

A

A

B

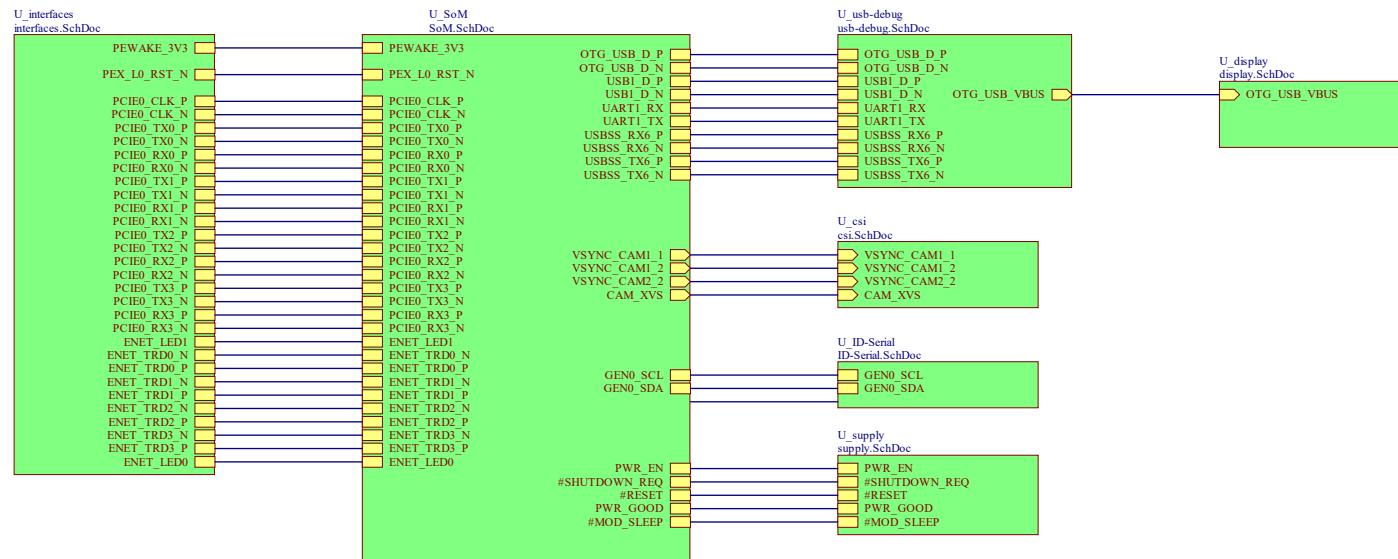
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C

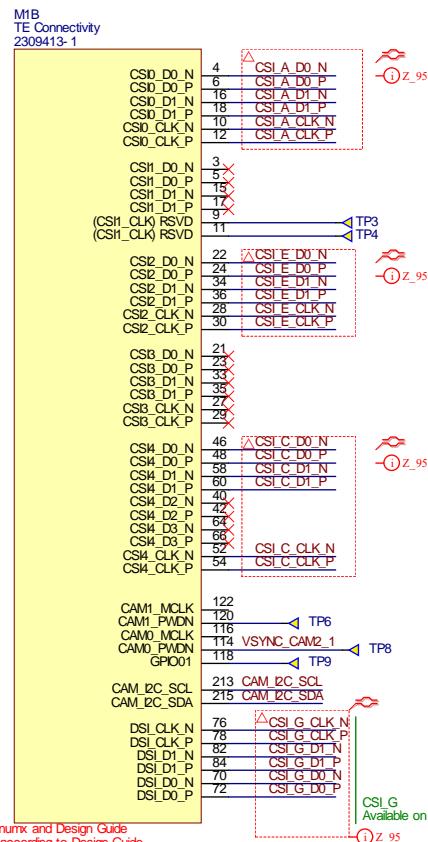
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D

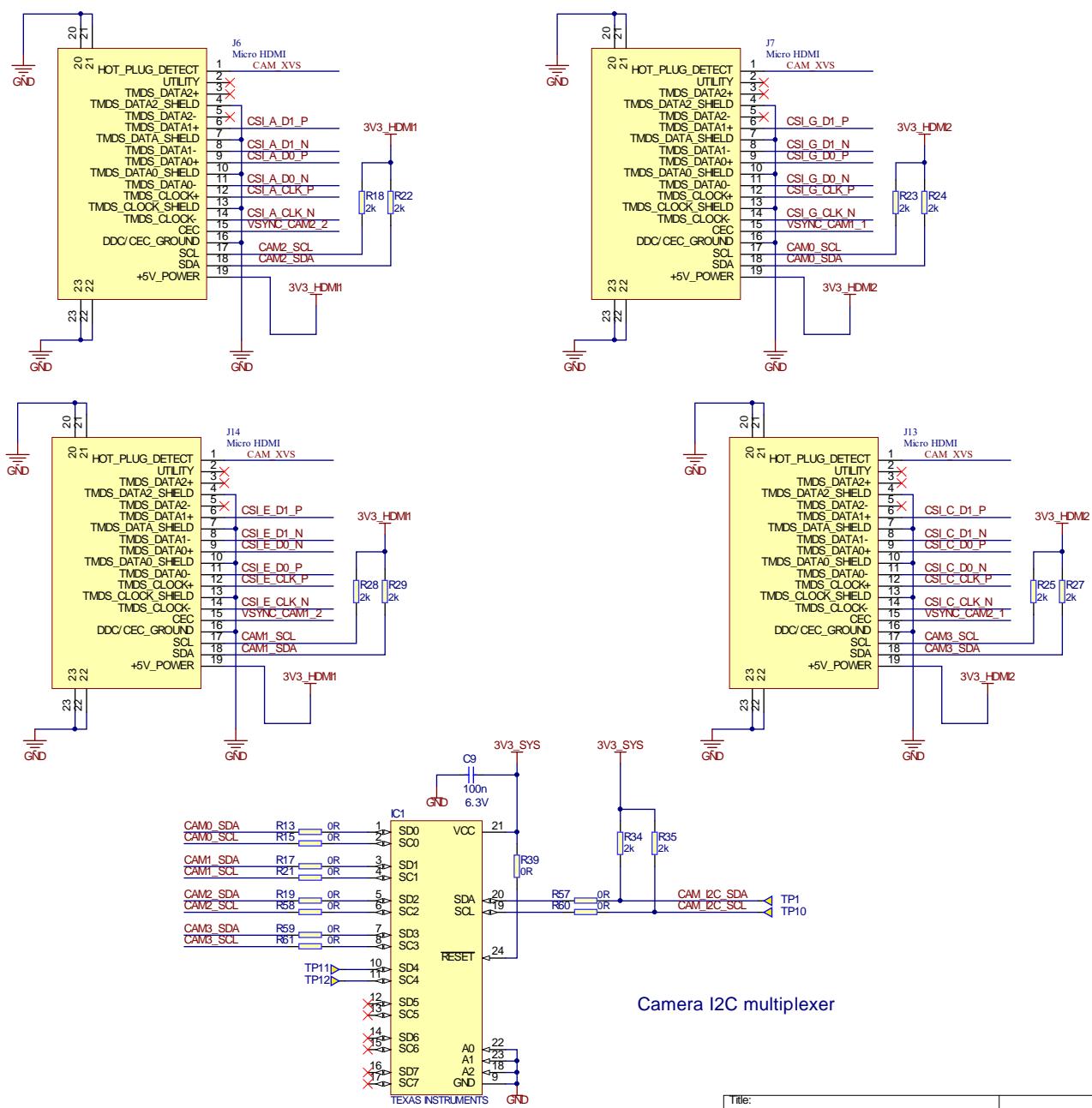
D



## SoM interface



- [ ] VSYNC\_CAM1\_VSYNC\_CAM1\_1
- [ ] VSYNC\_CAM1\_VSYNC\_CAM1\_2
- [ ] VSYNC\_CAM2\_VSYNC\_CAM2\_1
- [ ] VSYNC\_CAM2\_VSYNC\_CAM2\_2
- [ ] CAM\_XVS CAM\_XVS



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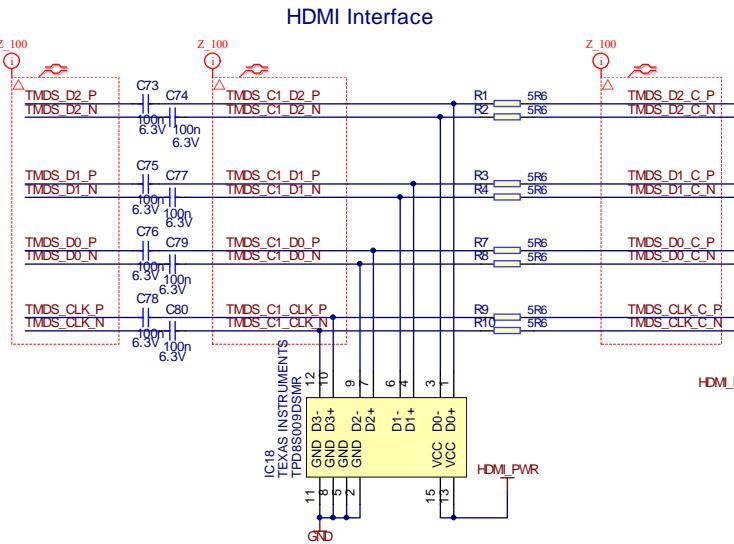
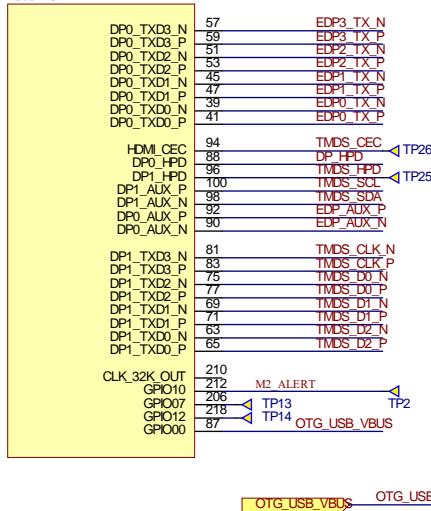
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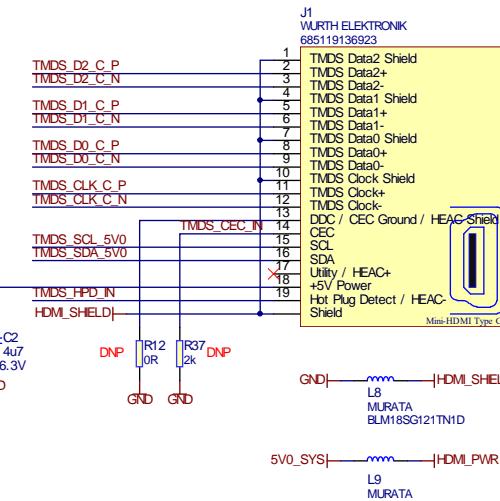
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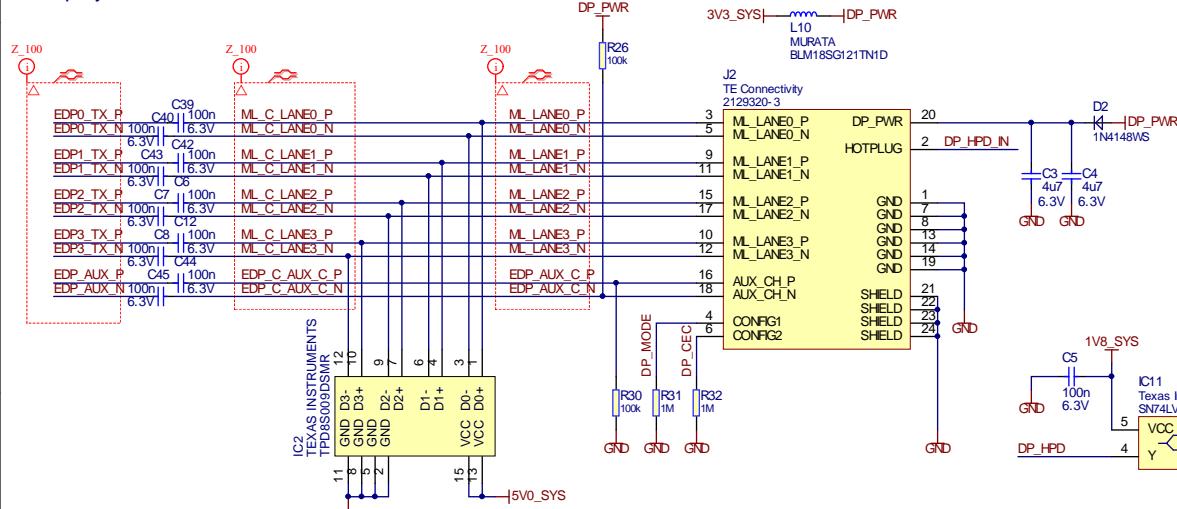
MIE  
TE Connectivity  
2309413-1



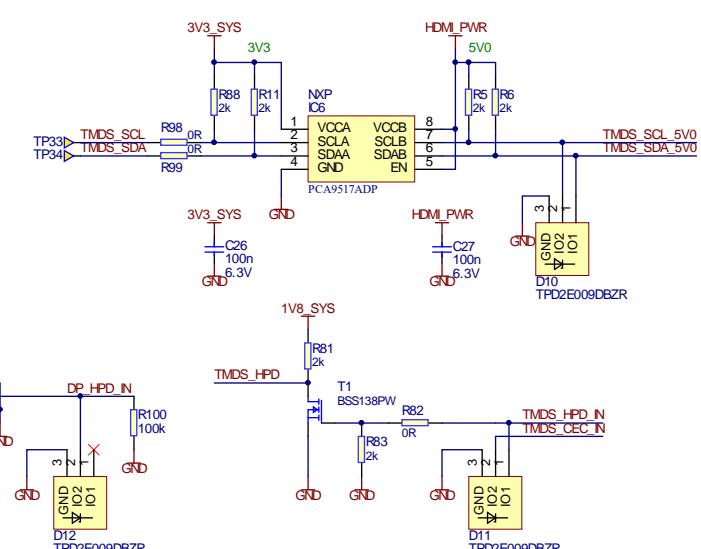
### HDMI Connector



### DisplayPort Interface



### DDC/HPD



Title:  
Jetson Nano Baseboard

Size: A3  
Date: 10/1/2020  
File: display.SchDoc

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Revision: 1.3  
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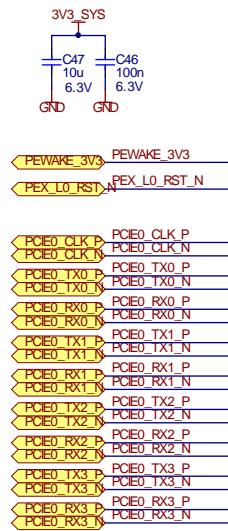
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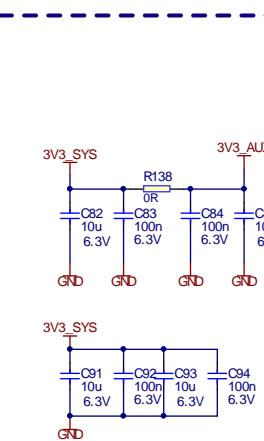
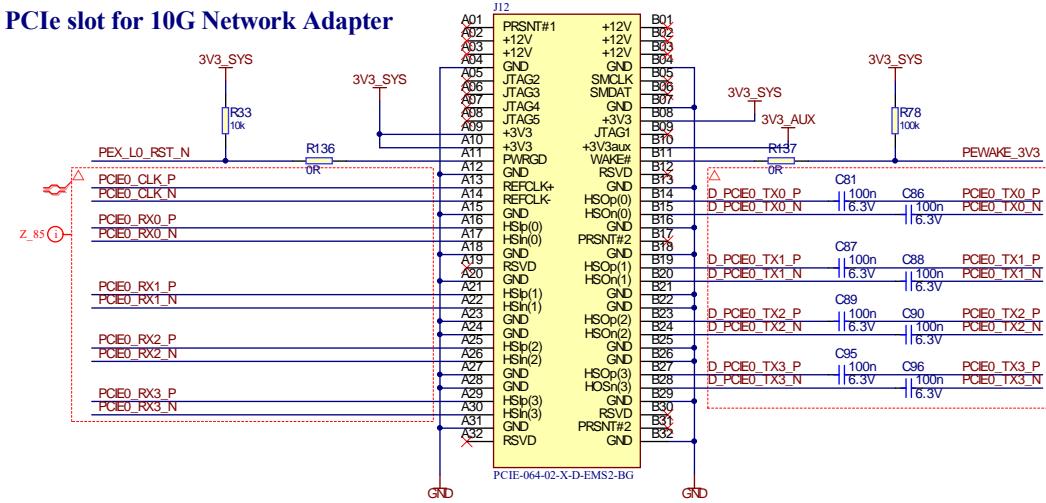
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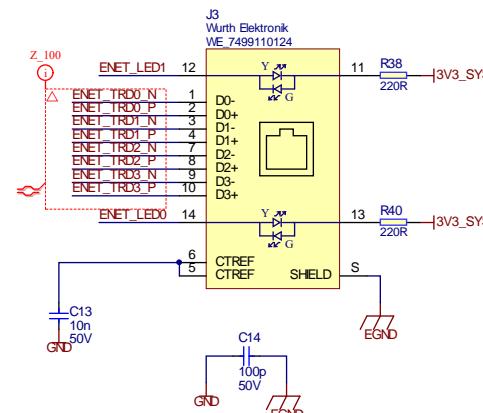
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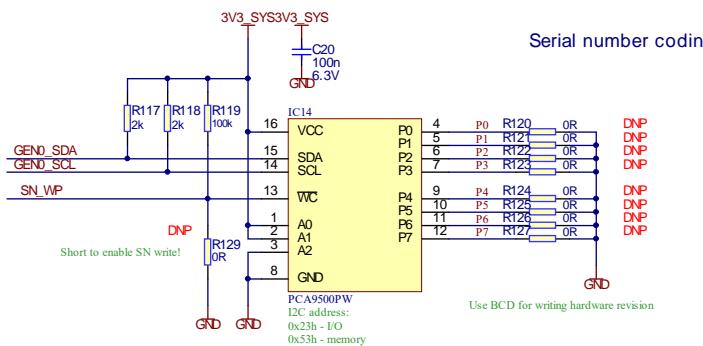
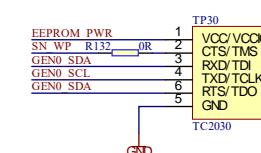
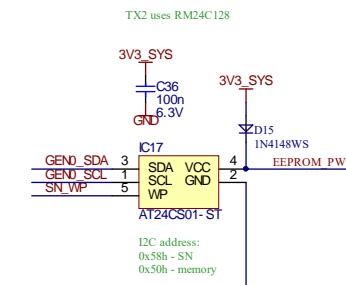
### PCIe slot for 10G Network Adapter



### Ethernet interface



A

**GPIO expander****EEPROM with Unique ID**

B

A

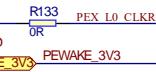
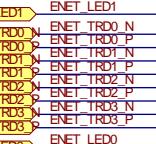
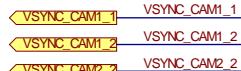
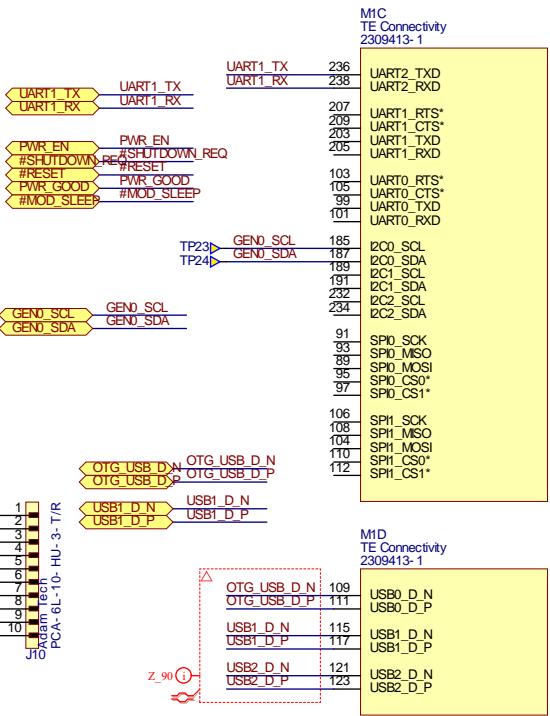
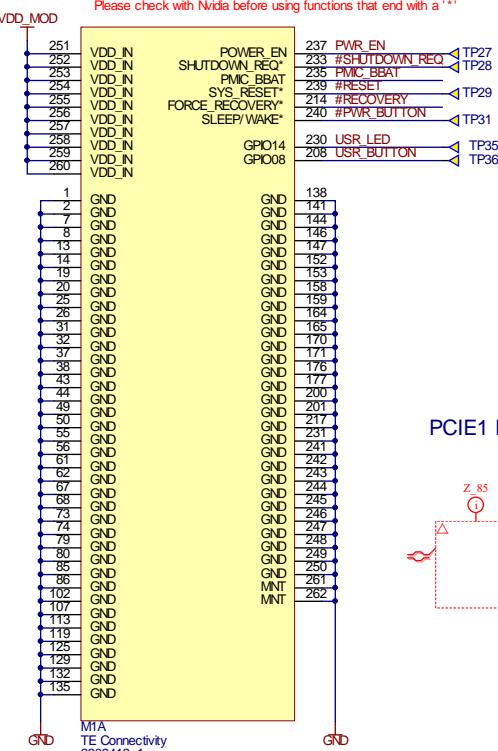
B

C

D

## SoM interfaces

Please check with Nvidia before using functions that end with a '\*'.



M1G  
TE Connectivity  
2309413-1

199	I2S0_SCLK
200	I2S0_DOUT
201	I2S0_DIN
202	I2S0_FS
226	I2S1_SCLK
227	I2S1_DOUT
228	I2S1_DIN
229	I2S1_FS
229	SDMMC_CLK
230	SDMMC_DATA0
231	SDMMC_DATA1
232	SDMMC_DATA2
233	SDMMC_DATA3
234	SDMMC_CMD

BT_M2_WAKE_AP	124
BT_M2_EN	126
CAM_XVS	127
VIDEOL1_CTRL	128
VSYNC_CAM2_Z	130
SD_VCC_EN	211

ENET_LED0	194
ENET_LED1	188
ENET_TRD0_N	204
ENET_TRD0_P	204
ENET_TRD3_N	202
ENET_TRD2_N	198
ENET_TRD2_P	196
ENET_TRD3_N	192
ENET_TRD3_P	190
ENET_TRD0_N	186
ENET_TRD0_P	184

(CAN_RX) RSV	143
(CAN_TX) RSV	145
#MOD_SLEEP	178
VSYNC_CAM1_1	228
VSYNC_CAM1_2	216

POE_WAKE*	179
POE0_RST*	180
POE0_CLKREQ*	180
PCIE1_RST	183
PCIE1_CLKREQ	182
PCIE1_CLK_P	175
PCIE1_CLK_N	173
PCIE1_CLK_K	160
PCIE0_CLK_P	162
PCIE0_RX0_N	134
PCIE0_RX0_P	132
PCIE0_RX0_N	131
PCIE0_RX0_P	133
PCIE0_RX1_N	140
PCIE0_RX1_P	142
PCIE0_RX1_N	137
PCIE0_RX1_P	139
PCIE0_RX2_N	148
PCIE0_RX2_P	150
PCIE0_RX2_N	149
PCIE0_RX2_P	151
PCIE0_RX3_N	154
PCIE0_RX3_P	156
PCIE0_RX3_N	155
PCIE0_RX3_P	157
USBSS_TX6_N	166
USBSS_TX6_P	169
USBSS_RX6_N	181
USBSS_RX6_P	163

PCIE1_TX0_P	174
PCIE1_TX0_N	172
PCIE1_RX0_P	169
PCIE1_RX0_N	167

Jetson Nano Baseboard



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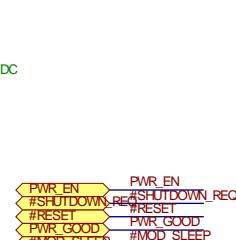
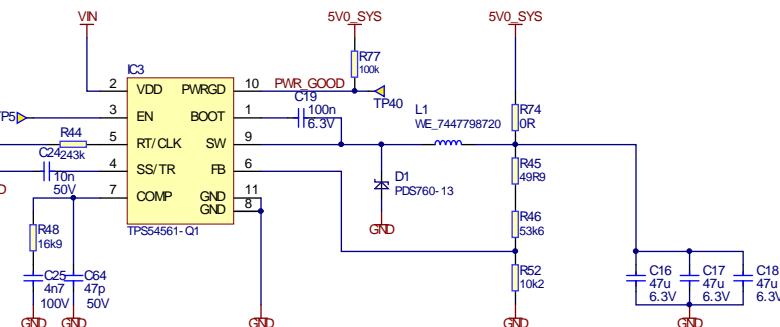
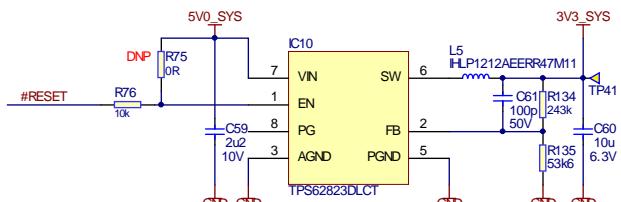
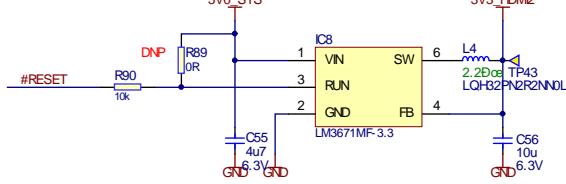
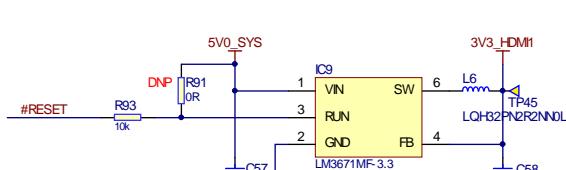
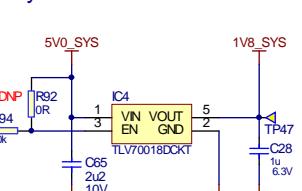
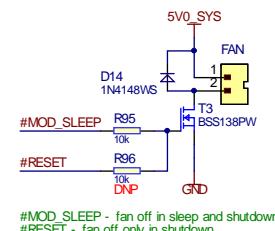


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Size: A3  
Date: 10/1/2020  
File: Schematic

Page: 4 of 6  
Revision: 1.3

1 2 3 4 5 6 7 8

**Power input****Main DC/DC****System 3V3****Power sequencer****Camera #2 3V3****Camera #1 3V3****System 1V8****FAN 5V**

#MOD\_SLEEP - fan off in sleep and shutdown  
 #RESET - fan off only in shutdown



Title: Jetson Nano Baseboard

Size: A3 Date: 10/1/2020 File: supply.SchDoc  
 Page: 5 of 6 Revision: 1.3

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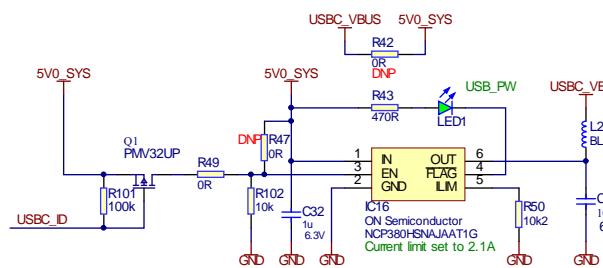
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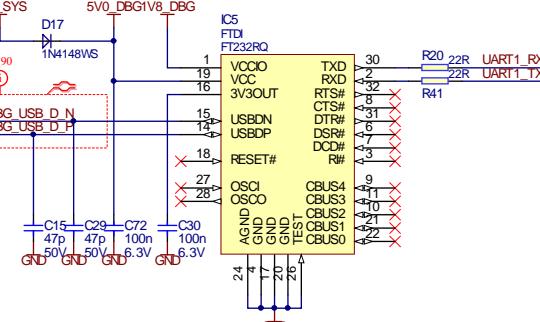
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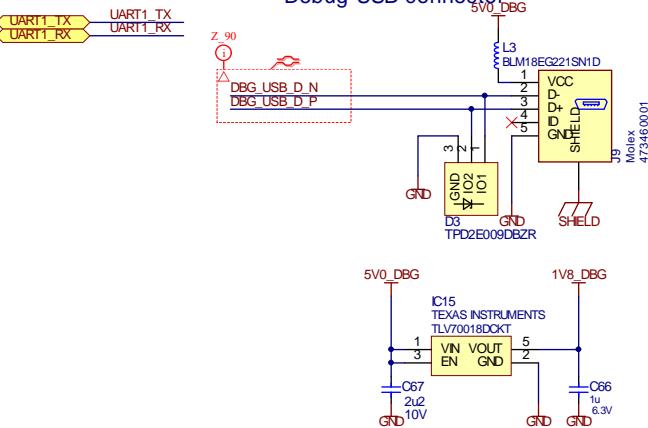


USBSS TX6\_N USBSS\_TX6\_N  
USBSS TX6\_P USBSS\_TX6\_P  
USBSS RX6\_N USBSS\_RX6\_N  
USBSS RX6\_P USBSS\_RX6\_P

## Debug UART

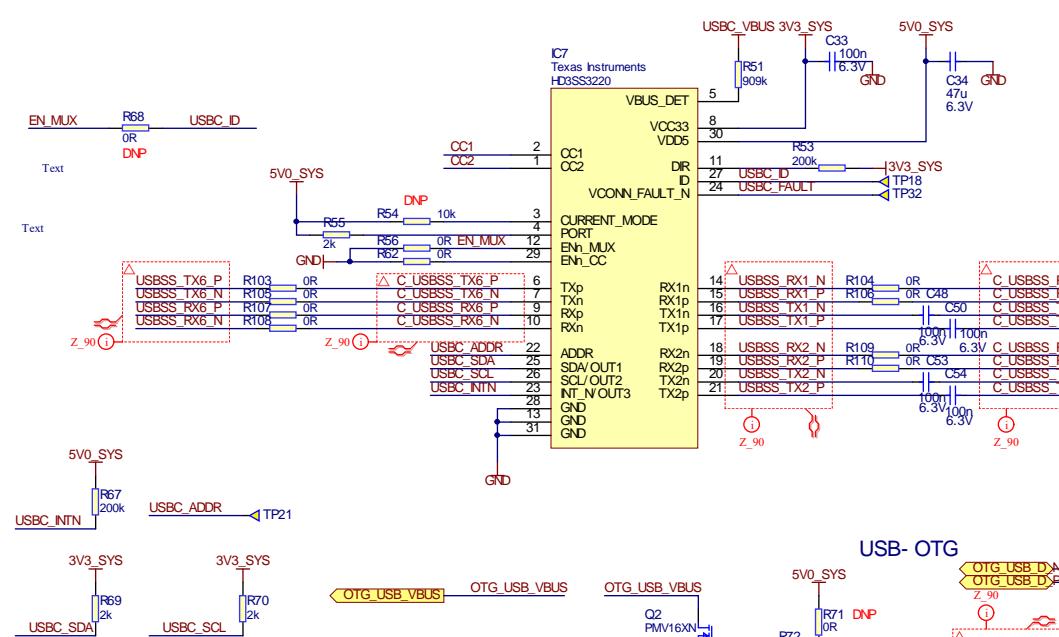


## Debug USB connector



With D17 there's no need to separate 1V8\_DBG from 1V8\_SYS

USB- C Multiplexer

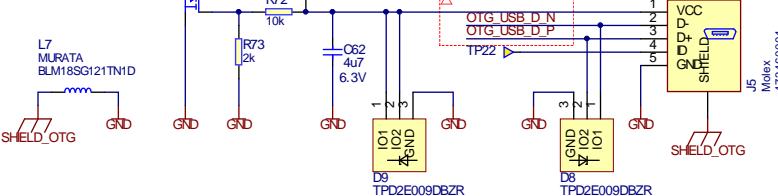


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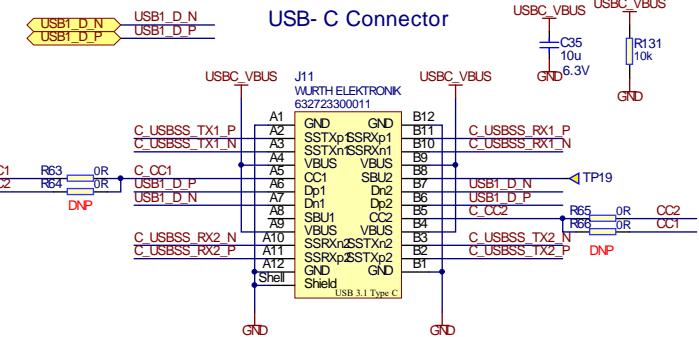


open source  
hardware

USB- OTG

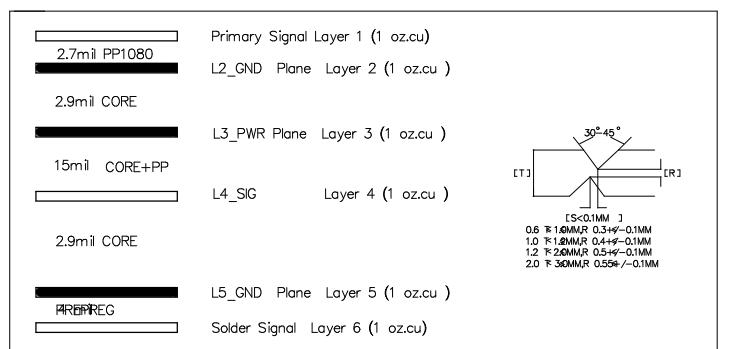


## USB- C Connector



Title: Jetson Nano Baseboard

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Impedance Control Table			
LAYER	SINGLE ENDED TRACE		DIFFERENTIAL TRACE
	WIDTH (mil)	IMPEDANCE (OHM+/-10%)	WIDTH/SPACE (mil)
1 6	4 mil	50 ohm	4.1/ 12mil
			4.2/ 7 mil
4	5 mil	50 ohm	4.1/ 10mil
			4.3/7.3mil
			4.6/6.8mil

Purchase Order And Specification Sheet

Dielectric Material: FR4

Total board Layers: 6

Board Thickness: 63+/-10%

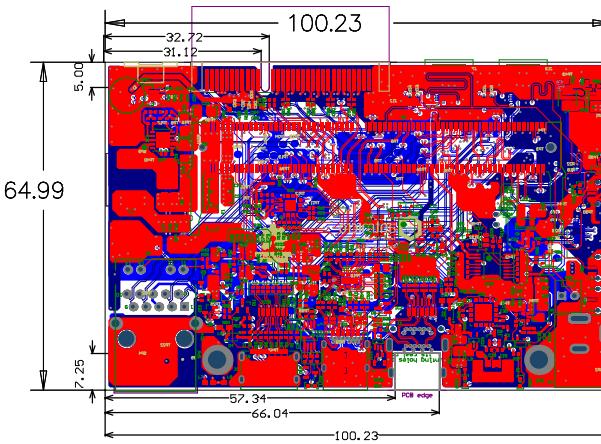
Silkscreen Colors: White

Soldermask Colors: Green Red Yellow Black Other

Surface Finished: HASL OSP GOLDFINGER IMMERSION GOLD

Other Notes:

1.Via:All vias need filling soldermask.  
 2.Silkscreen permanent white non-conductive epoxy inc.where appropriate clip silkscreen line width not to exceed 0.005"to ensure silkscreen clarity.  
 3. Plating:solder resist over bare copper on both sides of board.



DRILL CHART: TOP to BOTTOM			
ALL UNITS ARE IN MILS			
FIGURE	SIZE	PLATED	QTY
+	9.84	PLATED	5
+	10.0	PLATED	834
○	15.75	PLATED	14
+	17.72	PLATED	20
□	35.04	PLATED	10
□	35.43	PLATED	6
○	40.16	PLATED	2
○	40.16	PLATED	4
○	66.93	PLATED	2
◊	145.67	PLATED	7
+	39.02	NON-PLATED	2
○	39.37	NON-PLATED	2
△	43.31	NON-PLATED	1
○	62.99	NON-PLATED	1
○	127.95	NON-PLATED	2
○	43.3x23.62	PLATED	2
□	47.24x23.62	PLATED	4
×	51.18x23.62	PLATED	2
×	68.5x27.56	PLATED	2
×	92.52x35.43	PLATED	2
×	118.11x39.37	PLATED	1
×	118.11x39.37	PLATED	1
×	137.79x39.37	PLATED	1