

# MAXWELL SERDES USB 3.0 PERSONALITY CARD

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REV	E3
VER	1.0

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## REVISION HISTORY

VER #	DATE	DESCRIPTION OF CHANGES	AUTHOR	REVIEWED BY	APPROVED BY
0.1	05th JUNE 2018	Drafted from Rev E2, Ver 1.0 schematics.	Mistral Design Team	AJIT MB	AJIT MB
0.2	05th JUNE 2018	Updated USB3 power switch.	Mistral Design Team	AJIT MB	AJIT MB
1.0	25th JULY 2018	Baselined	Mistral Design Team	AJIT MB	AJIT MB

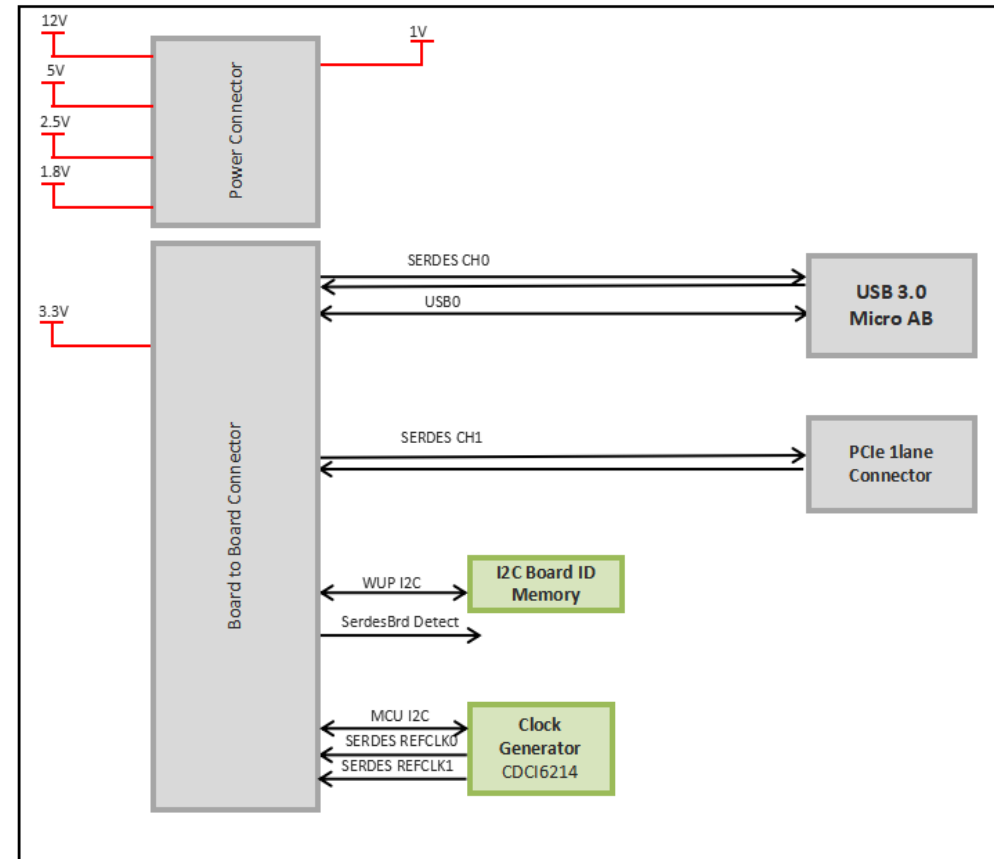
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# BLOCK DIAGRAM



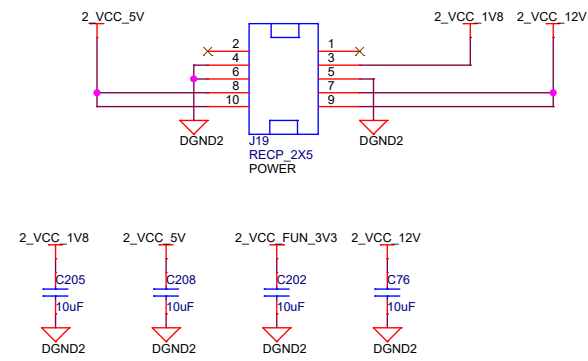
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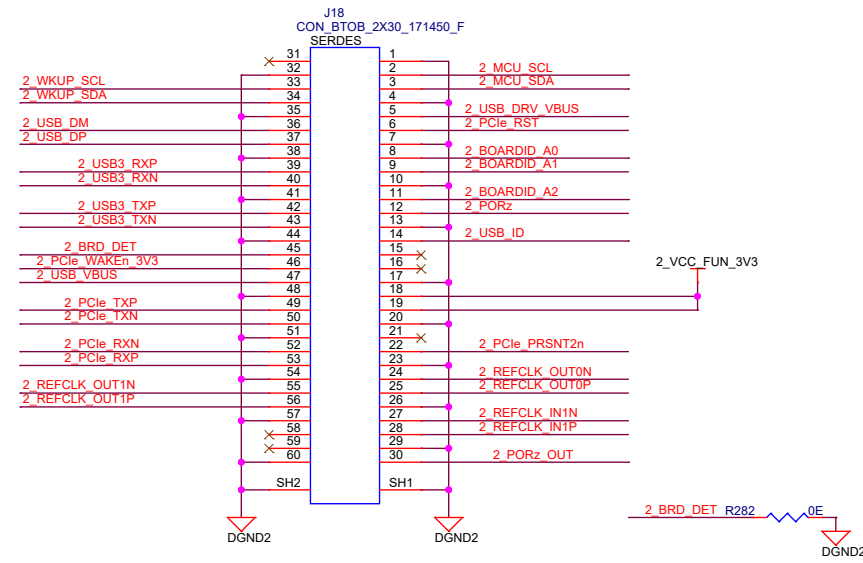
Title **BLOCK DIAGRAM**

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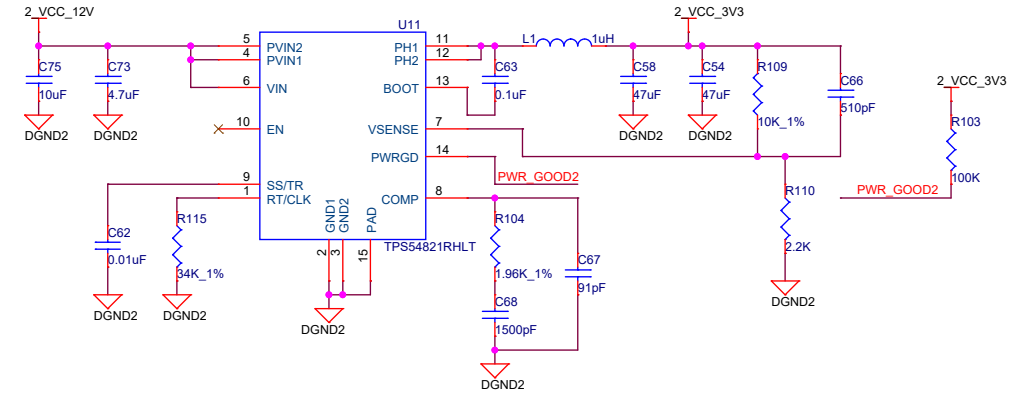
## Power Connector



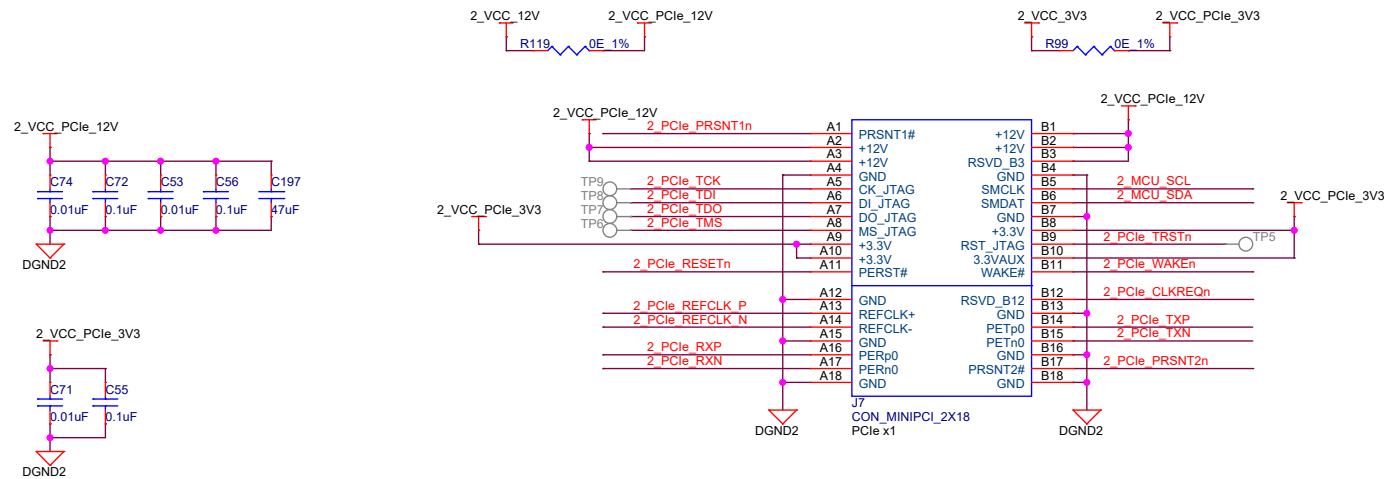
## Serdes Connector



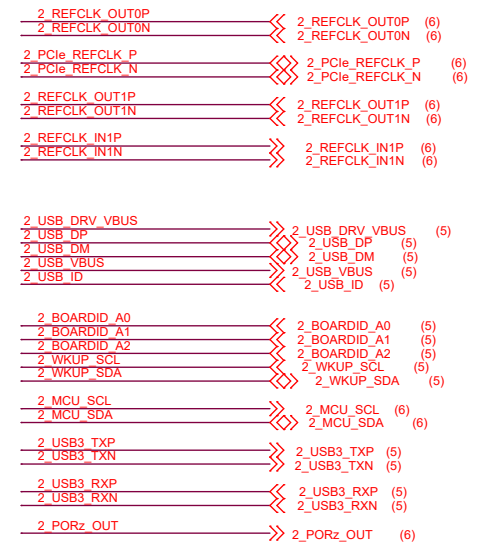
## 12V to 3.3V @ 6.5A Supply



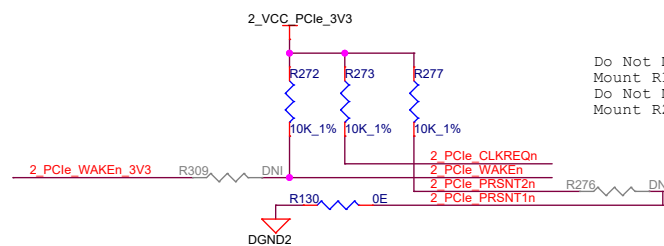
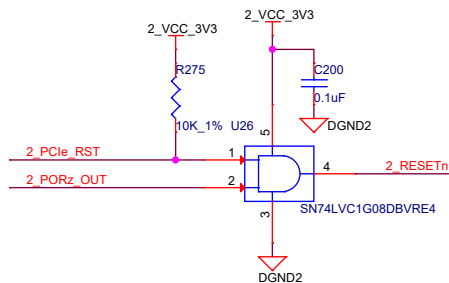
## PCIe x1 Connectors



Short 1 and 2 for Device operation  
Short 3 and 2 for Host operation



## PCIe Reset



Do Not Mount R276 for Host operation  
Mount R119, R99, R130 and R277 for Host operation  
Do Not Mount 119, R99, R130 and R277 for Device operation  
Mount R276 for Device operation

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Title  
**1LANEPCIe,SERDES & PCIe CON**

Size  
C PROC066

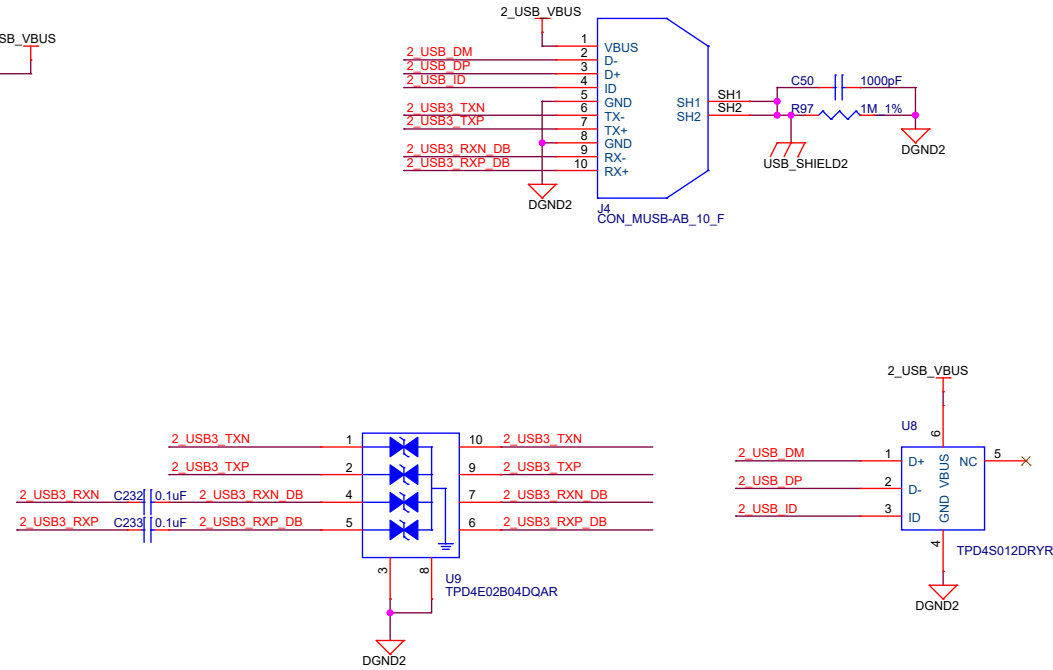
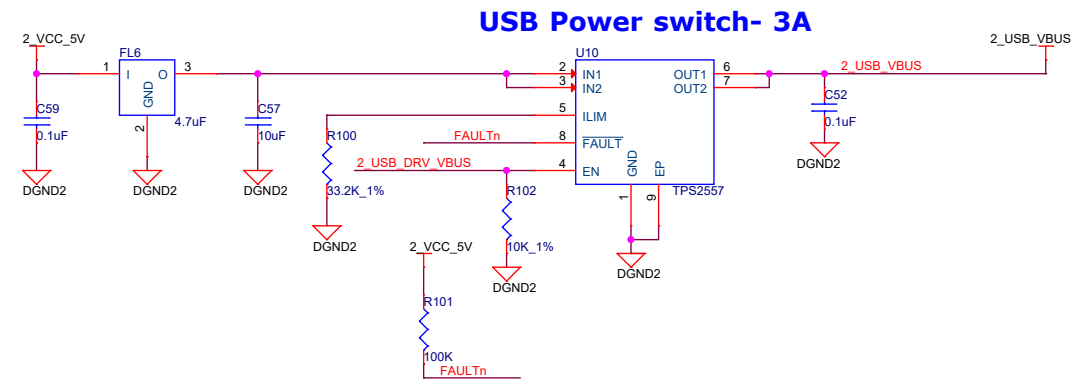
Rev  
E3

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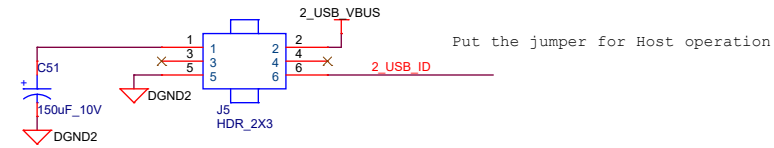
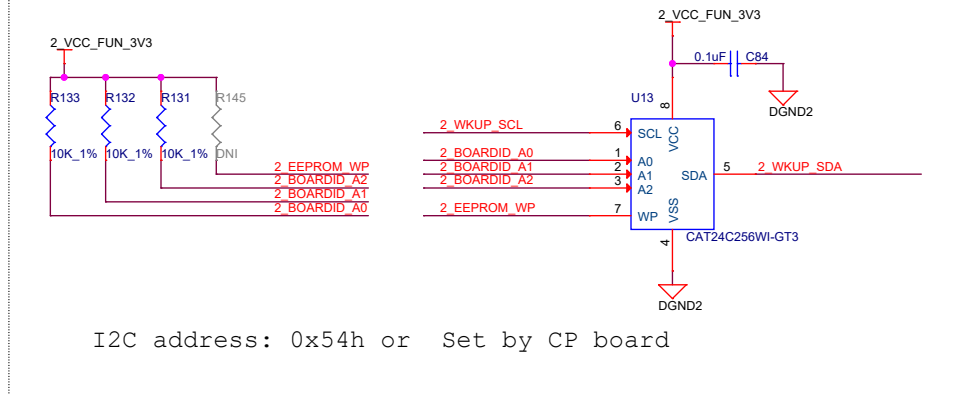
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# USB 3.0

## USB 3.0 micro AB Connector



## BOARD ID EEPROM



2_USB_VBUS	2_USB_VBUS	(4,5)
2_USB_ID	2_USB_ID	(4)
2_BOARDID_A0	2_BOARDID_A0	(4)
2_BOARDID_A1	2_BOARDID_A1	(4)
2_BOARDID_A2	2_BOARDID_A2	(4)
2_USB_VBUS	2_USB_VBUS	(4,5)
2_USB_DRV_VBUS	2_USB_DRV_VBUS	(4)
2_USB_DP	2_USB_DP	(4)
2_USB_DM	2_USB_DM	(4)
2_USB3_RXP	2_USB3_RXP	(4)
2_USB3_RXN	2_USB3_RXN	(4)
2_USB3_TXP	2_USB3_TXP	(4)
2_USB3_TXN	2_USB3_TXN	(4)
2_WKUP_SCL	2_WKUP_SCL	(4)
2_WKUP_SDA	2_WKUP_SDA	(4)

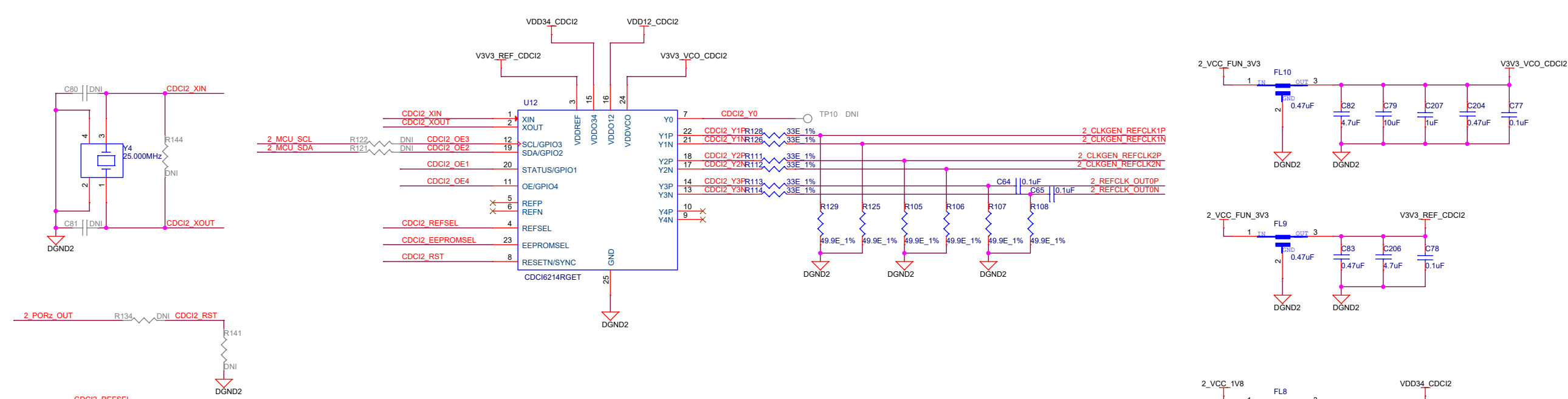
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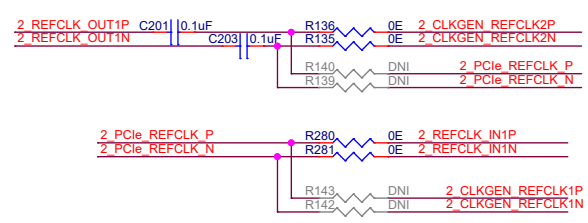
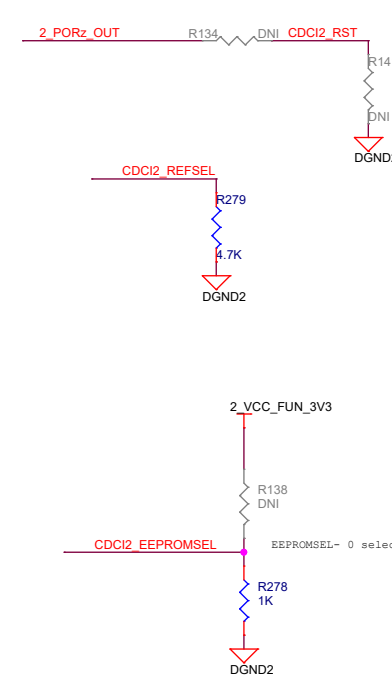
Title: 1LANEPCIe\_CLK, USB3.0&BRDID

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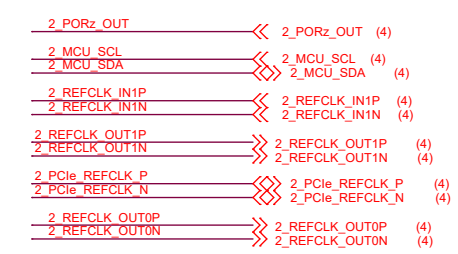
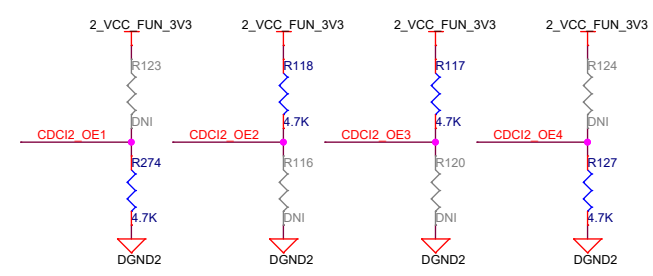
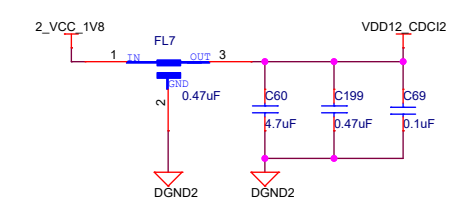
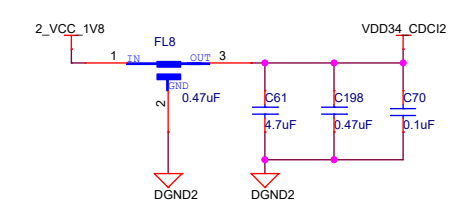
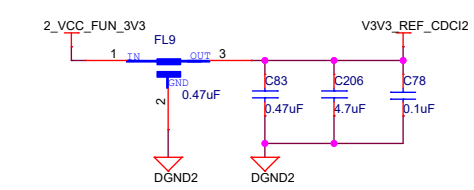
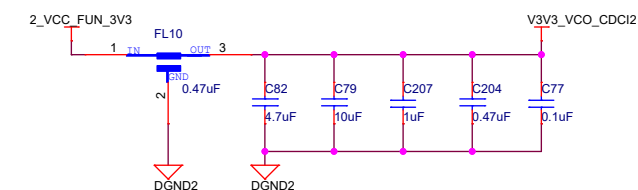
# 1LANE PCIe, USB3.0 Clock HCSL (100MHz) (EEPROM PAGE 0)



## CLOCK ROOT SELECTION



REFCLK_OUTxP	SoC Input Clock
REFCLK_OUTxN	
CLKGEN_REFCLKxP	Output Clock of Clock Generator
CLKGEN_REFCLKxN	
REFCLK_INxP	SoC Output Clock
REFCLK_INxN	
PCIe_REFCLKx_P	PCIe connector Clock lines
PCIe_REFCLKx_N	



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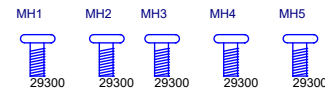
Title		1LANEPCIe_CLK	
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# HARDWARE SCHEMATICS

## ASSEMBLY NOTES

1. All MSL components should be baked as per JEDEC standard.
2. PCB should be baked at 120 degree for 8 hours.
3. Board assembly must comply with workmanship standards. IPC-A-610 Class 2, unless otherwise specified.
4. These assemblies are ESD sensitive, ESD precautions shall be observed.
5. These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.
6. Provide serial numbers to the assembled boards for identification.
7. The assembled board are wrapped in ESD Covers(individual) and packed securely before shipment.

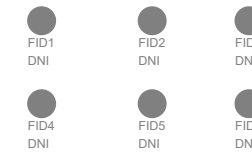
## SCREWS



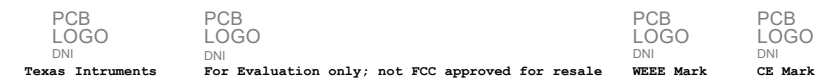
## WASHER'S



## FIDUCIALS



## LOGOs



## BARE PCB



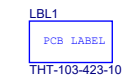
## JUMPERs



To be mounted on J14 pin 3 and 2 for Host operation. To be mounted on J5 for USB Host operation.

## LABELS

### Board Serial No.



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Title  
HARDWARE SCHEMATICS

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