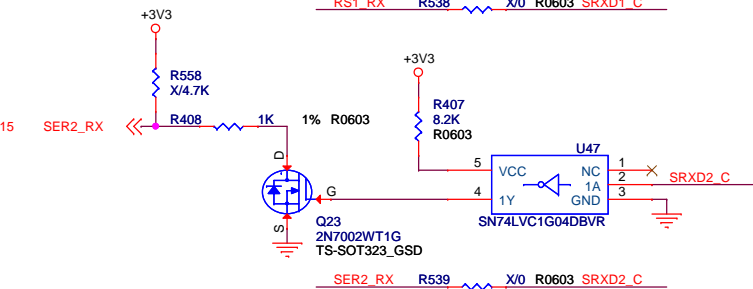
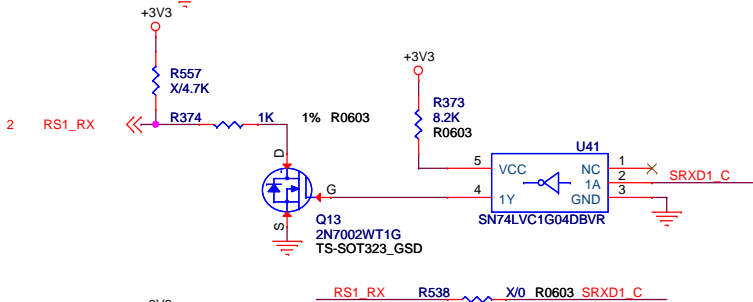
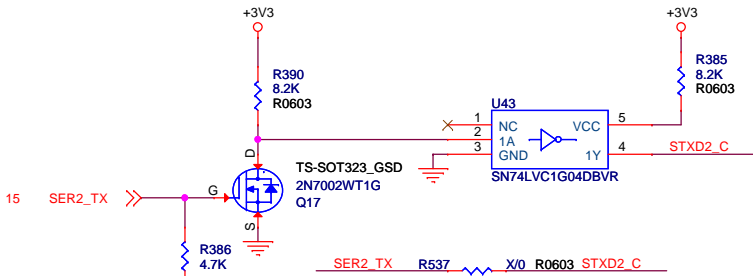
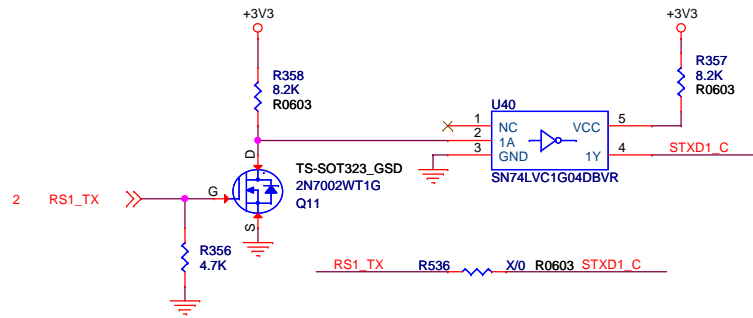
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Title DP Port		
Size B	Document Number ECB-920A	Rev A1.0_0_0
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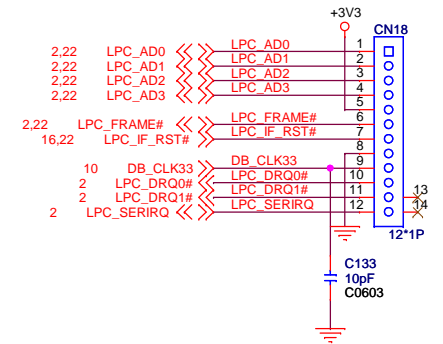
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		AAEON Technology INC.	
		RESET + PWR OK	
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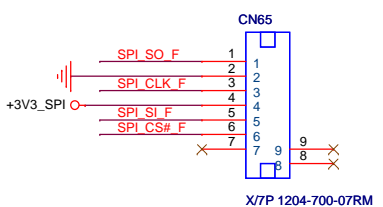
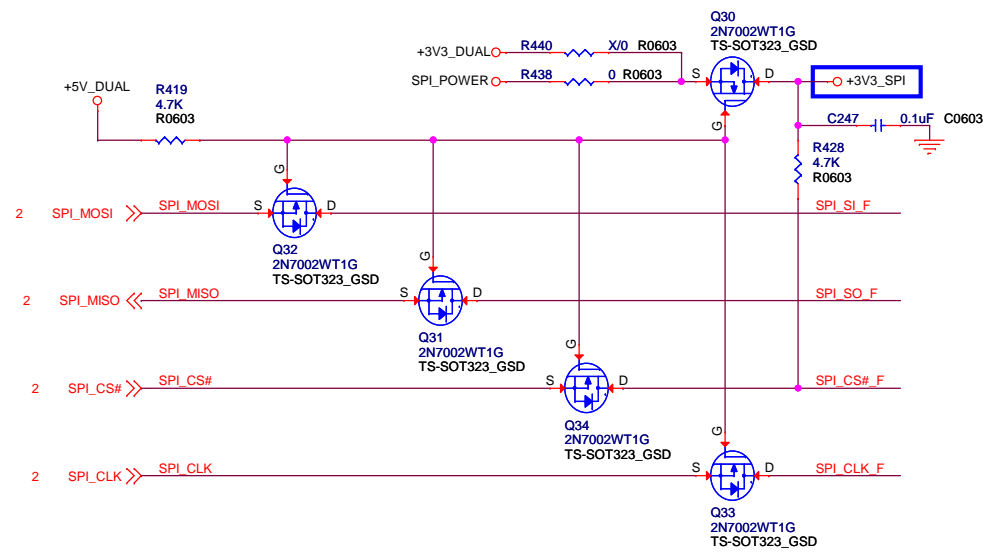
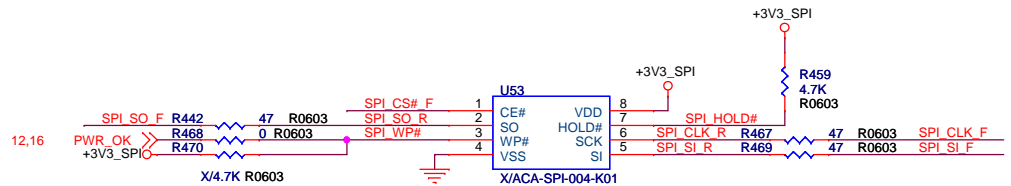
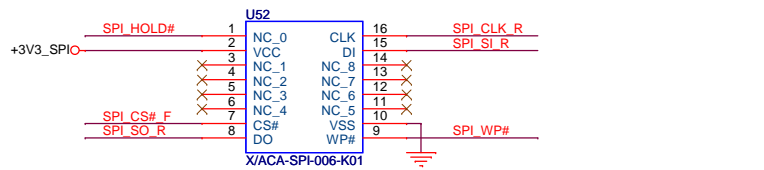


LPC Debug Port & Expansion

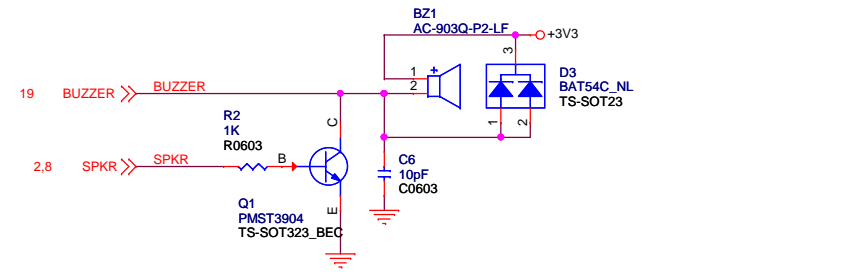


		AAEON Technology INC. Title: Serial port + LPC	
		Size B Document Number: ECB-920A	Rev: A1.0_0_0
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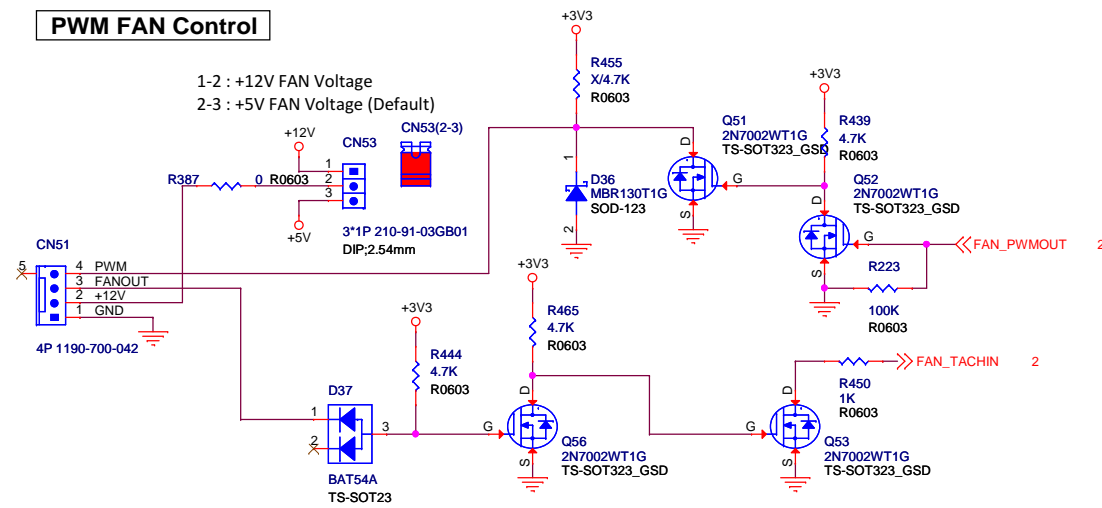
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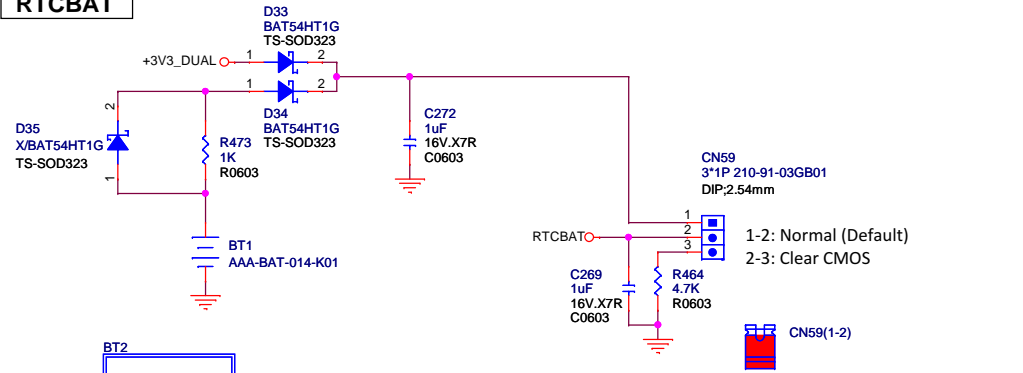
Buzzer



PWM FAN Control



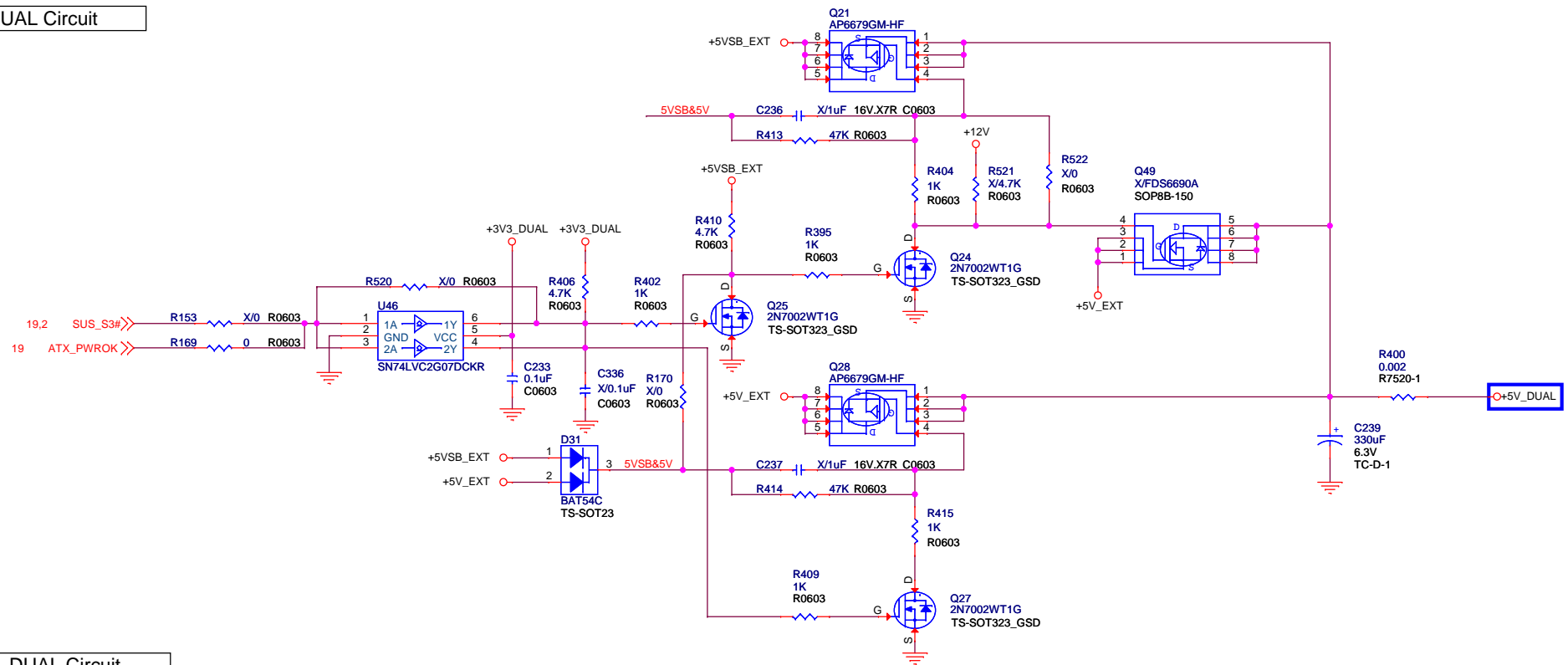
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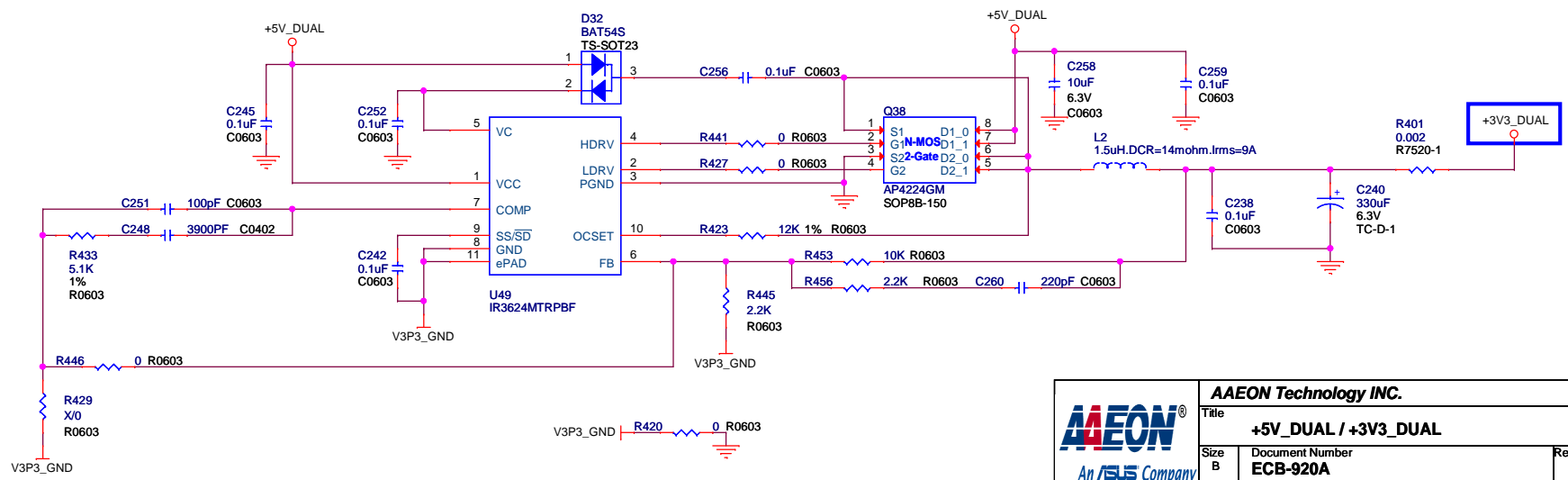
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AAEON Technology INC.		
Title SPI + Buzzer + FAN + RTC		
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+5V_DUAL Circuit

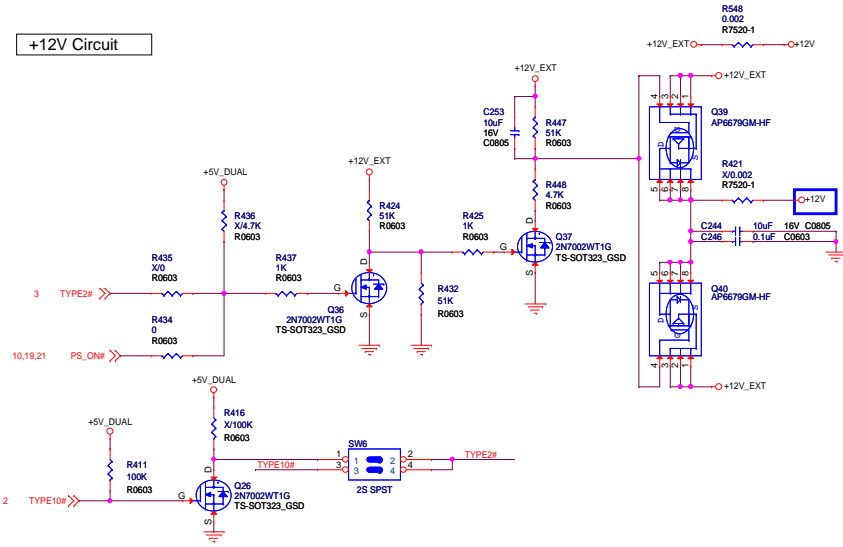


+3V3_DUAL Circuit

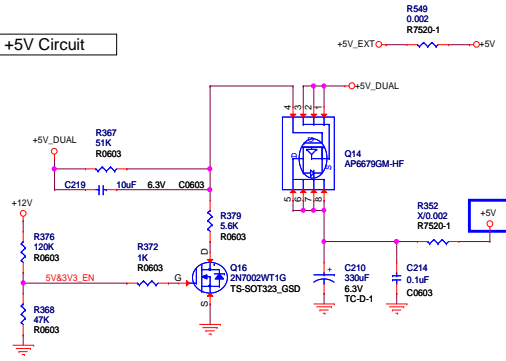


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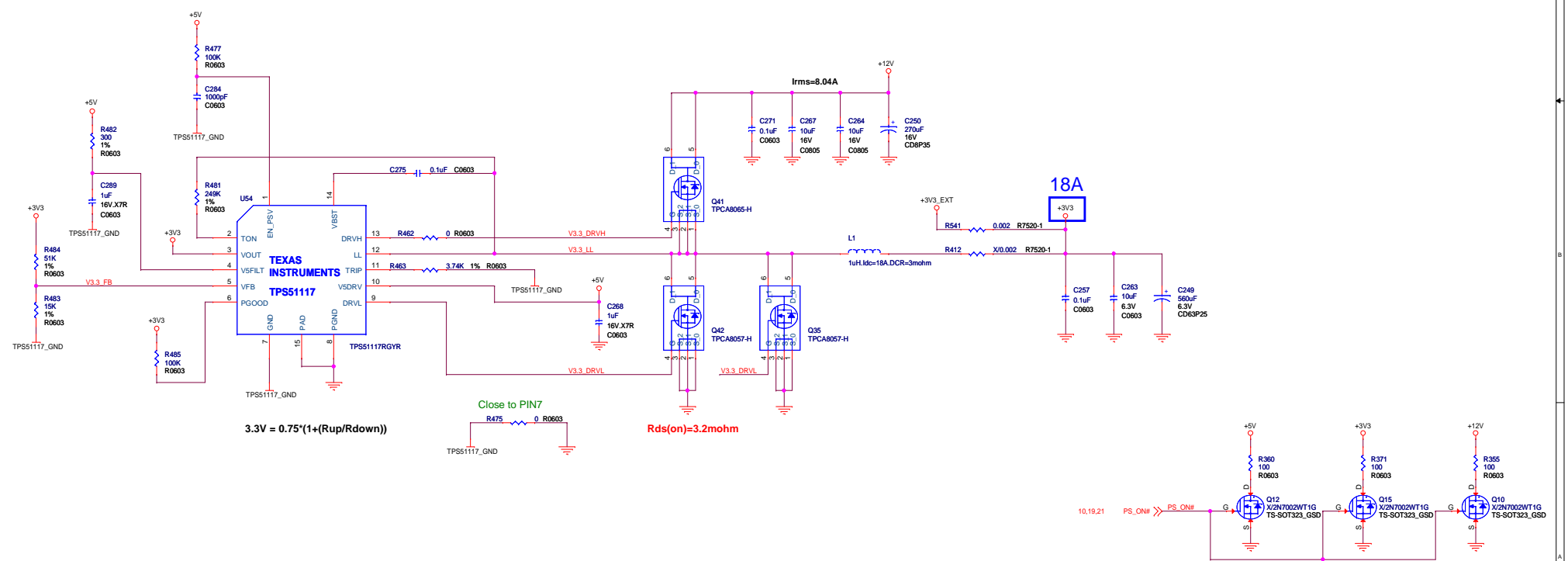
+12V Circuit

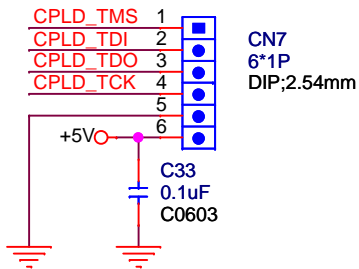
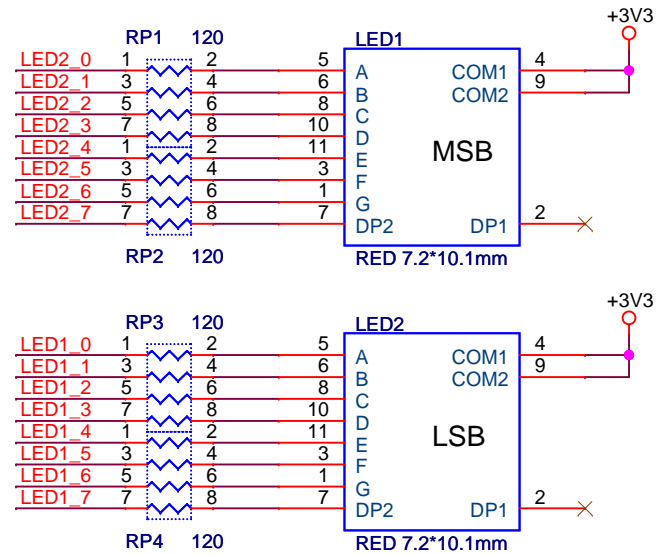
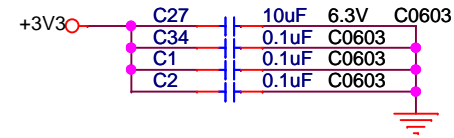
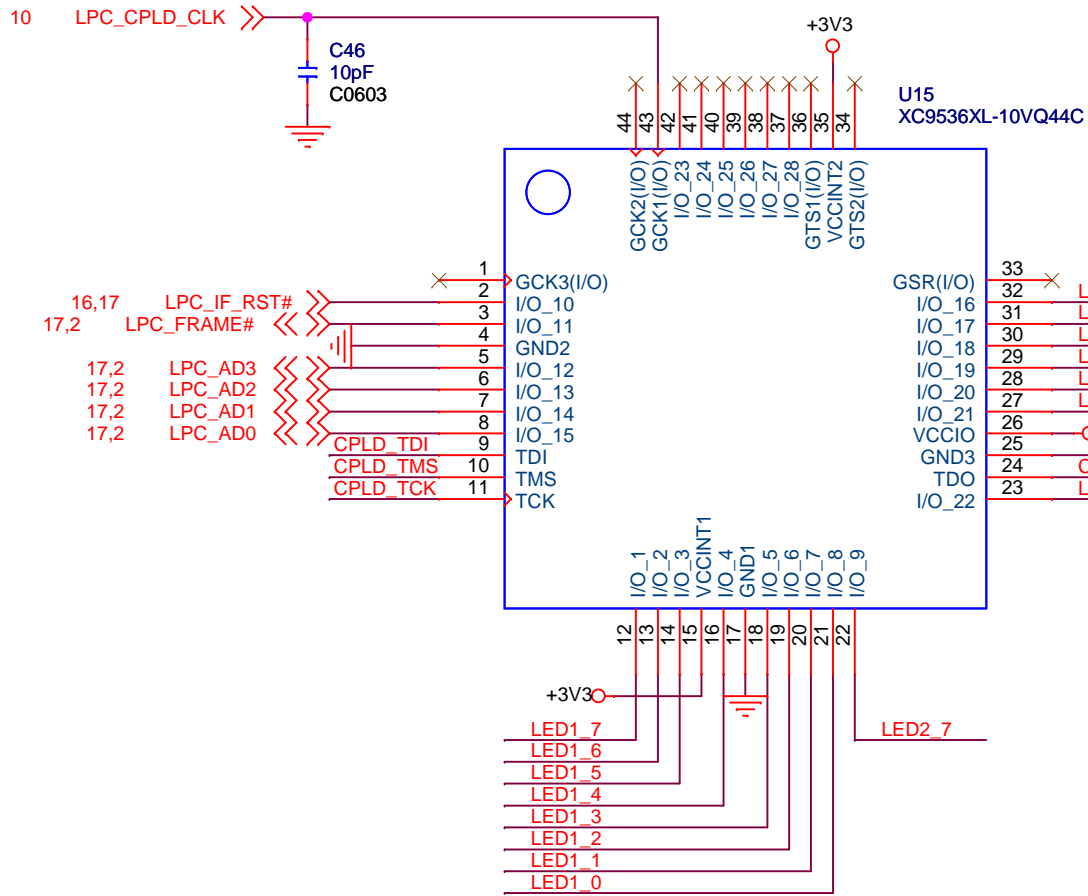



+5V Circuit



+3V3 Circuit





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