

1 | 2 | 3 | 4 | 5 | 6

A

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C

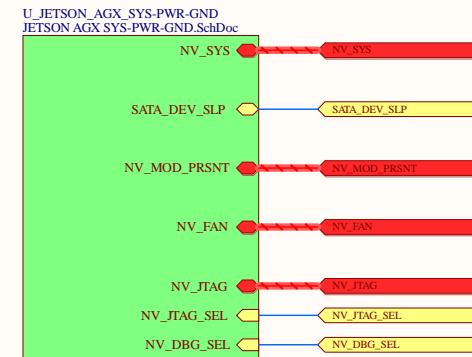
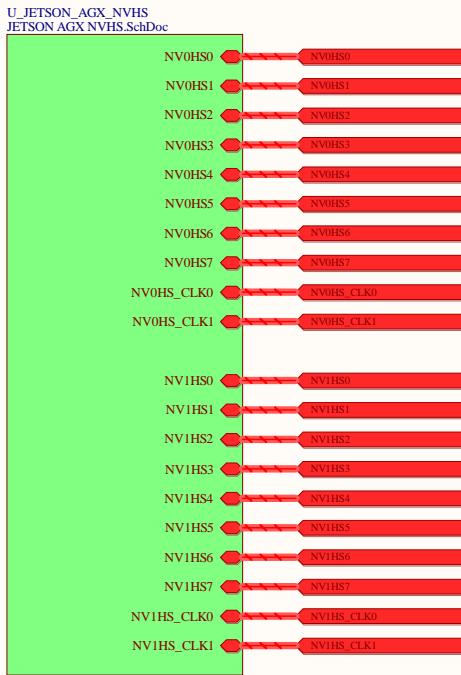
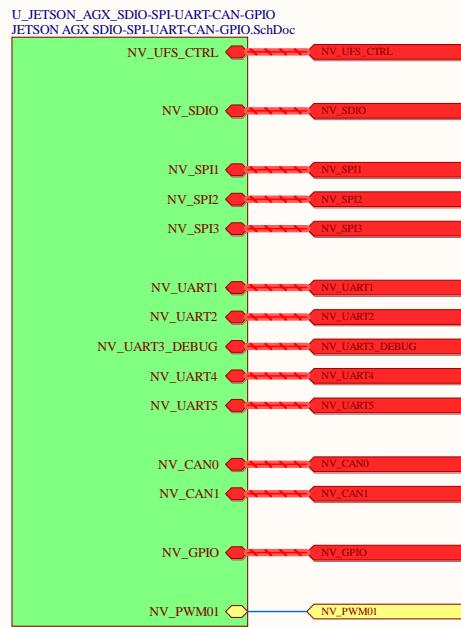
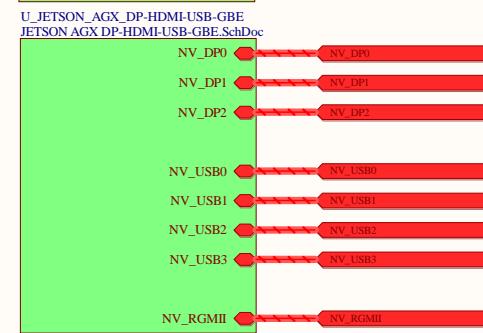
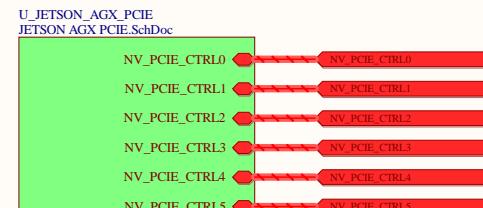
D

D

| | |
|---|------------------------------------|
| Title: Power | |
| Project: Jetson AGX Xavier Carrier Board.PnjPcb | |
| Rev: 1 | Reviewer: * |
| | Engineer: Cindy Li, Chealsie Bains |
| Date: 2021-06-16 | Sheet: 2 of 20 |



1 | 2 | 3 | 4 | 5 | 6



Title: Jetson AGX Connector

Project: Jetson AGX Xavier Carrier Board PriPcb

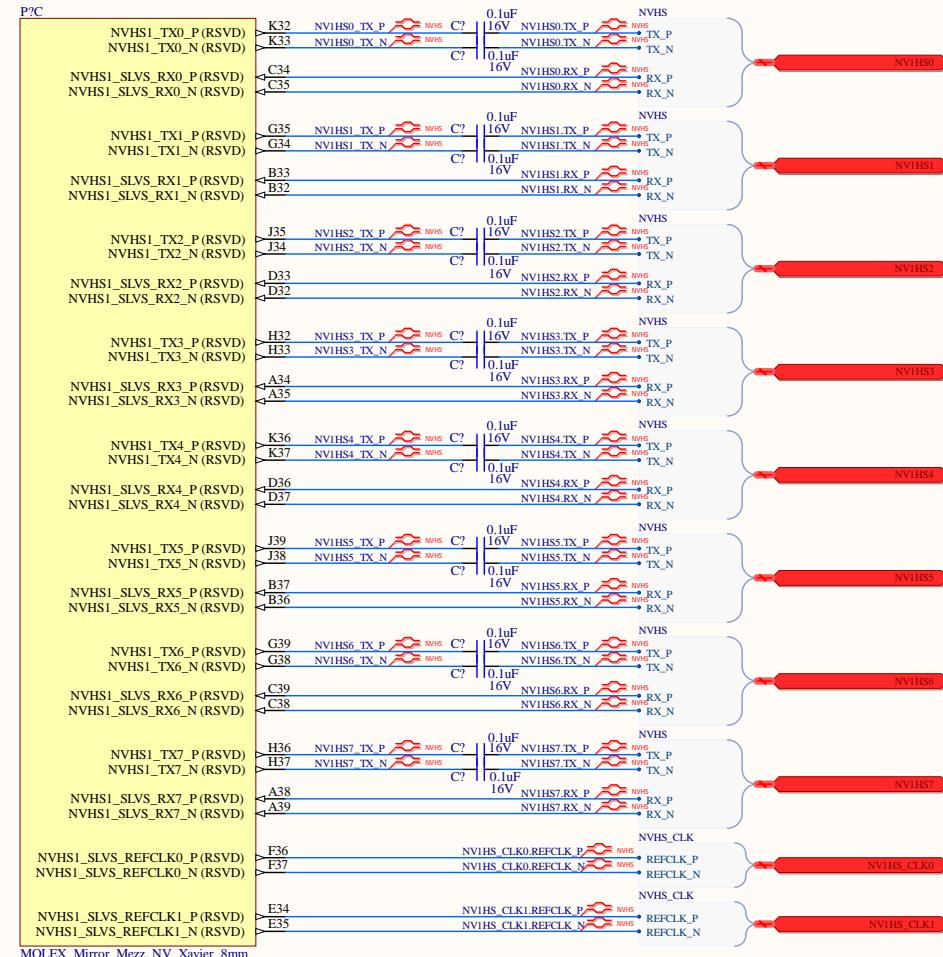
Rev: | Reviewer: *

Engineer: Cindy Li, Chealsie Bains

Date: 2021-06-16 | Sheet: 3 of 20

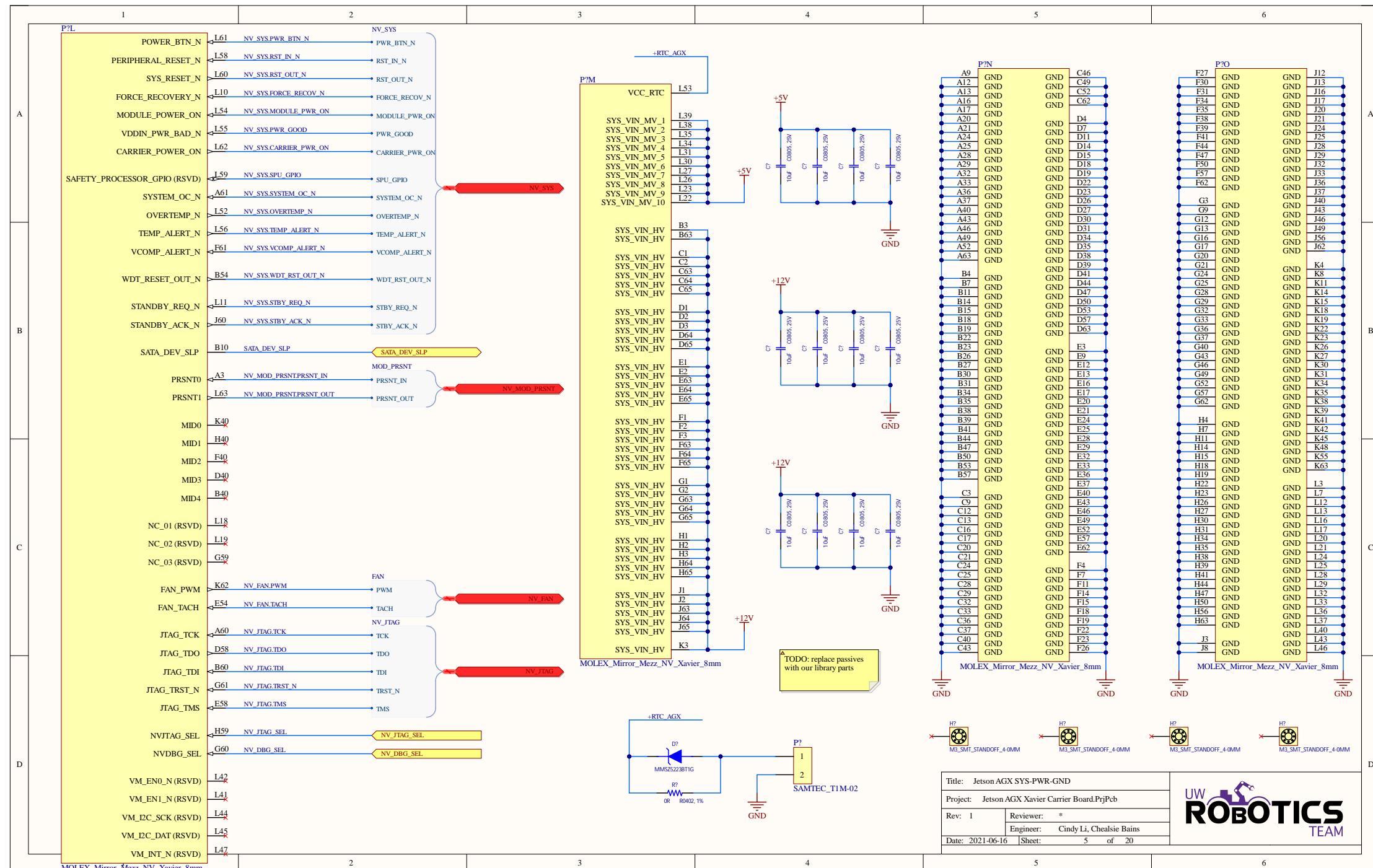


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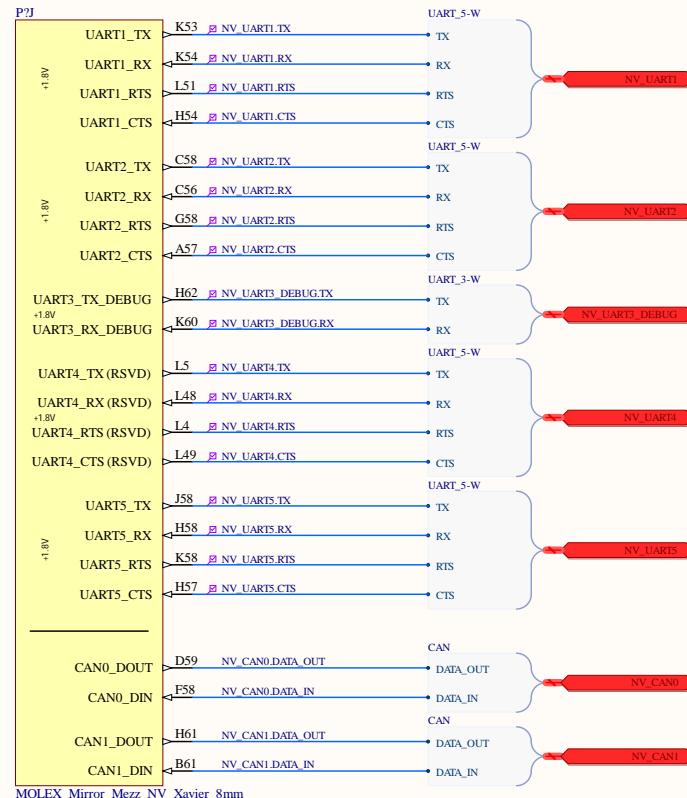
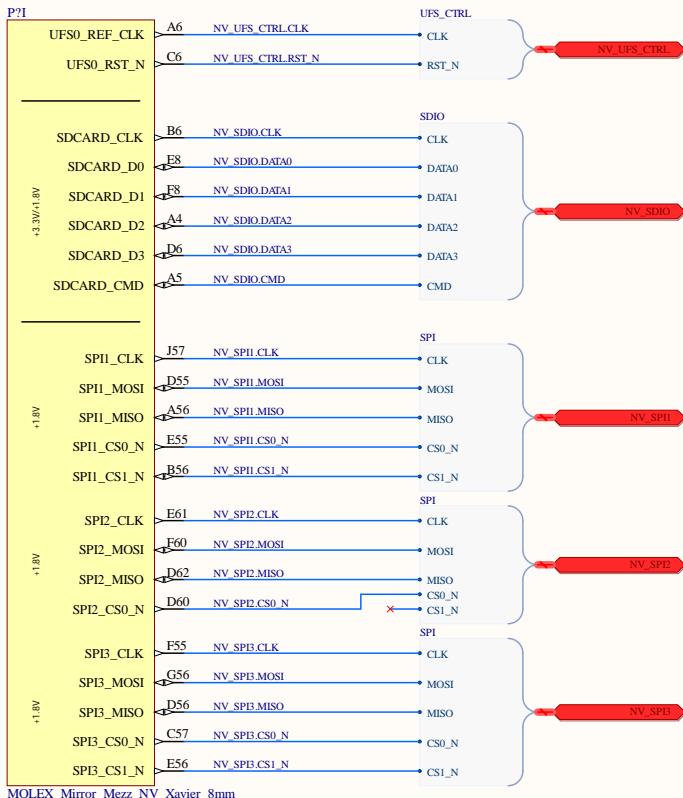


| | |
|------------------------|--|
| Title: Jetson AGX NVHS | |
| Project: | Jetson AGX Xavier Carrier Board.PnjPcb |
| Rev: | 1 |
| Reviewer: | * |
| Engineer: | Cindy Li, Chealsie Bains |
| Date: | 2021-06-16 |
| Sheet: | 4 of 20 |





1 2 3 4 5 6

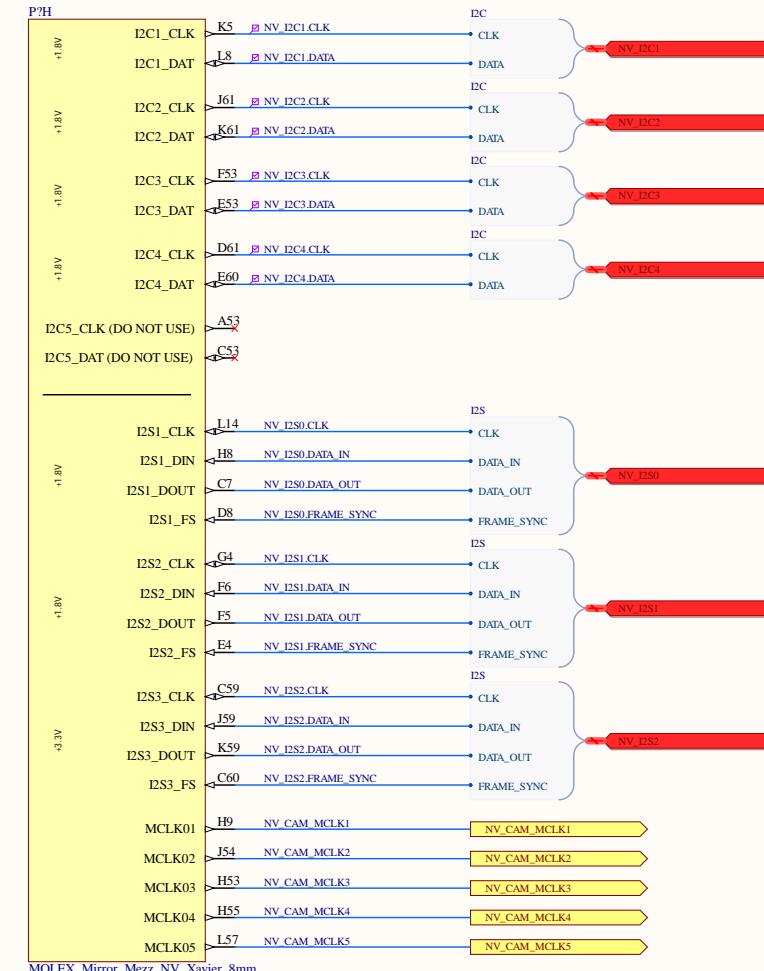
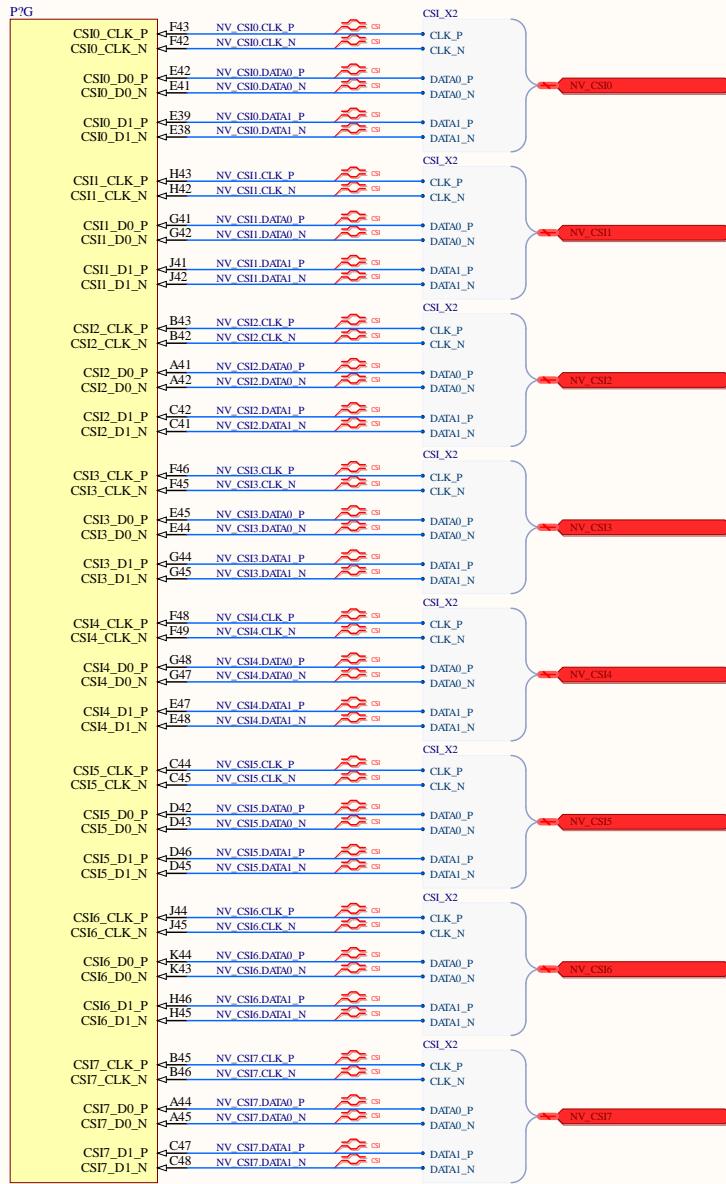


| | | |
|------------------|--|---------|
| Title: | Jetson AGX SDIO-SPI-UART-CAN-GPIO | |
| Project: | Jetson AGX Xavier Carrier Board.PnjPcb | |
| Rev: 1 | Reviewer: | * |
| Engineer: | Cindy Li, Chealsie Bains | |
| Date: 2021-06-16 | Sheet: | 6 of 20 |



1 2 3 4 5 6

1 2 3 4 5 6



| NVIDIA Jetson AGX Dev Kit Configuration | | |
|---|---------------------|-------------------|
| CSI | I2C | I2S |
| 0 CAM Expansion | - | - |
| 1 CAM Expansion | ID EEPROM / Debug | - |
| 2 CAM Expansion | PoE x16 / M.2 E-Key | 40 Pin Expansion |
| 3 CAM Expansion | CAM Expansion | M.2 E-Key WiFi/BT |
| 4 CAM Expansion | M.2 M.2 NVMe | - |
| 5 CAM Expansion | - | 40 Pin Expansion |
| 6 CAM Expansion | - | - |
| 7 CAM Expansion | - | - |

| NVIDIA Jetson AGX Design Configuration | | |
|--|-------------------|-------------------|
| CSI | I2C | I2S |
| 0 - | - | - |
| 1 - | - | - |
| 2 - | M.2 E-Key WiFi/BT | - |
| 3 - | - | M.2 E-Key WiFi/BT |
| 4 - | M.2 M.2 NVMe | - |
| 5 - | - | - |
| 6 - | - | - |
| 7 - | - | - |

Title: Jetson AGX CSI-I2C-I2S

Project: Jetson AGX Xavier Carrier Board.PjPcb

Rev: 1

Reviewer: *

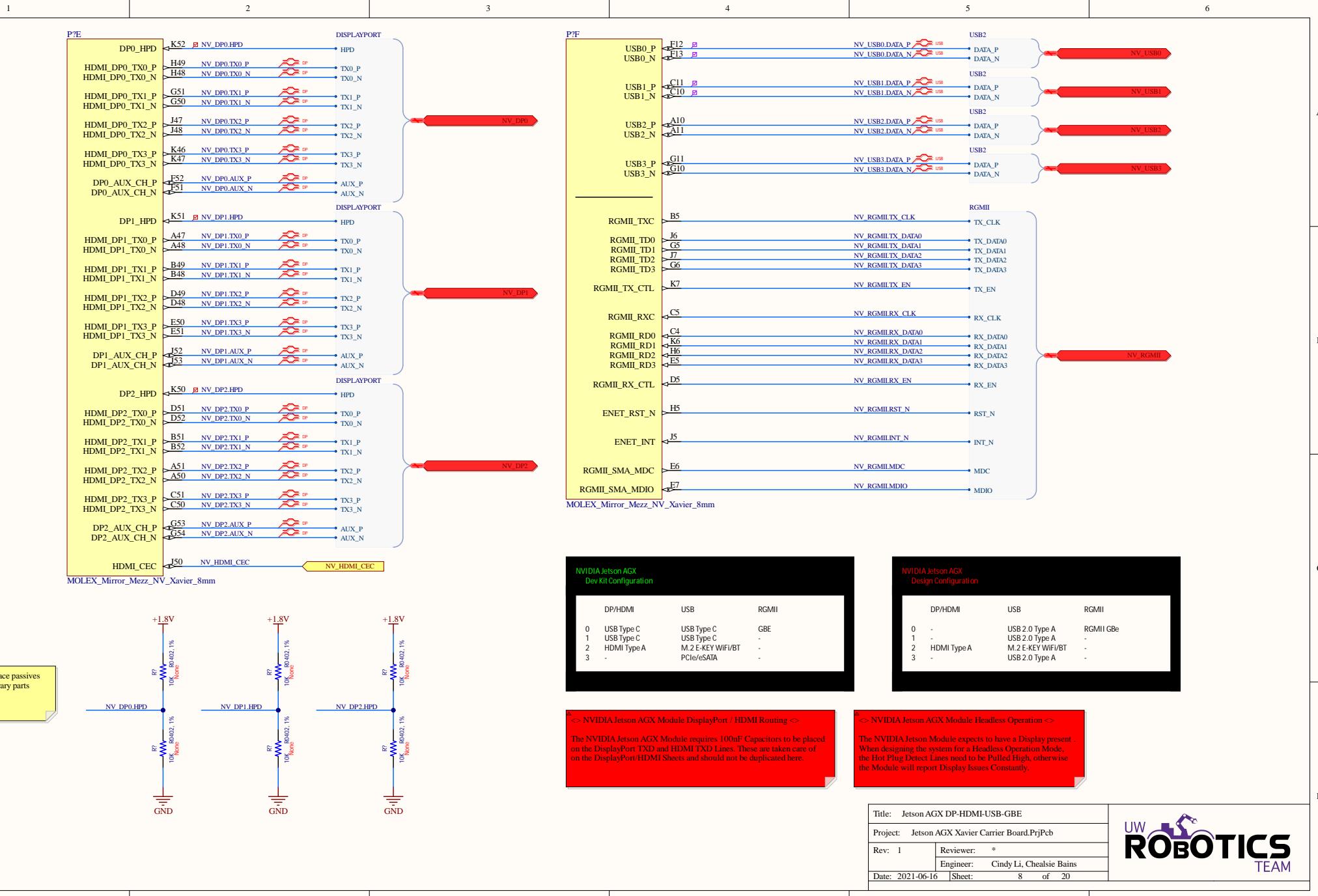
Engineer: Cindy Li, Chealsie Bains

Date: 2021-06-16

Sheet: 7 of 20



1 2 3 4 5 6



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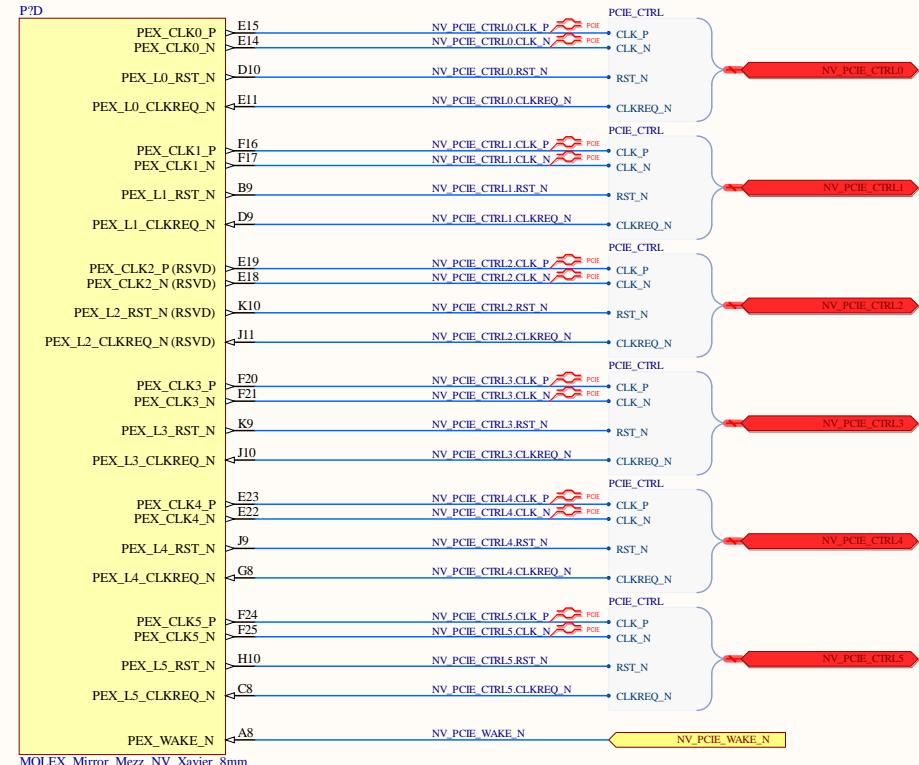
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| | |
|---|----------------|
| Title: Jetson AGX PCIe | |
| Project: Jetson AGX Xavier Carrier Board.PnjPcb | |
| Rev: 1 | Reviewer: * |
| Engineer: Cindy Li, Chealsie Bains | |
| Date: 2021-06-16 | Sheet: 9 of 20 |





NVIDIA Jetson AGX Dev Kit Configuration

| UPHY | NVHS0 | NVHS1 | PCIE_CTRL |
|---------------------|----------|-------|-------------------|
| 0 PCIE/eSATA | PCIe x16 | - | M.2 M-KEY NVMe |
| 1 USB Type C | PCIe x16 | - | PCIE/eSATA |
| 2 M.2 M-KEY NVMe | PCIe x16 | - | M.2 E-KEY WiFi/BT |
| 3 M.2 M-KEY NVMe | PCIe x16 | - | - |
| 4 M.2 M-KEY NVMe | PCIe x16 | - | - |
| 5 M.2 M-KEY NVMe | PCIe x16 | - | PCIe x16 |
| 6 USB Type C | PCIe x16 | - | - |
| 7 M.2 E-KEY WiFi/BT | PCIe x16 | - | - |
| 8 - | - | - | - |
| 9 - | - | - | - |
| 10 UFS/MicroSD | - | - | - |
| 11 PCIE/eSATA | - | - | - |

NVIDIA Jetson AGX Design Configuration

| UPHY | NVHS0 | NVHS1 | PCIE_CTRL |
|---------------------|-------|-------|-------------------|
| 0 - | - | - | M.2 M-Key Storage |
| 1 USB 3.0 Type A | - | - | - |
| 2 M.2 M-Key Lane 0 | - | - | - |
| 3 M.2 M-Key Lane 1 | - | - | M.2 E-KEY WiFi/BT |
| 4 M.2 M-Key Lane 2 | - | - | - |
| 5 M.2 M-Key Lane 3 | - | - | - |
| 6 USB 3.0 type A | - | - | - |
| 7 M.2 E-KEY WiFi/BT | - | - | - |
| 8 - | - | - | - |
| 9 - | - | - | - |
| 10 - | - | - | - |
| 11 USB 3.0 Type A | - | - | - |

Title: Jetson AGX UPHY

Project: Jetson AGX Xavier Carrier Board.PnjPcb

Rev: 1 Reviewer: *

Engineer: Cindy Li, Chealsie Bains

Date: 2021-06-16 Sheet: 10 of 20



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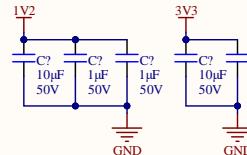
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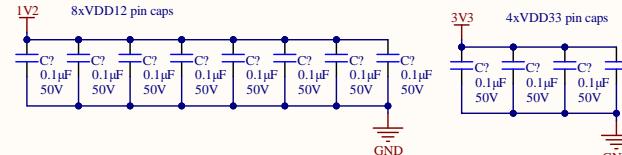
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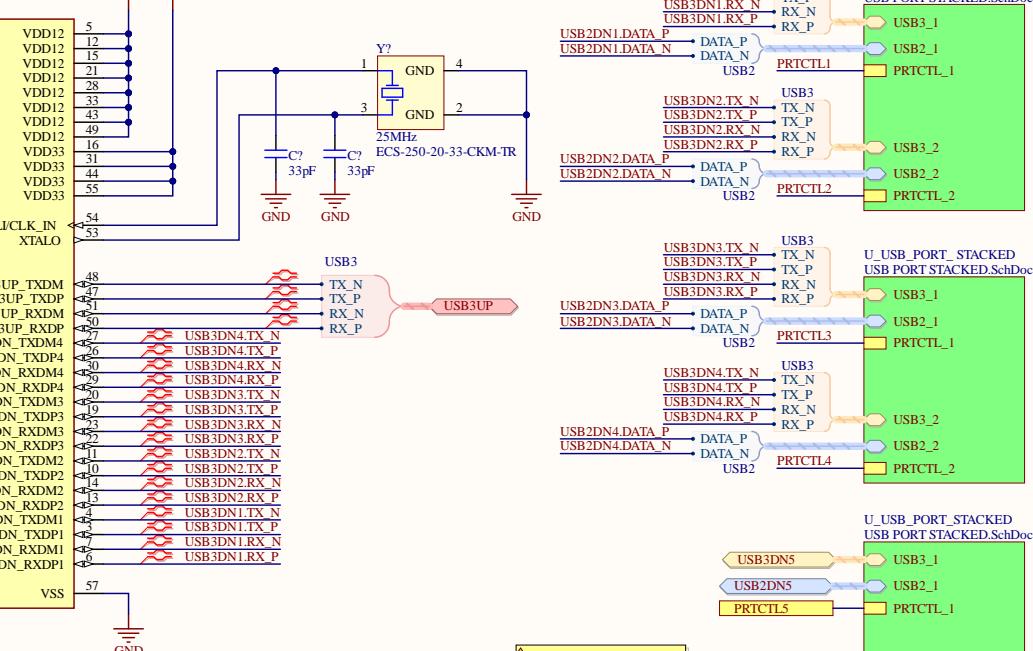
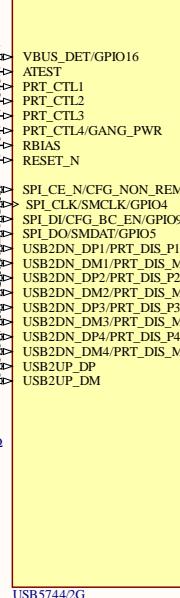
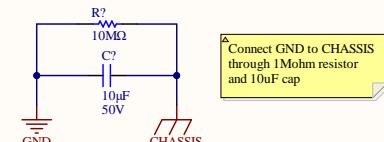
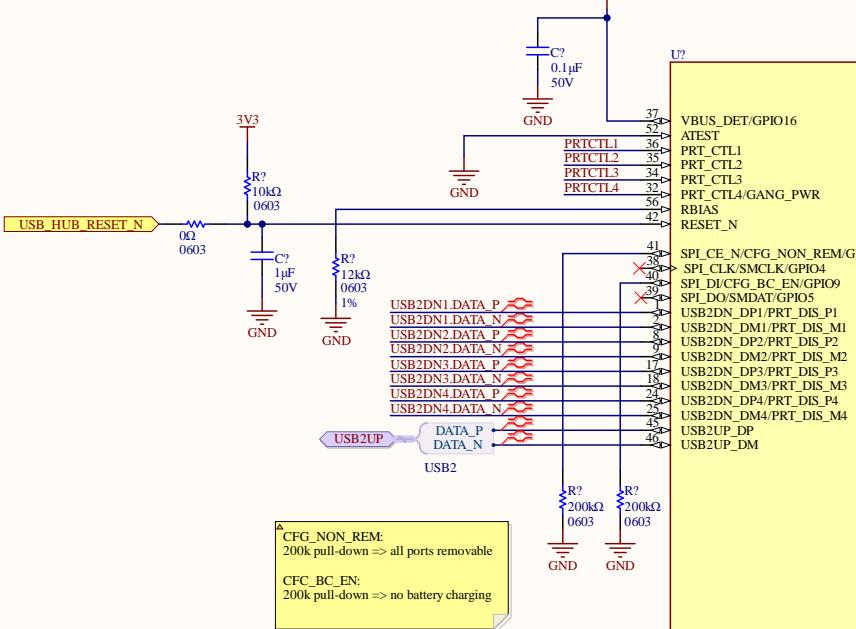
Bulk Capacitors



Decoupling Capacitors



USB Controller



| Title: USB | |
|---|-----------------|
| Project: Jetson AGX Xavier Carrier Board.PnjPcb | |
| Rev: 1 | Reviewer: * |
| Engineer: Cindy Li | |
| Date: 2021-06-16 | Sheet: 11 of 20 |

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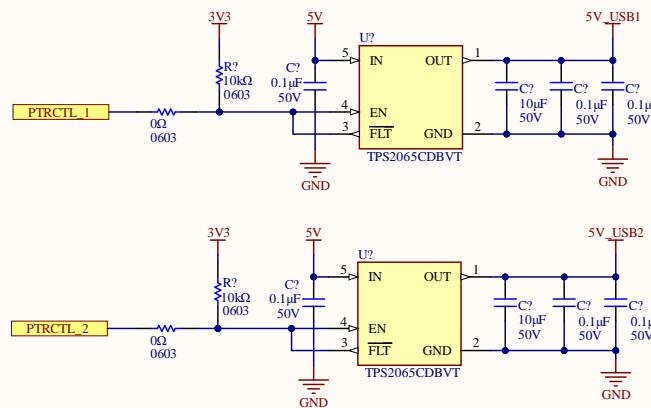
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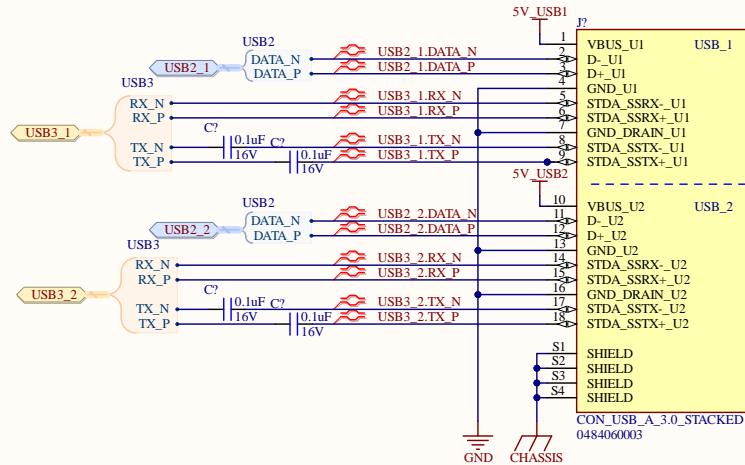
D

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Power Switches

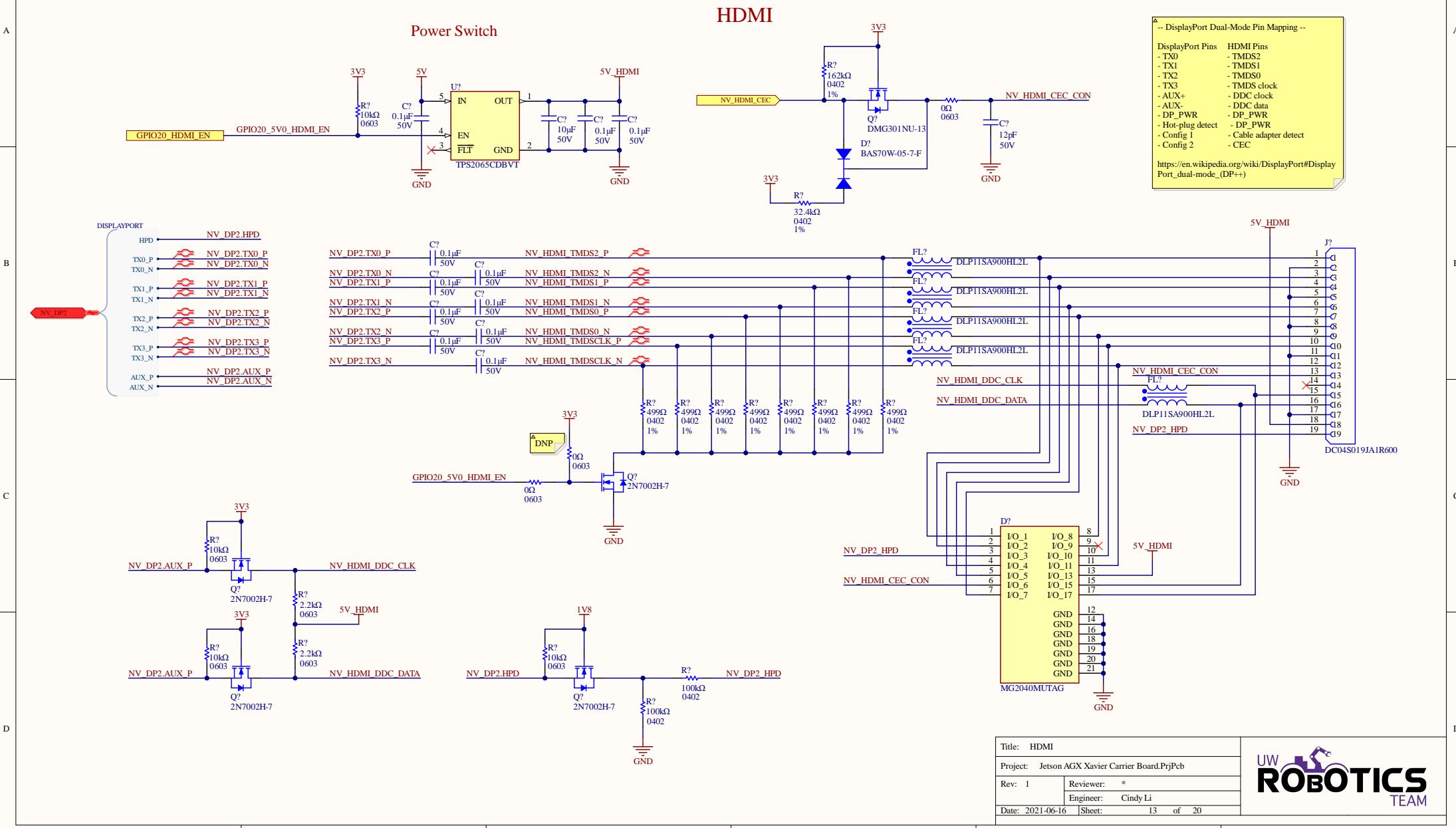


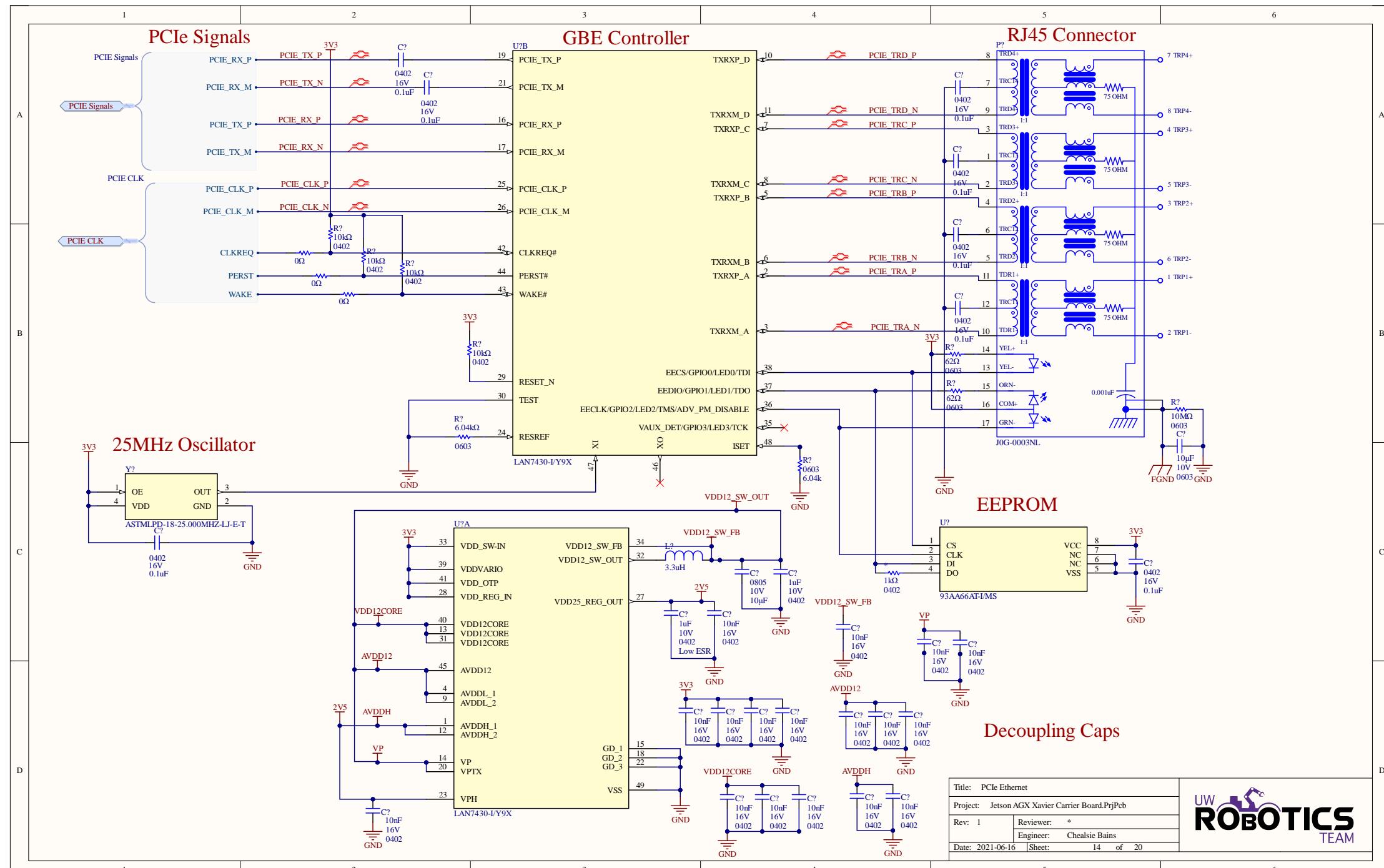
USB Ports

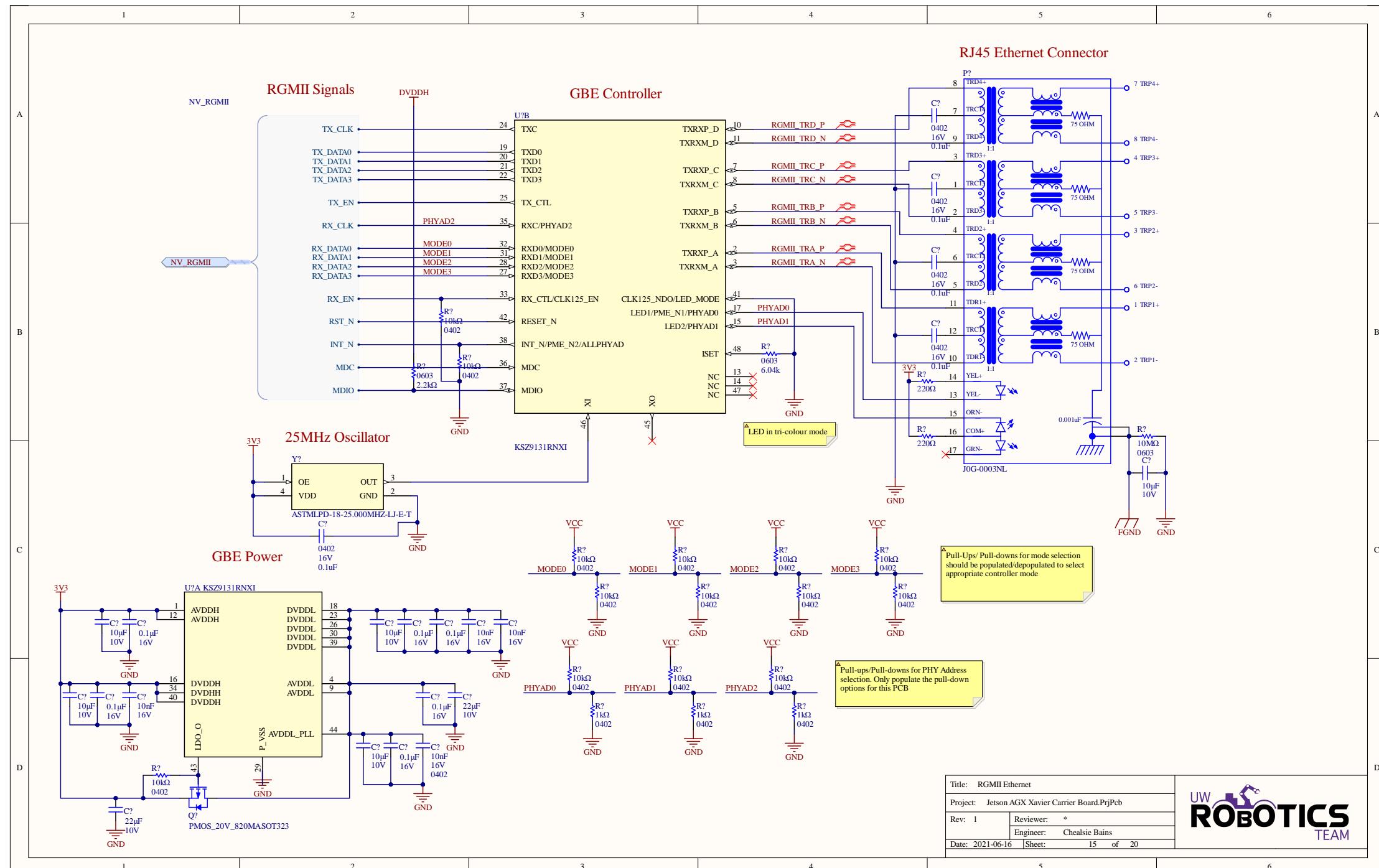


| | |
|---|-----------------|
| Title: USB Port | |
| Project: Jetson AGX Xavier Carrier Board.PnjPcb | |
| Rev: 1 | Reviewer: * |
| Engineer: Cindy Li | |
| Date: 2021-06-16 | Sheet: 12 of 20 |



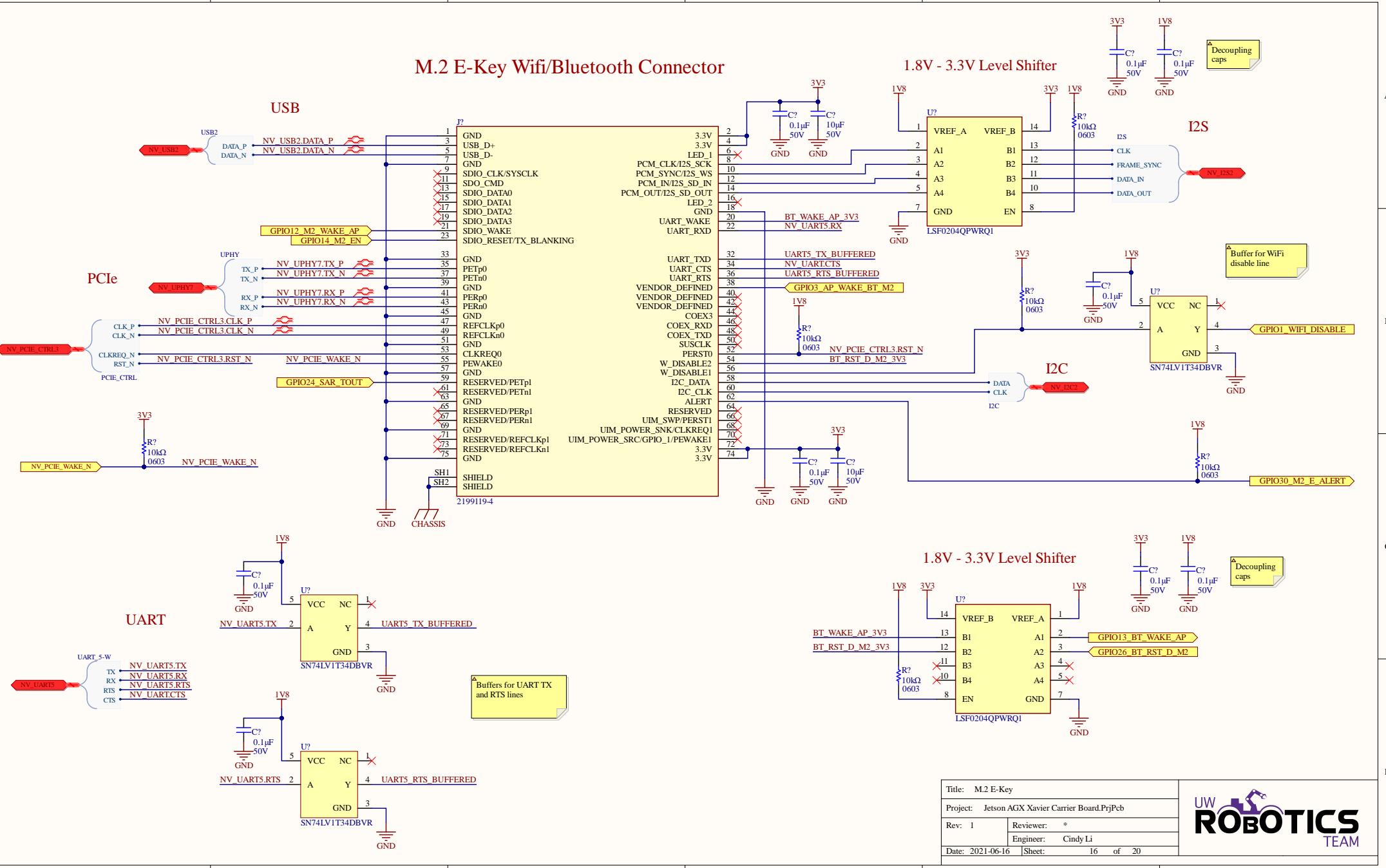






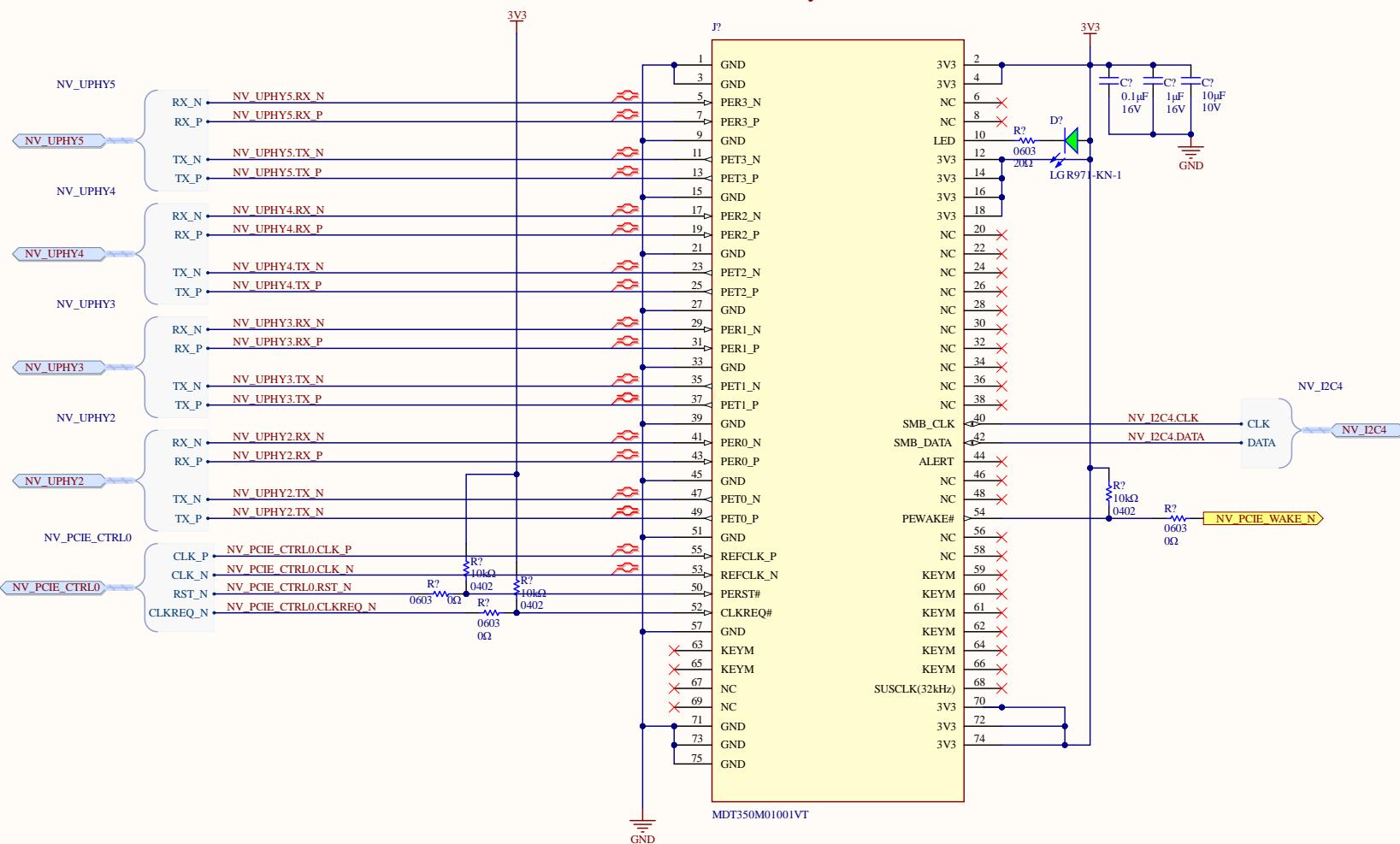
1 2 3 4 5 6

M.2 E-Key Wifi/Bluetooth Connector



1 2 3 4 5 6

M-Key Connector



| | |
|---|--------------------------|
| Title: | M.2 M-Key |
| Project: Jetson AGX Xavier Carrier Board.PrtPcb | |
| Rev: 1 | Reviewer: * |
| | Engineer: Chealsie Bains |



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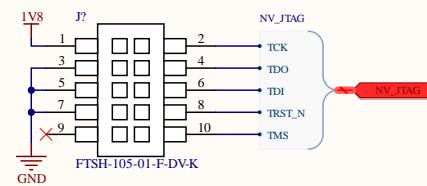
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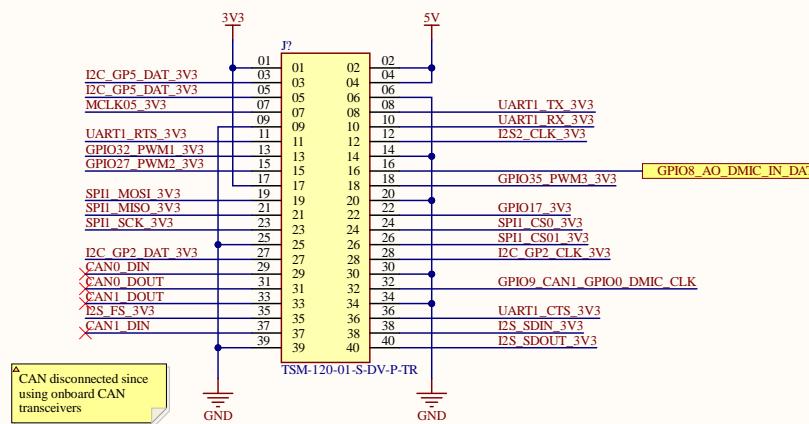
D

JTAG



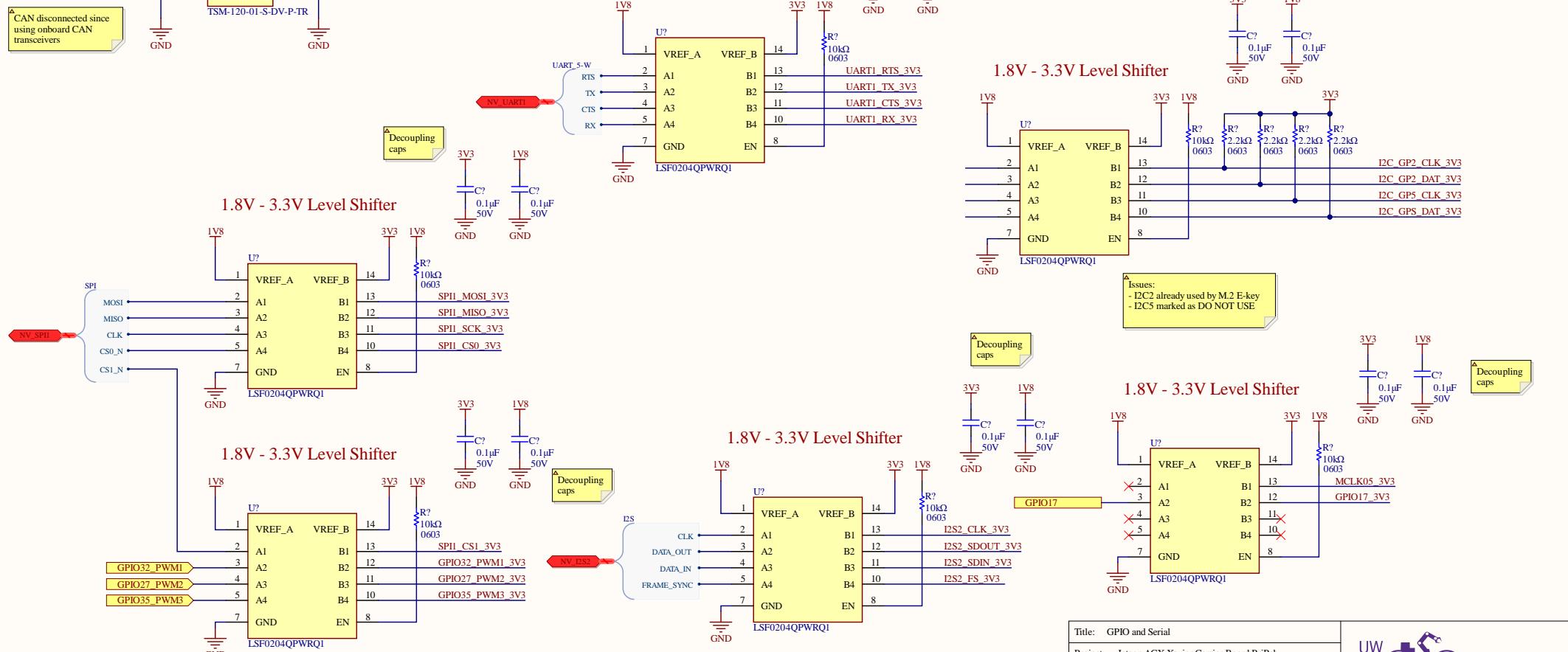
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|---|--------------------|
| Title: JTAG | |
| Project: Jetson AGX Xavier Carrier Board.PnjPcb | |
| Rev: 1 | Reviewer: * |
| | Engineer: Cindy Li |
| Date: 2021-06-16 | Sheet: 18 of 20 |





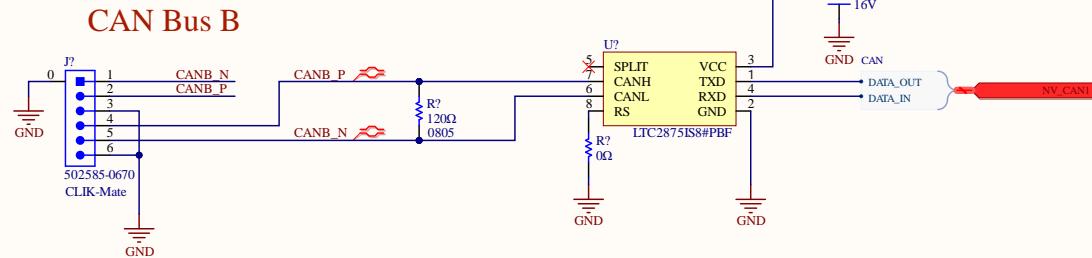
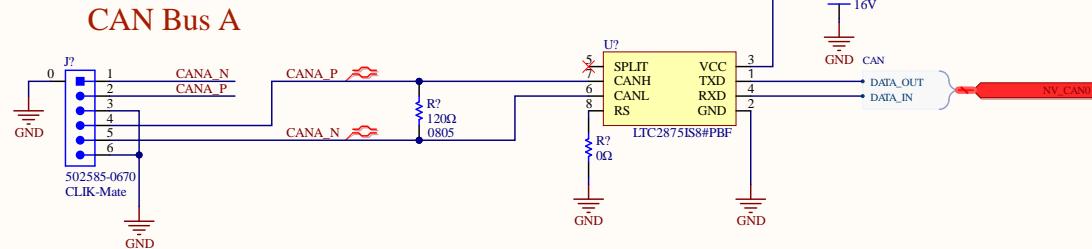
GPIO Expansion

Level shifter IC out of stock, may need to replace



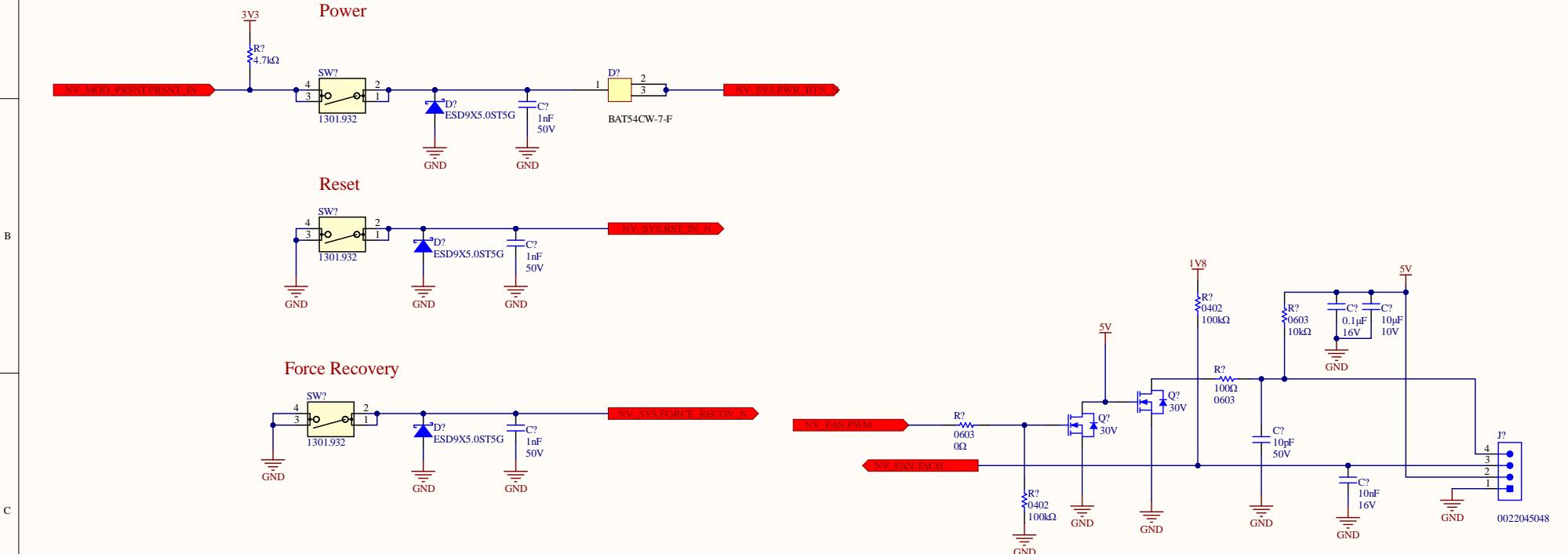
| | |
|--|------------------|
| Title: GPIO and Serial | |
| Project: Jetson AGX Xavier Carrier Board.PjPcb | |
| Rev: 1 | Reviewer: * |
| Engineer: Cindy Li | Date: 2021-06-16 |

CAN Transceivers



| | |
|---|-----------------|
| Title: CAN | |
| Project: Jetson AGX Xavier Carrier Board.PnjPcb | |
| Rev: 1 | Reviewer: * |
| Engineer: Cindy Li | |
| Date: 2021-06-16 | Sheet: 20 of 20 |





| Title | | | Altium Limited L3, 12a Rodborough Rd Frenchs Forest NSW Australia 2086 |
|---|------------------|-----------|--|
| Size: B | Number: | Revision: | |
| Date: 2021-06-16 | Time: 8:18:41 PM | Sheet of | |
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