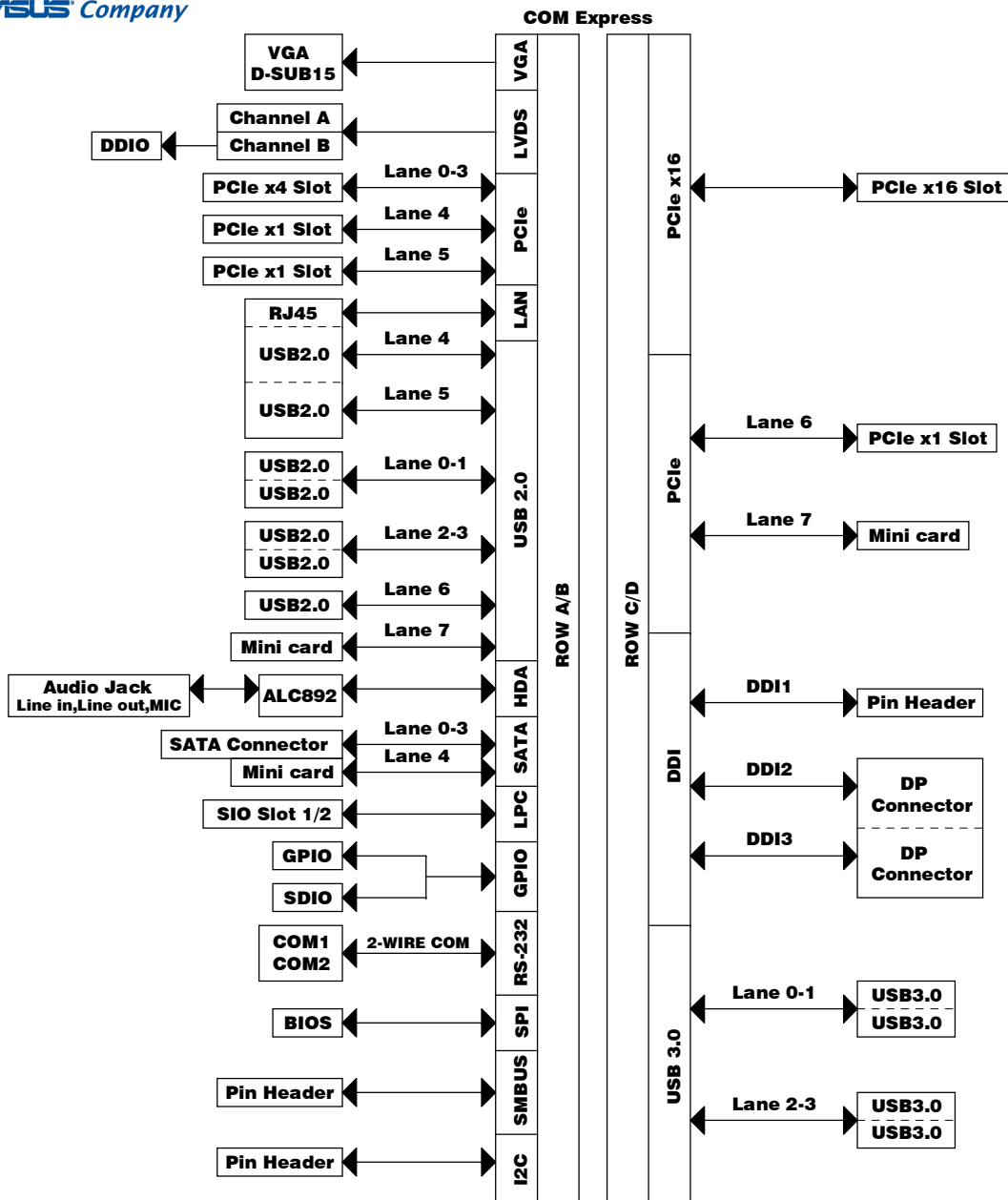


ECB-920A Rev.A0.1_0_0 COM Express (COM.0 Rev 2.1) Type 6/1/10 Carrier Board



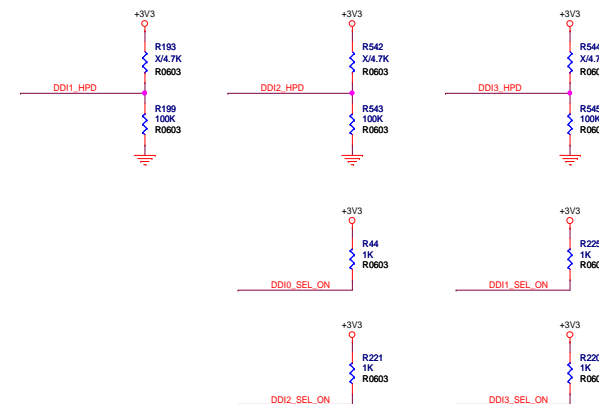
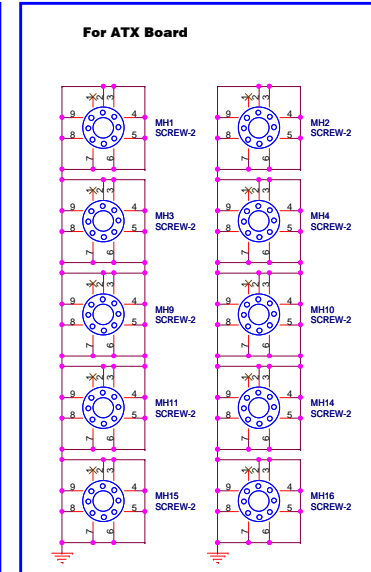
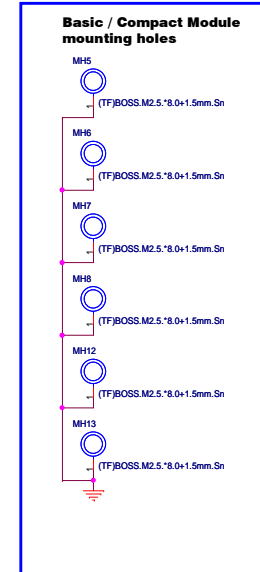
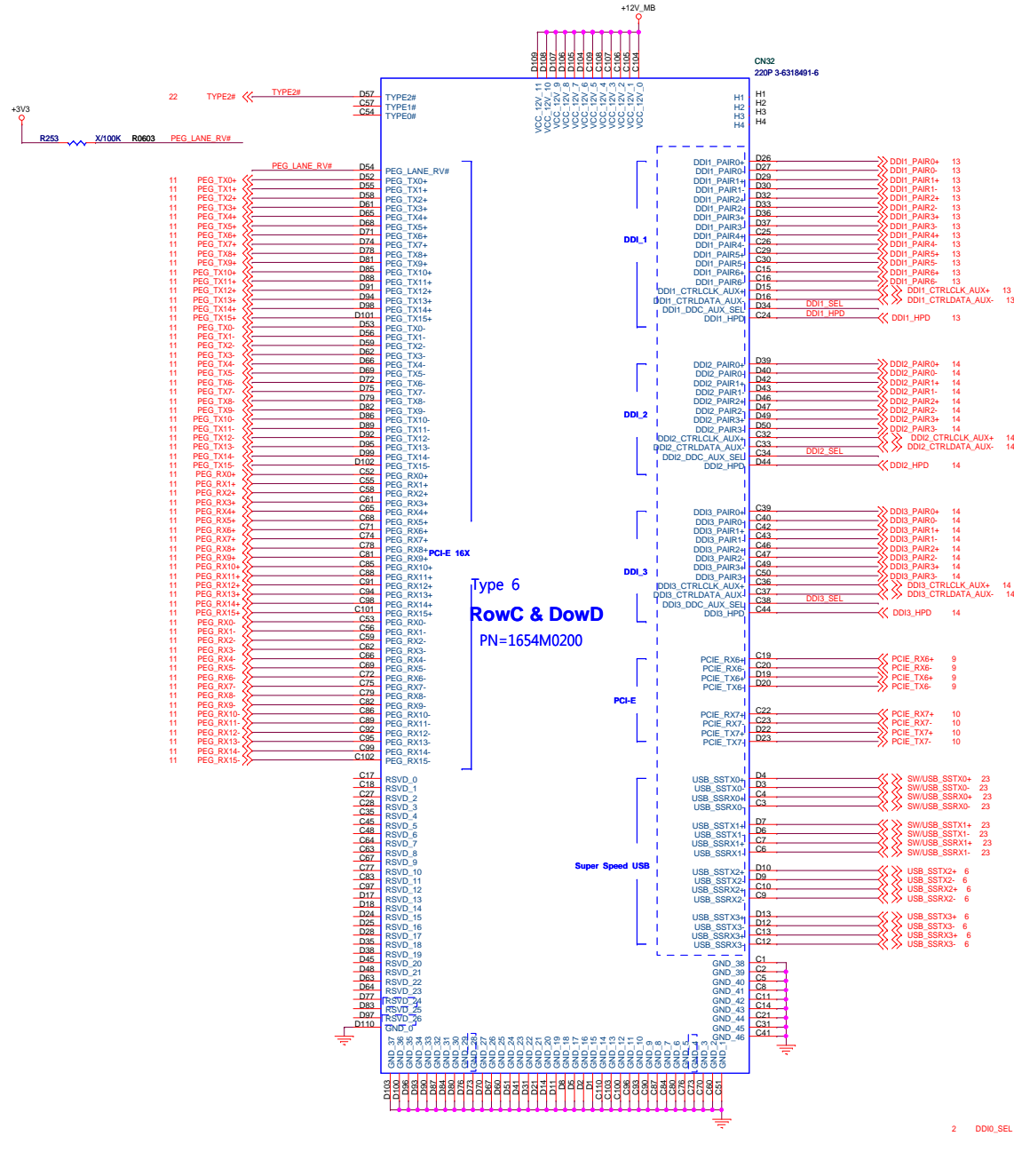
Page	Index
1	Cover Sheet
2	Row A/B
3	Row C/D
4	LAN-RJ45 + USB2.0
5	USB2.0 + USB3.0
6	USB3.0 Redriver
7	SATA
8	Audio
9	PCIe x4 / x1 Slots
10	MINI CARD_Clock Buffer
11	PCI Express Graphic
12	LVDS
13	VGA + DDI1
14	DP Port
15	CANBUS / SMBUS / I2C
16	RESET + PWROK
17	SIO Card SLOT
18	Serial port + LPC
19	SPI + Buzzer + FAN + RTC
20	ATX Power + Front Panel
21	+5V_DUAL / +3V3_DUAL
22	+12V / +5V / +3V3
23	SATA/USB Switch
24	DDI0/LVDS/CRT Switch
25	LPC 80H
26	Power Block
27	Revision History

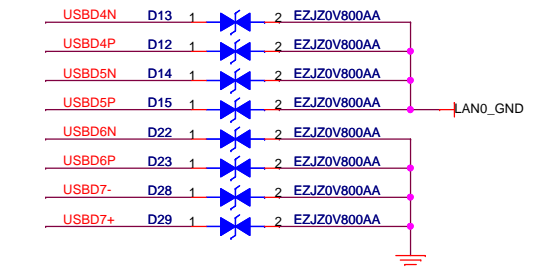
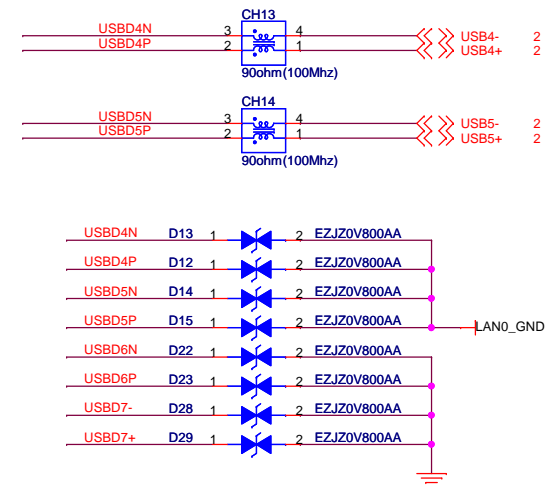
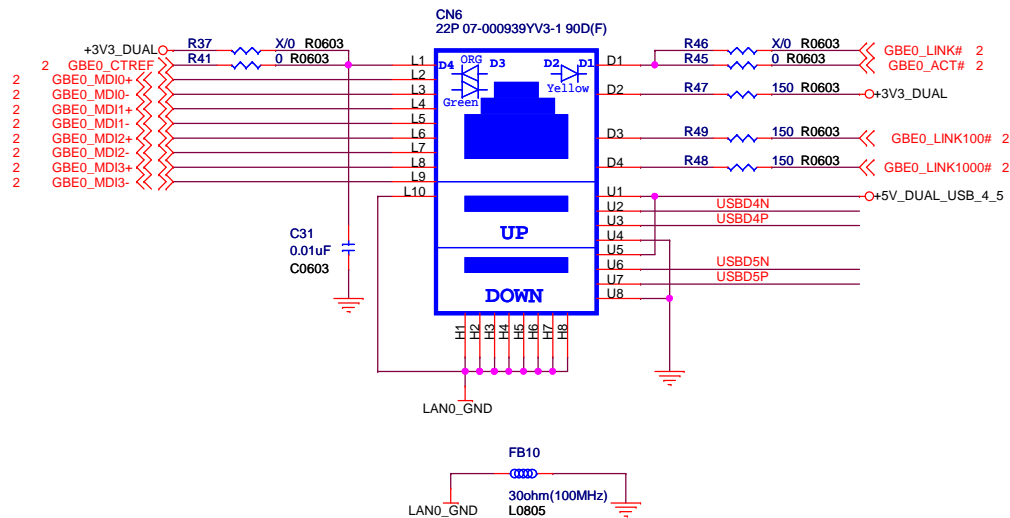
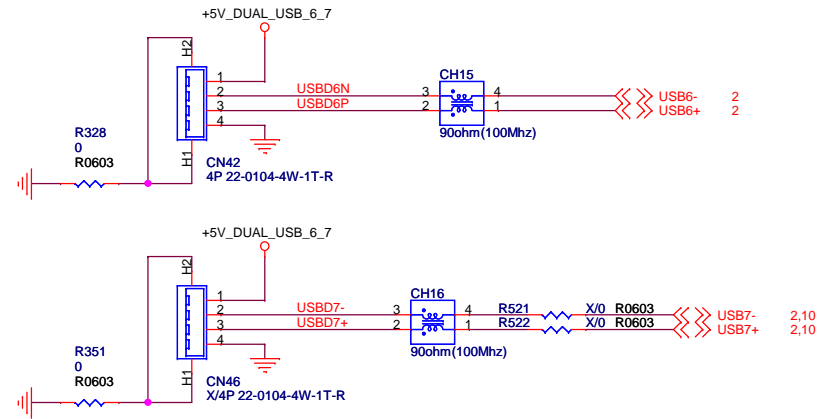
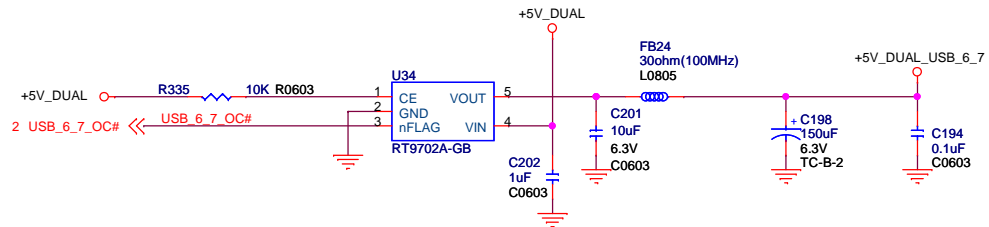
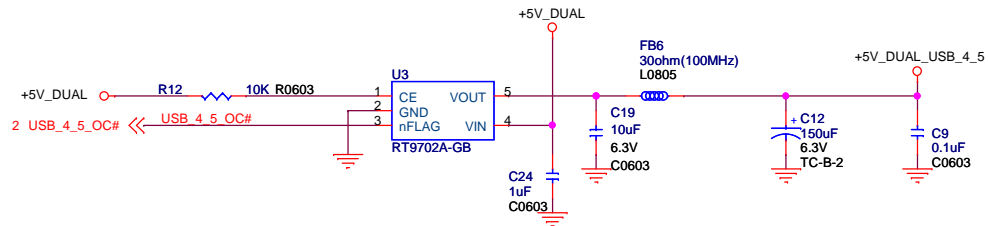
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Title			
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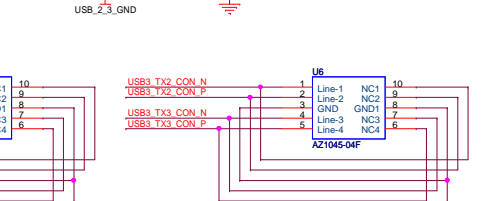
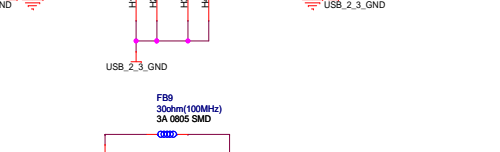
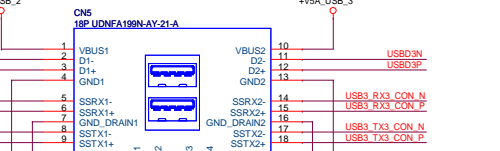
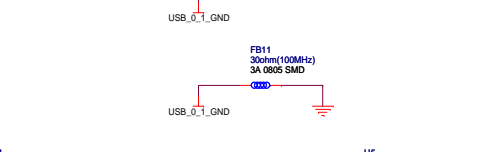
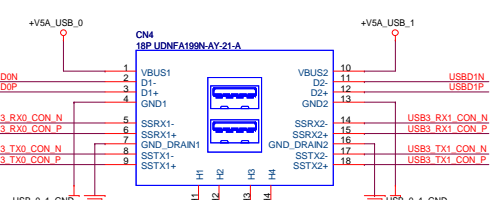
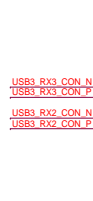
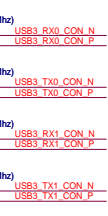
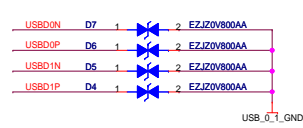
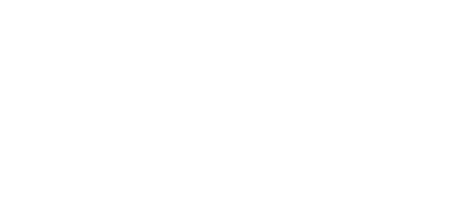
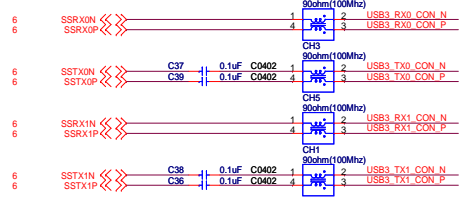
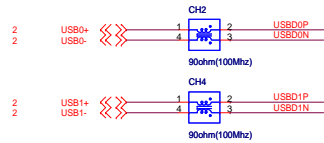
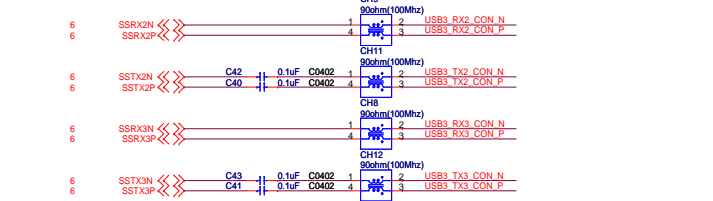
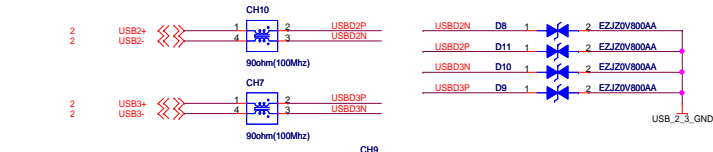
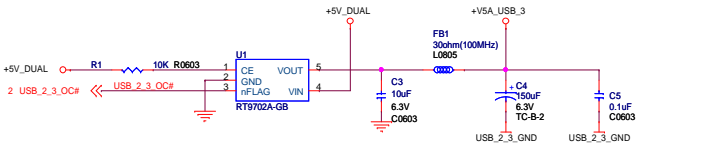
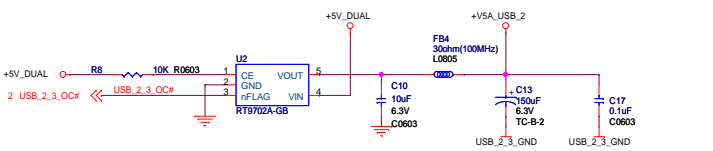
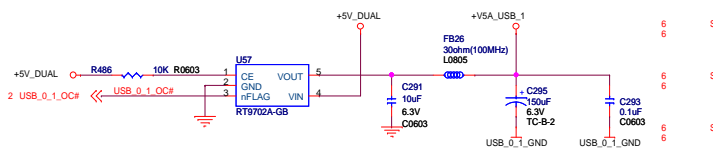
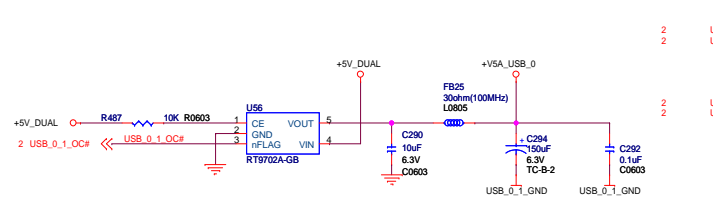
Power Rail	Module Pin Current Capability (Amps)	Nominal Input (Volts)	Input Range (Volts)	Derated Input (Volts)	Max Input Ripple (mV)	Max Module Input Power (w. derated input) (Watts)	Assumed Conversion Efficiency	Max Load Power (Watts)
VCC_12V	12	12	11.4 - 12.6	11.4	+/- 100	137	85%	116
VCC_5V_SBY	2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

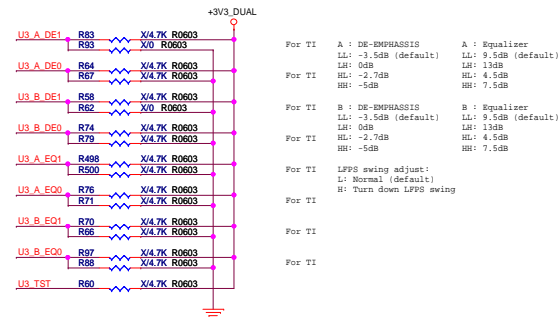
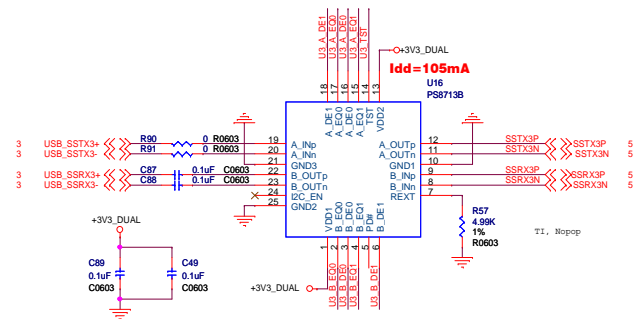
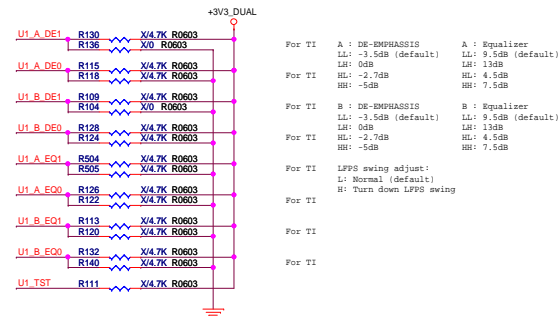
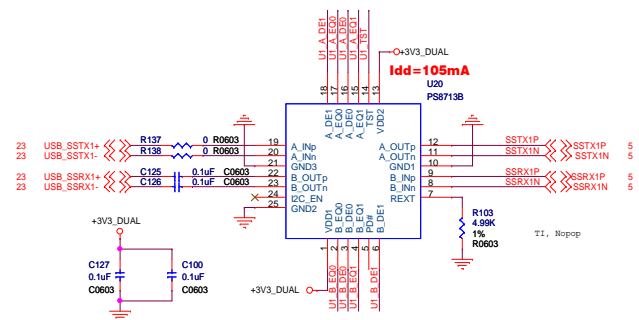
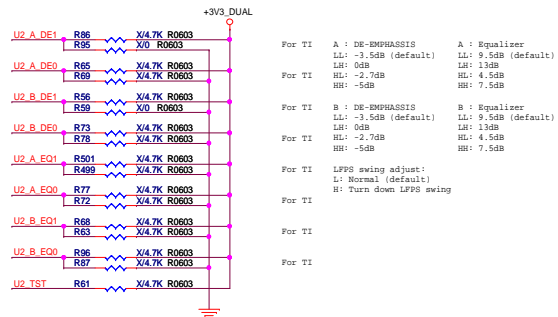
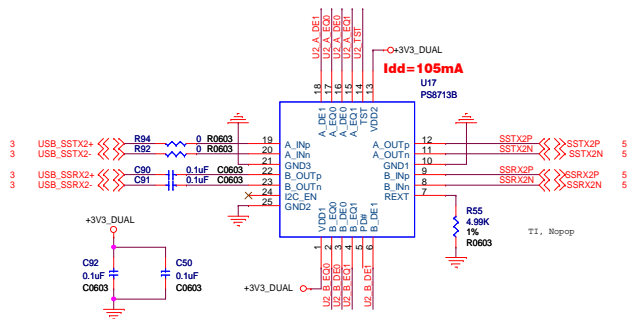
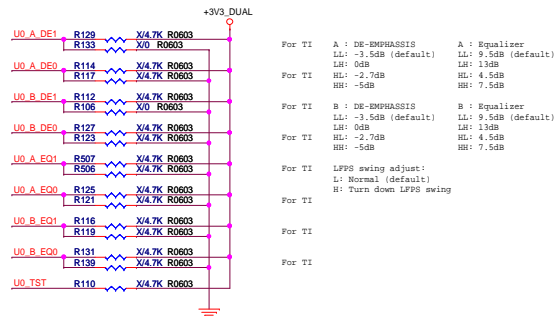
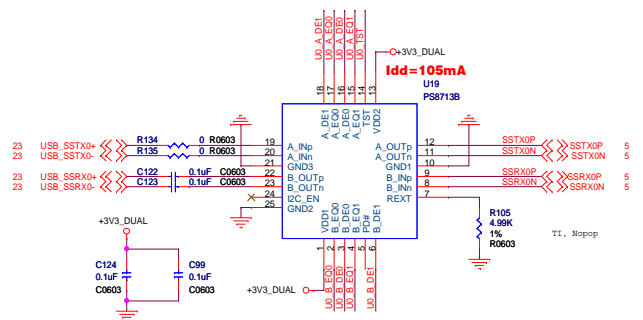
Type 6
RowA & RowB
PN = 1654M0201

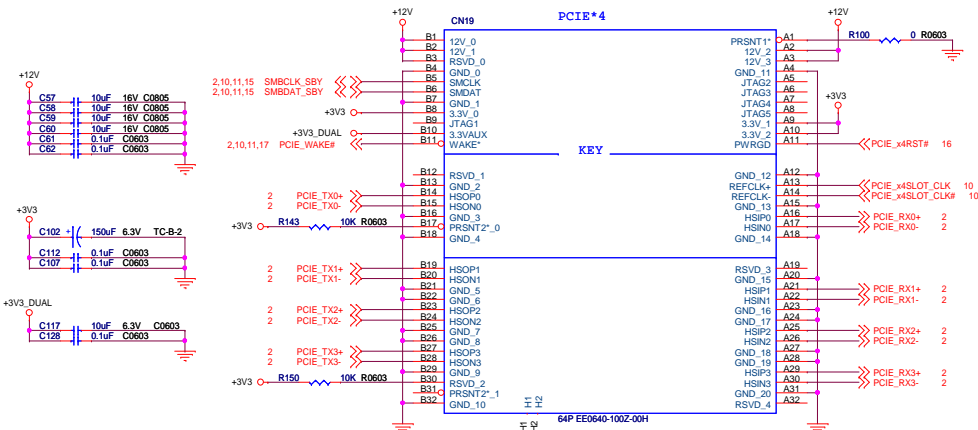




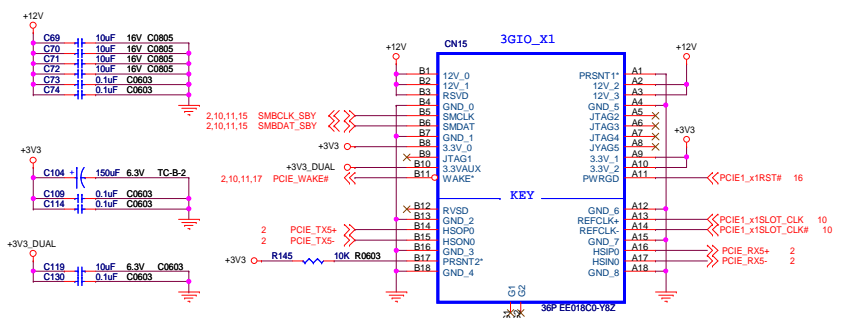
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		Title	
LAN-RJ45 + USB2.0		Size B	
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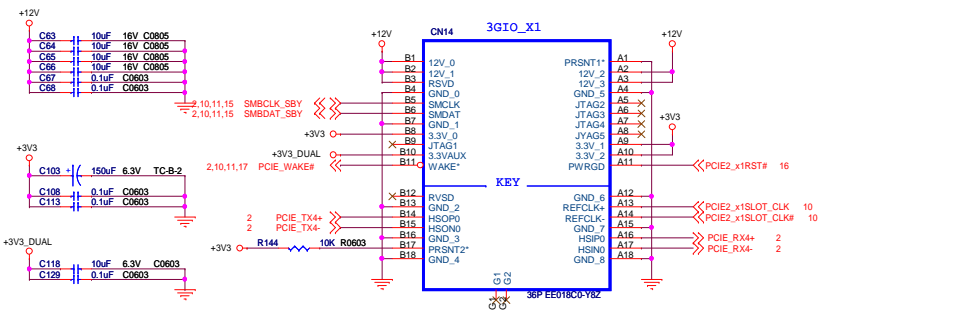




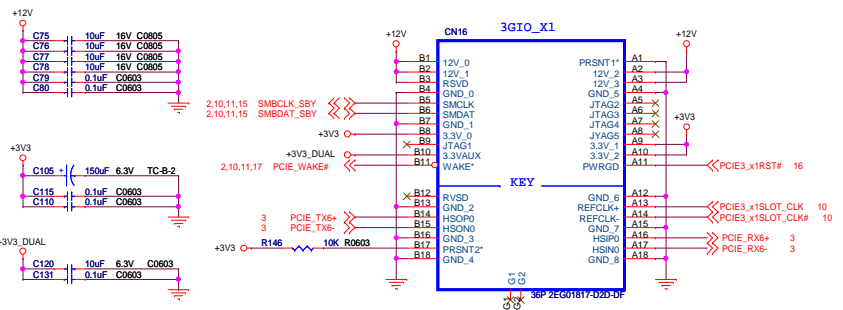
+12V==>2.1A
+3V3==>3A
+3V3_DUAL==>375mA



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



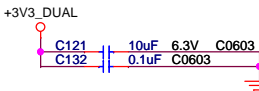
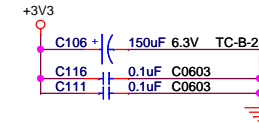
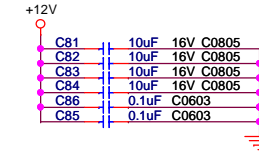
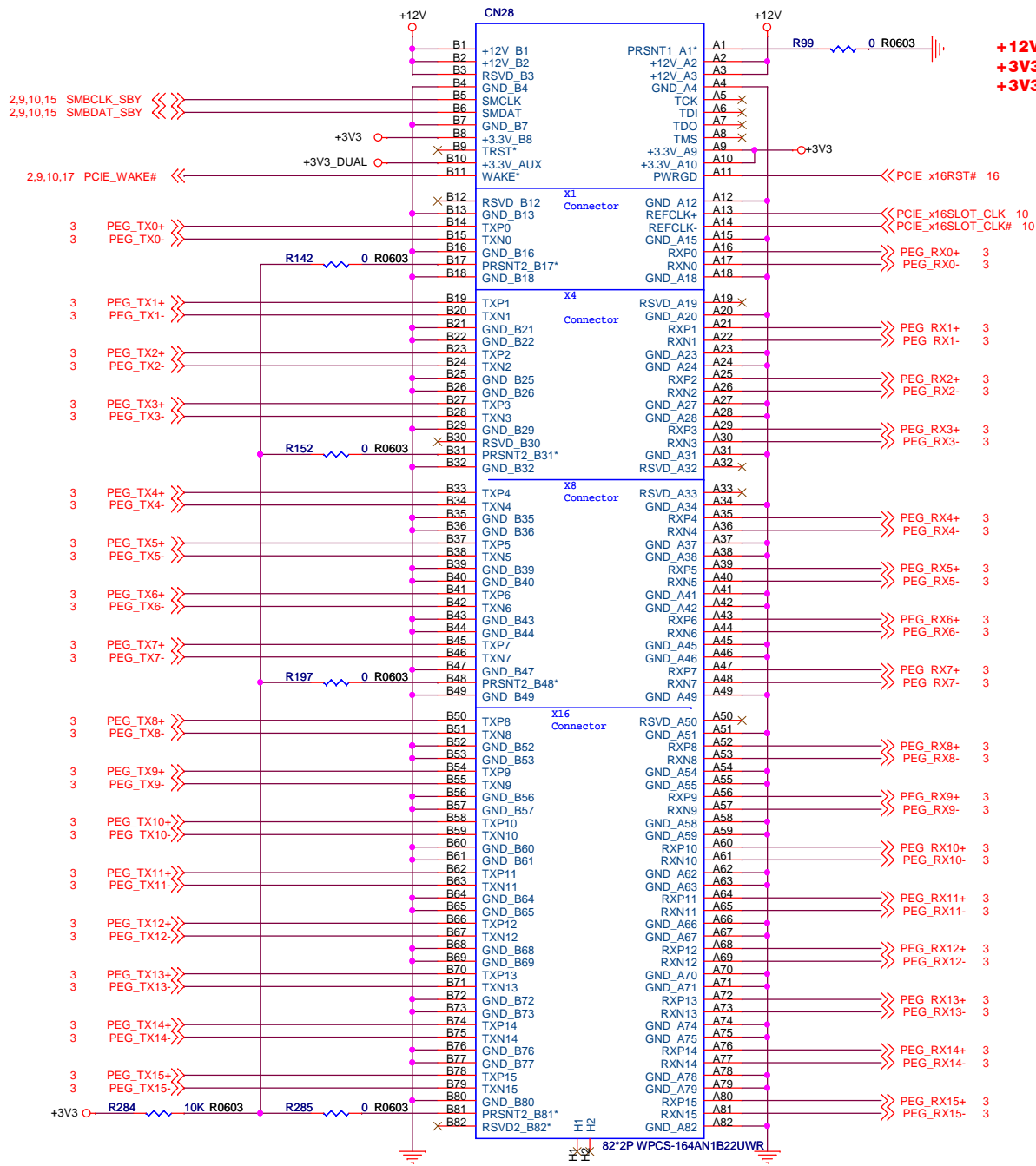
IVORY
+12V==>0.5A
+3V3==>3A
+3V3_DUAL==>375mA



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

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

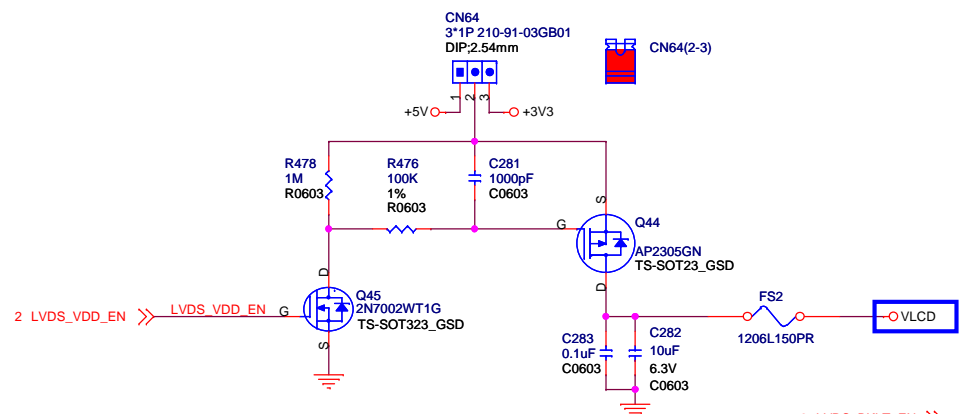


AAEON Technology INC.		
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LVDS Operating Voltage Selection

1-2 : +5V

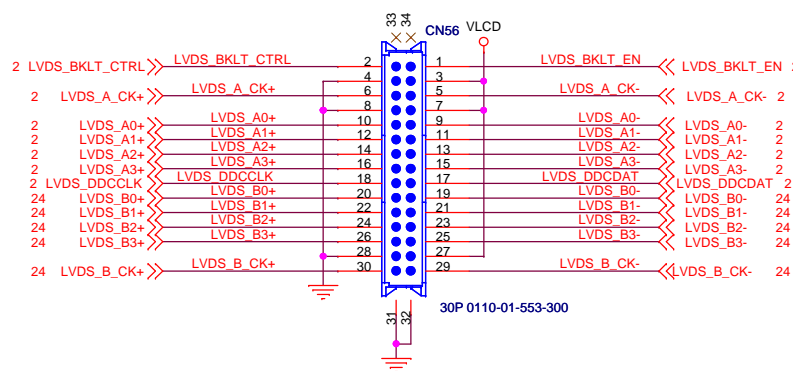
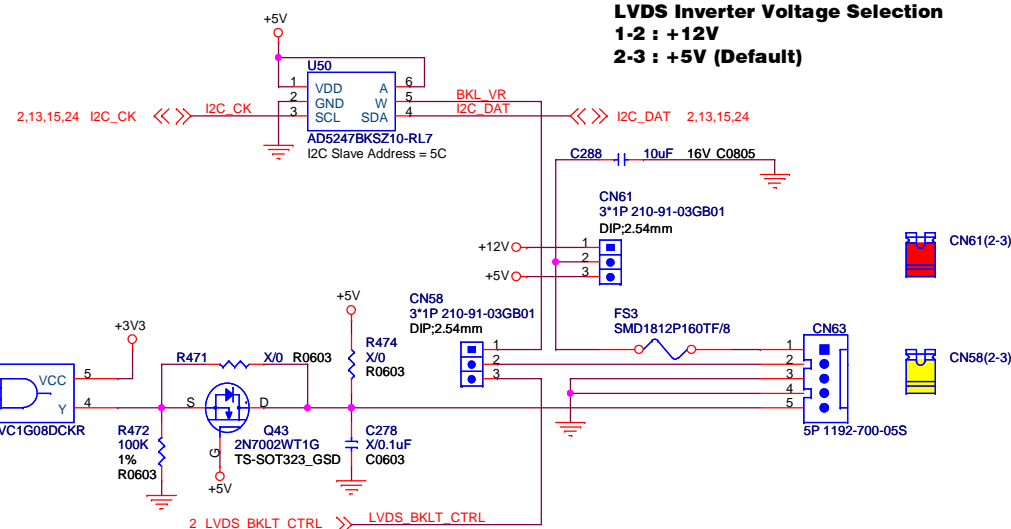
2-3 : +3.3V (Default)



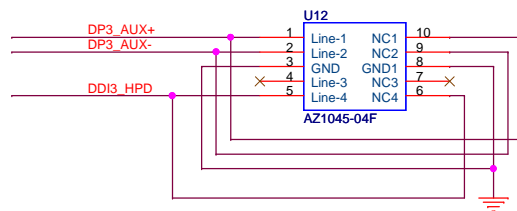
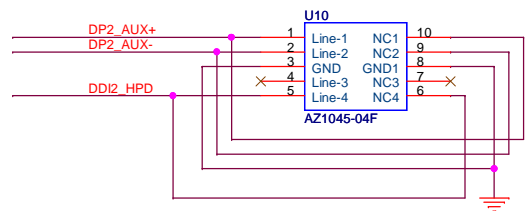
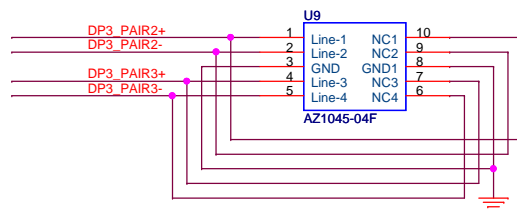
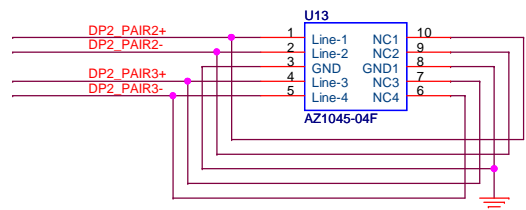
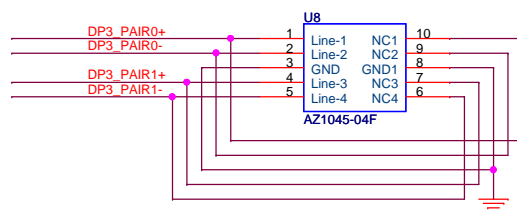
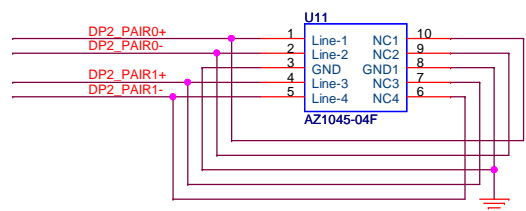
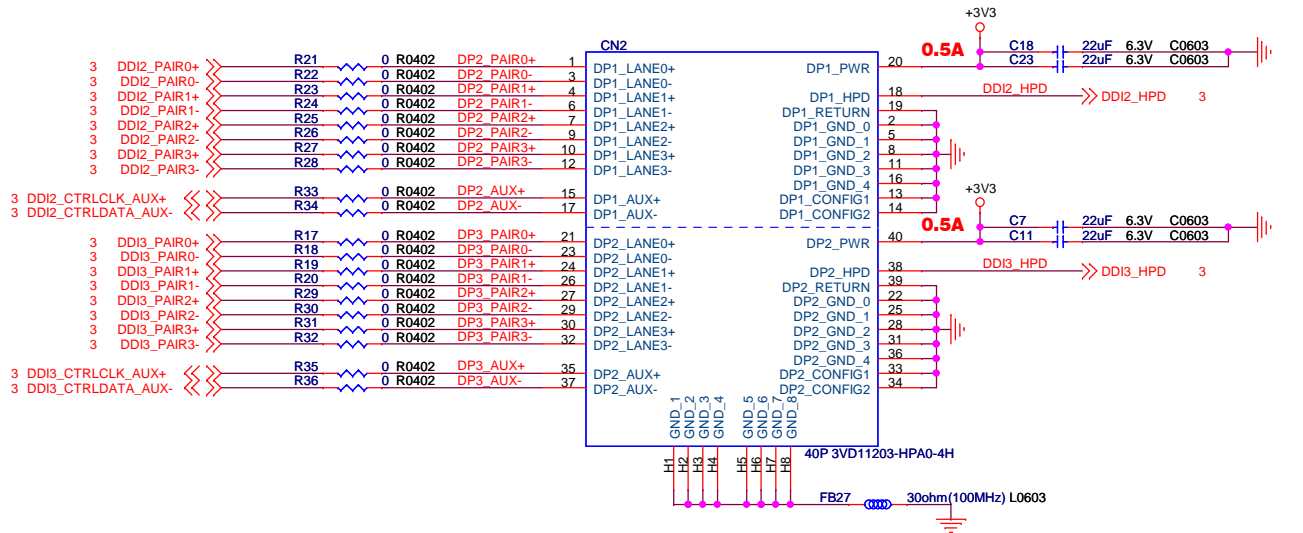
LVDS Inverter Voltage Selection

1-2 : +12V

2-3 : +5V (Default)

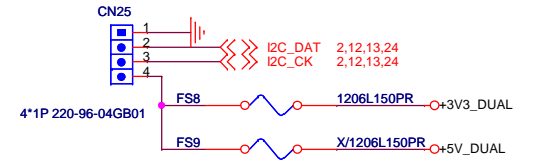
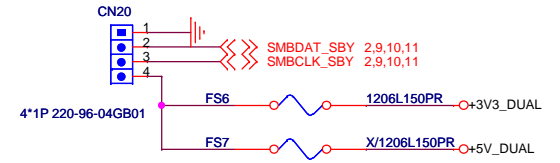
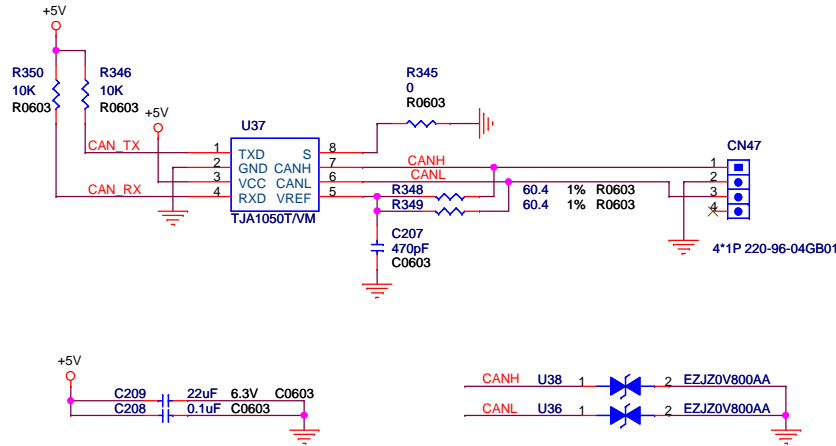
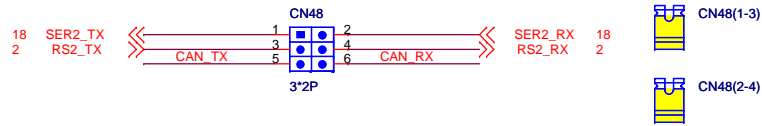



		AAEON Technology INC.	
		Title LVDS	
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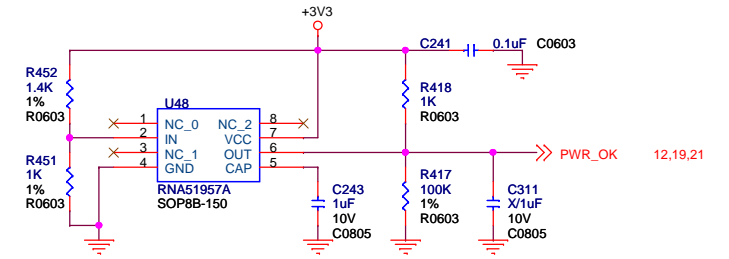
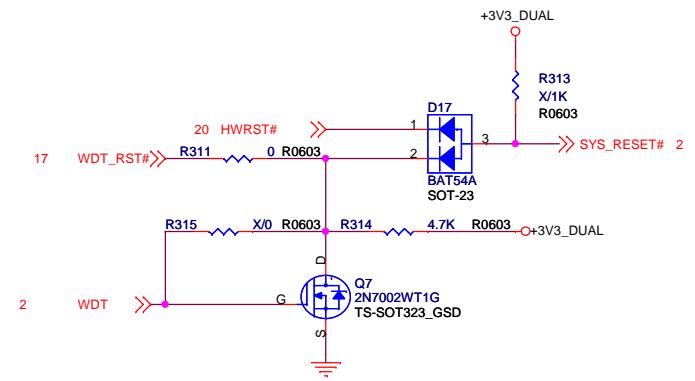
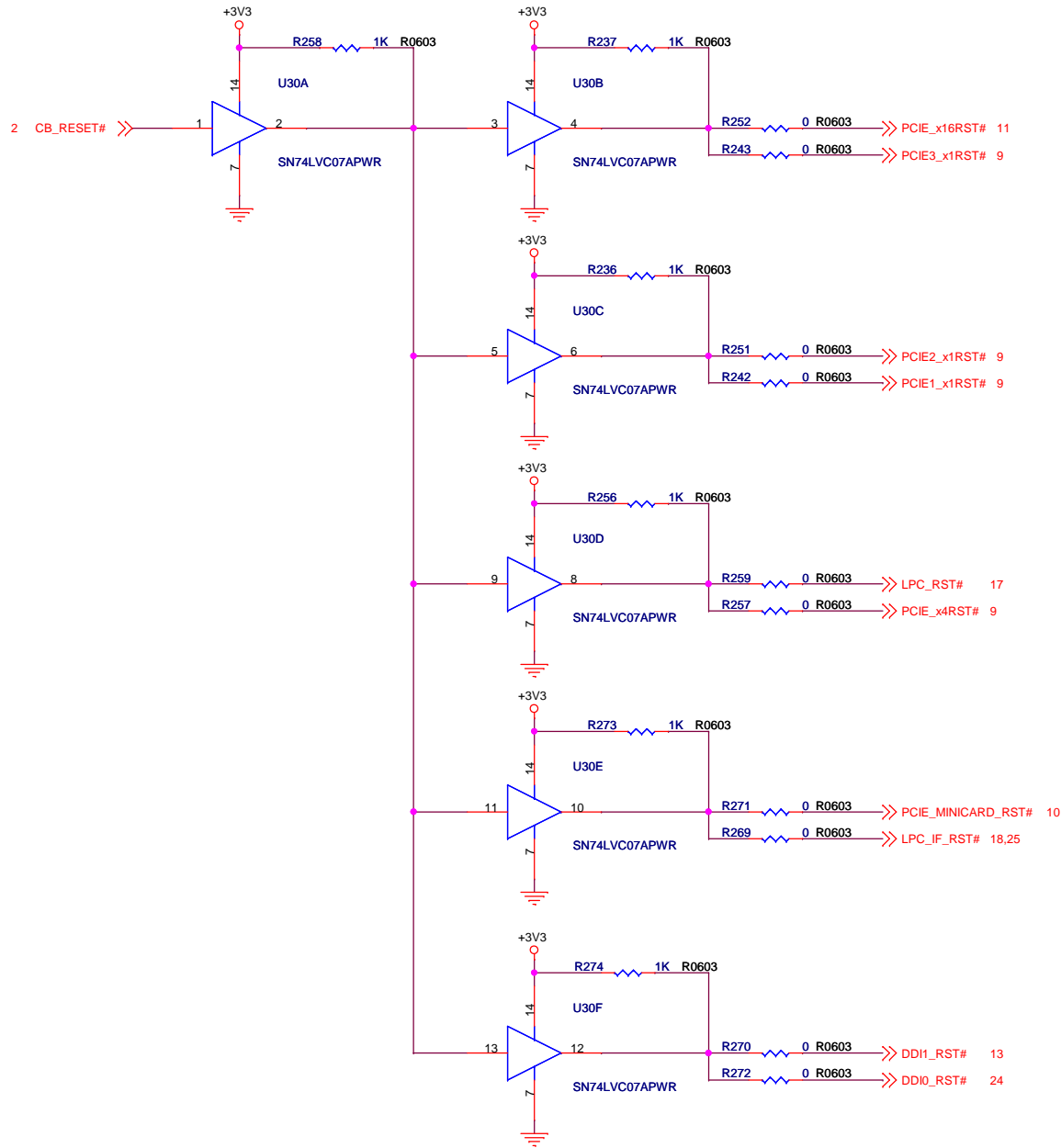



AAEON Technology INC.		
Title DP Port		
Size B	Document Number ECB-920A	Rev A0.1_0_0
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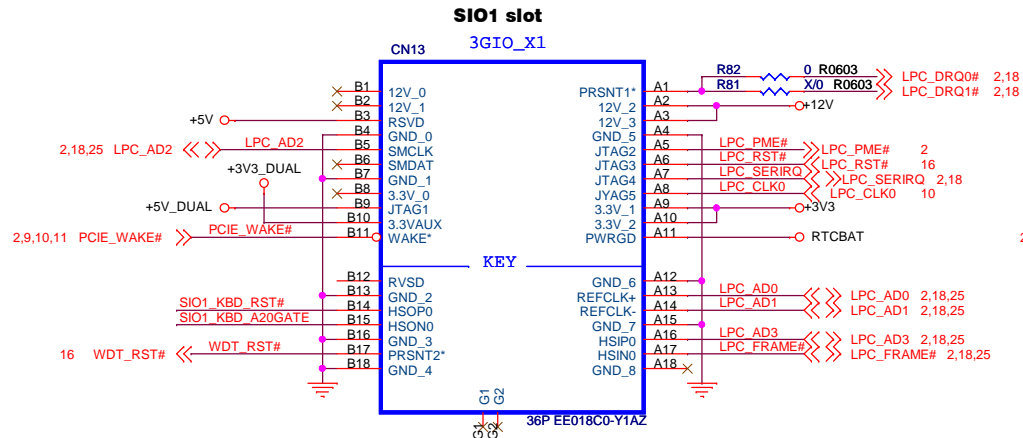
1-3 , 2-4 : Serial port (default)
3-5 , 4-6 : CAN BUS



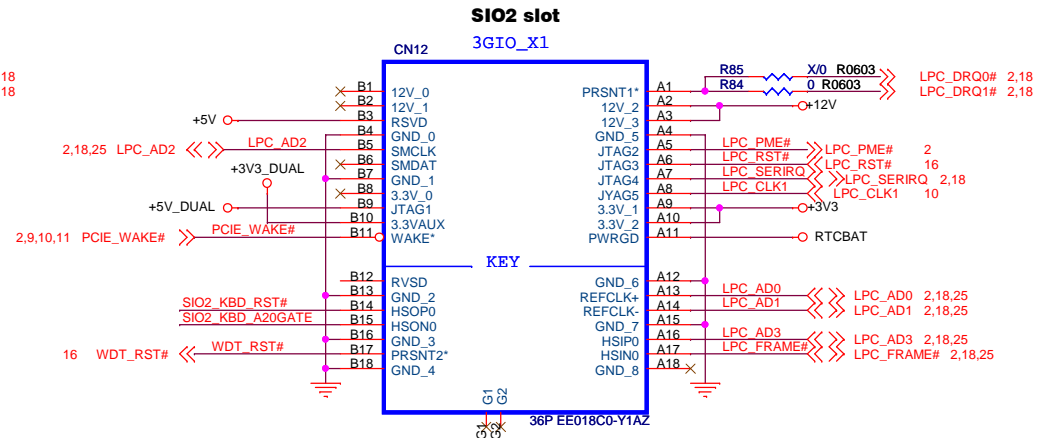
		AAEON Technology INC.	
		Title CANBUS / SMBUS / I2C	
Size B	Document Number ECB-920A		Rev A0.1_0_0
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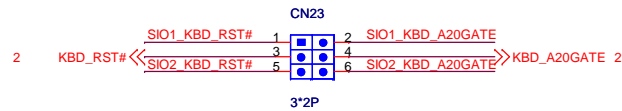
		AAEON Technology INC.	
		RESET + PWROK	
Size	Document Number	Rev	
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BLUE



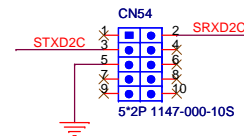
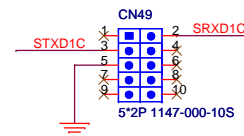
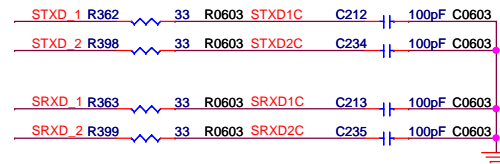
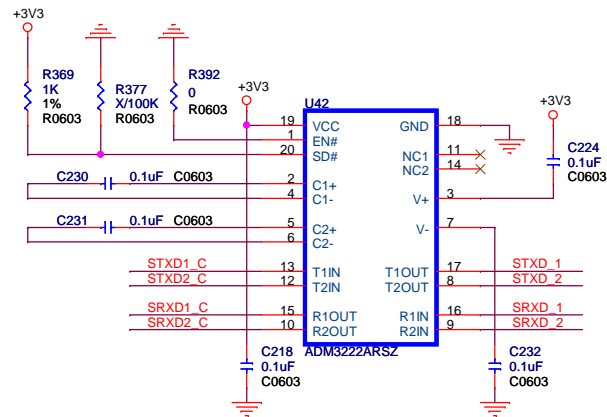
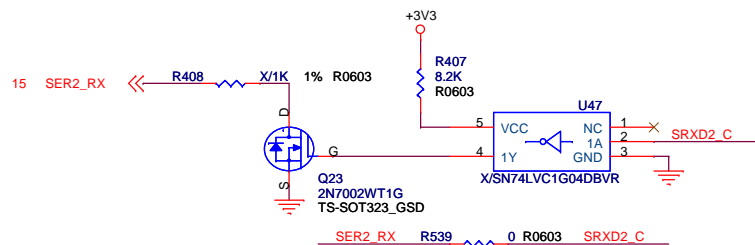
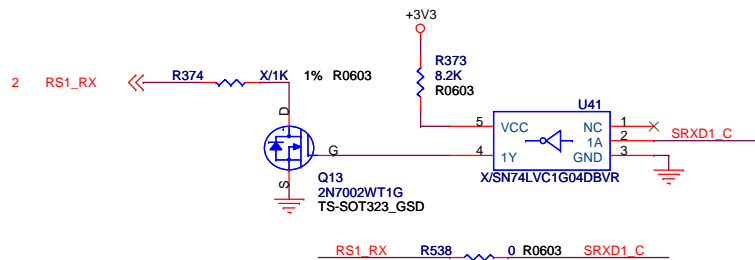
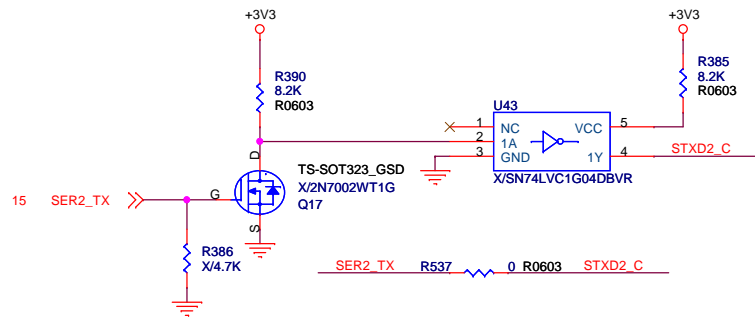
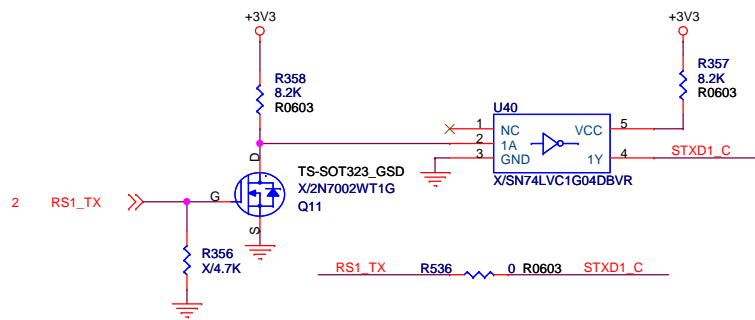
BLUE



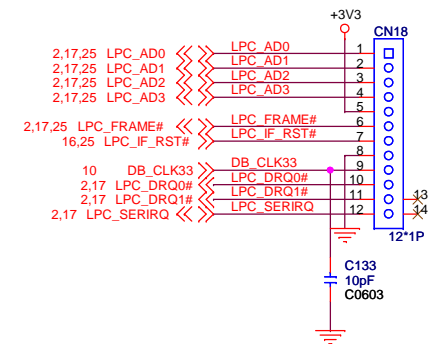
1-3 , 2-4 : Keyboard controller from SIO1 (default)
3-5 , 4-6 : Keyboard controller from SIO2




		AAEON Technology INC.	
		Title SIO Card SLOT	
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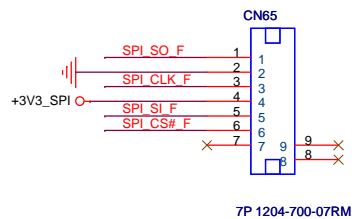
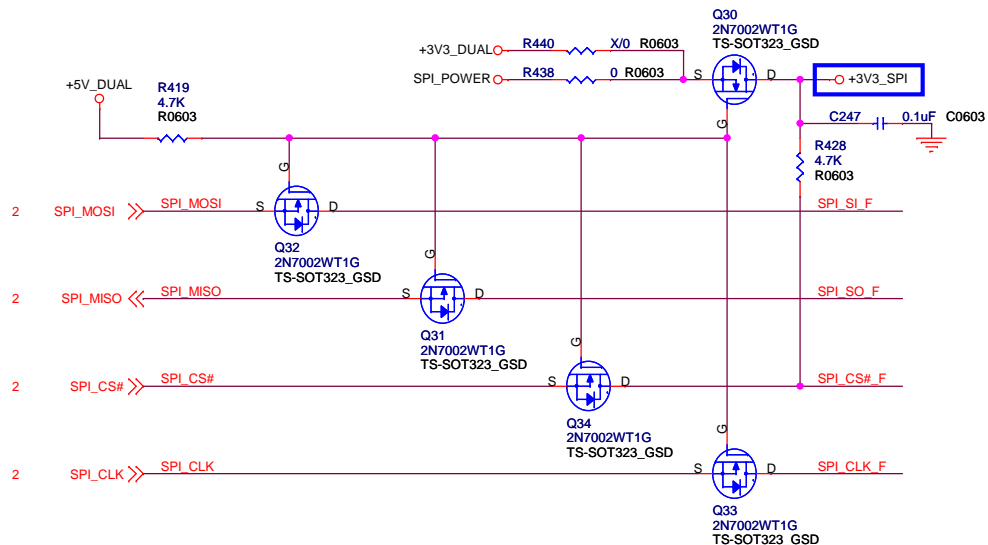
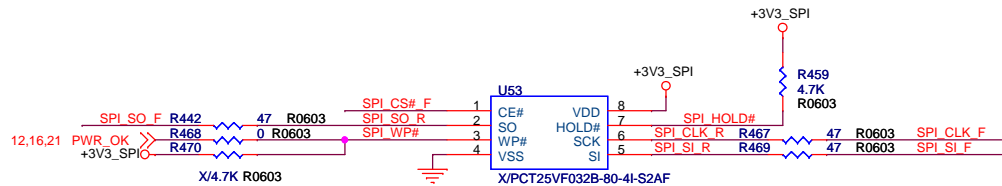
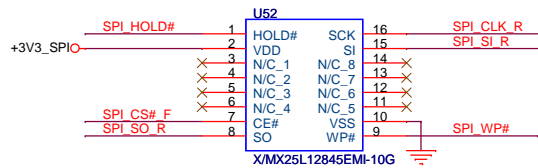


LPC Debug Port & Expansion

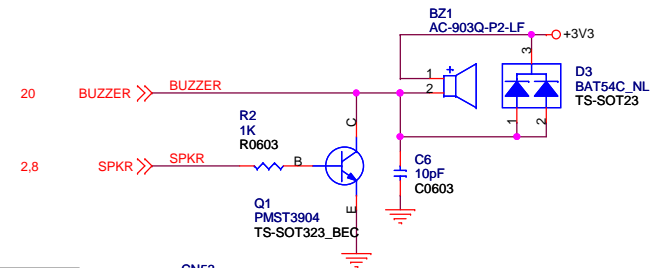


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		Serial port + LPC	
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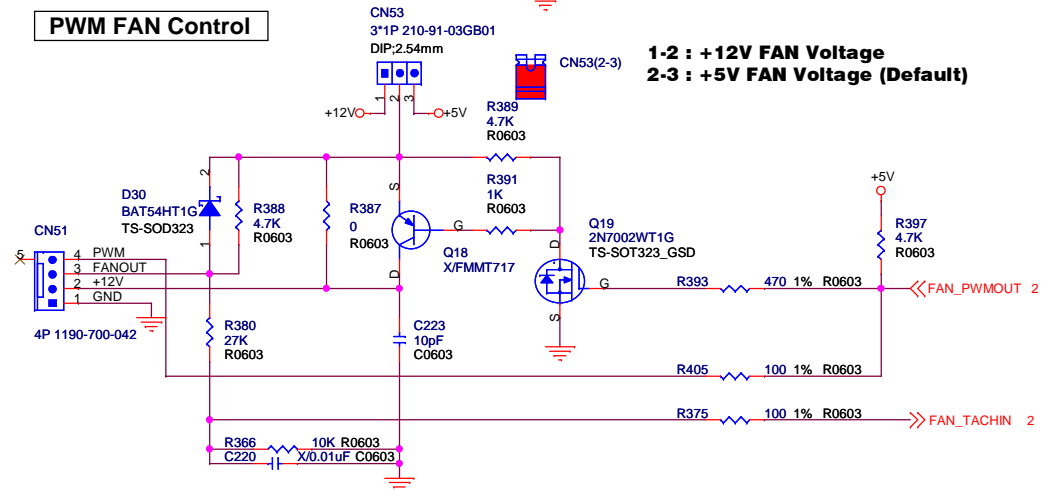
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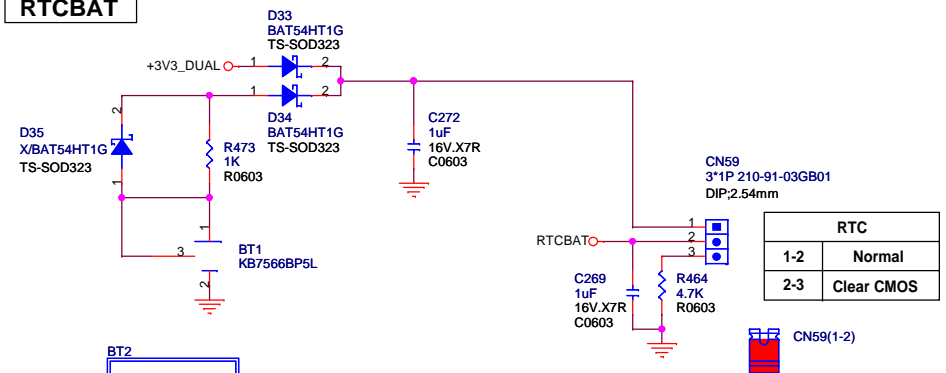
Buzzer



PWM FAN Control



RTCBAT



RTC	
1-2	Normal
2-3	Clear CMOS

<Variant Name>

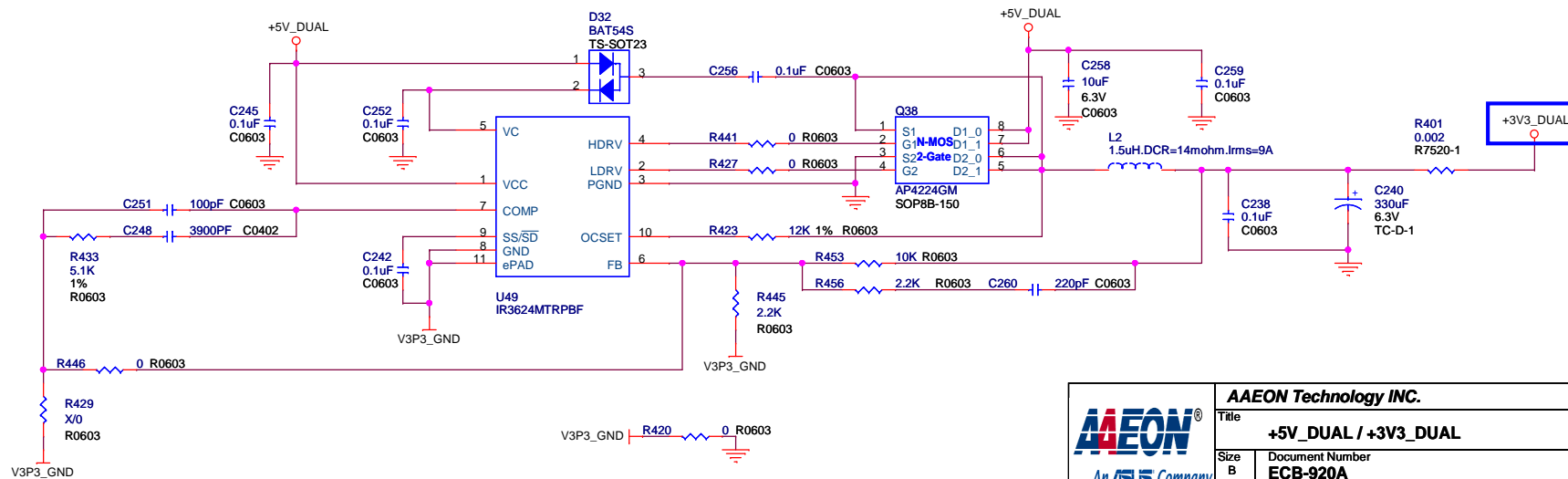
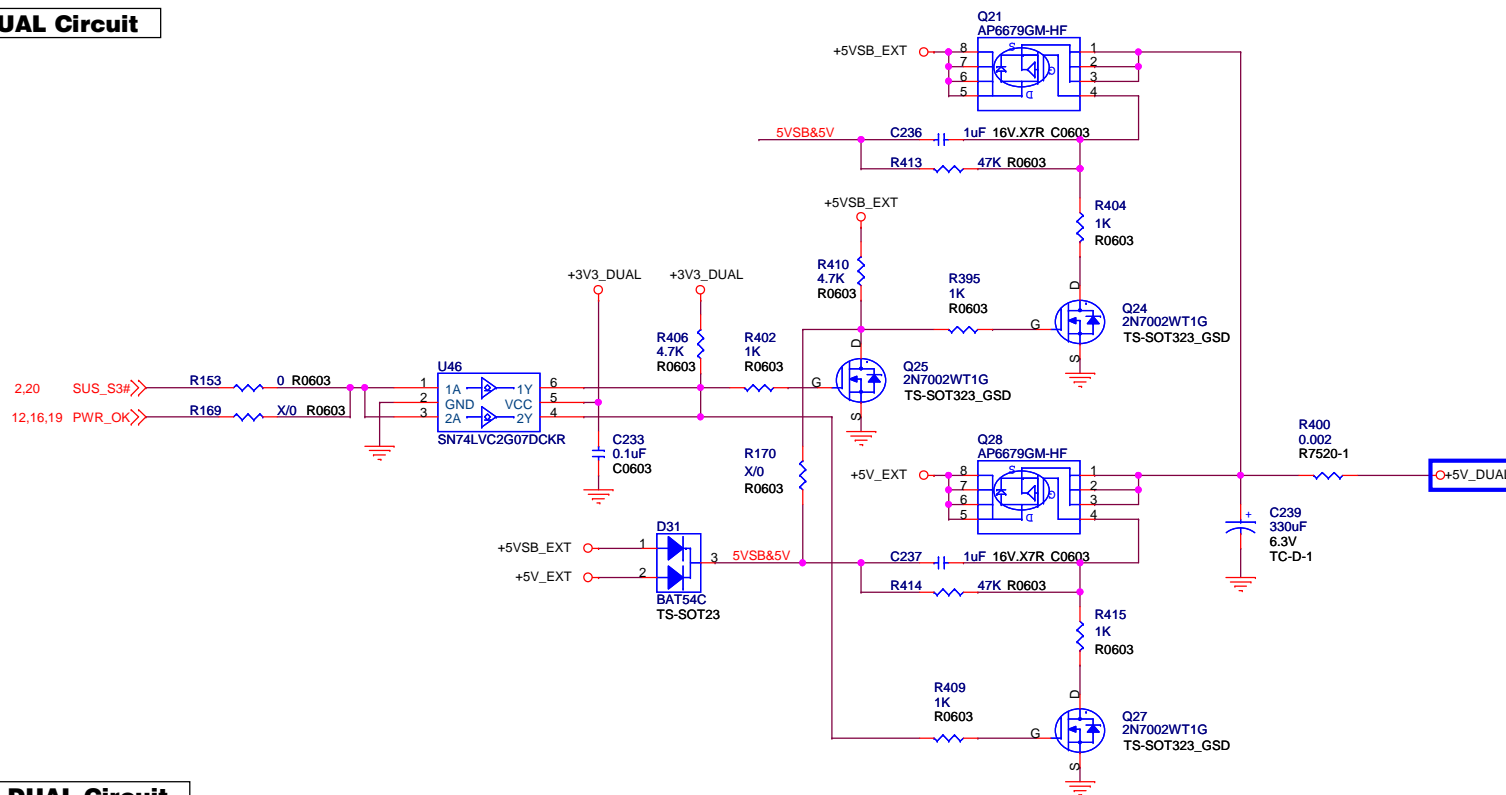


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Title	SPI + Buzzer + FAN + RTC
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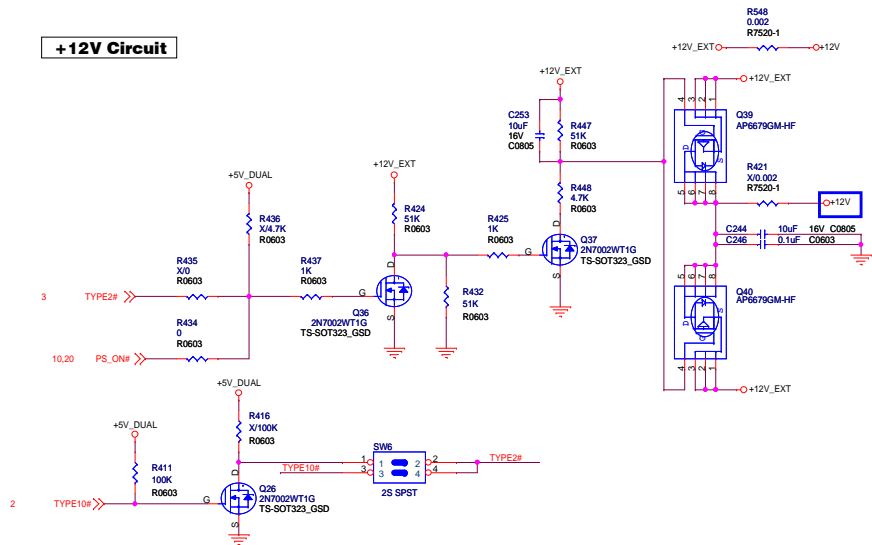
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+3V3_DUAL Circuit

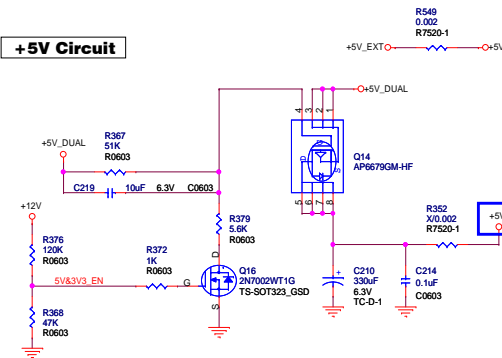


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Title +5V_DUAL / +3V3_DUAL			
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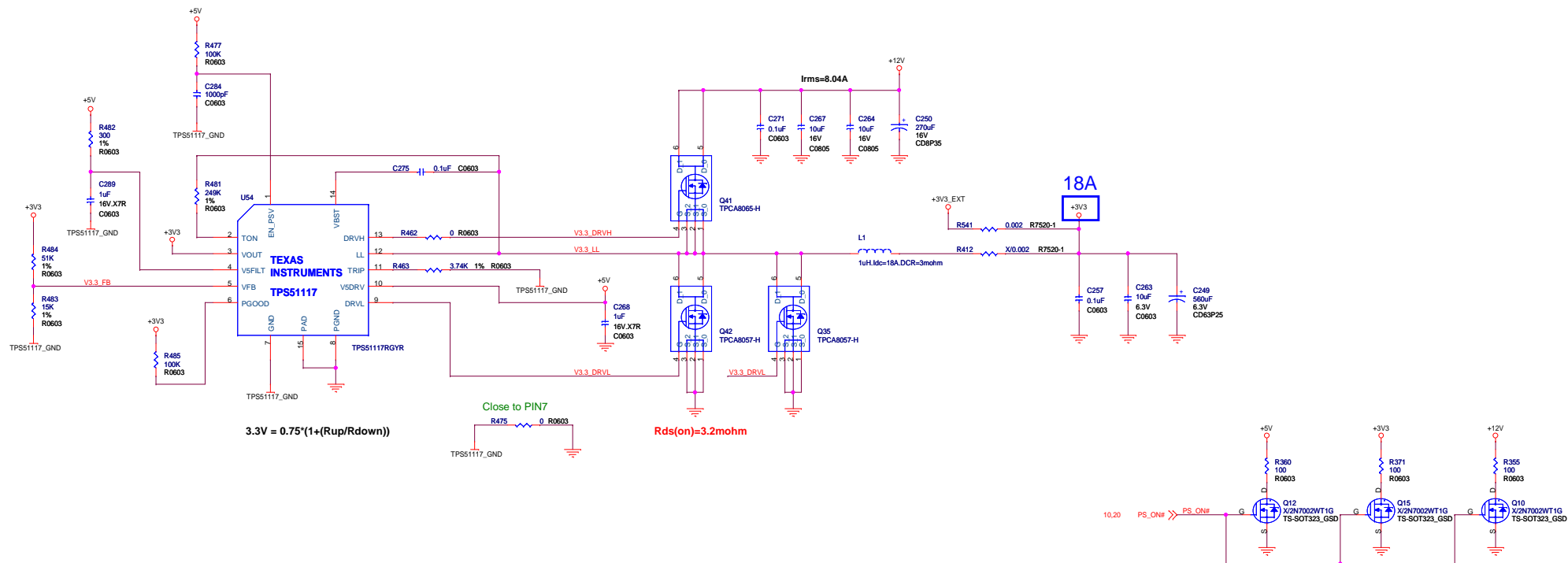
+12V Circuit

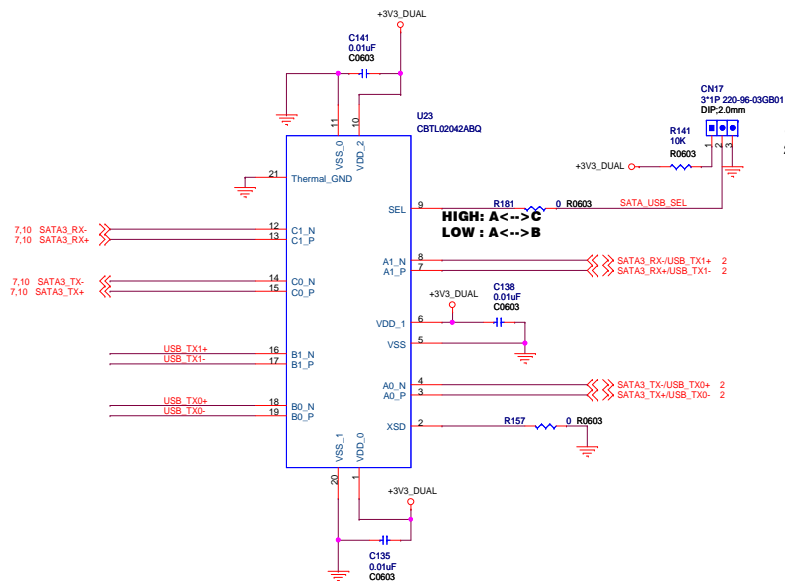


+5V Circuit

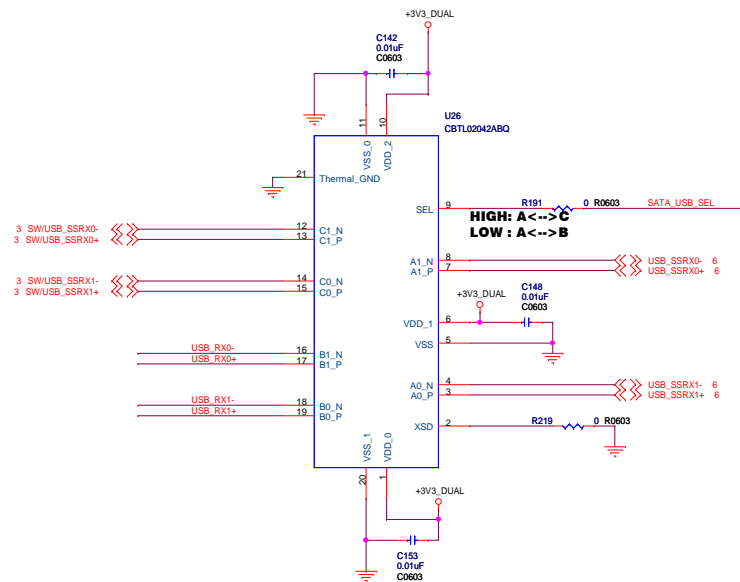
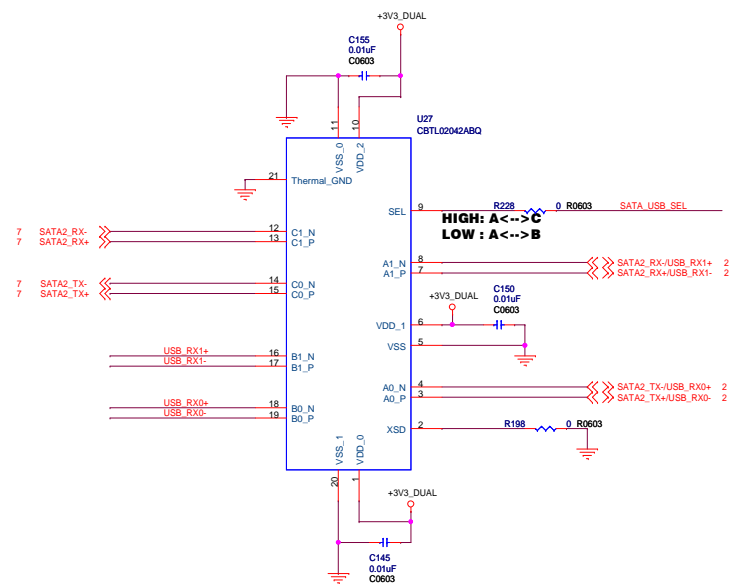
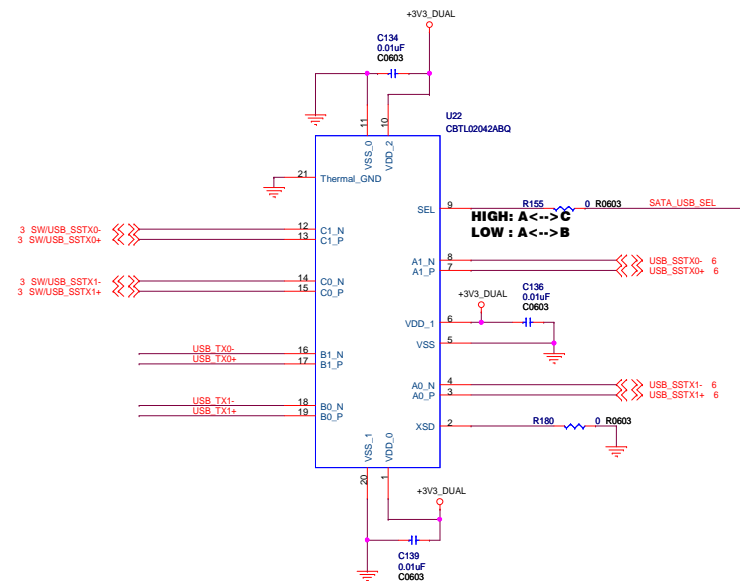


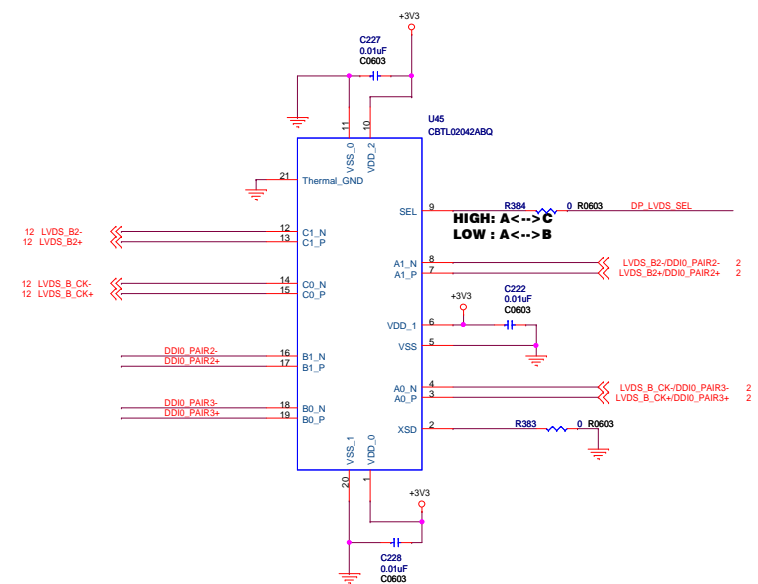
+3V3 Circuit

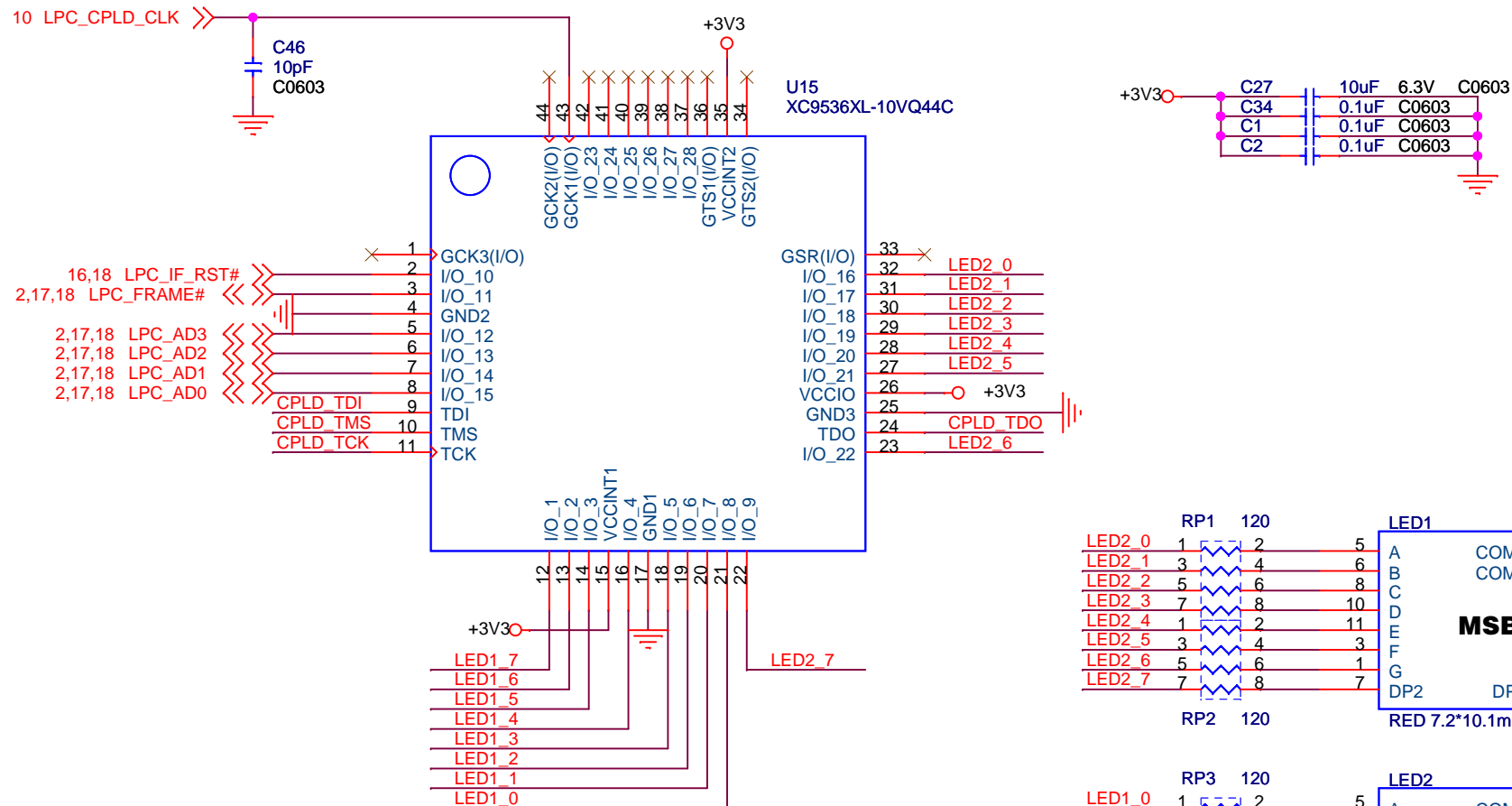




1-2 : Type 6/ Type1
2-3 : Type 10







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LPC 80H

Size
A

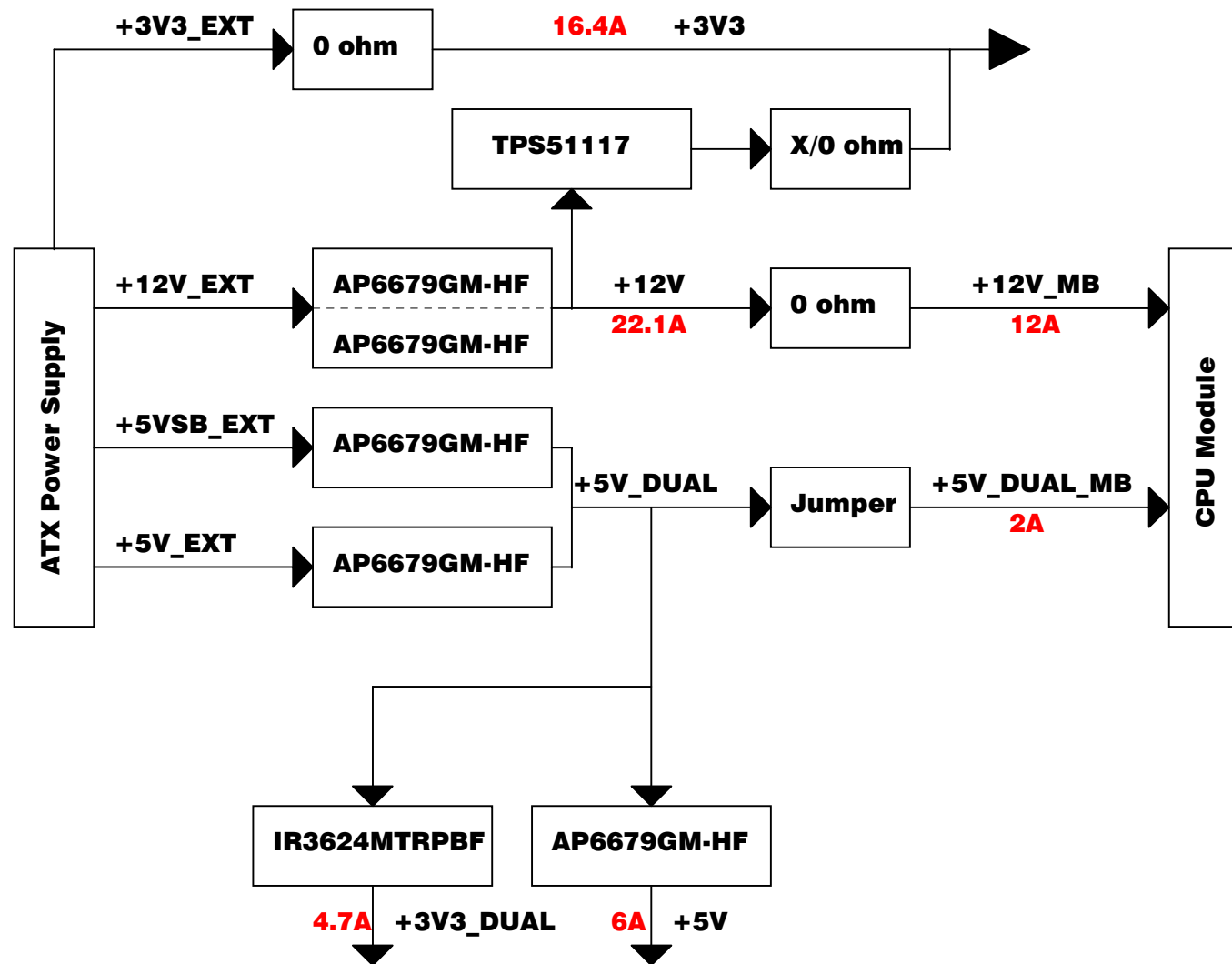
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Power Block		
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	5	4	3	2	1
D					D
C					C
B					B
A					A
	5	4	3	2	1



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Revision History				
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