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SOC GPIO Pins :

Name	Power Well	Default	GPIO Function
GPIO_0	1.8V	20K PD/I	BOARDID_BIT0
GPIO_1	1.8V	20K PD/I	BOARDID_BIT1
GPIO_2	1.8V	20K PD/I	
GPIO_3	1.8V	20K PD/I	
GPIO_4	1.8V	20K PD/I	LVDS_RB10
GPIO_5	1.8V	20K PD/I	LVDS_RB11
GPIO_6	1.8V	20K PD/I	LVDS_RB12
GPIO_7	1.8V	20K PD/I	LVDS_RB13
GPIO_8	1.8V	20K PD/I	
GPIO_9	1.8V	20K PD/I	
GPIO_10	1.8V	20K PD/I	
GPIO_11	1.8V	20K PD/I	
GPIO_12	1.8V	20K PD/I	
GPIO_13	1.8V	20K PD/I	GPIO_PME#
GPIO_14	1.8V	20K PD/I	WAKE_R#
GPIO_15	1.8V	20K PD/I	EN_USB
GPIO_16	1.8V	20K PD/I	LAN1_DISABLE#
GPIO_17	1.8V	20K PD/I	W_DISABLE0#
GPIO_18	1.8V	20K PD/I	W_DISABLE1#
GPIO_19	1.8V	20K PD/I	
GPIO_20	1.8V	20K PD/I	
GPIO_21	1.8V	20K PD/I	
GPIO_22	1.8V	20K PD/I	SATA_GPIO
GPIO_23	1.8V	20K PD/I	SATA_GPI1
GPIO_24	1.8V	20K PD/I	SATA_DEVSLP10
GPIO_25	1.8V	20K PD/I	SATA_DEVSLP11
GPIO_26	1.8V	20K PD/I/OP	SATA_LED_N
GPIO_27	1.8V	20K PD/I	
GPIO_28	1.8V	20K PD/I	
GPIO_29	1.8V	20K PD/I	
GPIO_30	1.8V	20K PD/I	
GPIO_31	1.8V	20K PD/I	
GPIO_32	1.8V	20K PD/I	
GPIO_33	1.8V	20K PD/I	PMIC_IRQ
GPIO_216	1.8V	20K PD/I/O	
GPIO_217	1.8V	20K PD/I/O	
GPIO_218	1.8V	20K PD/I/O	
GPIO_219	1.8V	20K PD/I/O/OP	

The Mapping Table For Super I/O F81801U GPIOs :

Name	PIN No.	Power	Type	Description & setting
GPIO[6]	42	+3.3V_ALW	I/OOD12t	
GPIO[12]	35	+3.3V	I/OOD12t	WDTRST#
GPIO[15]	36	+3.3V	I/OOD12,st,lv	None
GPIO[16]	37	+3.3V	I/OOD12,st,lv	
GPIO[20]	38	+3.3V	I/OOD12,st,lv	
GPIO[21]	39	+3.3V	I/OOD12t	
GPIO[22]	40	+3.3V	I/OOD12t	
GPIO[23]	41	+3.3V	I/OOD12t	
GPIO[30]	9	+3.3V	I/OOD12t	DCDB#
GPIO[31]	10	+3.3V	I/OOD12t	RIB#
GPIO[32]	11	+3.3V	I/OOD12t	CTSB#
GPIO[33]	13	+3.3V	I/OOD12t	DTRB#
GPIO[34]	14	+3.3V	I/OOD12t	RTSB#
GPIO[35]	15	+3.3V	I/OOD12t	DSRB#
GPIO[36]	16	+3.3V	I/OOD12t	TXB#
GPIO[37]	17	+3.3V	I/OOD12t	RXB#

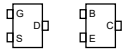
I/OOD12st,lv : Low level bi-directional pin with schmitt trigger, can select to OD or OUT by register, with 12 mA source-sink capability.

I/OOD12t : TTL level bi-directional pin, can select to OD or OUT by register, with 12 mA source-sink capability

F75111RG GPIO Pins :

Name	Tolerance	Power Well	Default	Function
GPIO10	5V	VS3V	Native	BOARDID_BIT0
GPIO11	5V	VS3V	Native	ADM213_EN
GPIO12	5V	VS3V	Native	81438_SD
GPIO13	5V	VS3V	Native	
GPIO14	5V	VS3V	Native	BOARDID_BIT1
GPIO15	5V	VS3V	Native	
GPIO16	5V	VS3V	Native	
GPIO17	5V	VS3V	Native	
GPIO20	5V	VS3V	Native	SEL_COM2_MD0
GPIO21	5V	VS3V	Native	SEL_COM2_MD1
GPIO22	5V	VS3V	Native	COM2_SLEW
GPIO23	5V	VS3V	Native	BIO_GPIO
GPIO24	5V	VS3V	Native	DIO_P0
GPIO25	5V	VS3V	Native	DIO_P1
GPIO26	5V	VS3V	Native	DIO_P2
GPIO27	5V	VS3V	Native	DIO_P3
GPIO30	5V	VS3V	GPIO	LVDS_EN
GPIO31	5V	VS3V	GPIO	
GPIO32	5V	VS3V	GPIO	
GPIO33	5V	VS3V	GPIO	LVDS_PD#

PCB Footprints



SMBus/I2C Addresses :

Device	Address
SODIMMA	A0h
LCD Backlight Controller	5Ch
GPIO IC	6Eh
PTN3460 Slave	C0h

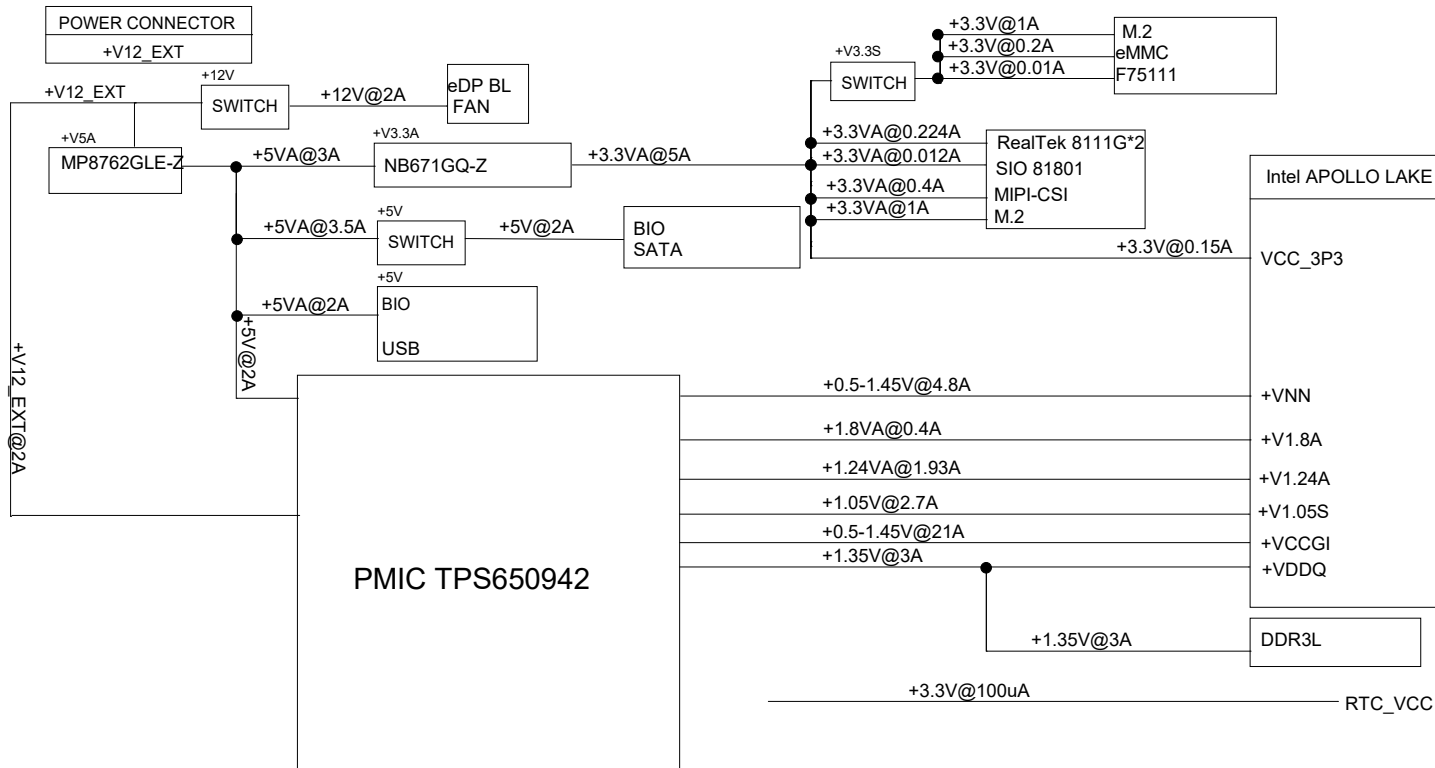
PCB STACK :

Impedence 50ohm +/-15%.

	Layer 1 : Component
	Layer 2 : GND
	Layer 3 : Signal
	Layer 4 : GND
	Layer 5 : Signal
	Layer 6 : VCC
	Layer 7 : Signal
	Layer 8 : Signal
	Layer 9 : GND
	Layer 10 : Solder

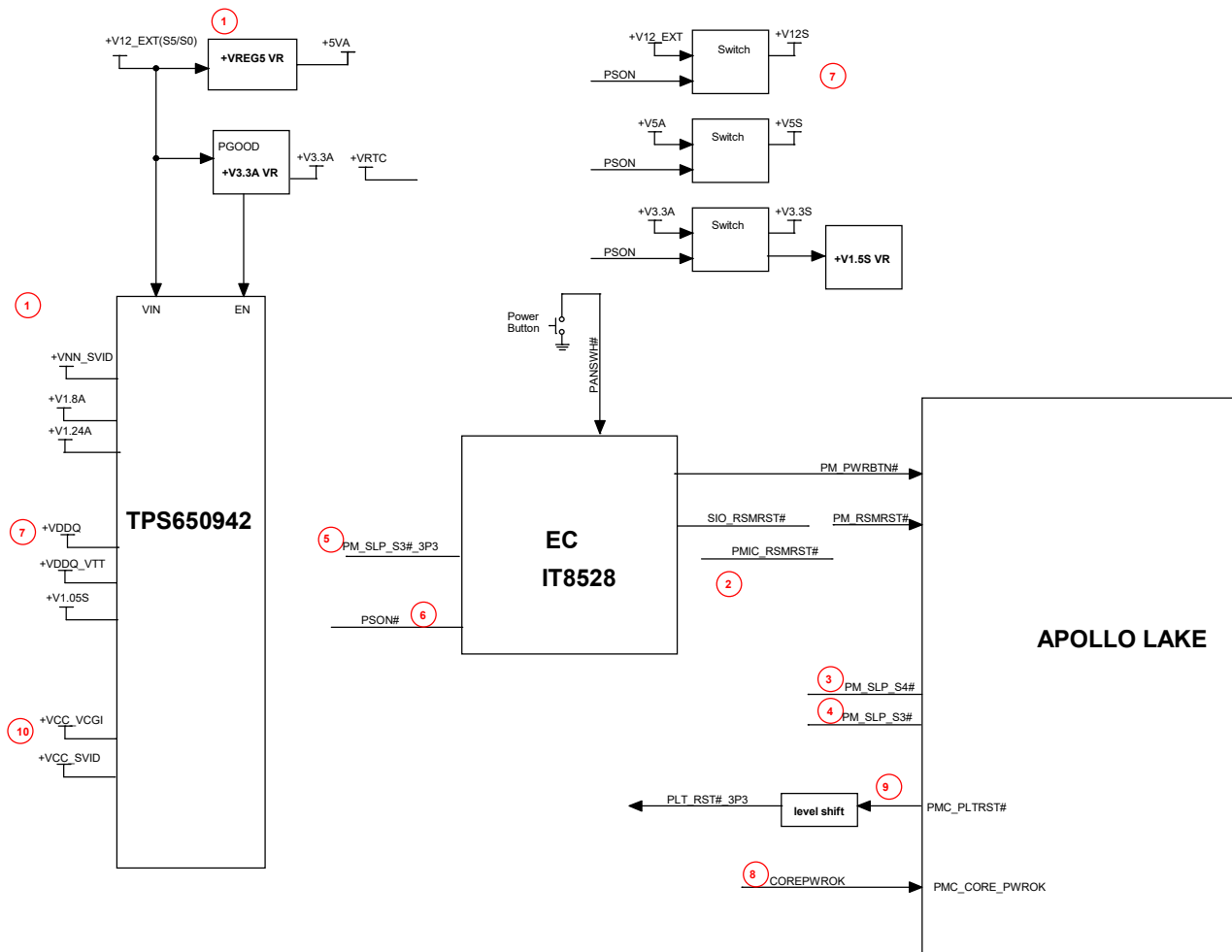


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Size B	Document Number PICOAPL1A01	Rev: A0.1
Date: Friday, May 12, 2017		Sheet: 2 of 32

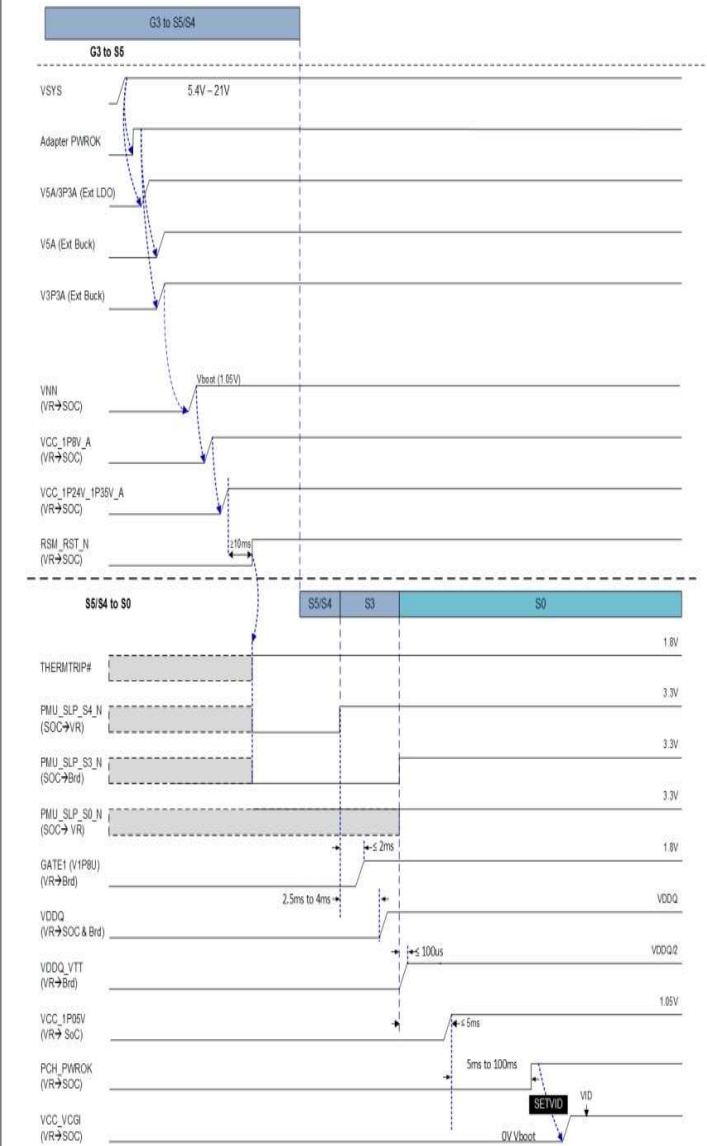


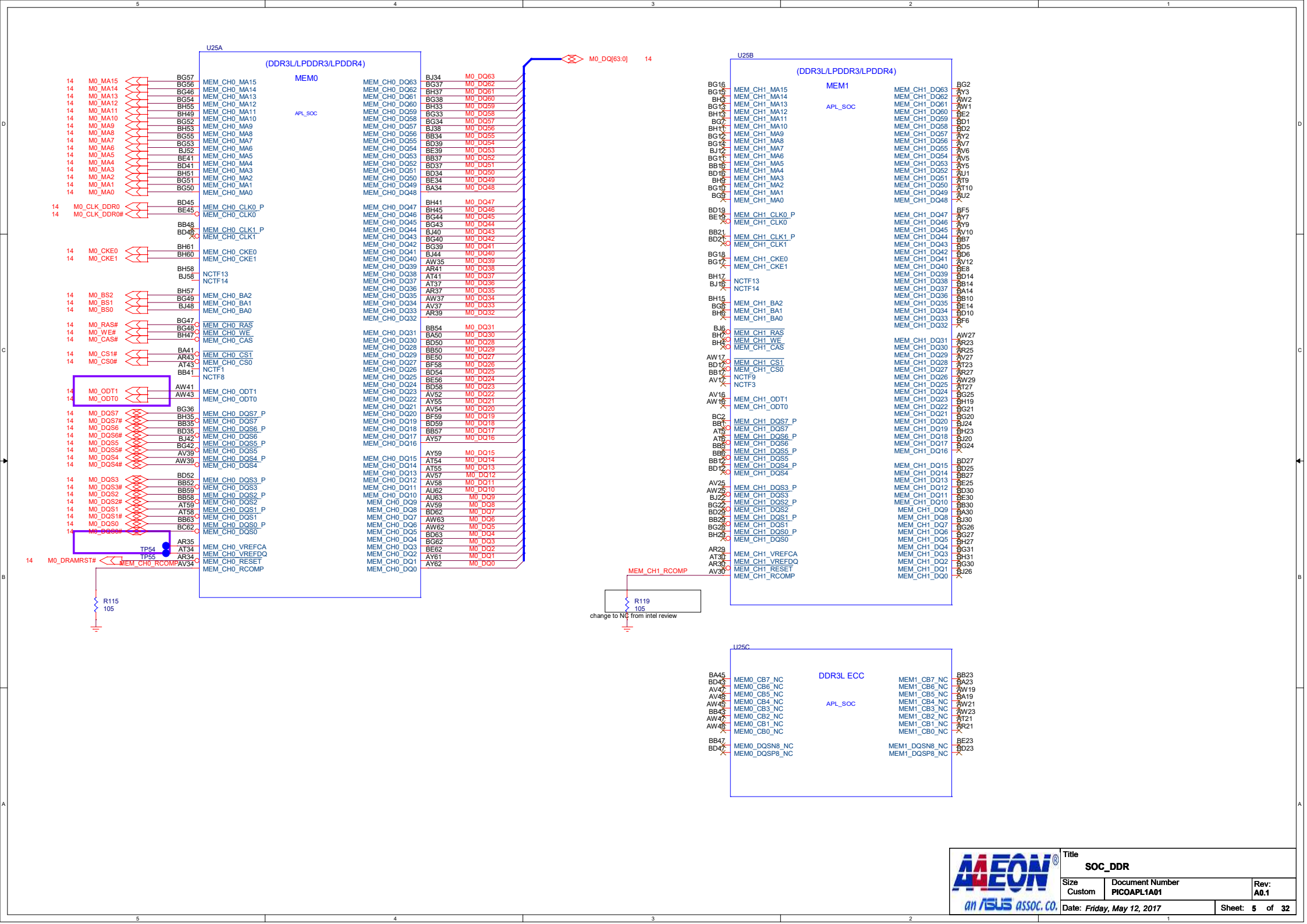
+V5A -> +V3.3A -> +VNN -> +VCC -> +V1P8A -> +V1P24A -> +V1P8U -> +VDDQ
+V1.05S -> +VCC_VCGI

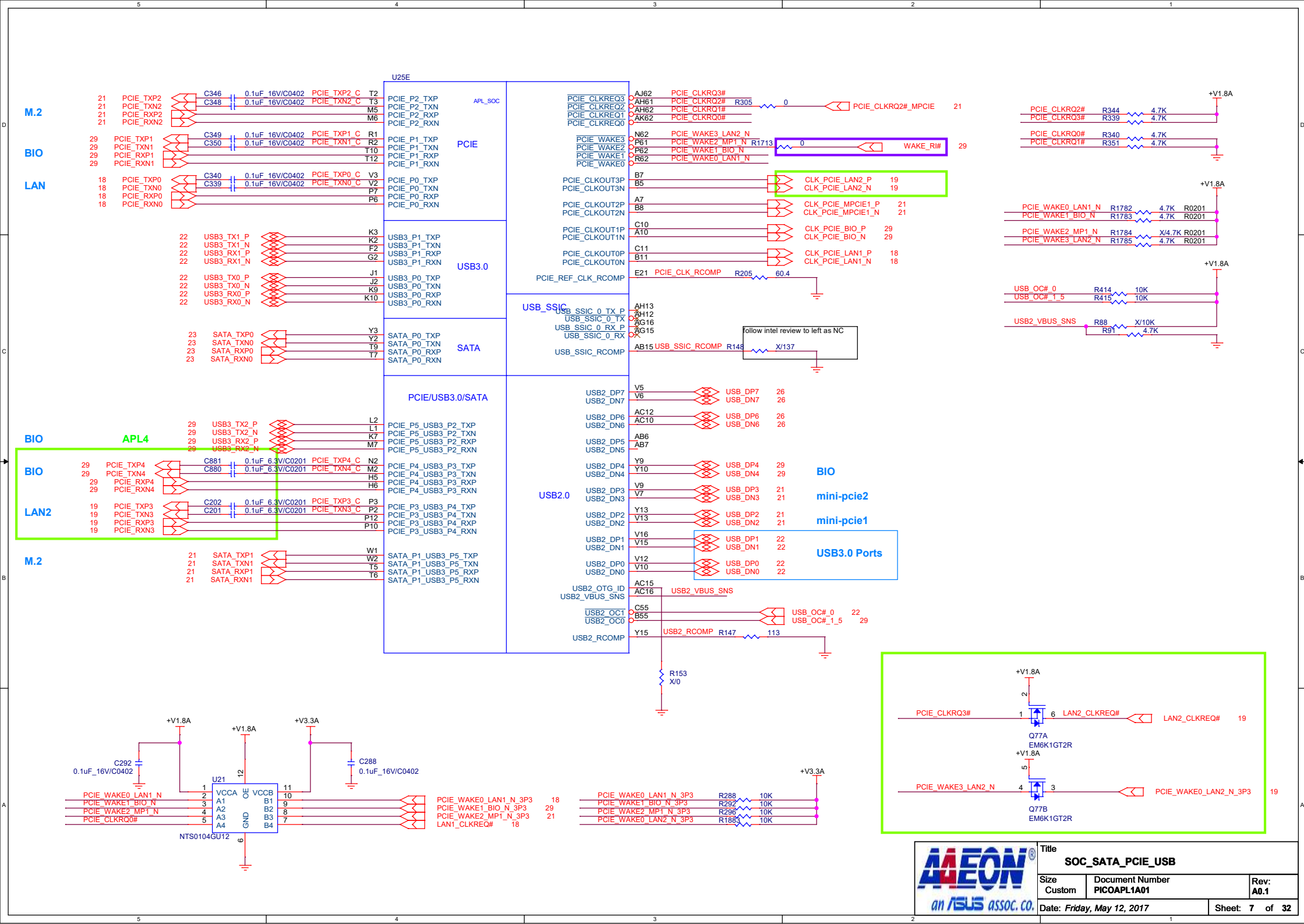
Power Type	Voltage Range (V)	Voltage Tolerance (AC+DC+Ripple)	Iccmax (A)
VCC_VCGI	0.45-1.3	DC Load Line (DCLL) = TBD Ripple at Iccmax = +/-15mV TOB_Iccmax = +/-20mV Maximum overshoot voltage = 100mV Maximum overshoot duration = 50 µs	21
VNN	0.45-1.3	+/-50mV	4.8
VCC_V1P05	1.05	+/-5%	2.7
VCC_V1P24_1P35_A	1.24V or 1.35V	+/- 5%	1.3
VCC_V1P24_A	1.24	+/-5%	TBD
VCC_V1P8V_A	1.8	+/-5%	0.4
VDDQ	1.35	+/-5%	2.8 (excluding DRAM)
	1.24	+/-5%	
VCC_3P3V_A	3.3	+/-5%	0.15
VCC_RTC_3P3V	2-3.47	N/A	TBD

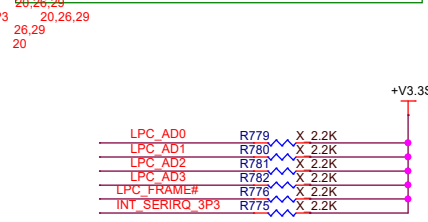
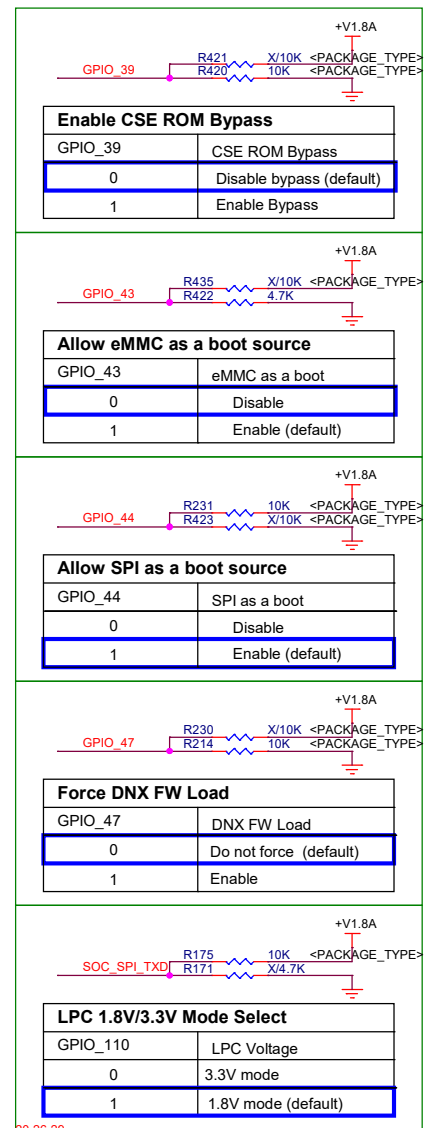


Power-Up Sequencing (G3 to S0)—Adapter

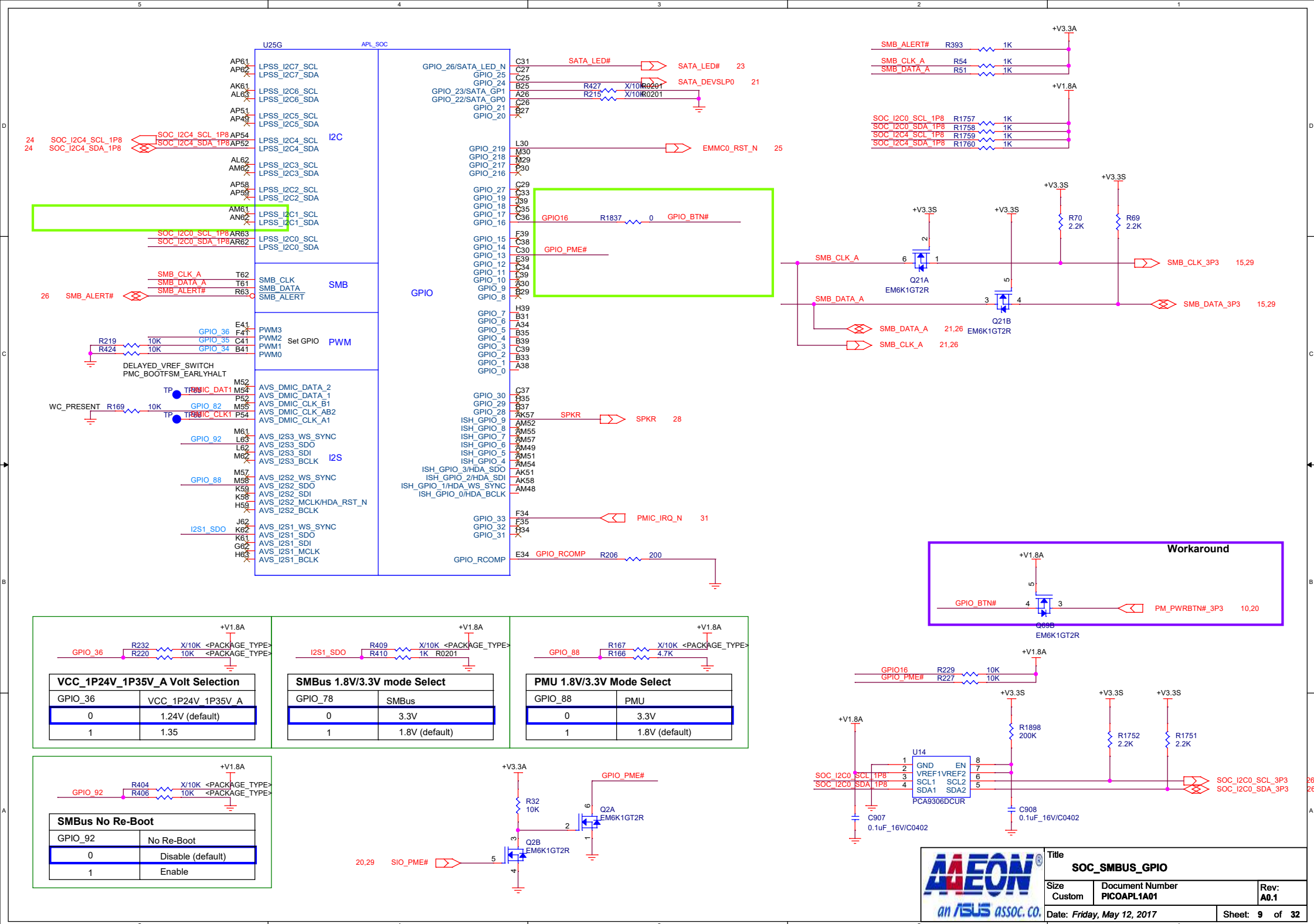


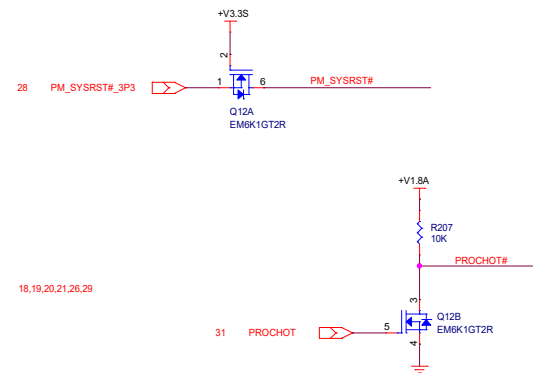
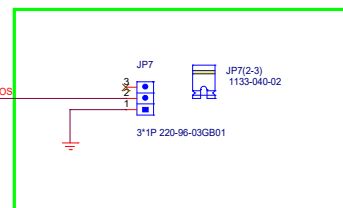
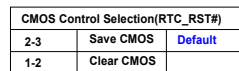
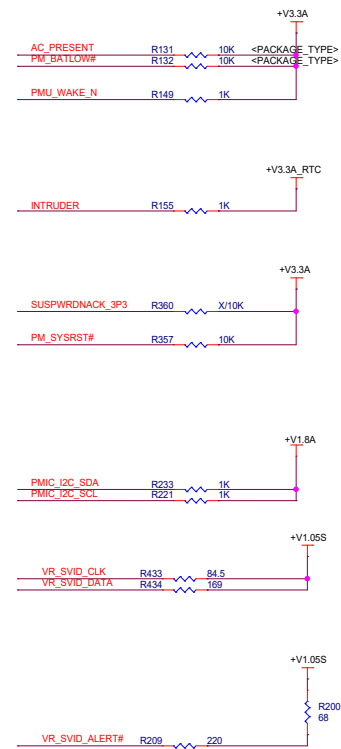


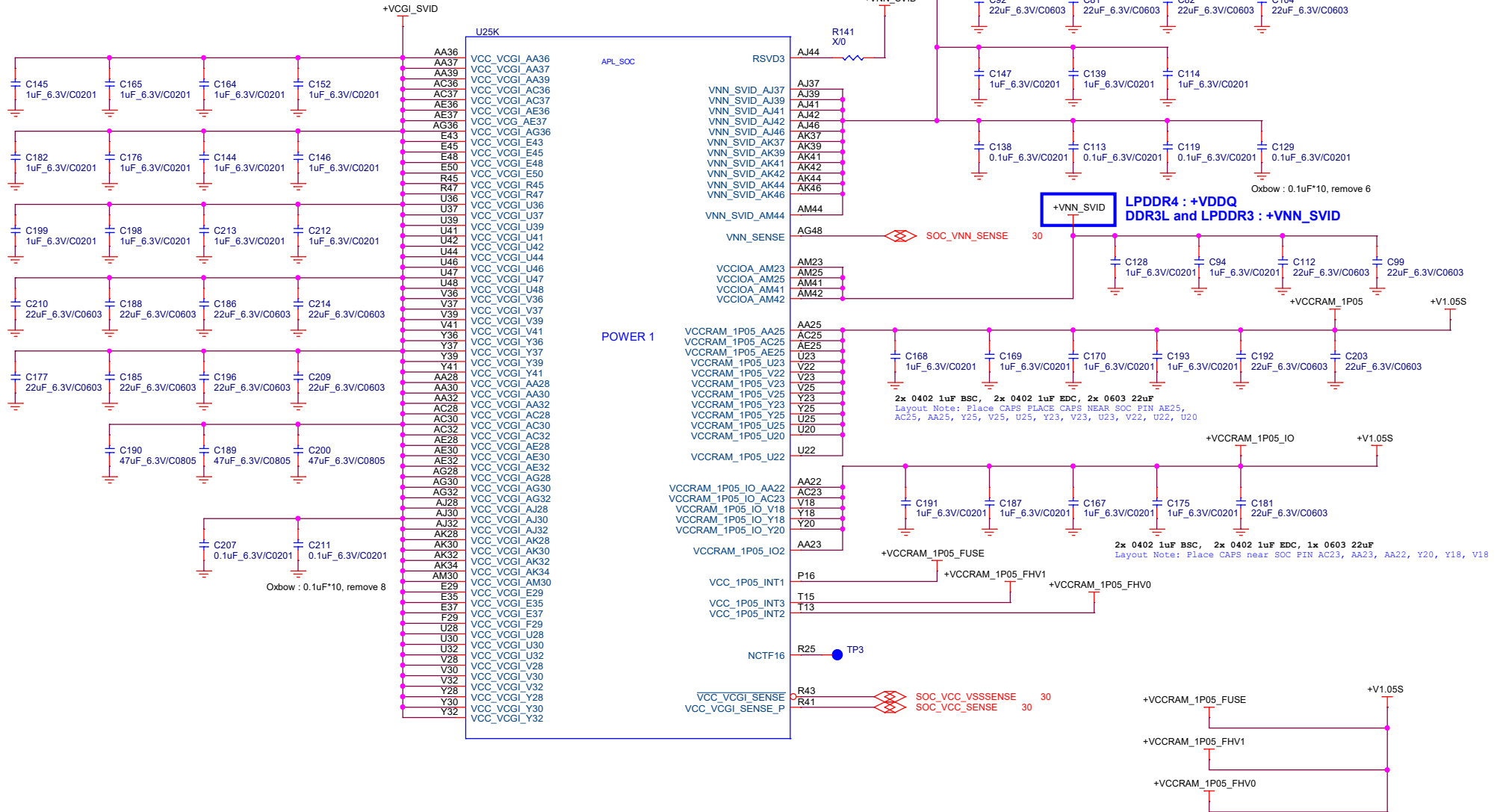


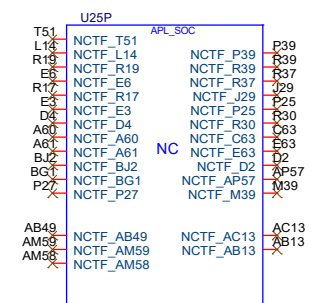
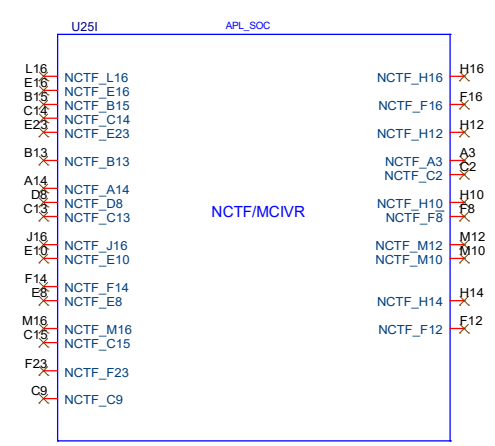
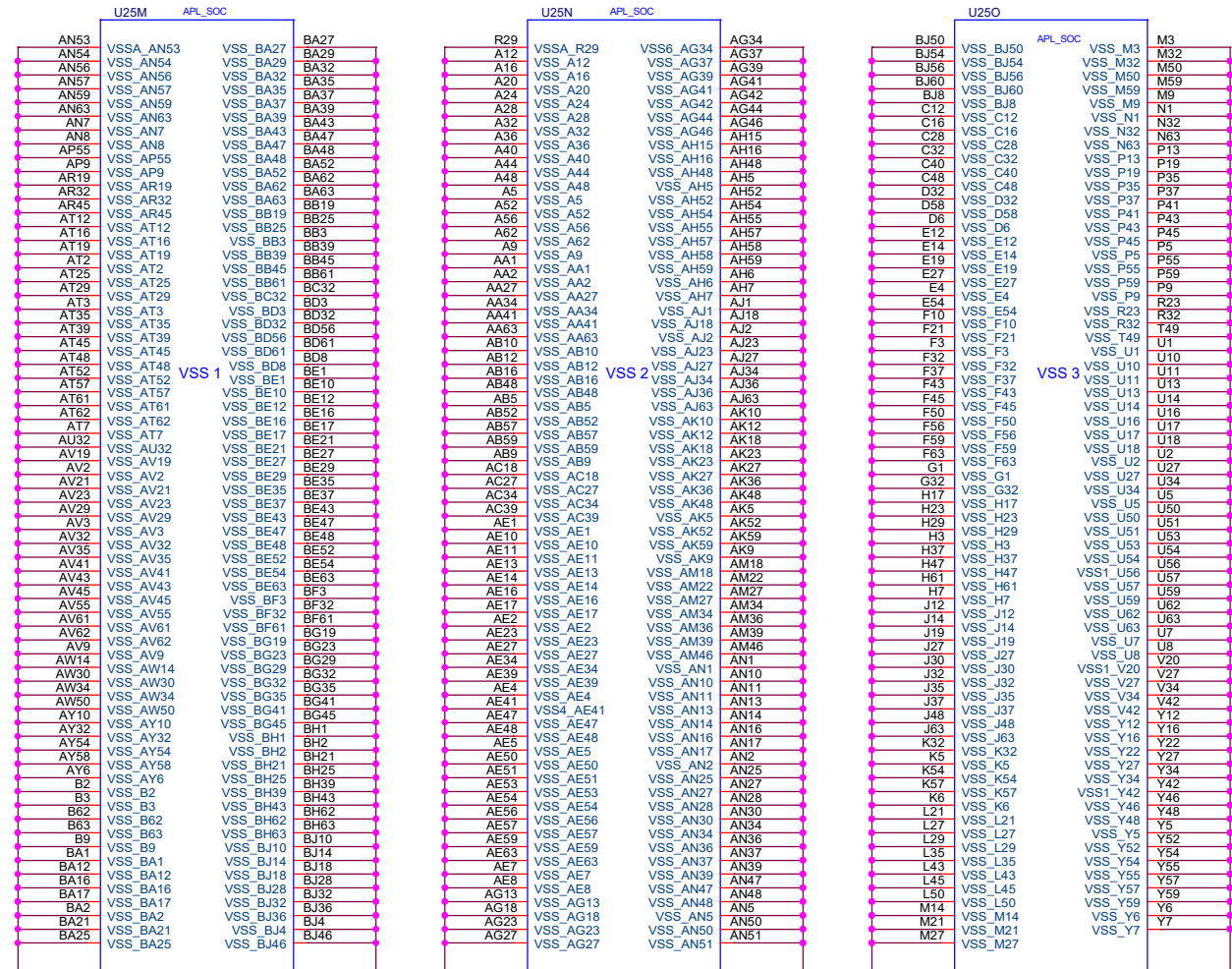


Top swap override	
GPIO_120	
0	Disable (default)
1	Override

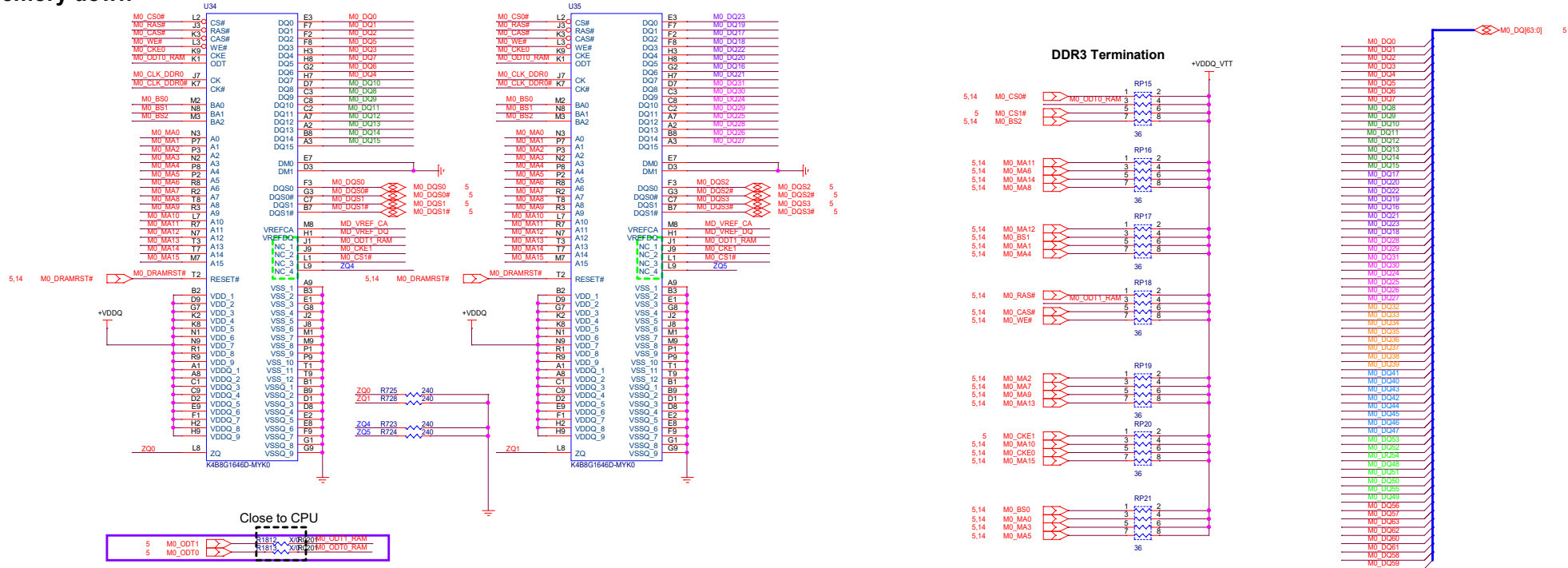




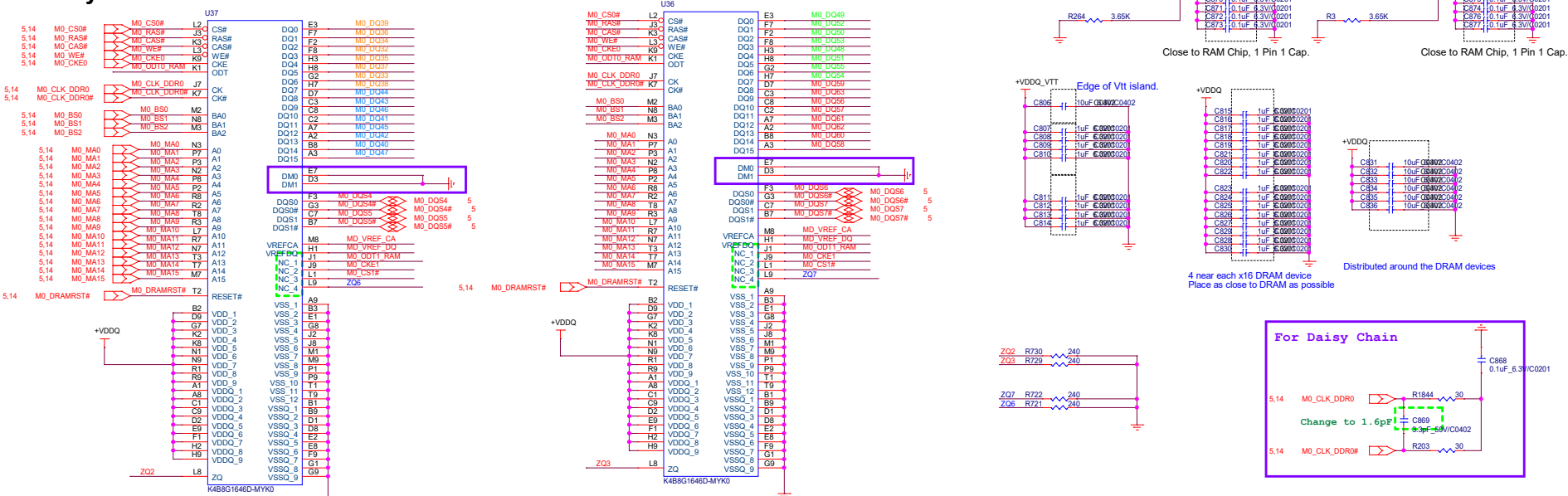




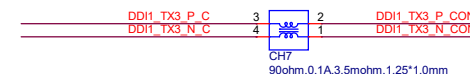
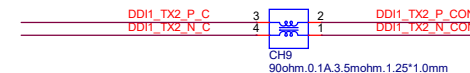
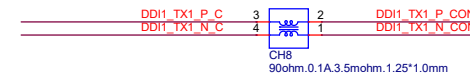
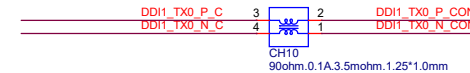
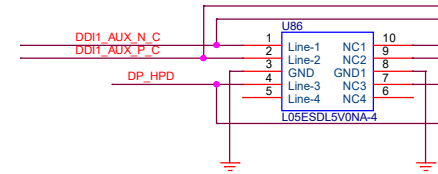
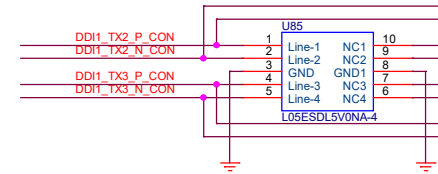
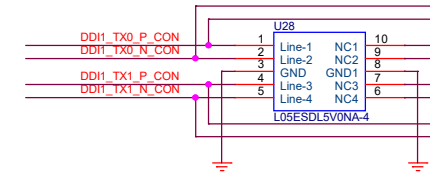
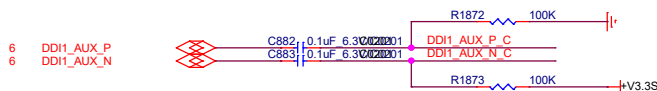
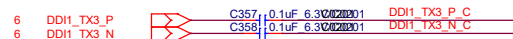
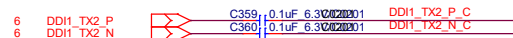
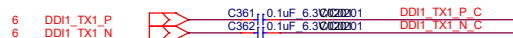
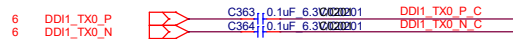
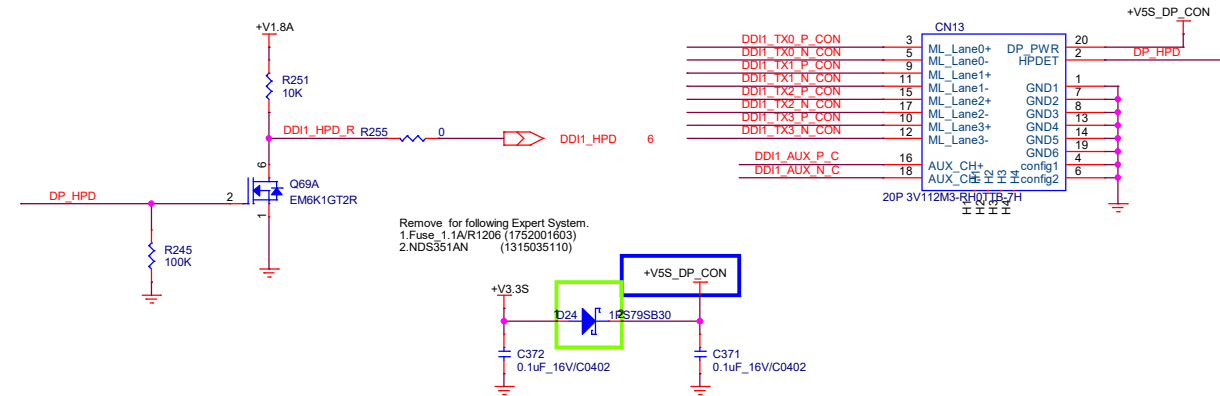
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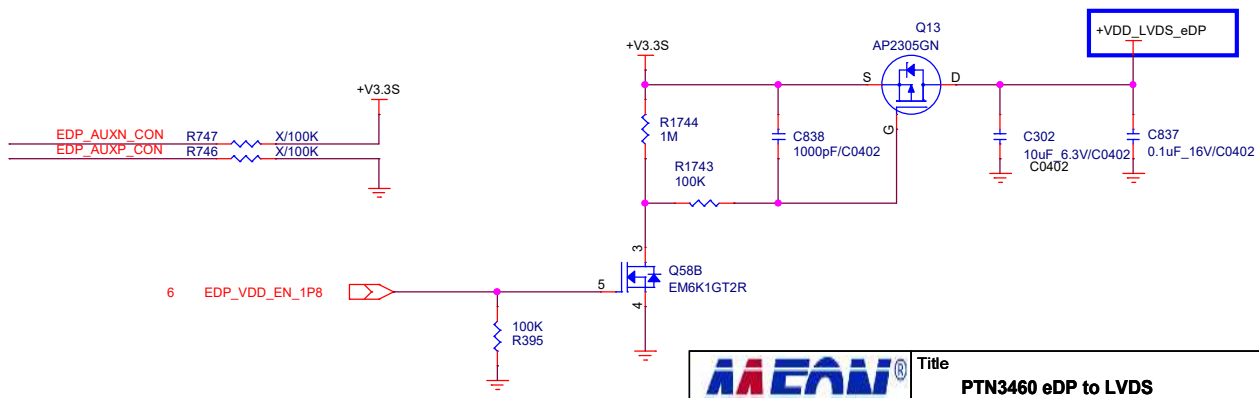
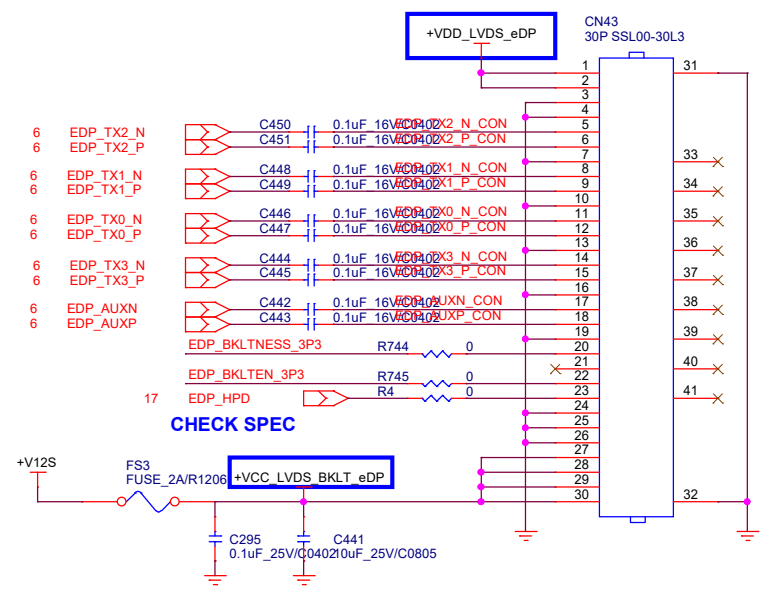
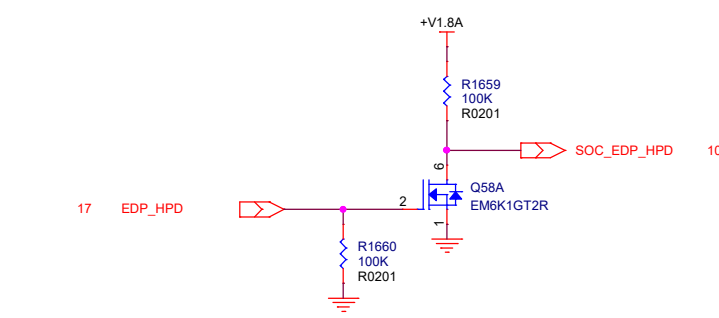
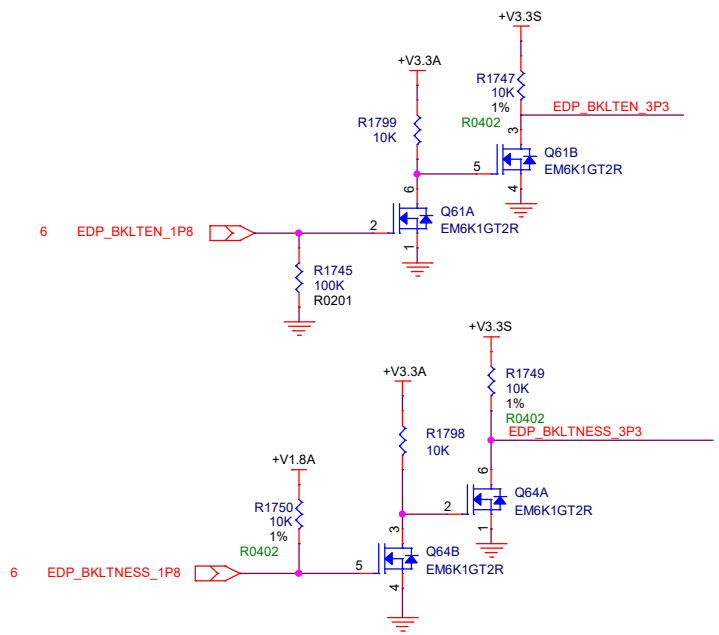


Memory down

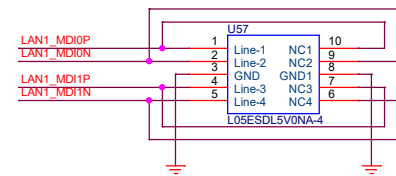
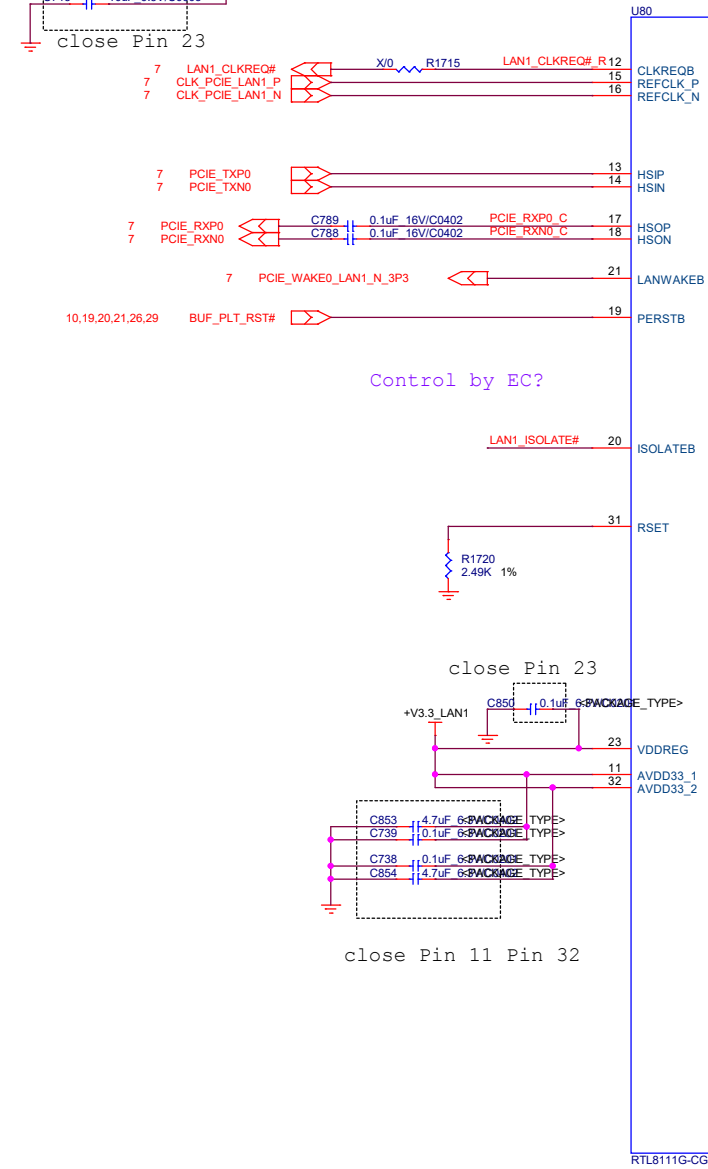


HDMI

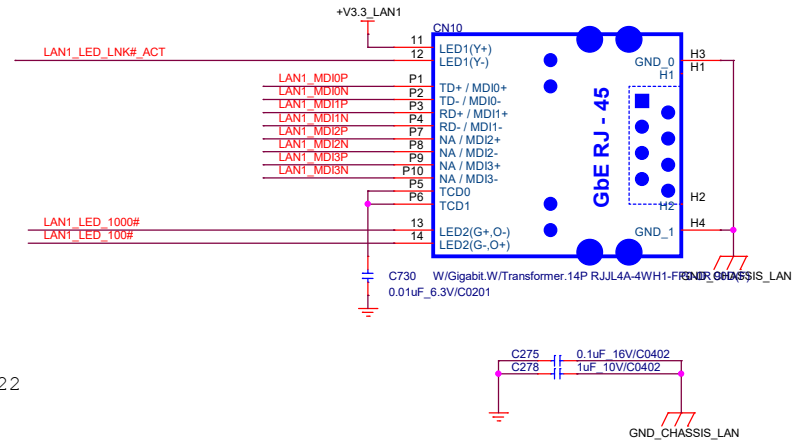




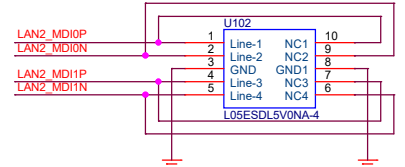
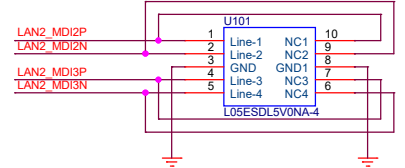
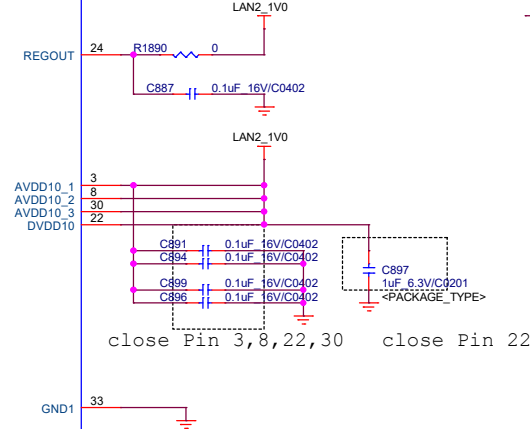
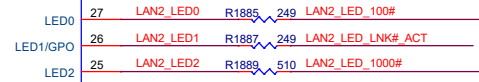
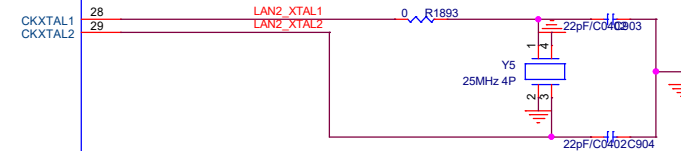
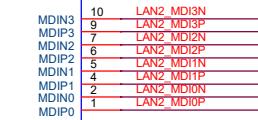
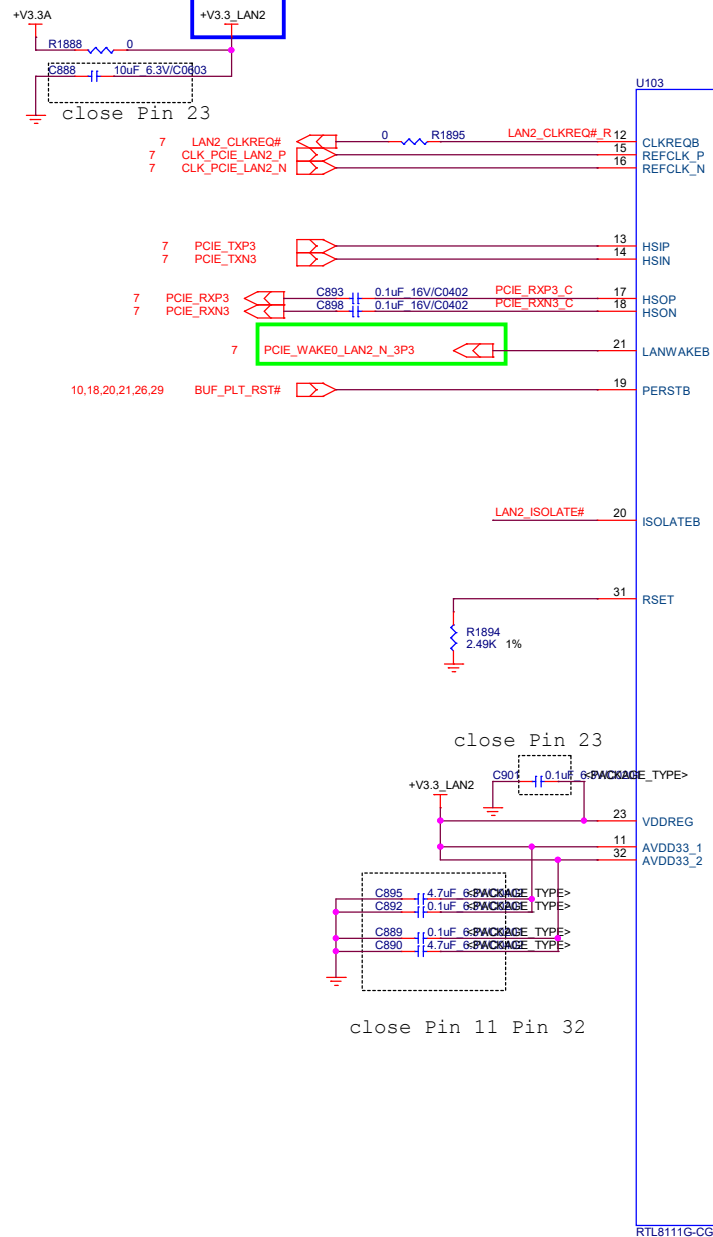
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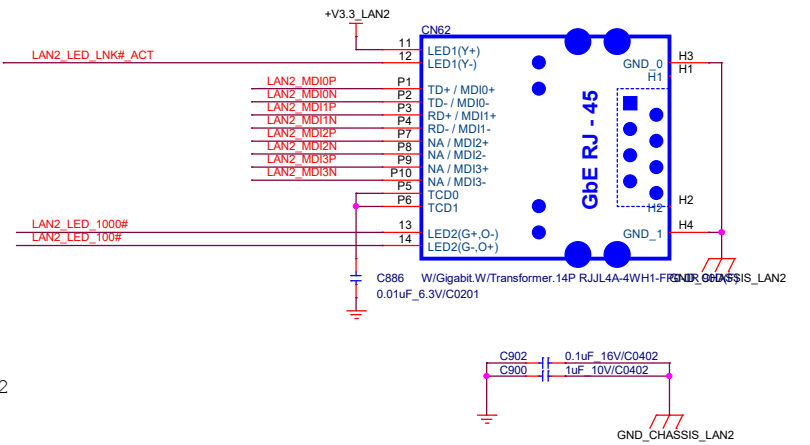
DESIGN NOTE				
LEDS1-0	00	01	10	11
LED0	ACT	LINK/ACT	LINK10/ACT	LINK10/ACT10
LED1	LINK100	LINK1000	LINK100	LINK100/ACT100
LED3	LINK1000	LINK100	LINK1000	LINK1000/ACT1000

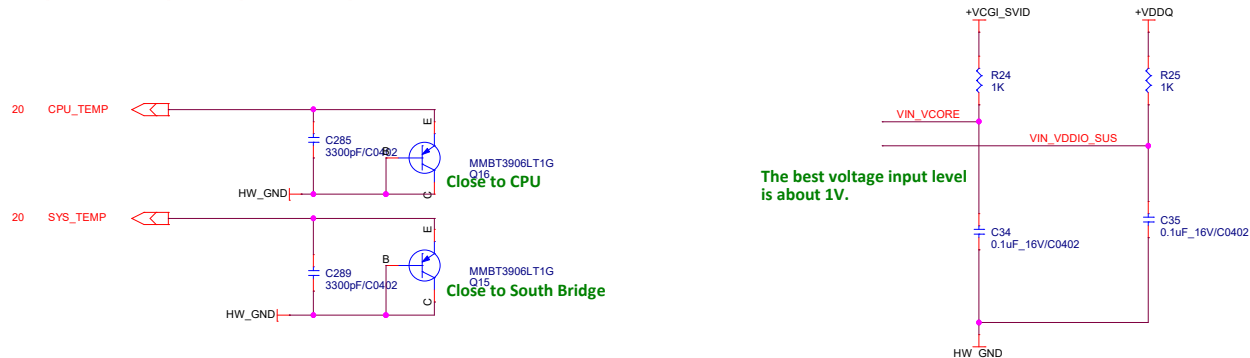
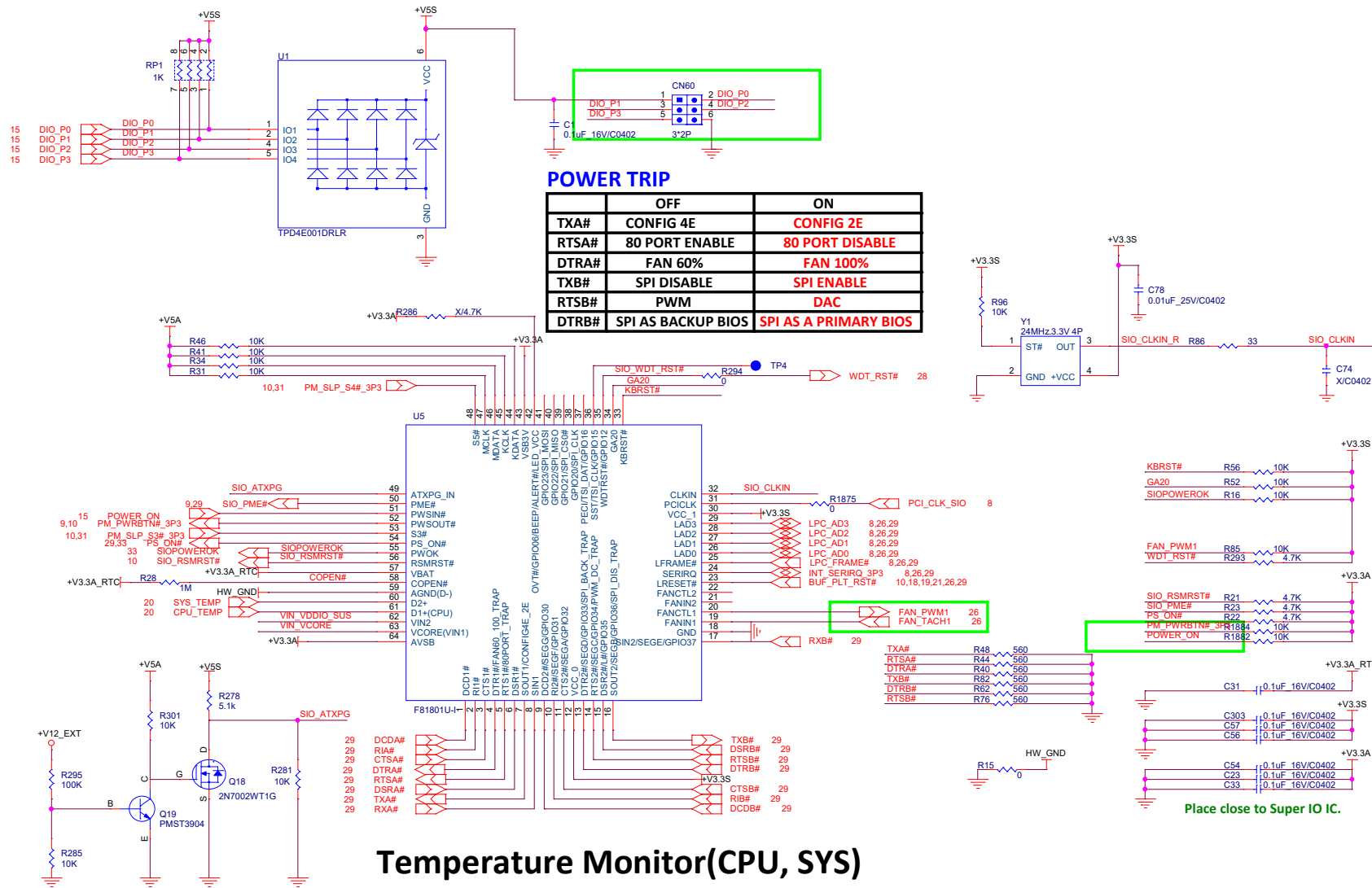


RealTek 8111G

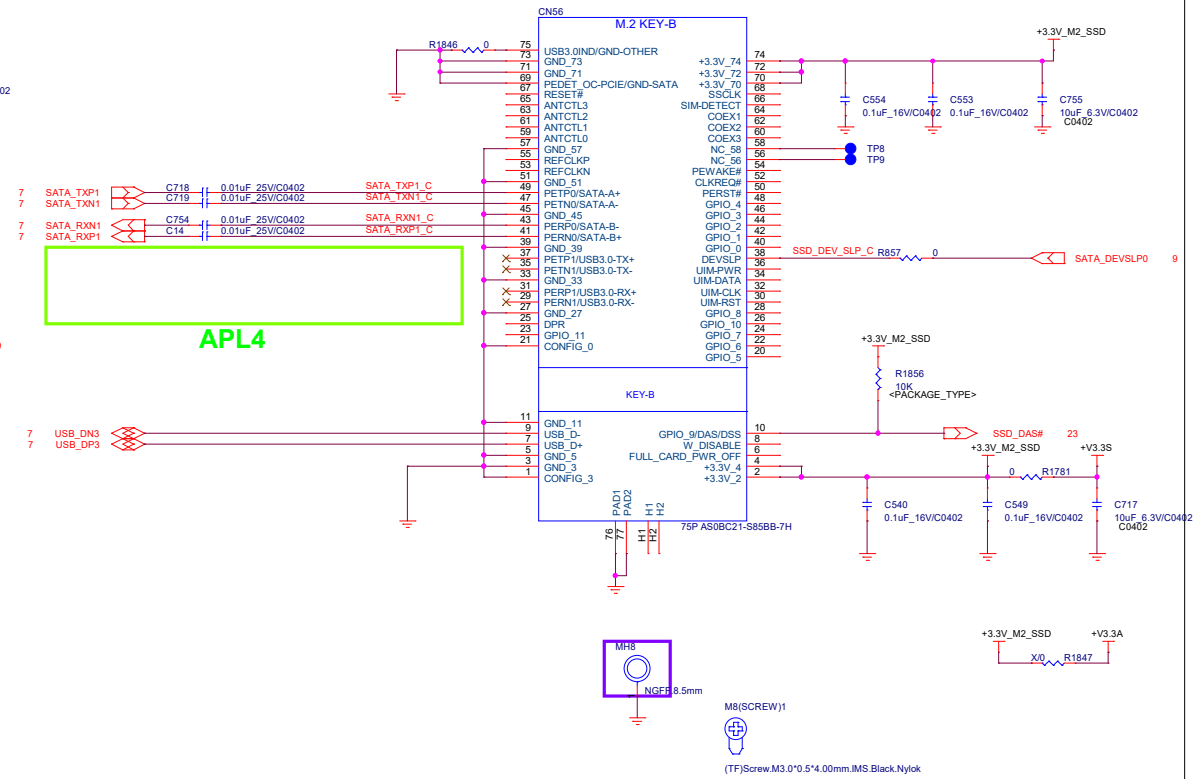


DESIGN NOTE				
LEDS1-0	00	01	10	11
LED0	ACT	LINK/ACT	LINK10/ACT	LINK100/ACT10
LED1	LINK100	LINK1000	LINK100	LINK100/ACT100
LED3	LINK1000	LINK100	LINK1000	LINK1000/ACT1000

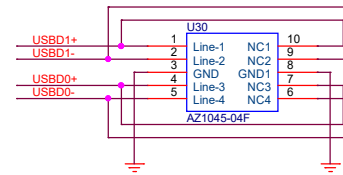
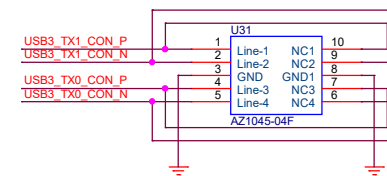
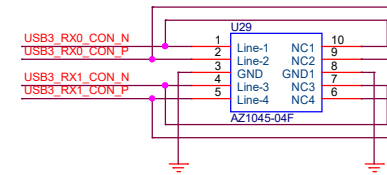
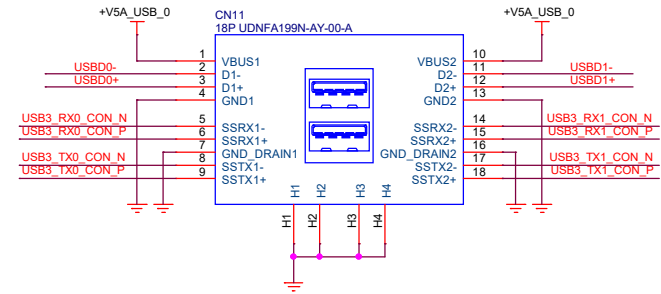
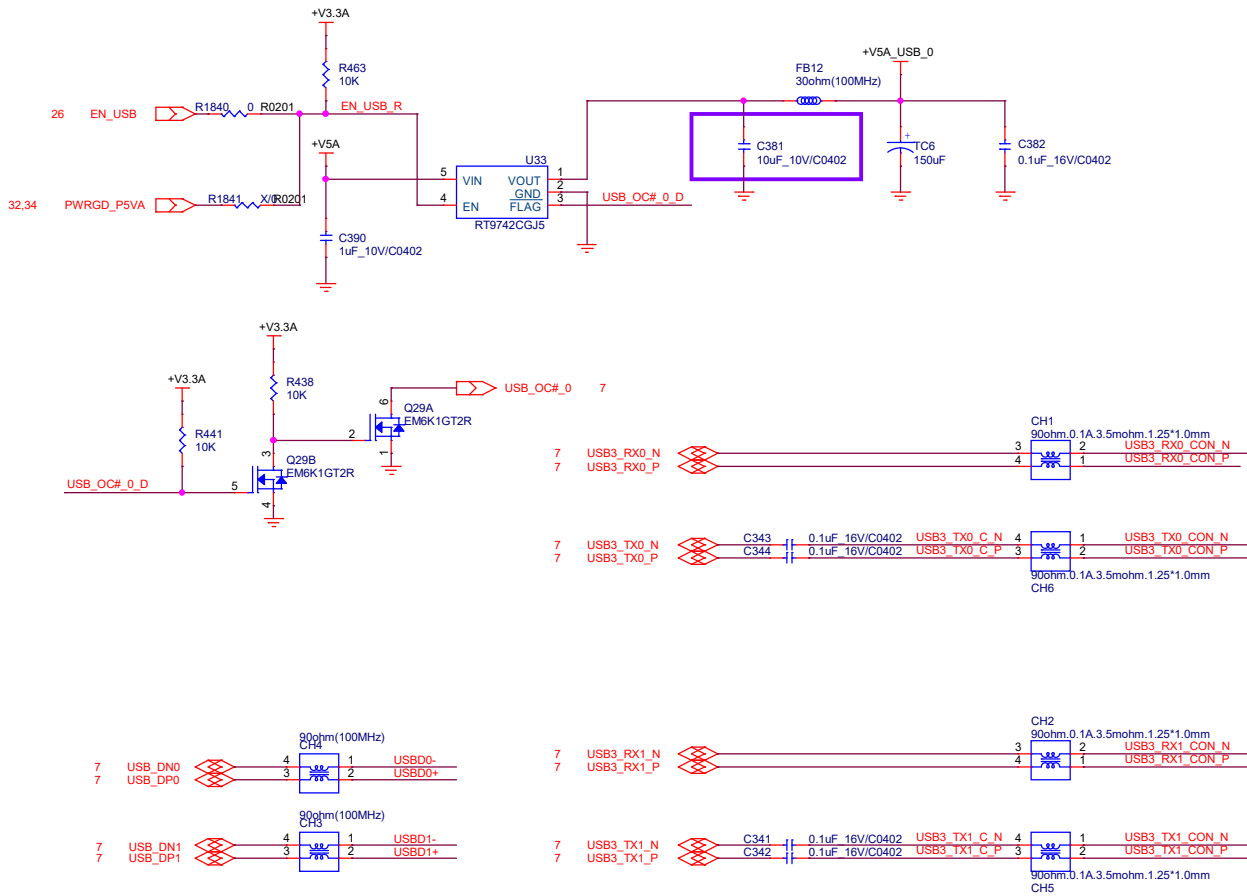




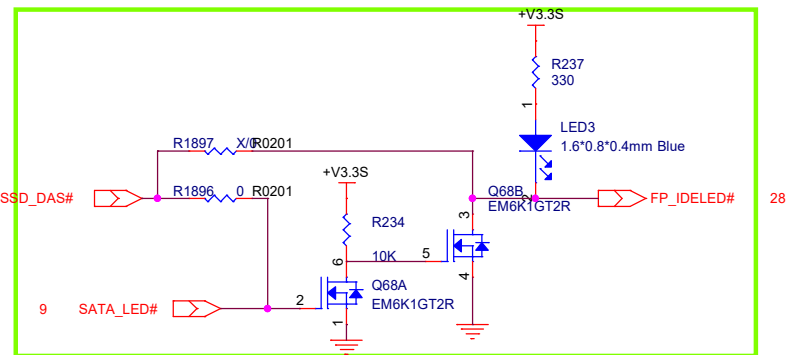
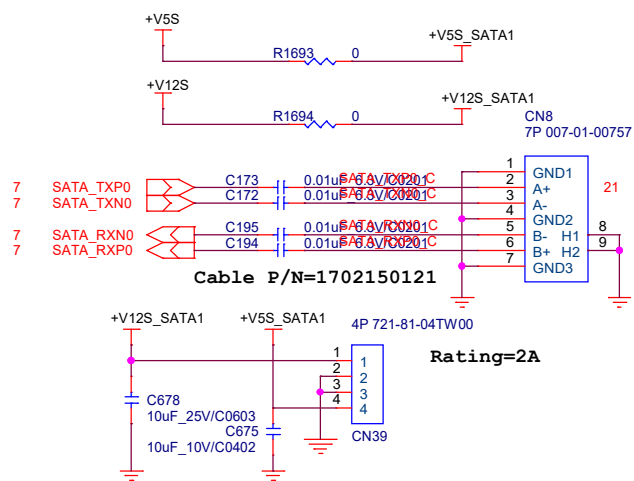
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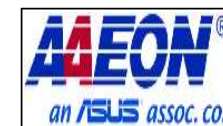
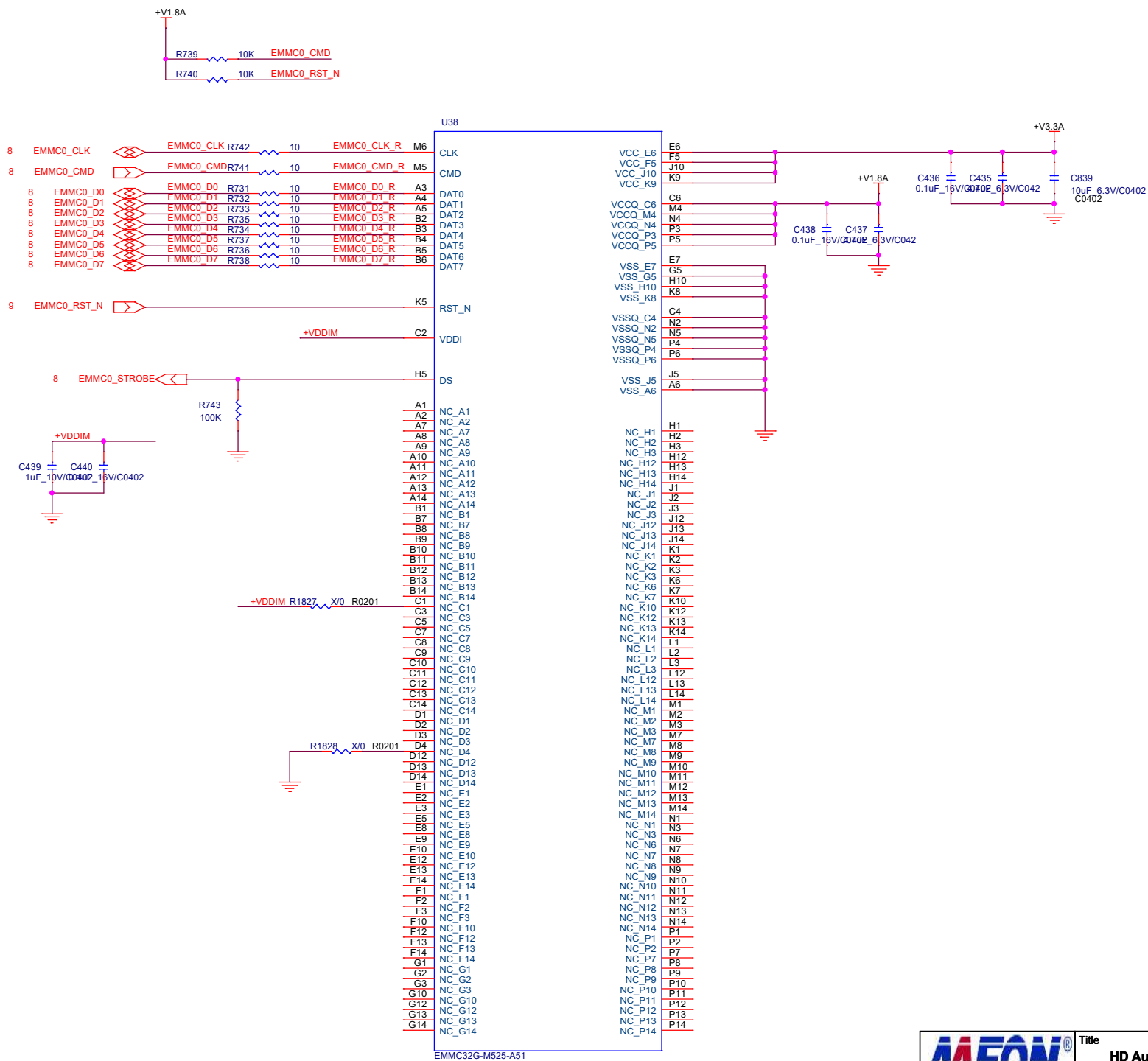


USB3.0 x 2

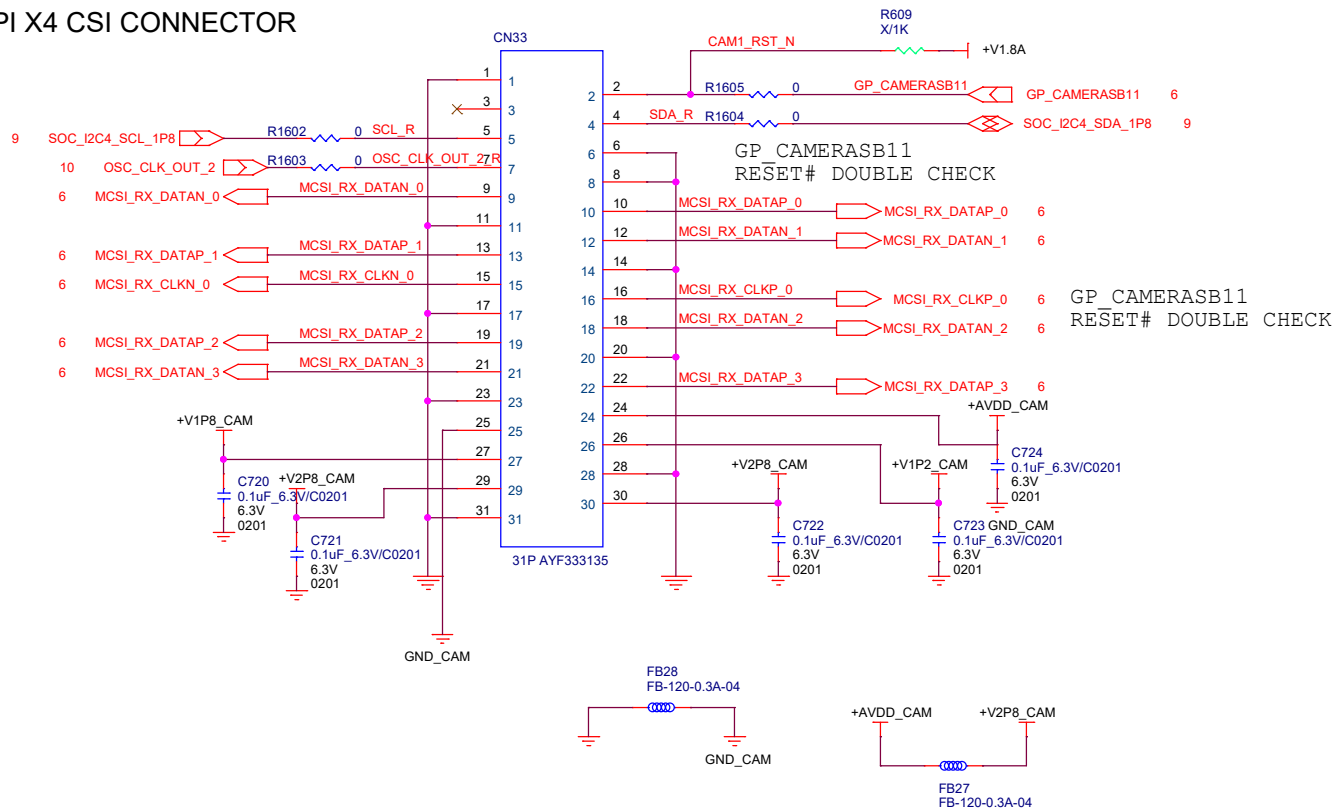


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USB 3.0/2.0 PORT		
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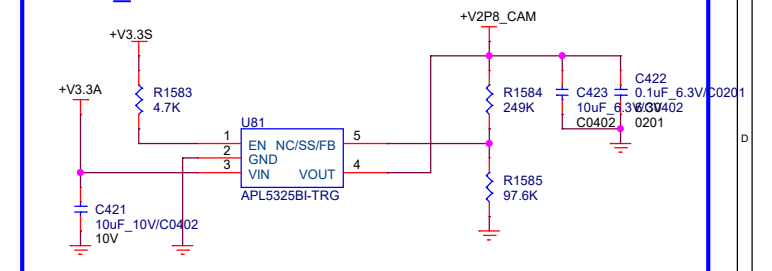


MIPI X4 CSI CONNECTOR

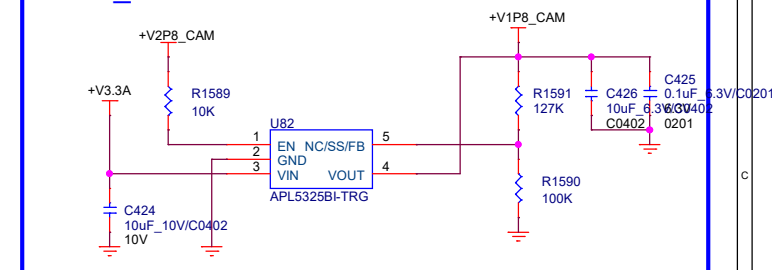


MIPI CSI CONNECTOR

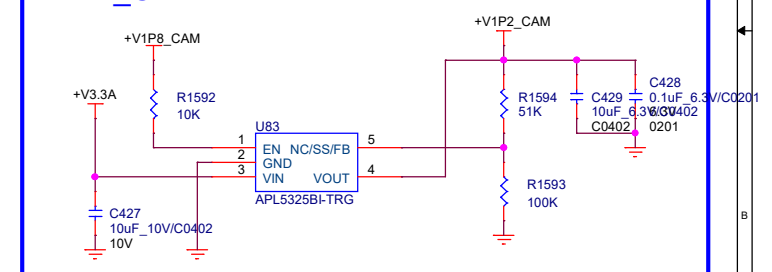
+V2P8_CAM



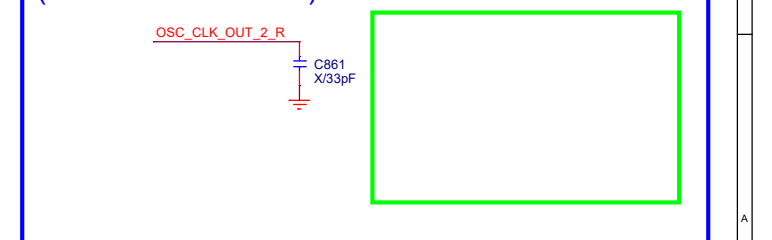
+V1P8_CAM



+V1P2_CAM

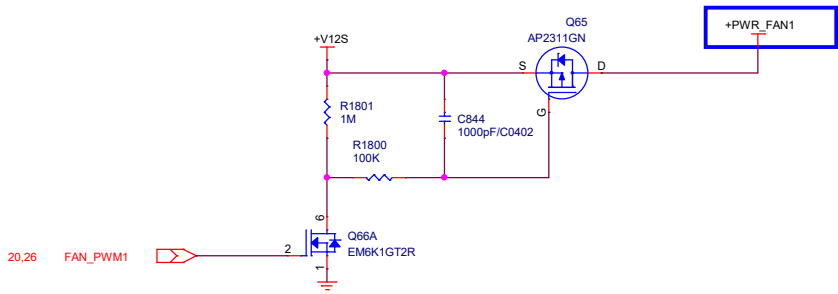
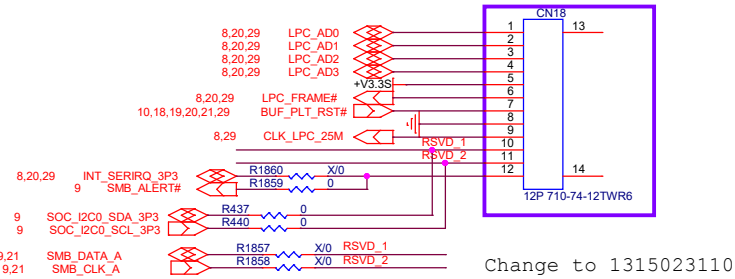


Reserved for OSC Clock Filter (Close to Connector)

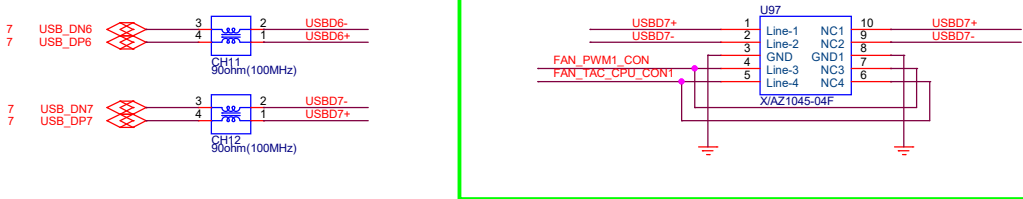
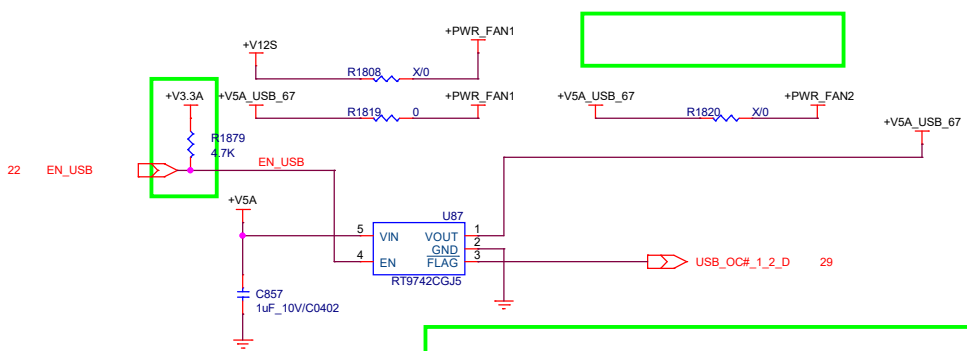
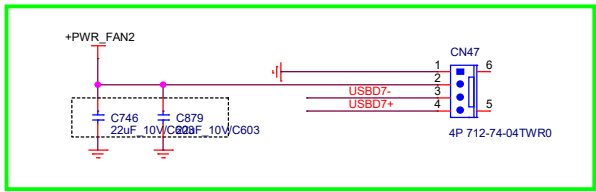
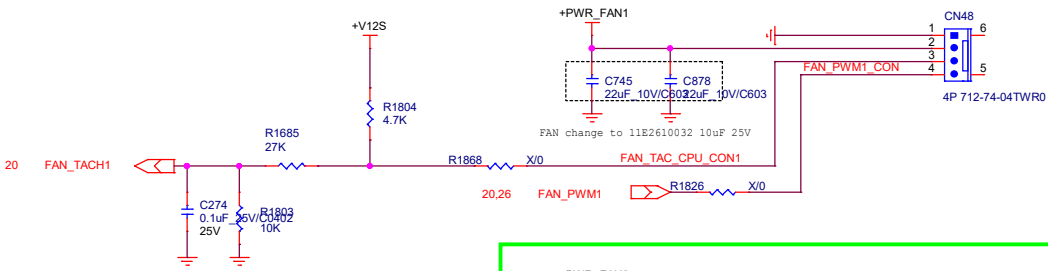


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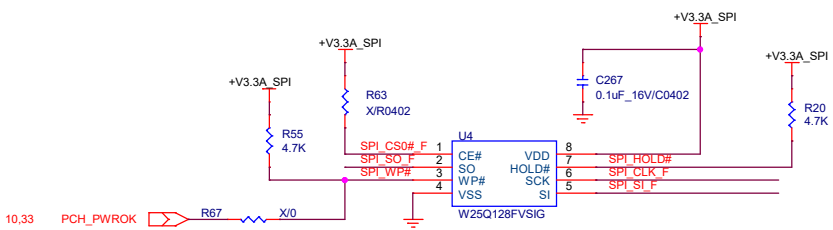
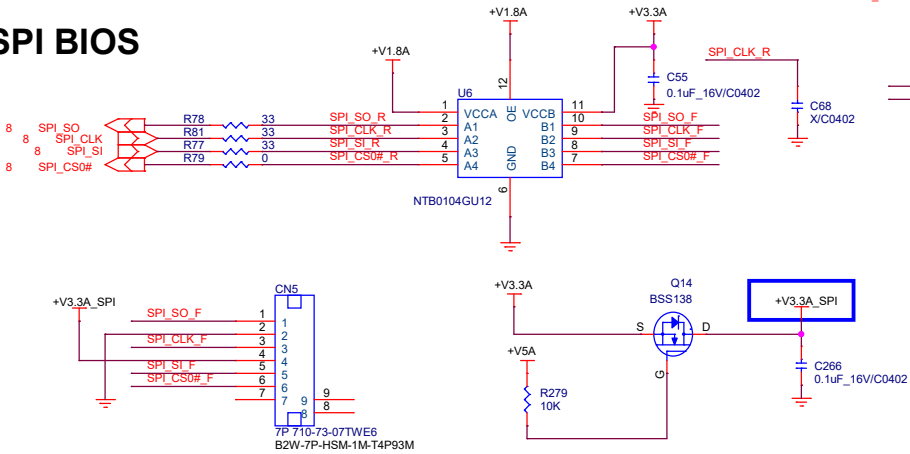
LPC Debug Connector



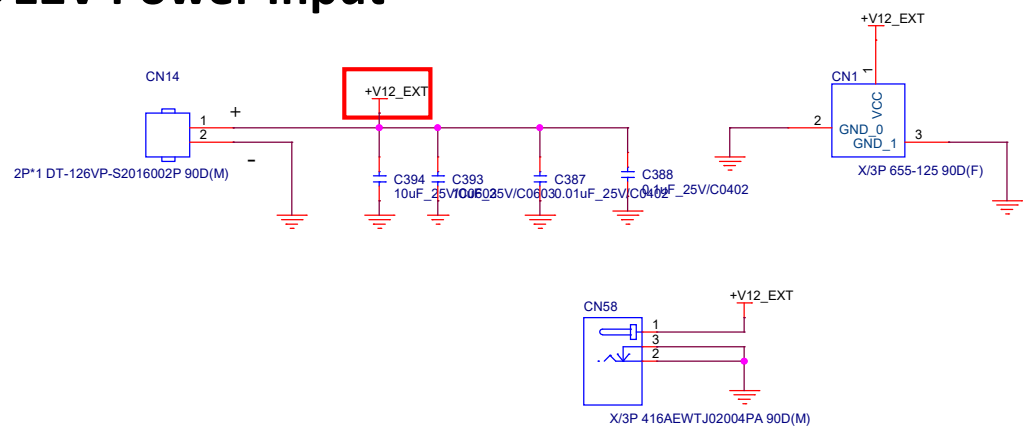
FAN1 Co-lay USB



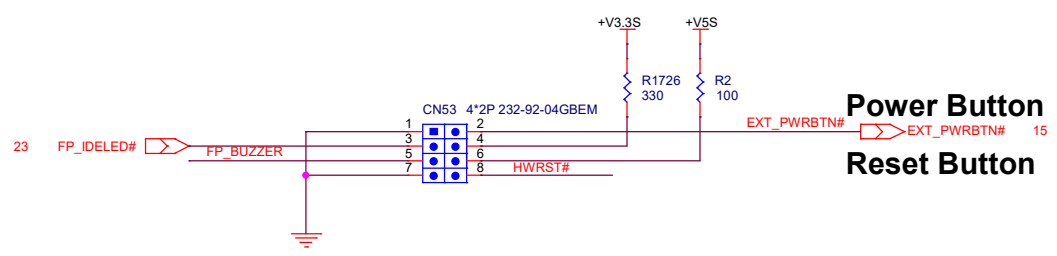
SPI BIOS



+12V Power Input

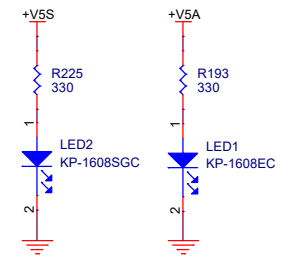


Front Panel

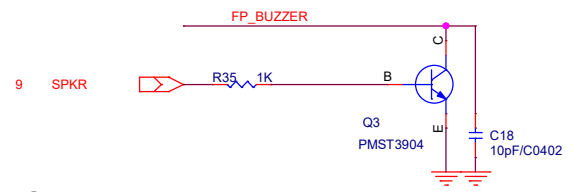
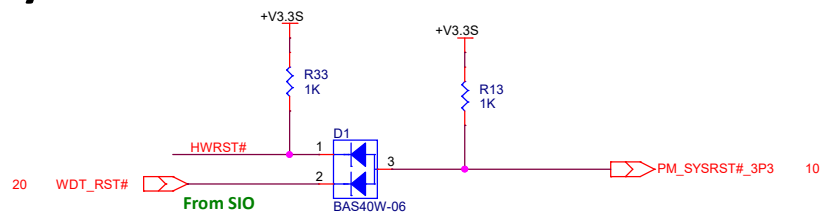


Auto power button		
No Stuff	ATX	Default
1-2	AT	

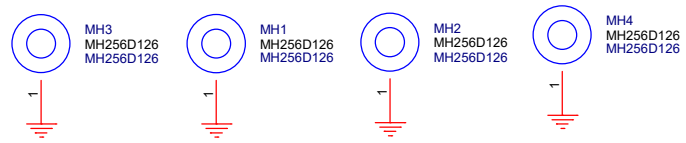
Power LED



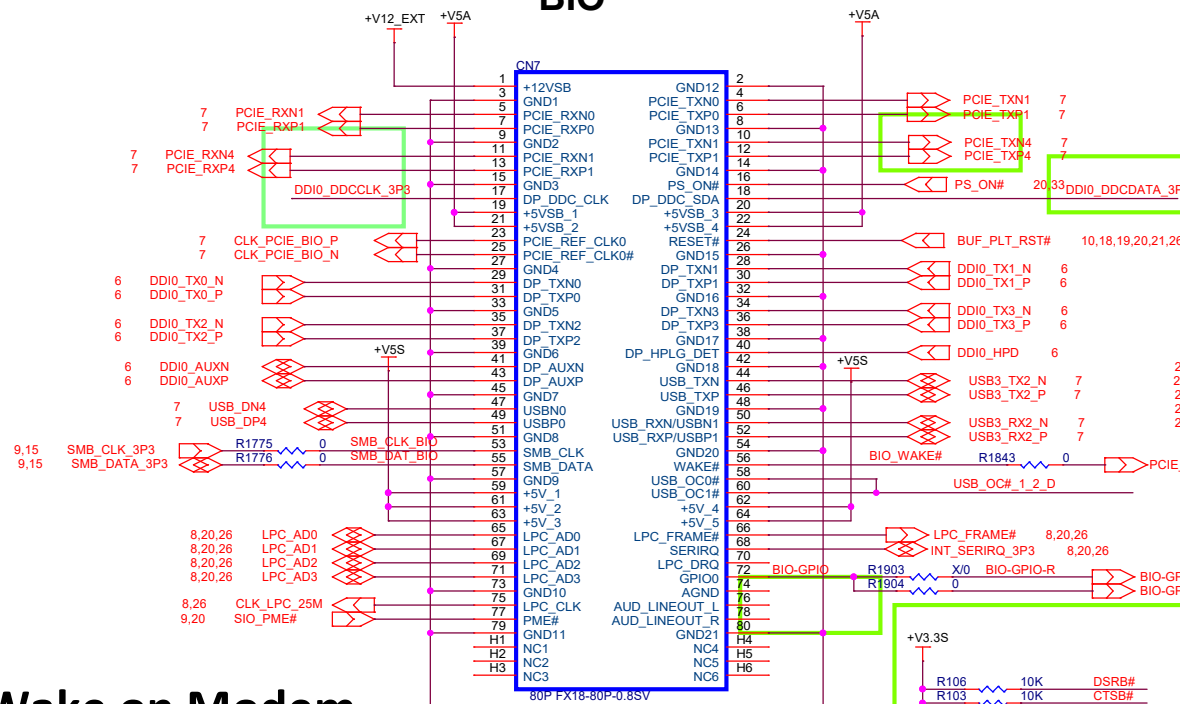
System Reset



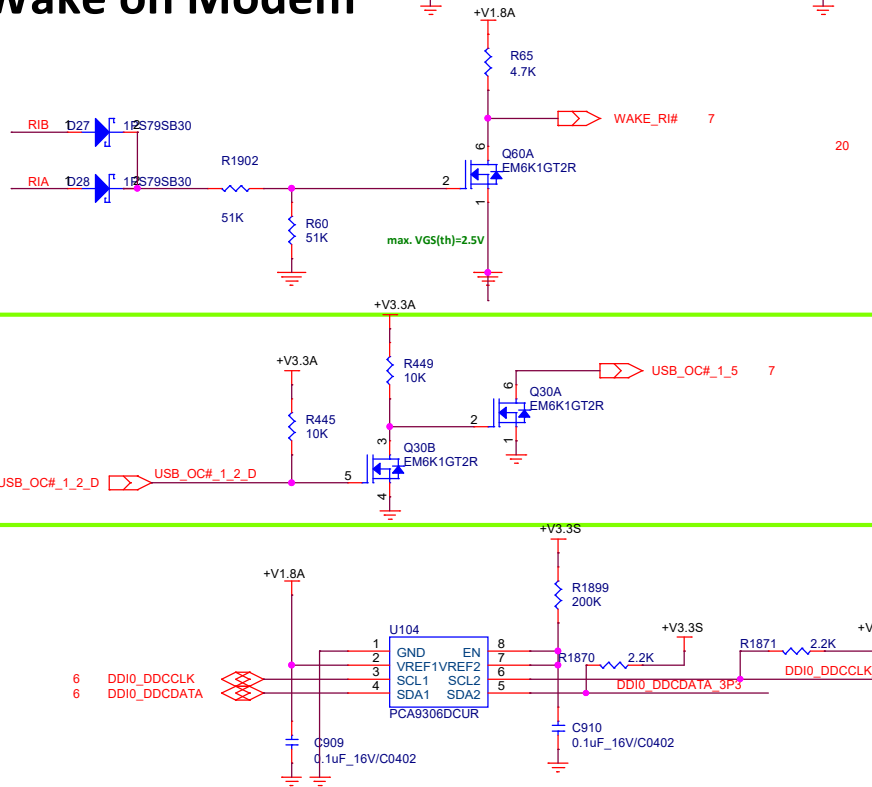
Mounting Holes / Non-PTH



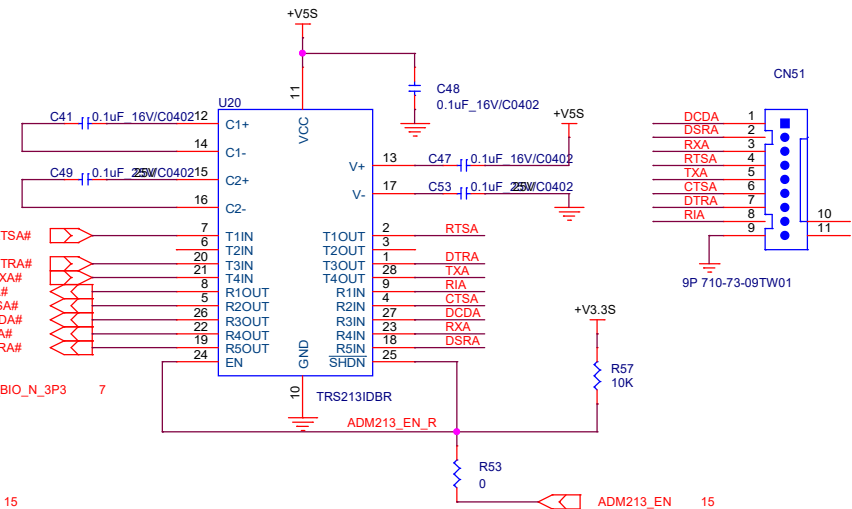
BIO



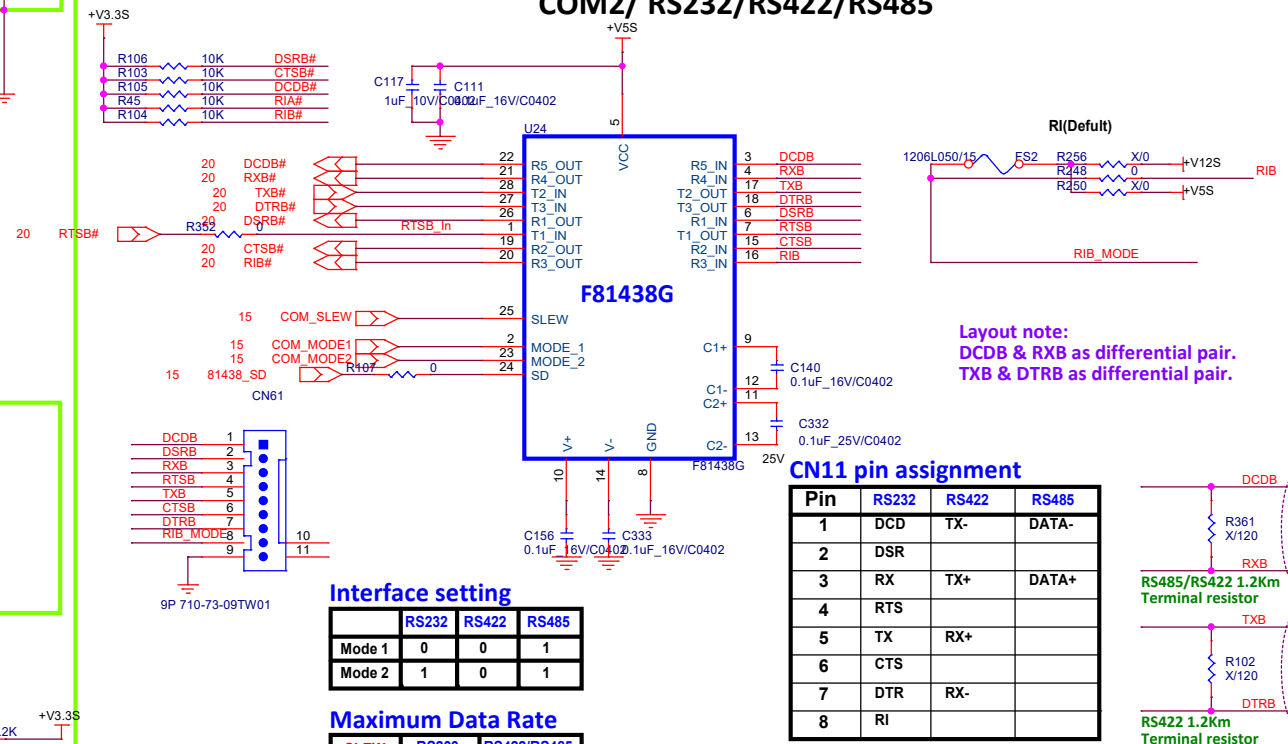
Wake on Modem



COM1/RS232



COM2/ RS232/RS422/RS485



Interface setting

	RS232	RS422	RS485
Mode 1	0	0	1
Mode 2	1	0	1

Maximum Data Rate		
SLEW	RS233	RS422/RS485
1	250kbps	250kbps

Pin	RS232	RS422	RS485
1	DCD	TX-	DATA-
2	DSR		
3	RX	TX+	DATA+
4	RTS		
5	TX	RX+	
6	CTS		
7	DTR	RX-	
8	RI		

Layout note:
DCDB & RXB as differential pair.
TXB & DTRB as differential pair.

25V CN11 pin assignment

DCDB

R361
X/120

RXB

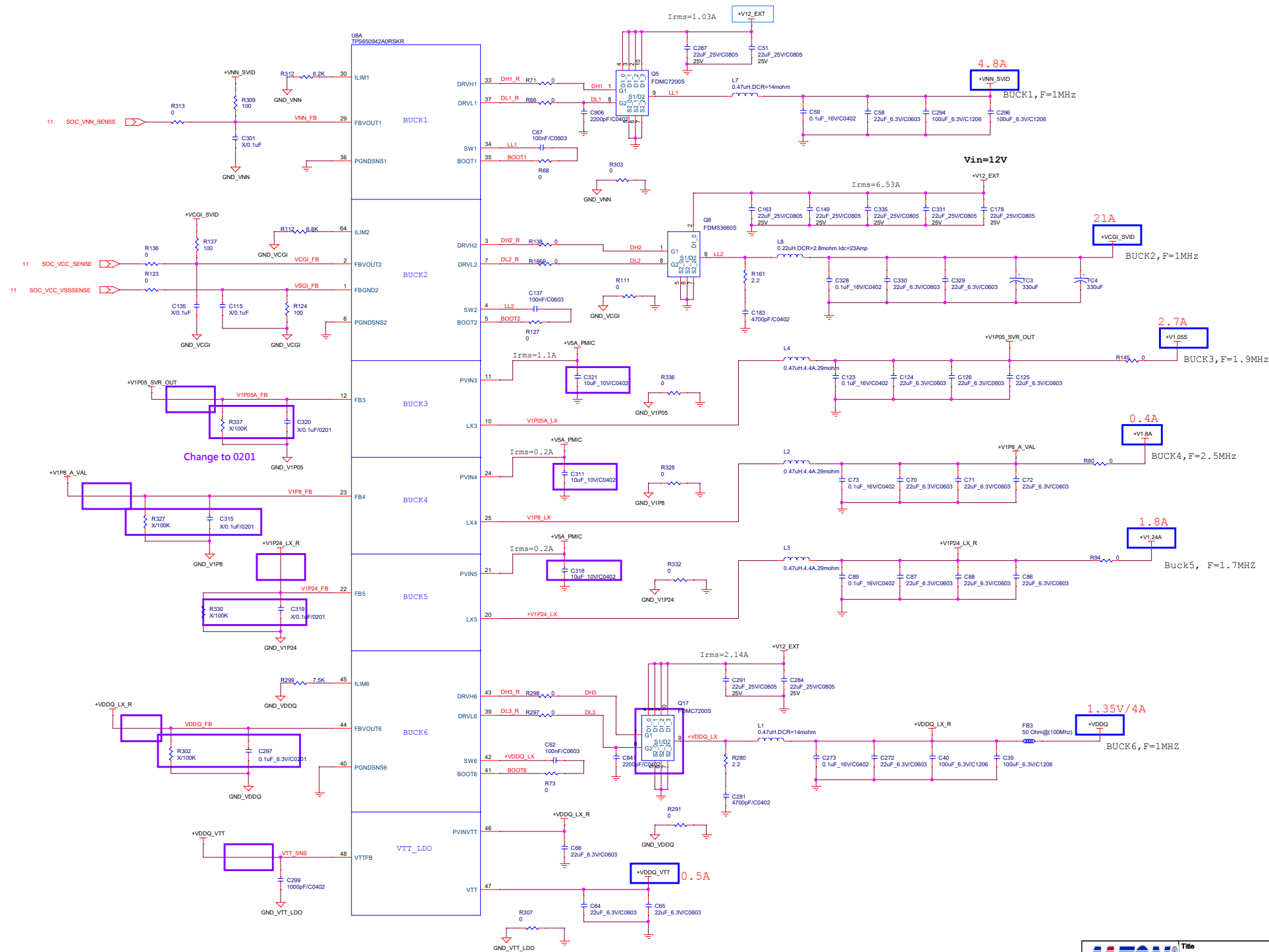
RS485/RS422 1.2Km
Terminal resistor

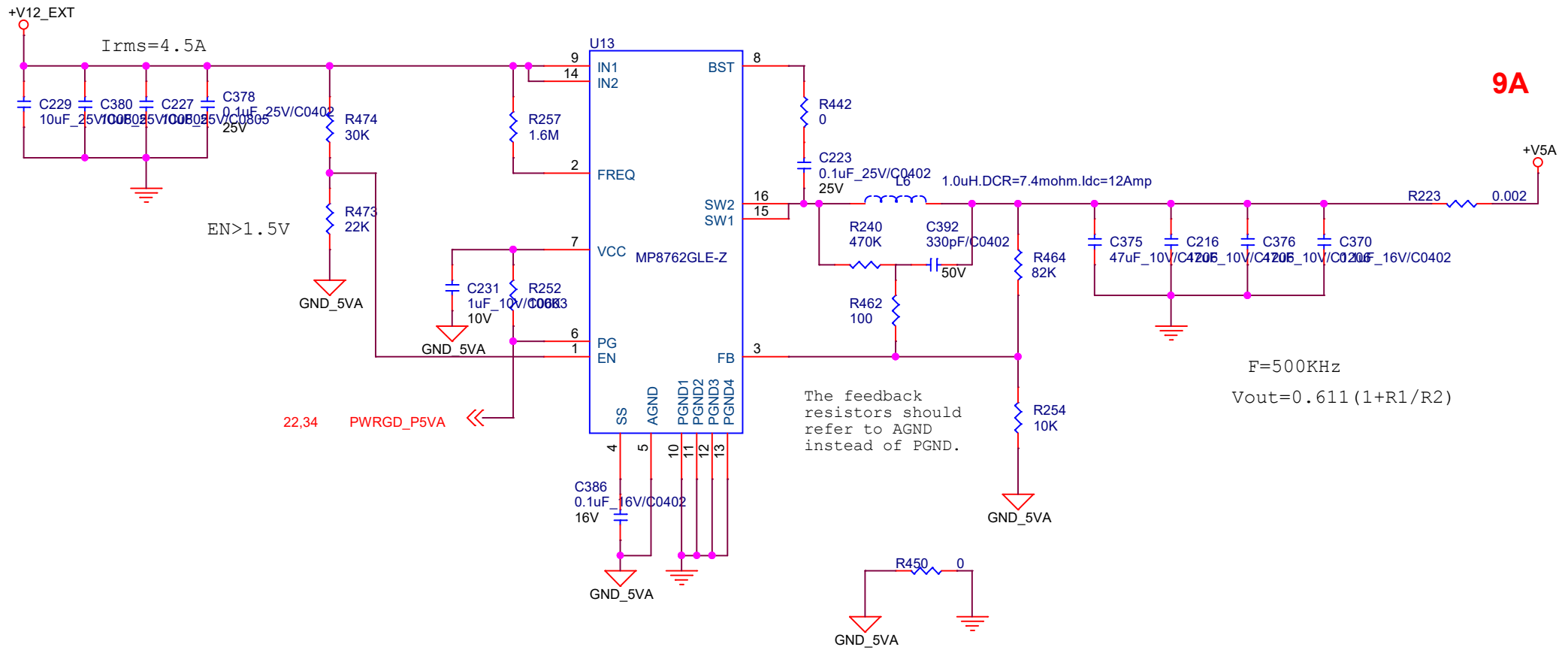
TXB

R102
X/120

DTRB

RS422 1.2Km
Terminal resistor





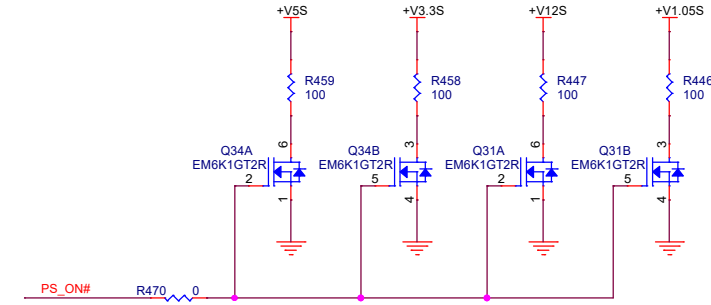
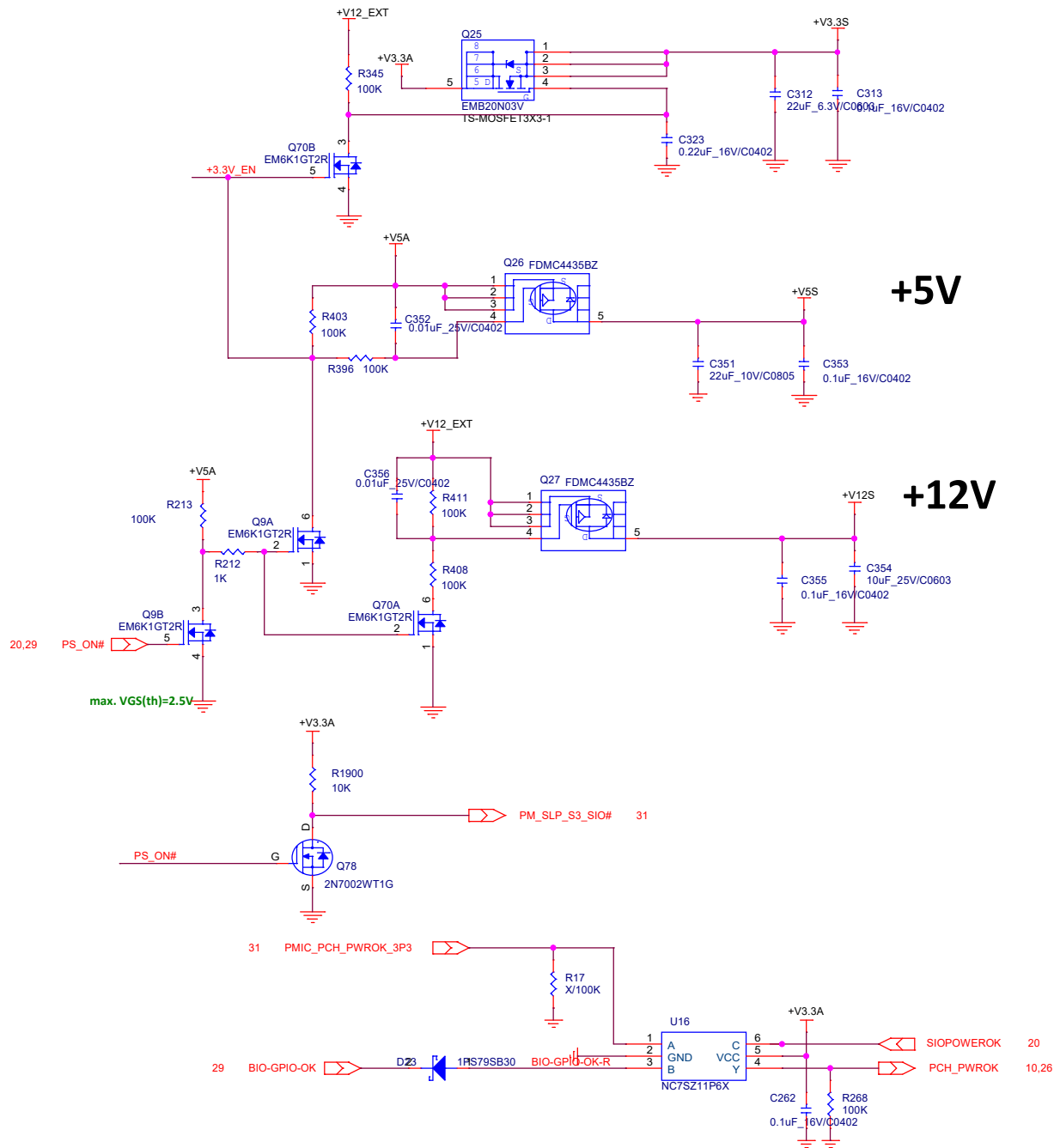
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[illegible]

+3.3V

+5V

+12V



<Variant Name>



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Power Sequence Logic		
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Revision History		
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