

VAR-MX6CustomBoard



CONTENT

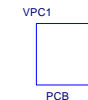
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Disclaimer:

Schematics are for reference only.
 Variscite LTD provides no warranty for the use of these schematics.
 Schematics are subject to change without notice.

Revision History

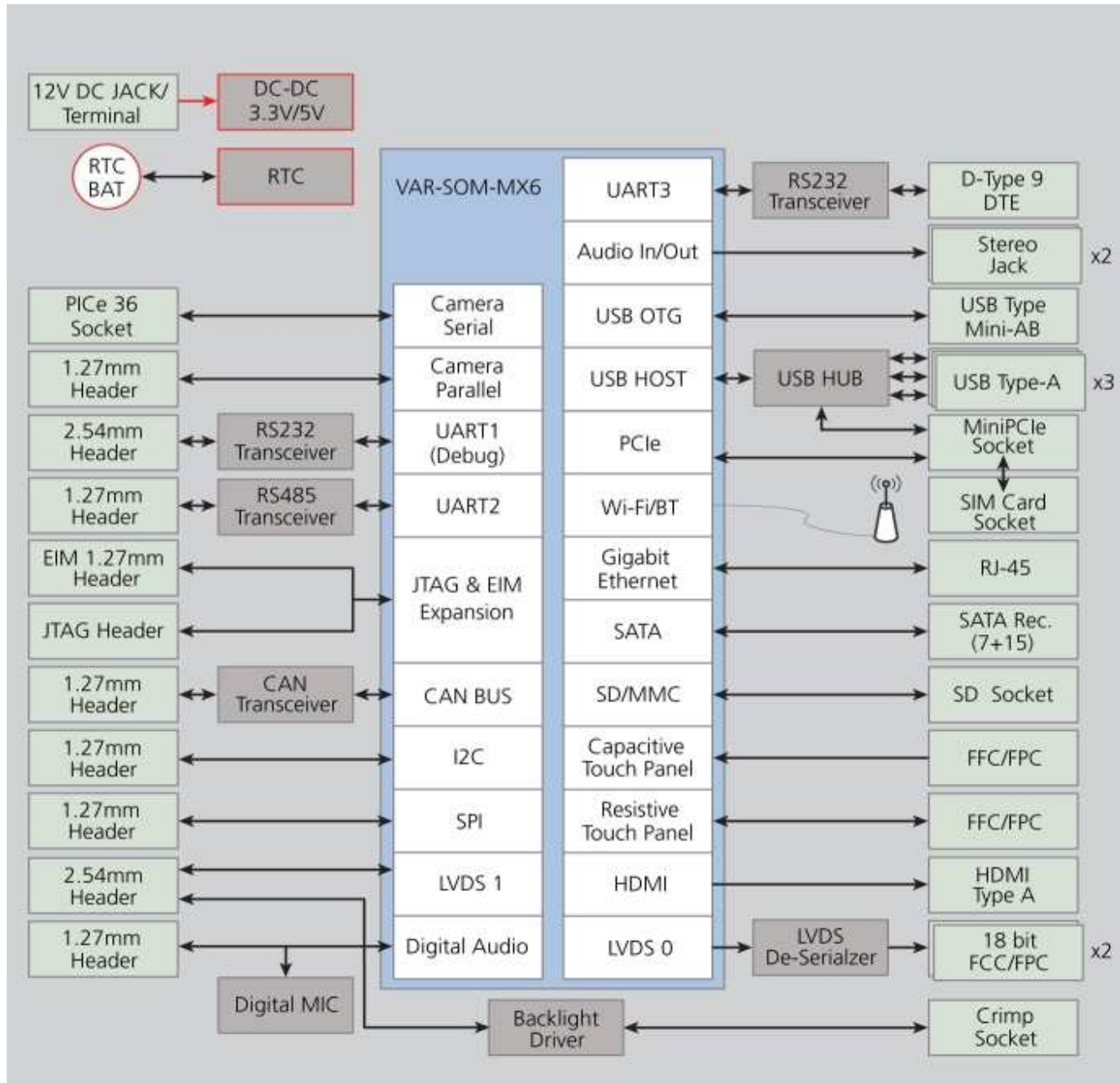
Rev 1.02	Initial
Rev 1.02A	U22- NC, short pin 7,8 U17- NC (Accelerometer) SATA Power Limitation Note
Rev 1.1	SD card is powered directly from BASE_PER_3V3 Accelerometer - Removed USB OTG - Connector Changed to Micro USB
Rev 1.1A	USB hub power distribution pull ups removed RX1, RX2 resistor added on L14
Rev 1.1B	Inductor L9 changed to 15uH
Rev 1.1C	Changed: SOM Pin 52: GPIO3(26) SOM Pin 56: GPIO3(24)
Rev 1.1D	Changed: SOM Pin 94: GPIO1(4)
Rev 1.1E	CTS and RTS direction switch UART1, UART3
Rev 1.2	UART1 & UART3 Disable on reset added.
Rev 1.3	U27 PN and connection change R8 Pulled down
Rev 1.3A	R63 Assembled
Rev 1.3B	R63 removed Q2 changed



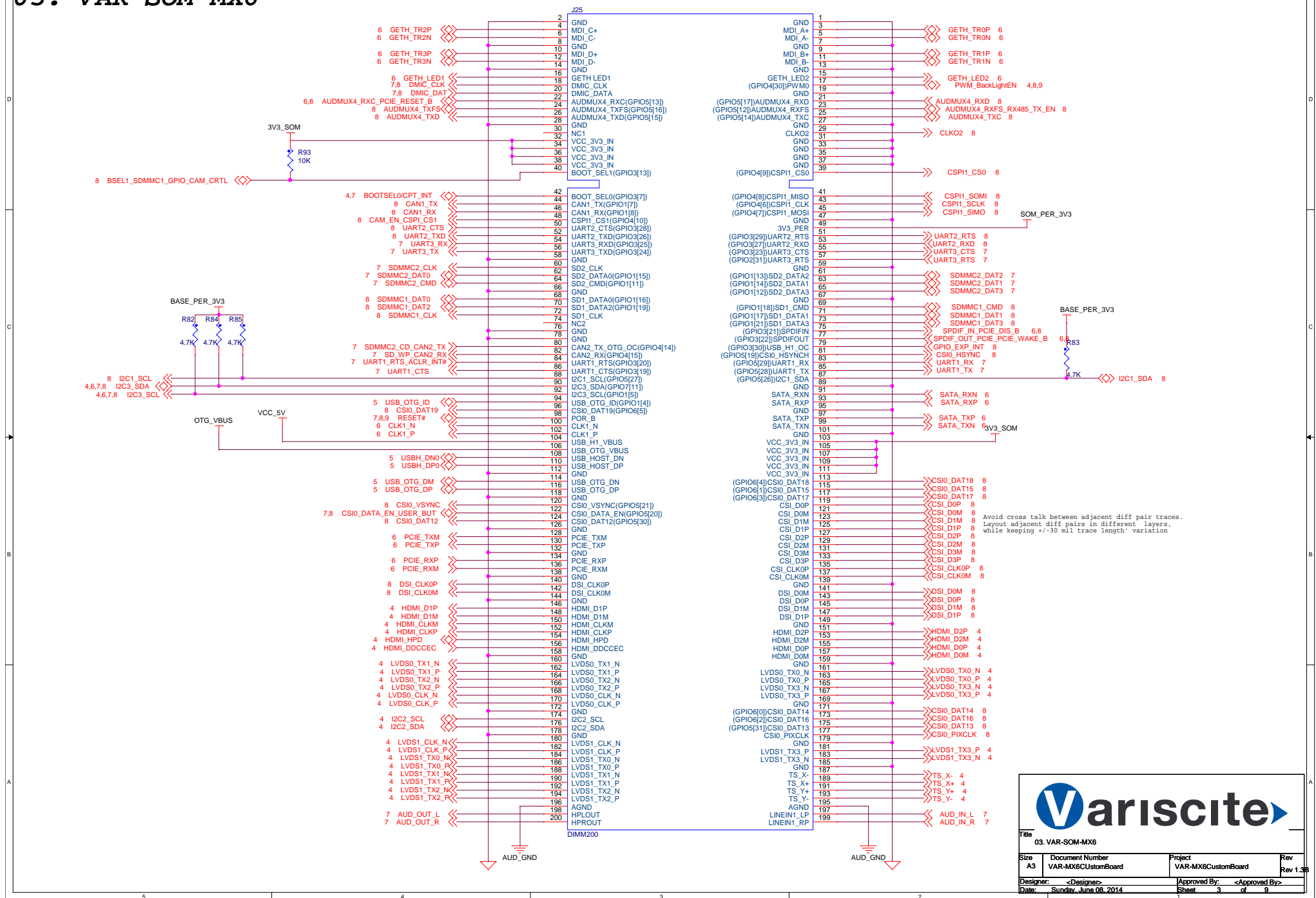
01. Cover

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Designer: Date: Sunday, June 08, 2014	<Designer>	Approved By: Sheet 1 of 9	<Approved By>

02 - Block Diagram



03. VAR-SOM-MX6

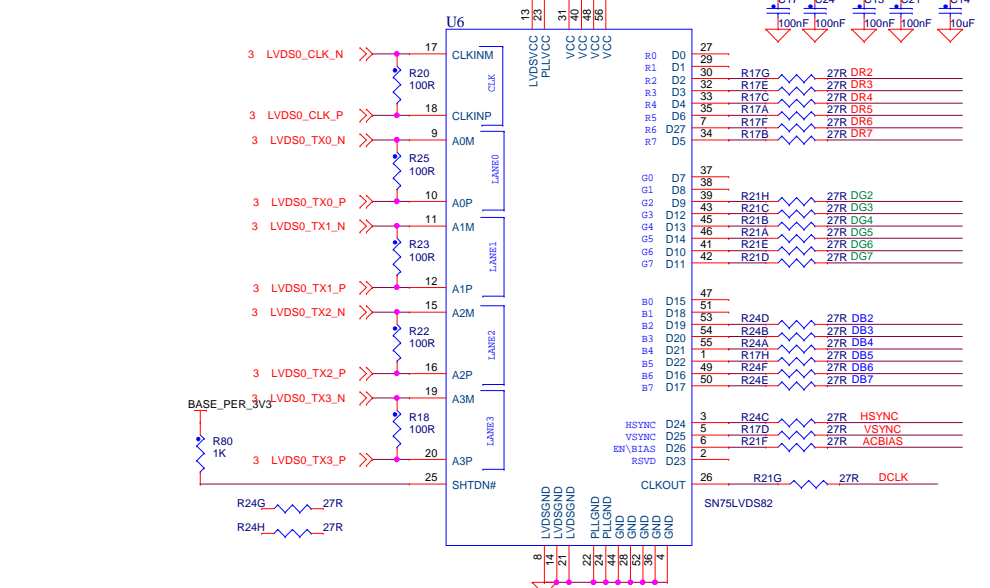
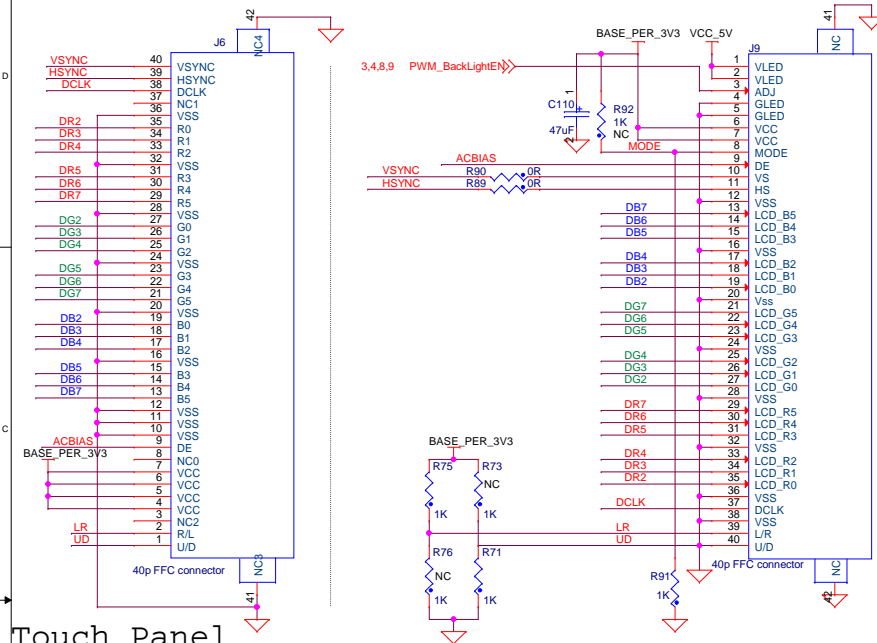


Title 03. VAR-SOM-MX6
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Rev Rev 1.38
Designer <Designer>
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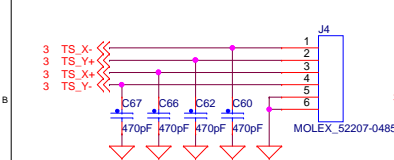
04. Display ,Touch

Parallel RGB (LVDS0)

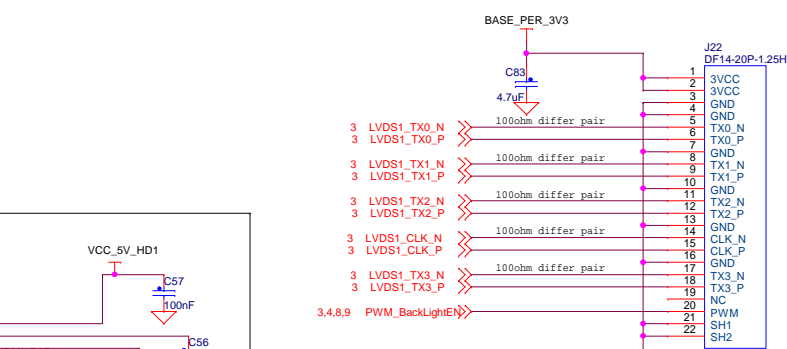
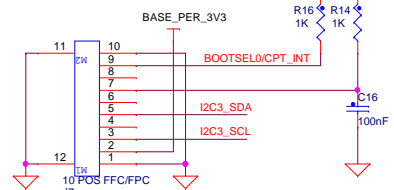
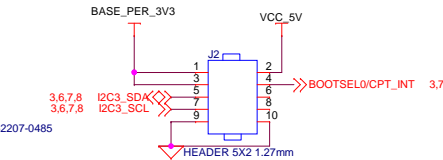
Parallel BUS FCC Connectors



Touch Panel Resistive

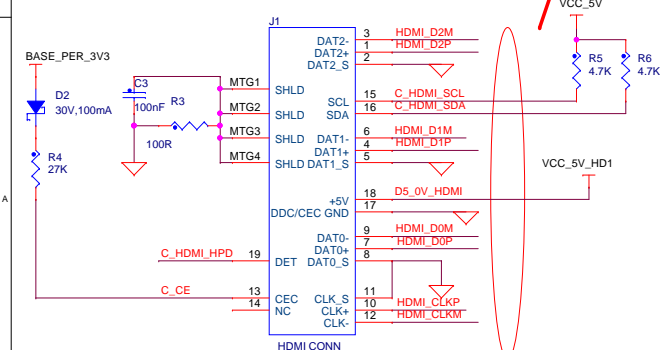


Capacitive



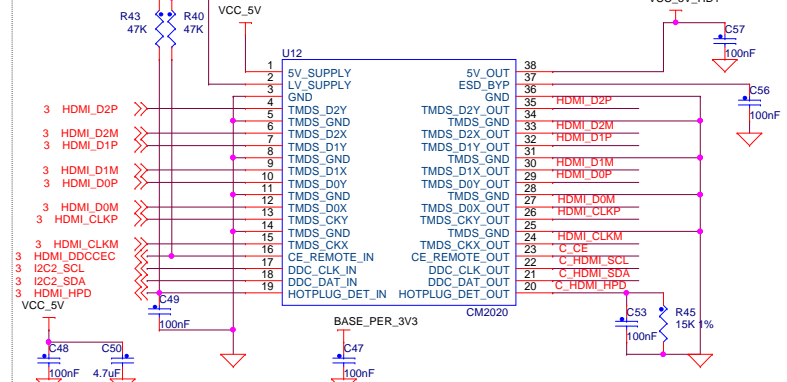
HDMI

HDMI Connector



LAYOUT NOTE:
HDMI Differential Pairs, Follow HDMI routing guidelines. Differential Impedance: 100 ohms

HDMI ESD



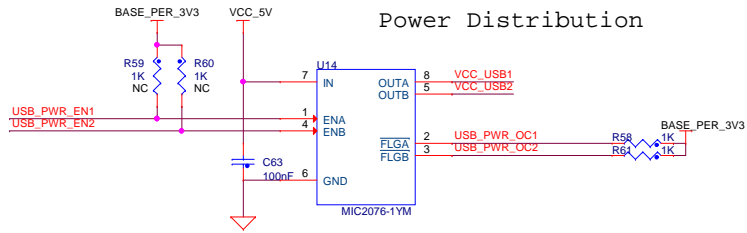
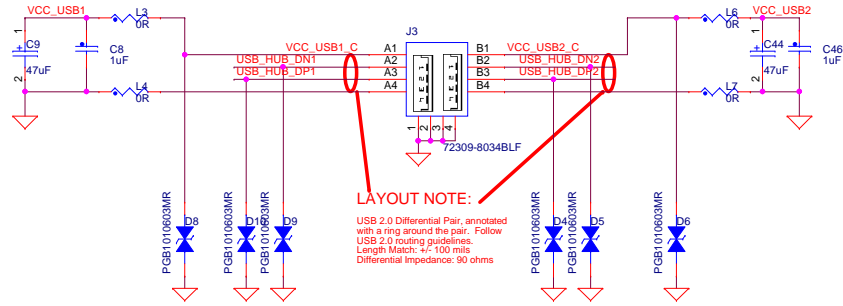
Variscite

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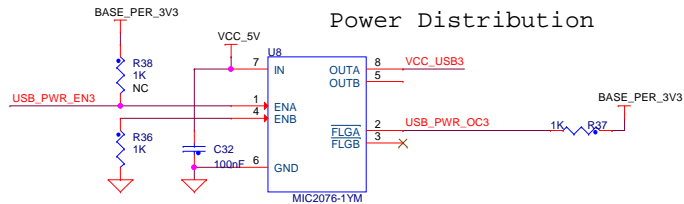
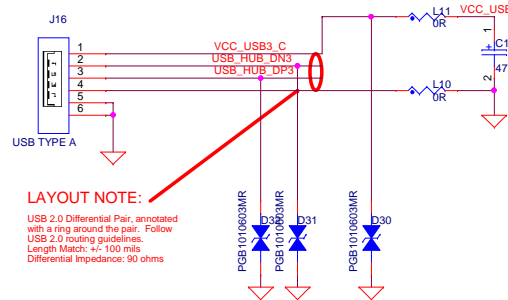
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5. USB

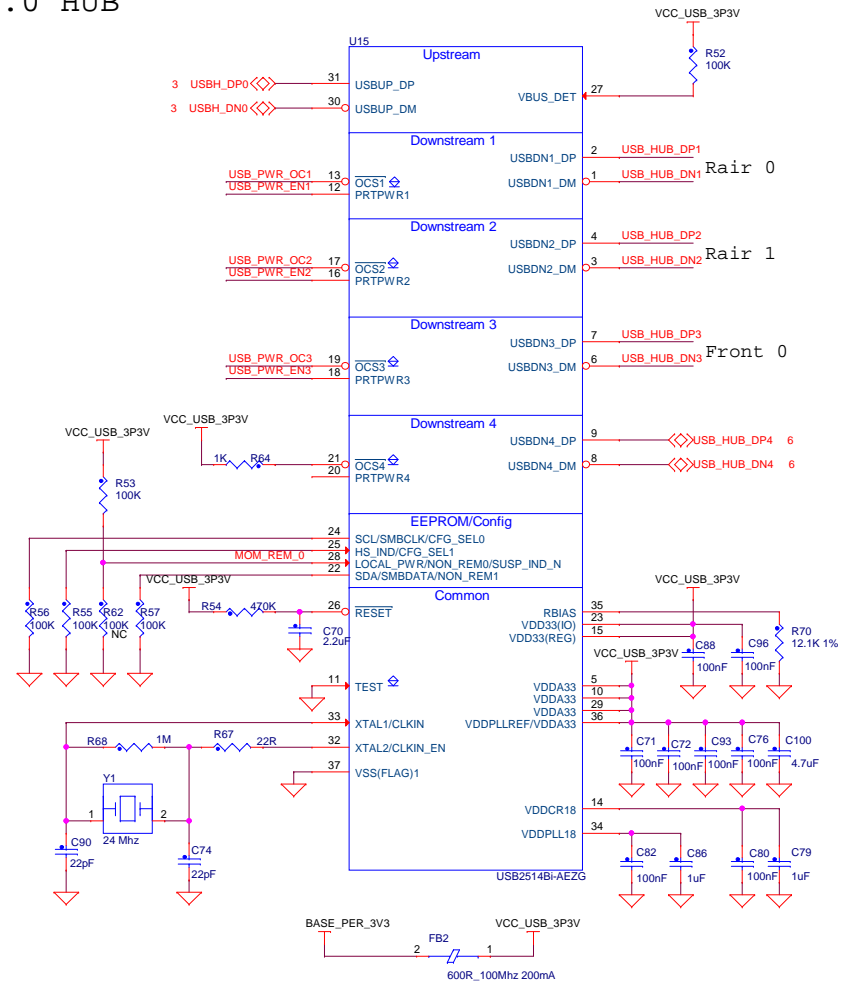
USB PORT 1-2 : 2 x USB 2.0 Host Dual Type A Rear Panel



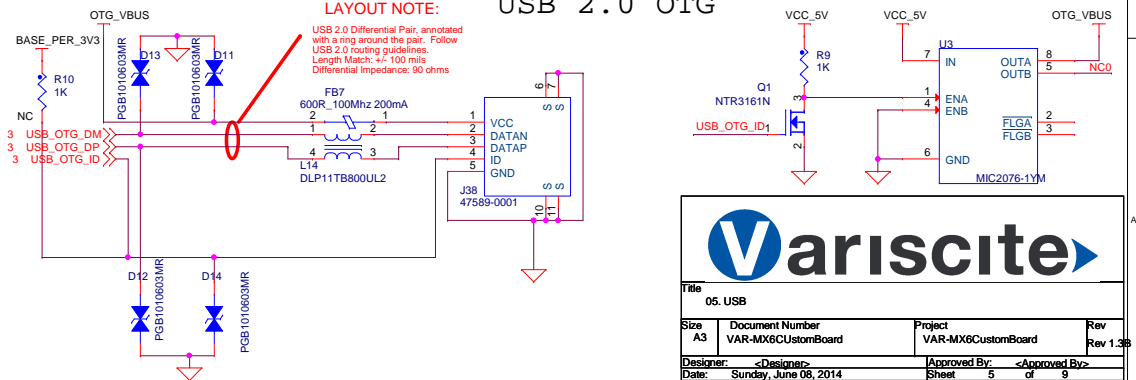
USB PORT 3 : 1 x USB 2.0 Type A Front Panel



USB 2.0 HUB



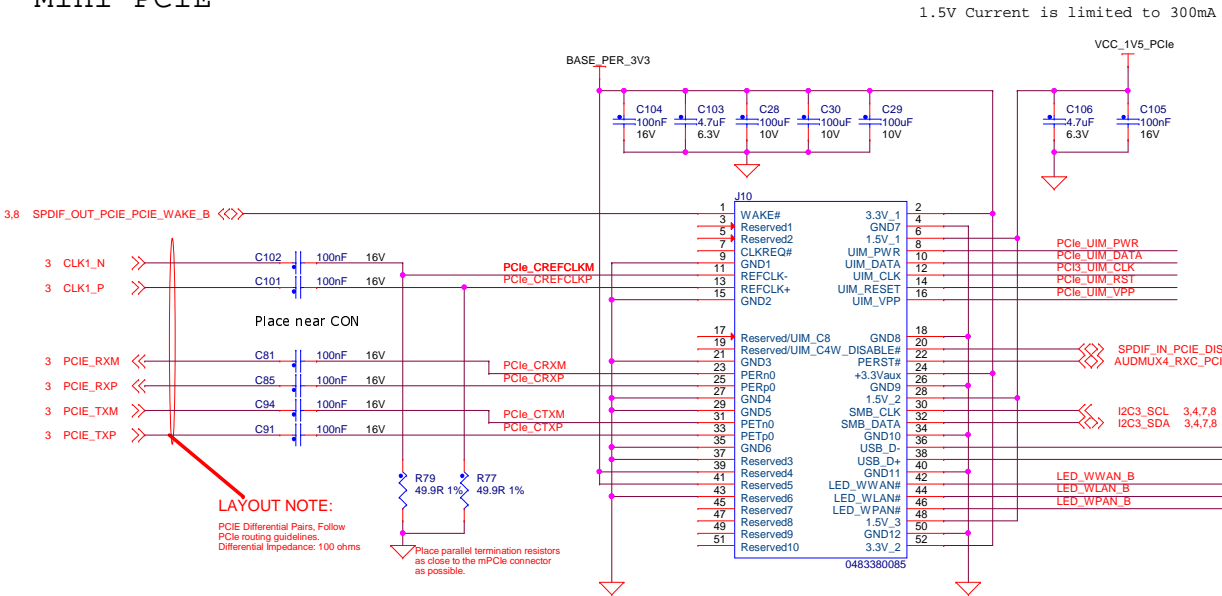
USB 2.0 OTG



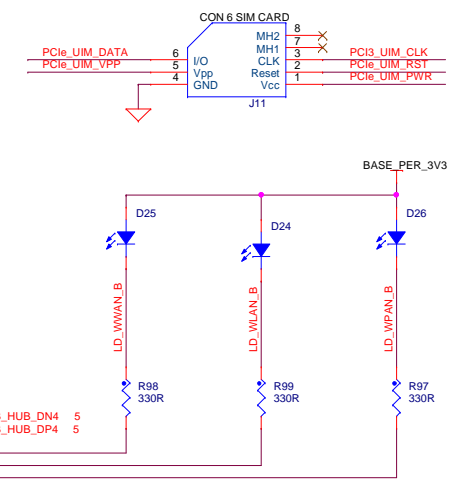
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06. SATA ,PCIE, G.ETH

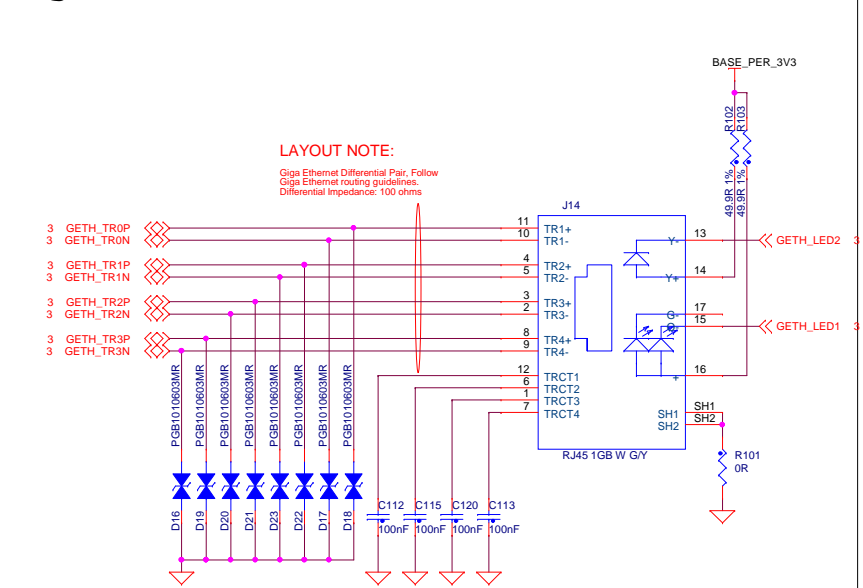
Mini-PCIE



USIM Card

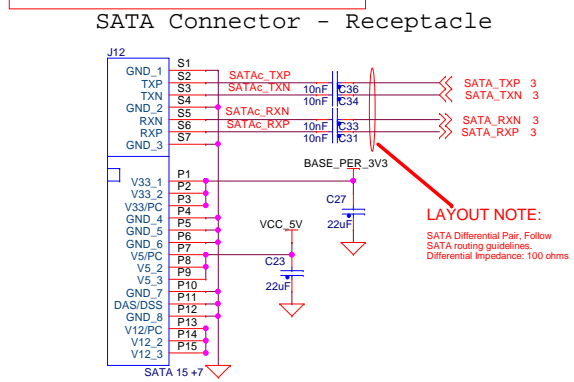


Giga Ethernet



SATA

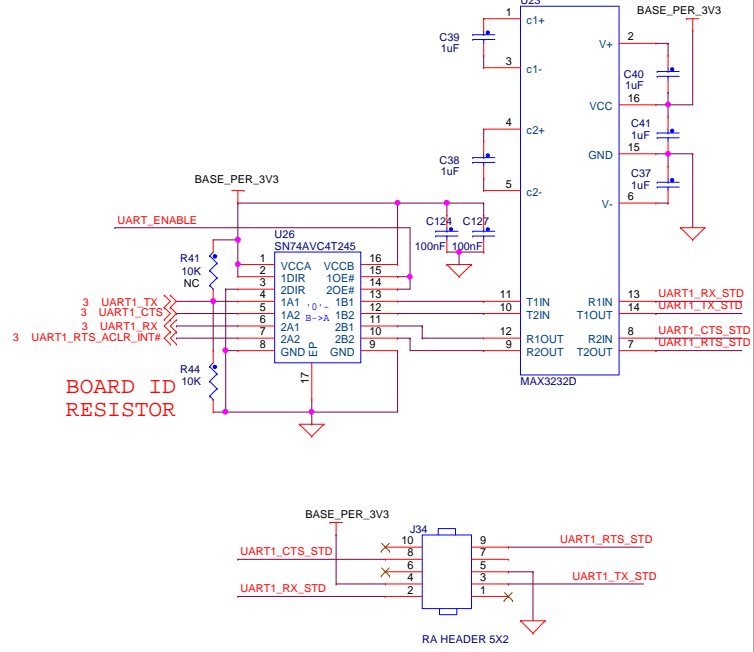
Customboard's 5V power supply is limited to 3A, shared with Board's USB and SATA devices. Do not connect devices which exceed current limitation.



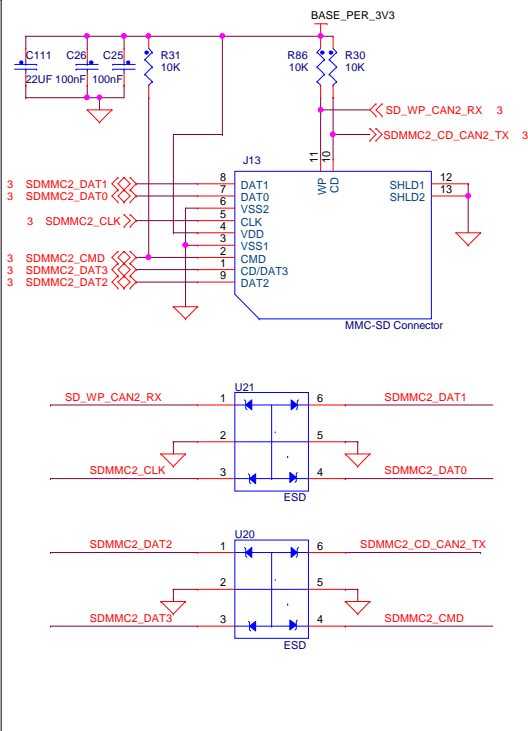
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07. Peripherals

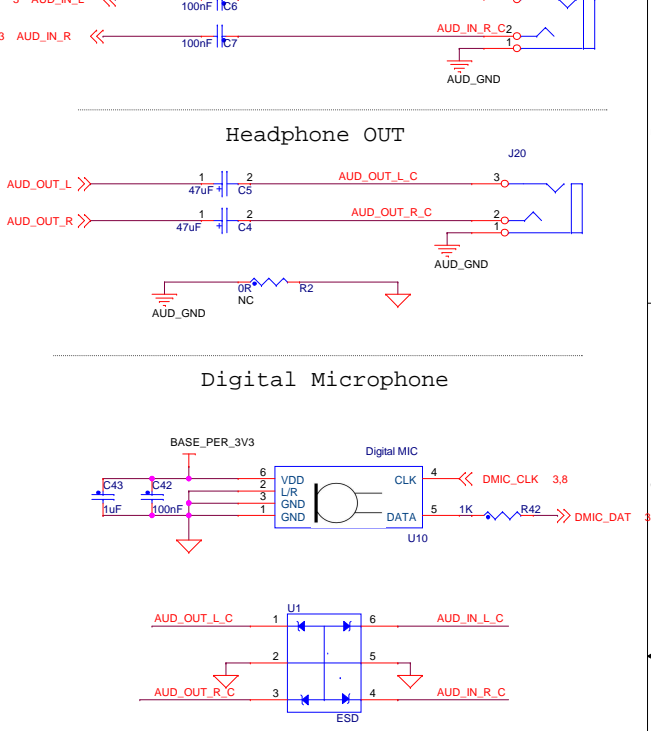
UART1- RS232 Debug



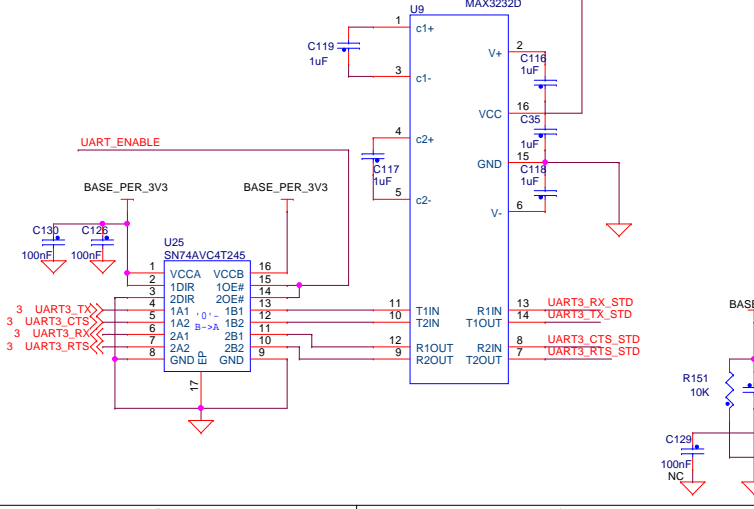
SD-Card



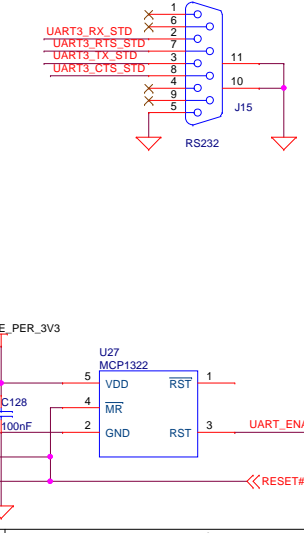
AUDIO



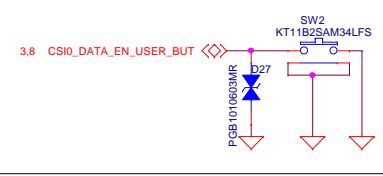
UART3 - RS232 DTE



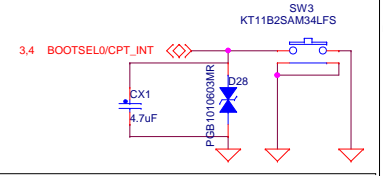
D-Type - Male



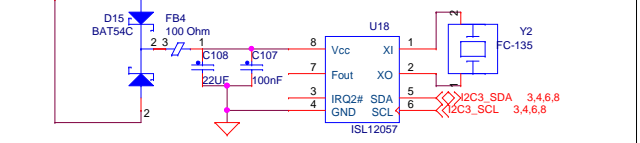
USER



Sys-boot



ISL12057 - RTC



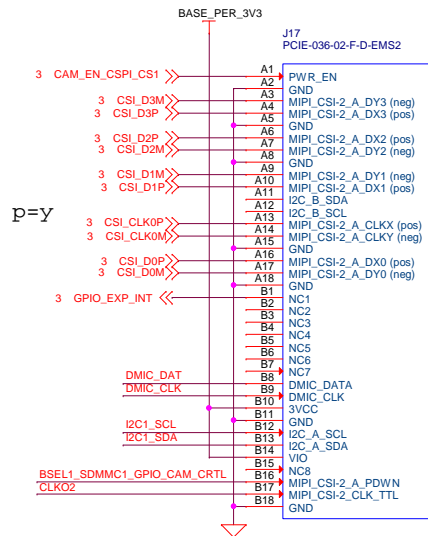
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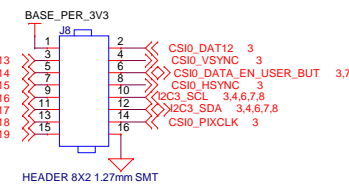
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08. DVK Exp. Connectors

Serial

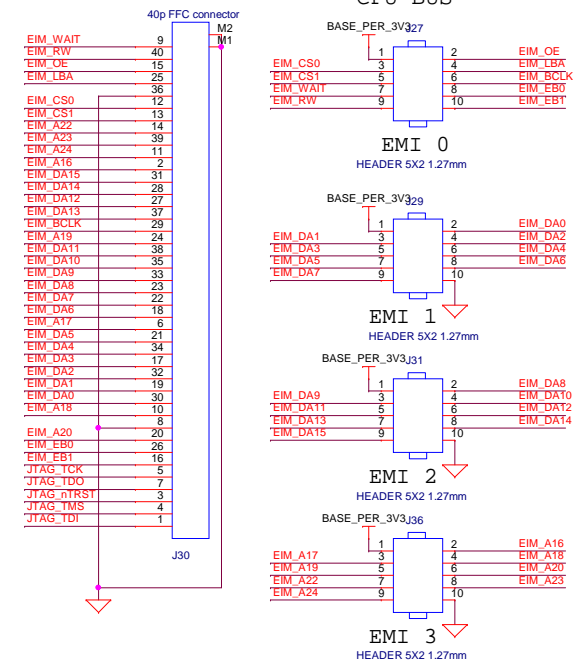


Camera Interface

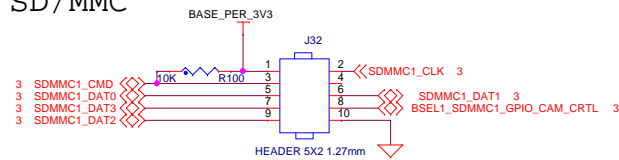


EMI & JTAG Fanout

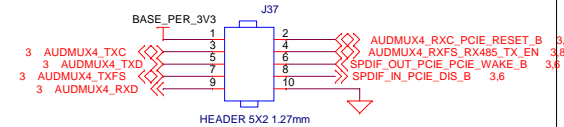
VAR-SOM-MX6 Expansion



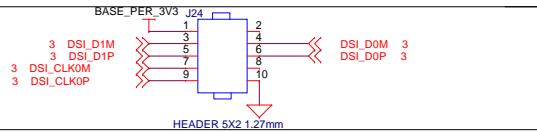
SD/MMC



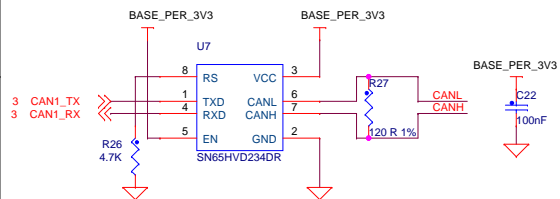
Digital AUDIO (AUDMUX4 / SPDIF)



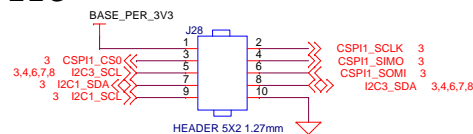
DSI



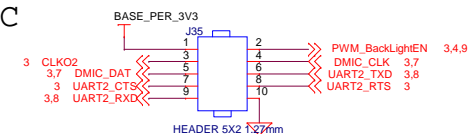
CAN TRX



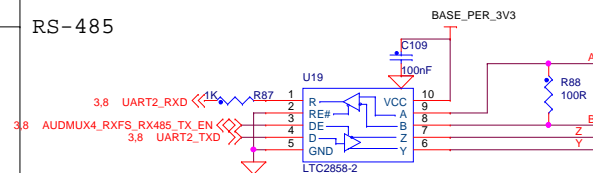
SPI/I2C



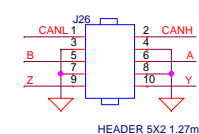
MISC



RS-485

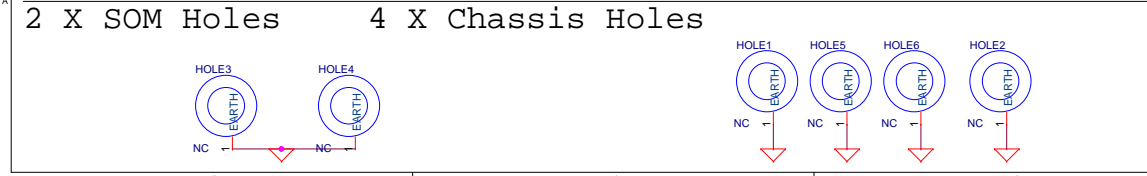
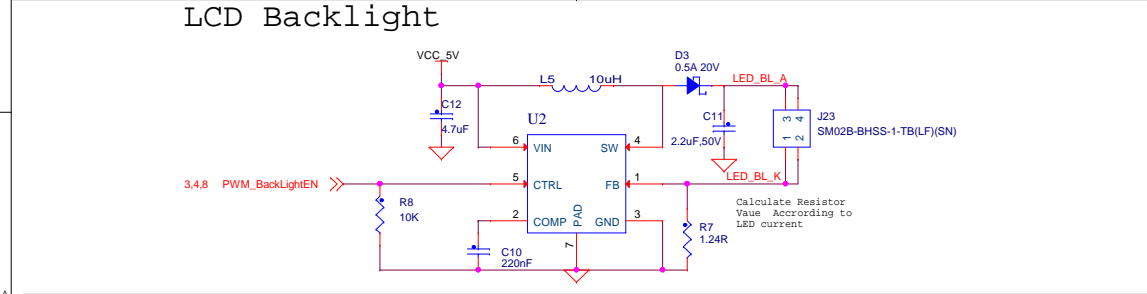
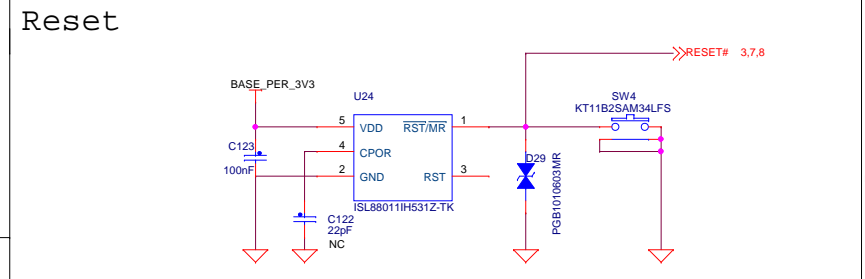
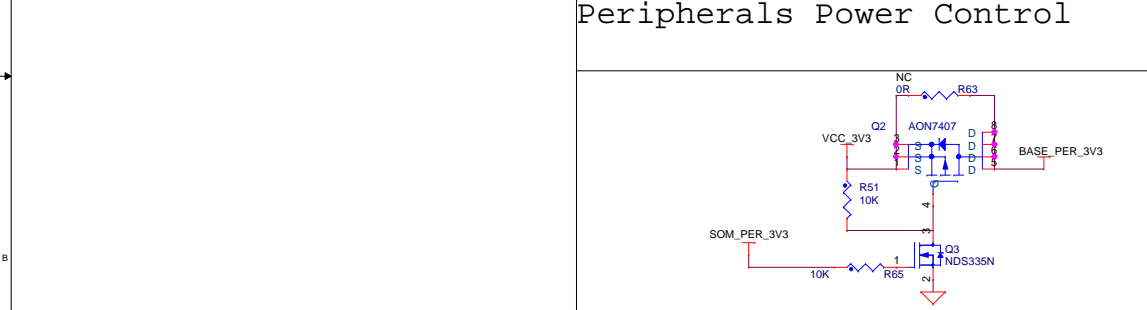
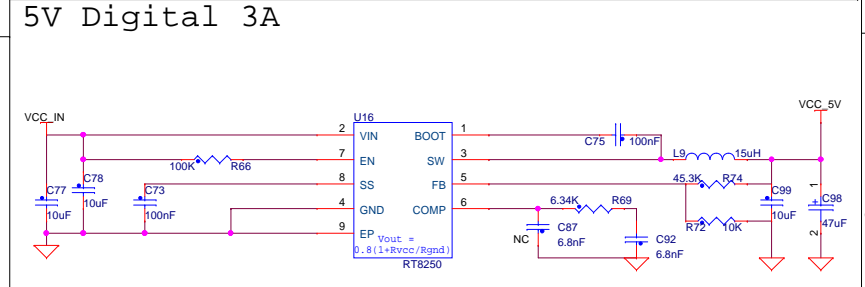
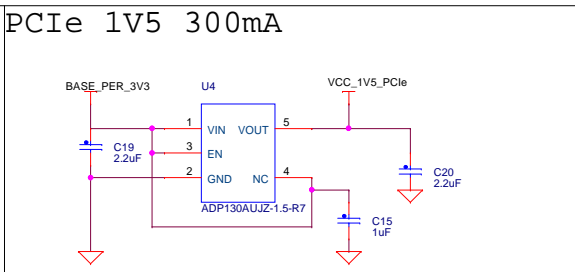
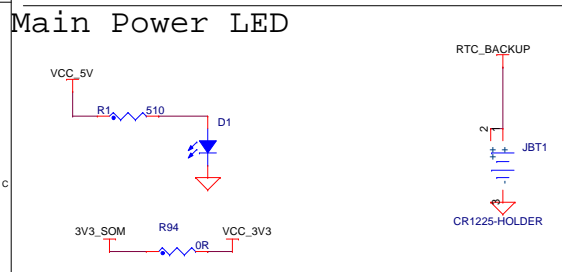
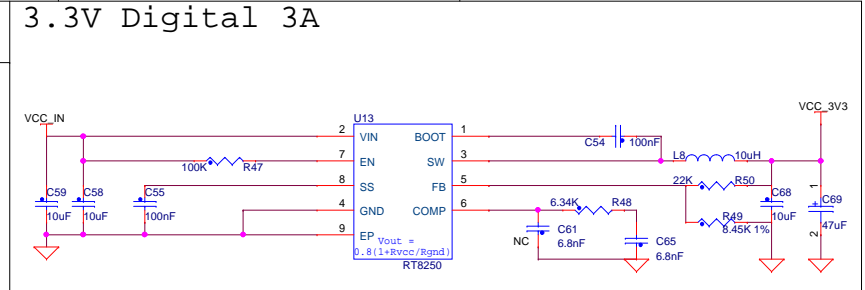
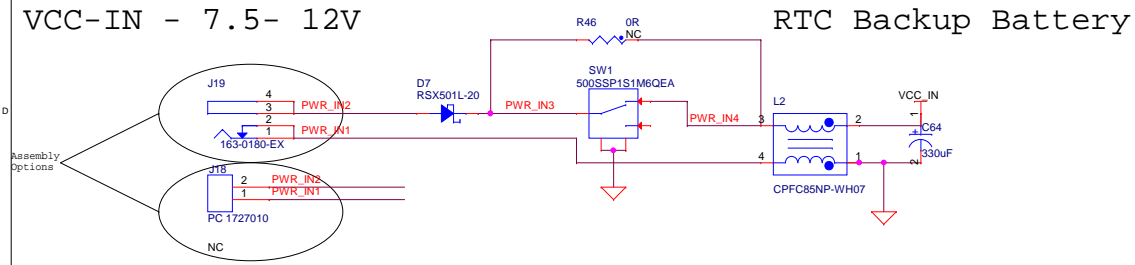


Header



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09. Power & Mechanics



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