

A

A

B

B

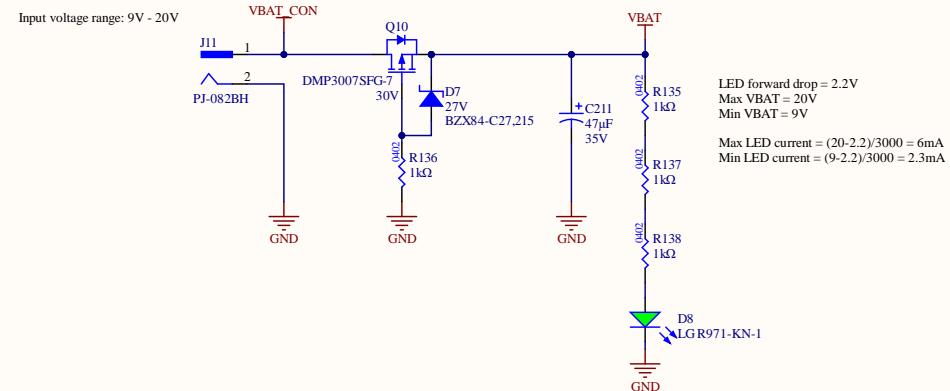
C

C

D

D

## Power Jack      Reverse Polarity Protection



|   |                         |
|---|-------------------------|
| Title: Power Connector                          |                         |
| Project: Jetson AGX Xavier Carrier Board.PnjPcb |                         |
| Rev: 1  | Reviewer: Lance Bantoto |
| Engineer: Cindy Li                              |                         |

Date: 2021-08-01 Sheet: 2 of 26

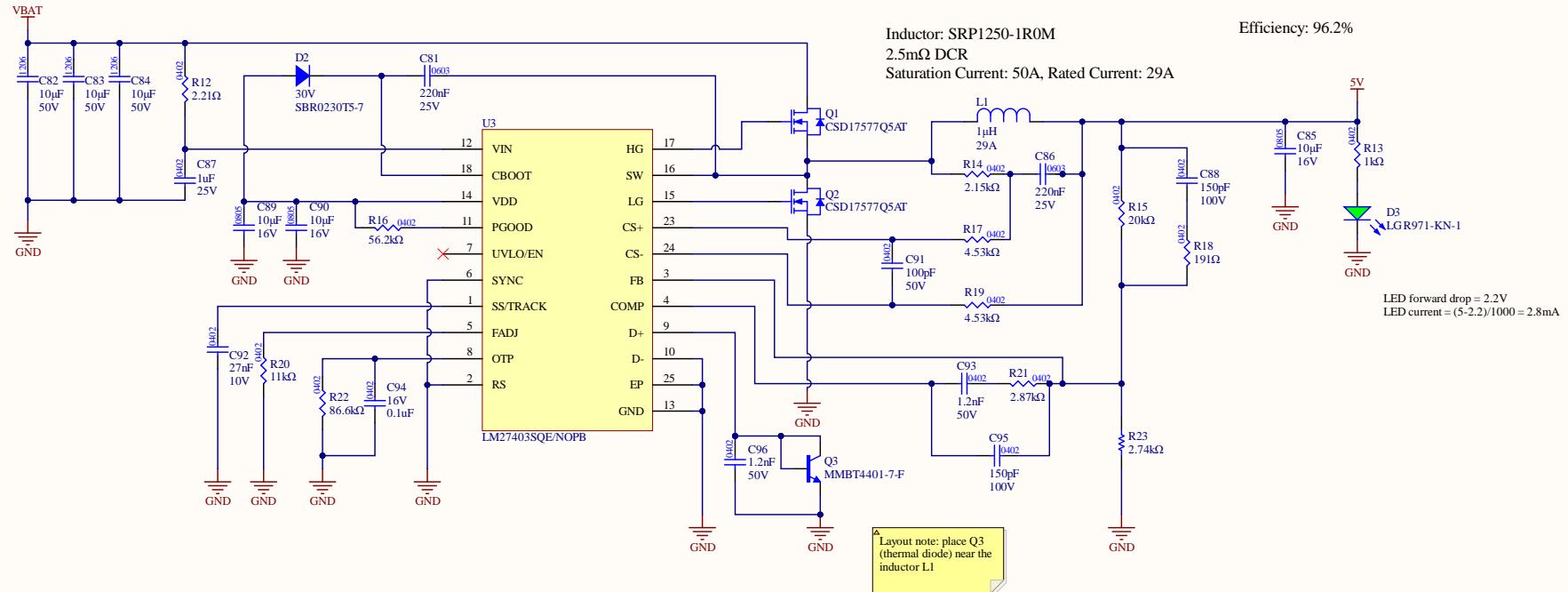


A

A

## 5V Buck Converter @ 16A

Input voltage range: 9V - 20V



Webbench reference design: <https://webbench.ti.com/appinfo/webbench/scripts/SDP.cgi?ID=E23207869D5F0DD4>

|   |                                 |
|---|---------------------------------|
| Title: 5V Power                                 |                                 |
| Project: Jetson AGX Xavier Carrier Board.PnjPcb |                                 |
| Rev: 1  | Reviewer: Lance Bantoto         |
| Engineer: Cindy Li                              | Date: 2021-08-01 Sheet: 3 of 26 |

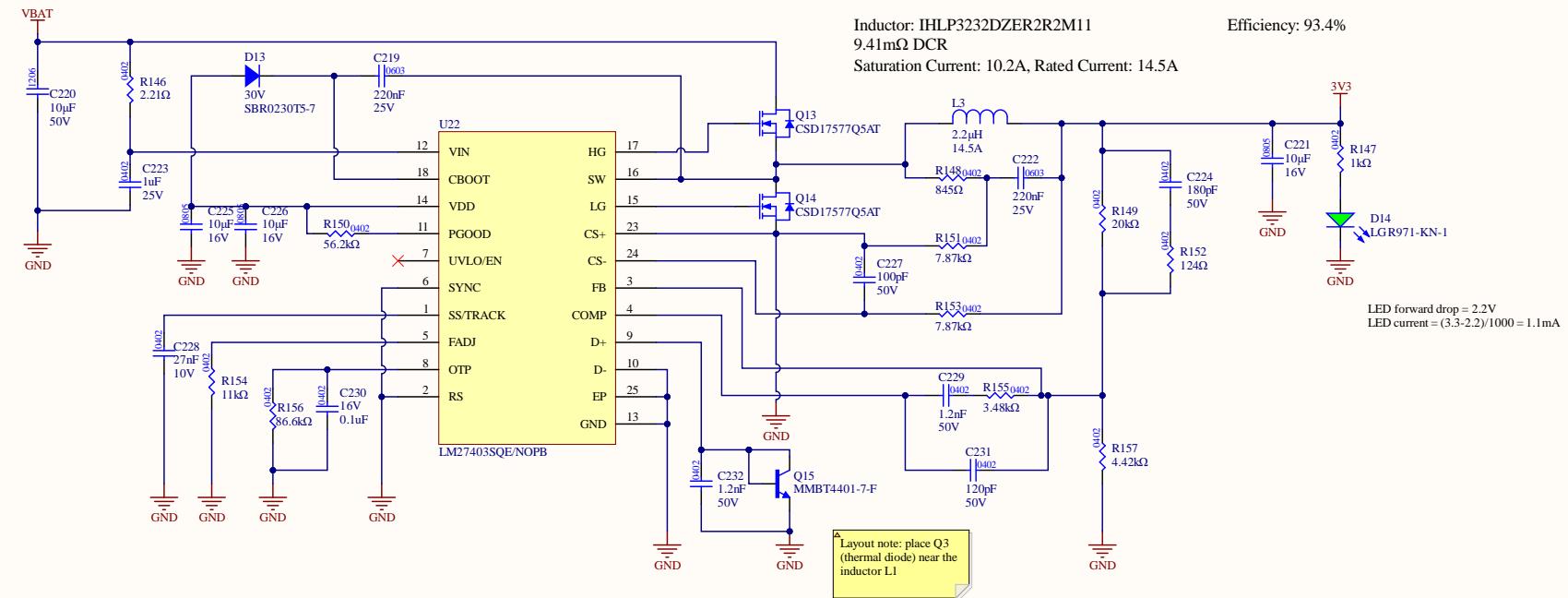


A

A

### 3.3V Buck Converter @ 6A

Input voltage range: 9V - 20V



Webench reference design: <https://webench.ti.com/appinfo/webench/scripts/SDP.cgi?ID=97FD766931642B43>

|                   |  |
|-------------------|--|
| Title: 3.3V Power |  |
| Project:          | Jetson AGX Xavier Carrier Board.PnjPcb |
| Rev: 1            | Reviewer: Lance Bantoto                |
| Engineer:         | Cindy Li                               |
| Date: 2021-08-01  | Sheet: 4 of 26                         |



A

A

B

B

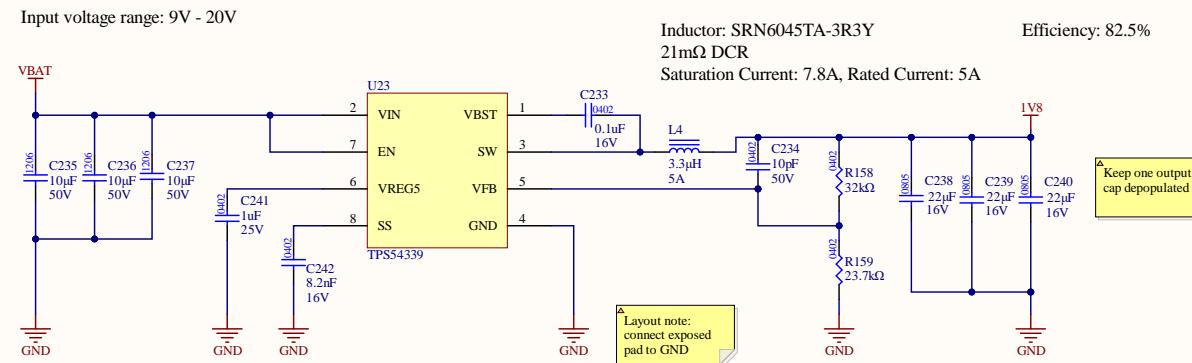
C

C

D

D

## 1.8V Buck Converter @ 2A



|   |                                 |
|---|---------------------------------|
| Title: 1.8V Power                               |                                 |
| Project: Jetson AGX Xavier Carrier Board.PrjPcb |                                 |
| Rev: 1  | Reviewer: Lance Bantoto         |
| Engineer: Cindy Li                              | Date: 2021-08-01 Sheet: 5 of 26 |



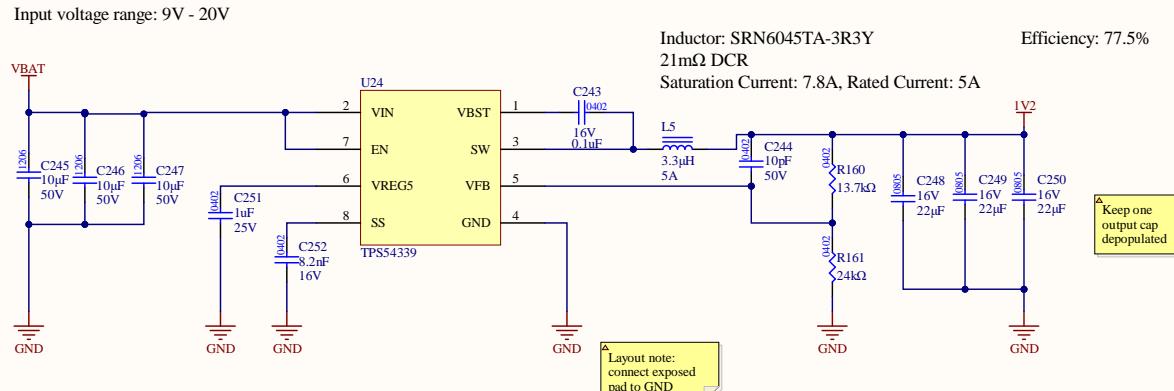
A

A

## 1.2V Buck Converter @ 2A

B

B



C

C

[Webench reference design: https://webench.ti.com/appinfo/webench/scripts/SDP.cgi?ID=348A2FAA81A09D71](https://webench.ti.com/appinfo/webench/scripts/SDP.cgi?ID=348A2FAA81A09D71)

D

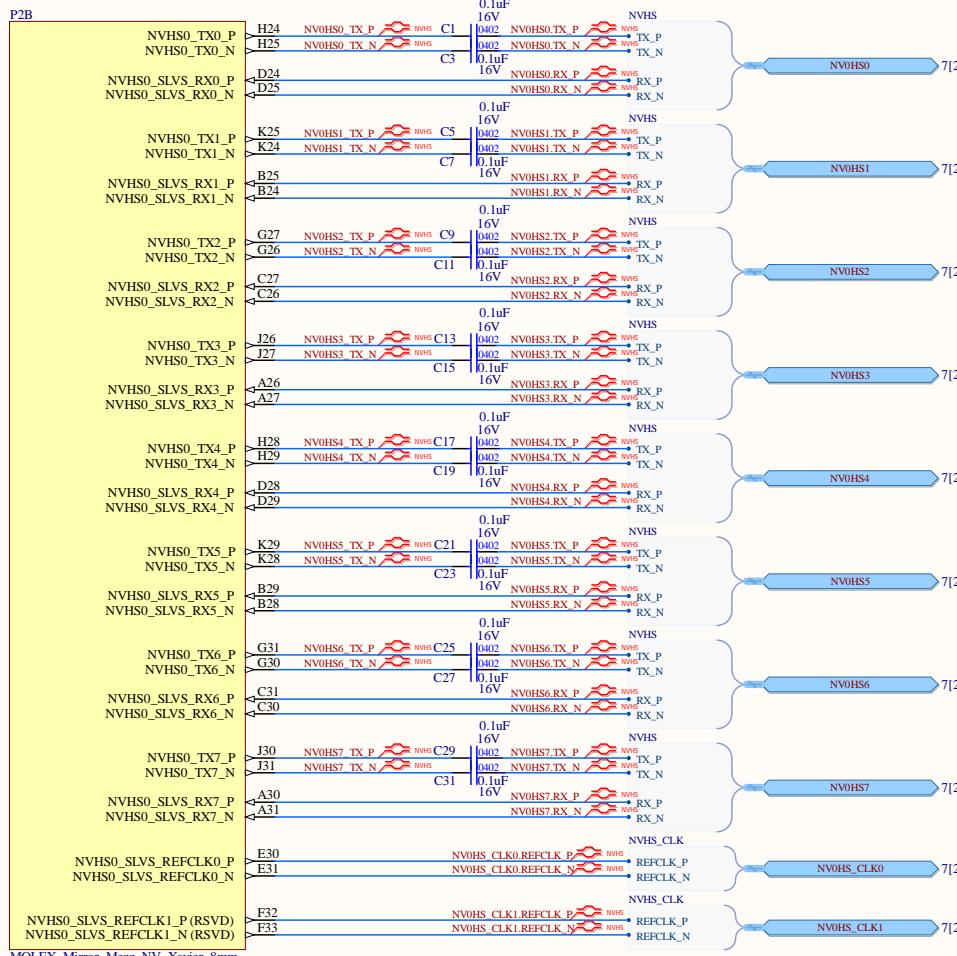
D

|   |                                 |
|---|---------------------------------|
| Title: 1.2V Power                               |                                 |
| Project: Jetson AGX Xavier Carrier Board.PrjPcb |                                 |
| Rev: 1  | Reviewer: Lance Bantoto         |
| Engineer: Cindy Li                              | Date: 2021-08-01 Sheet: 6 of 26 |



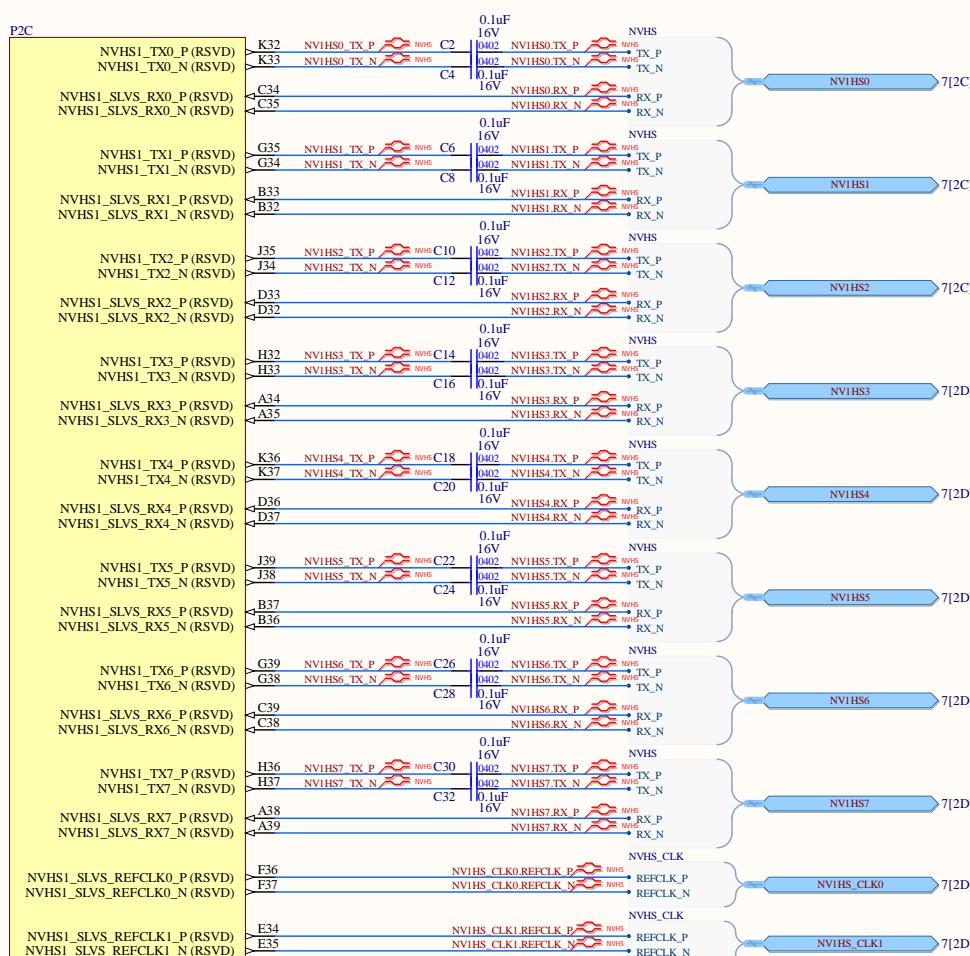


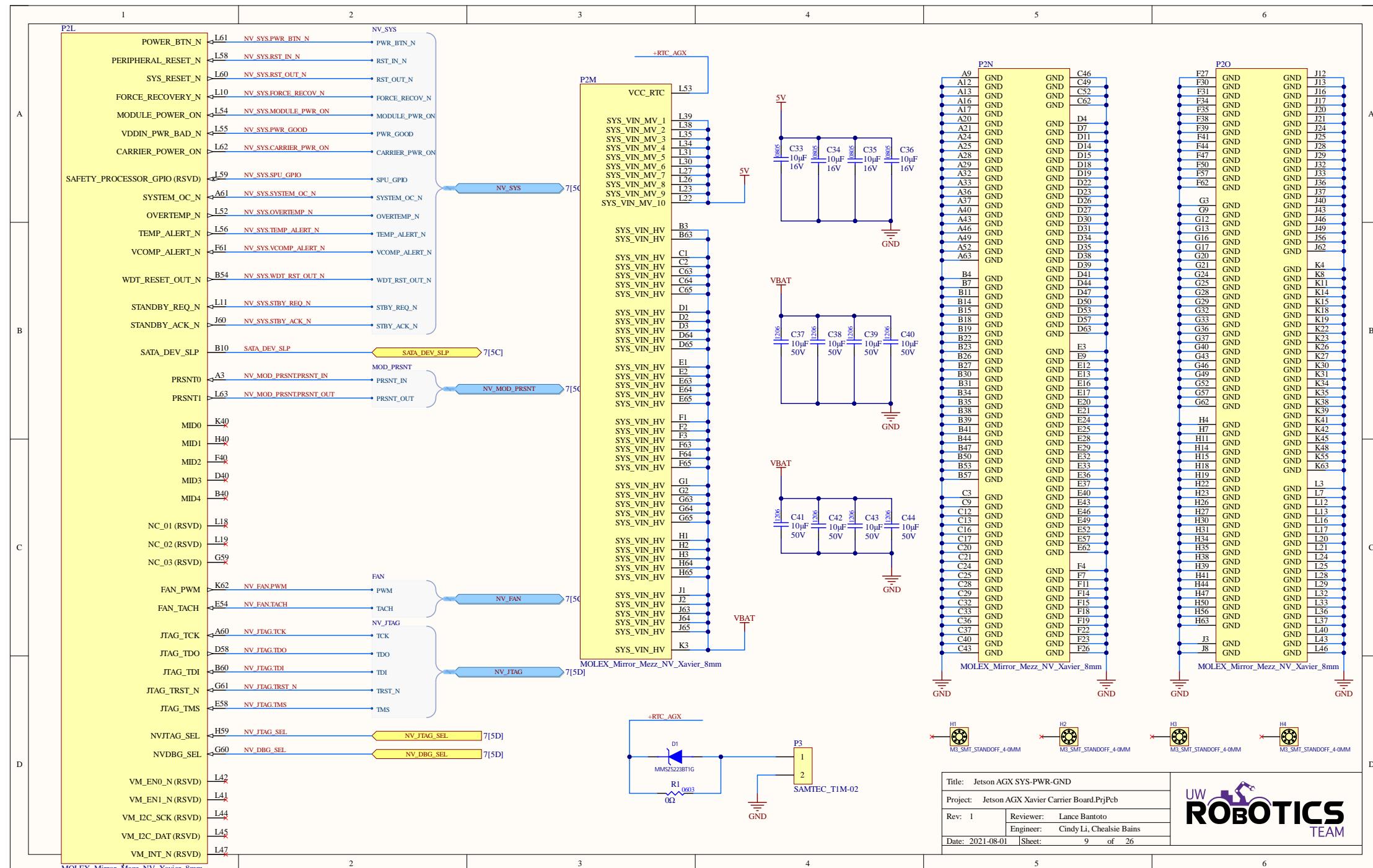
A



MOLEX\_Mirror\_Mezz\_NV\_Xavier\_8mm

B





1 2 3 4 5 6



Title: Jetson AGX SDIO-SPI-UART-CAN-GPIO

Project: Jetson AGX Xavier Carrier Board.PnjPcb

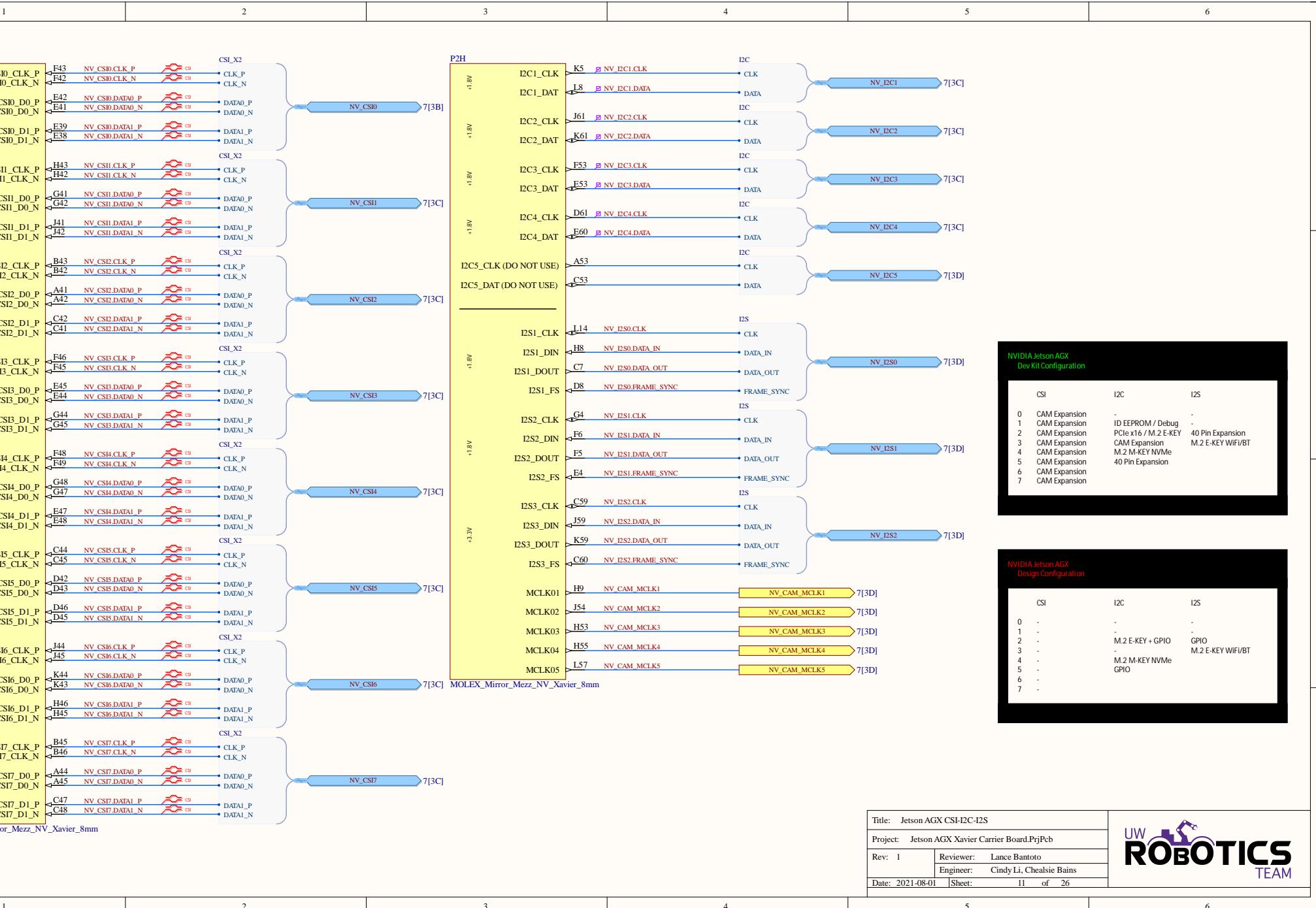
Rev: 1 Reviewer: Lance Bantoto

Engineer: Cindy Li, Chealsine Bains

Date: 2021-08-01 Sheet: 10 of 26



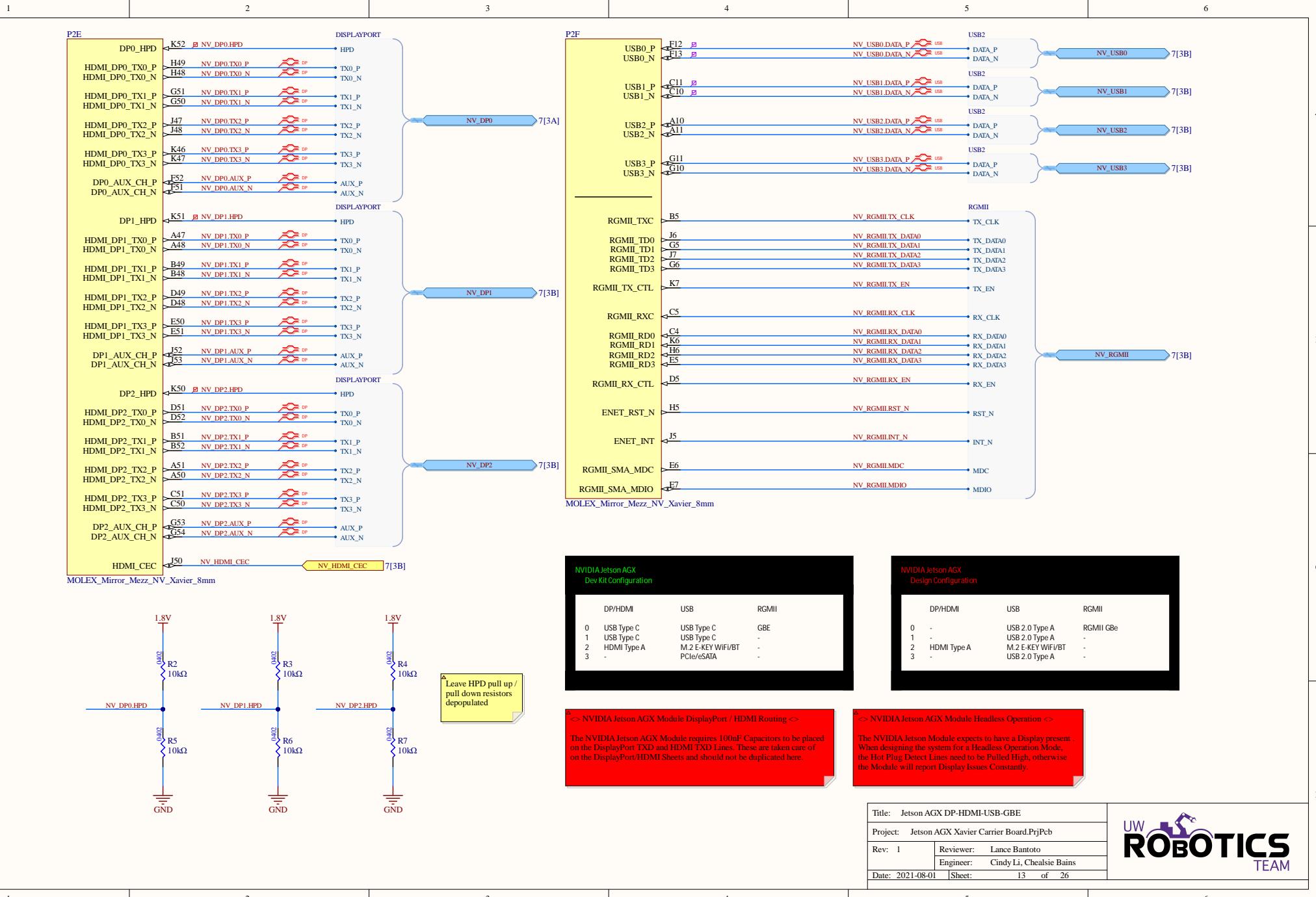
1 2 3 4 5 6





|   |                                  |
|---|----------------------------------|
| Title: Jetson AGX UPHY                          |                                  |
| Project: Jetson AGX Xavier Carrier Board.PnjPcb |                                  |
| Rev: 1  | Reviewer: Lance Bantoto          |
| Engineer: Cindy Li, Chealsie Bains              | Date: 2021-08-01 Sheet: 12 of 26 |





A

A

B

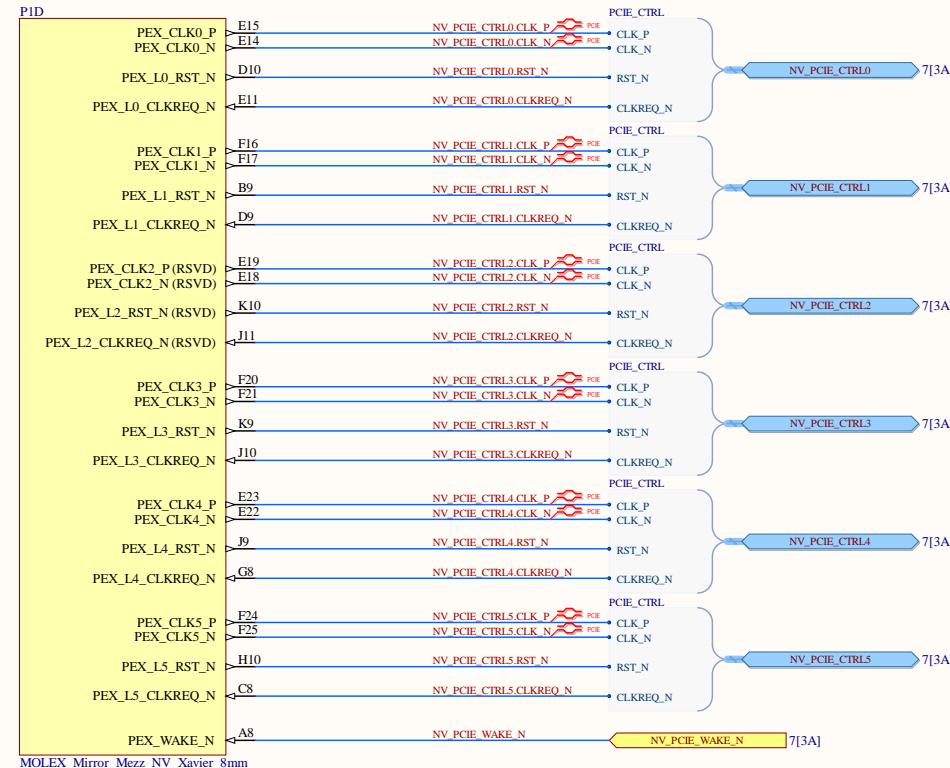
B

C

C

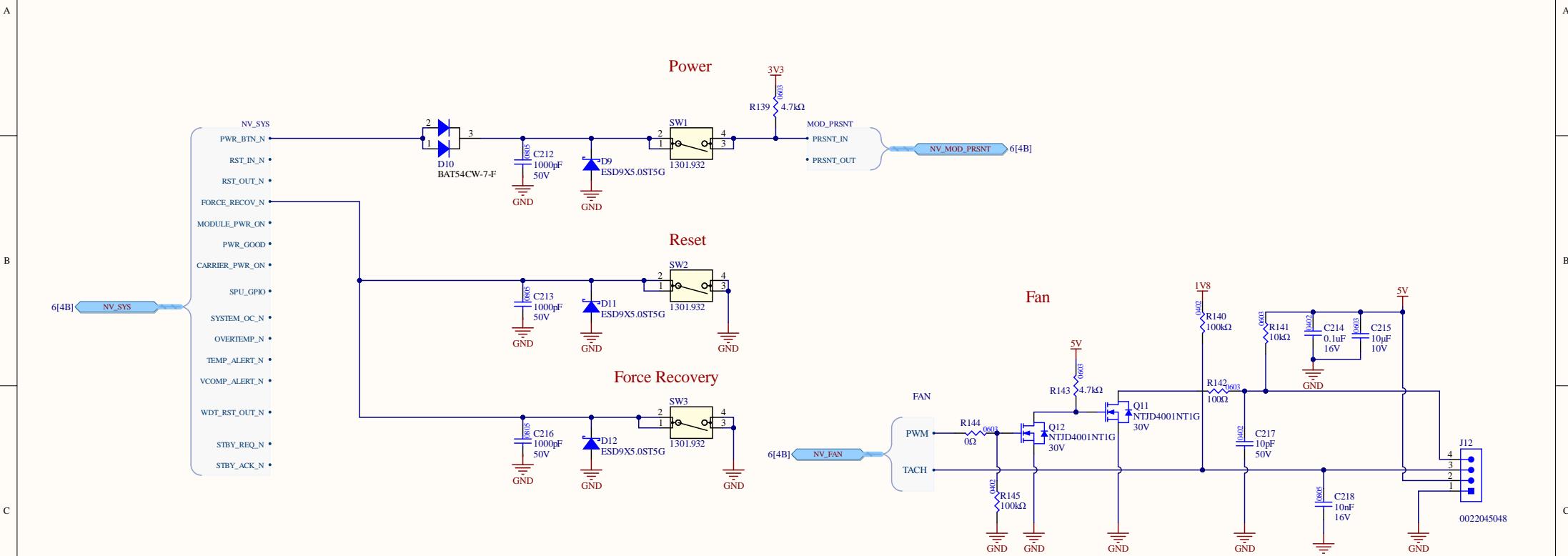
D

D

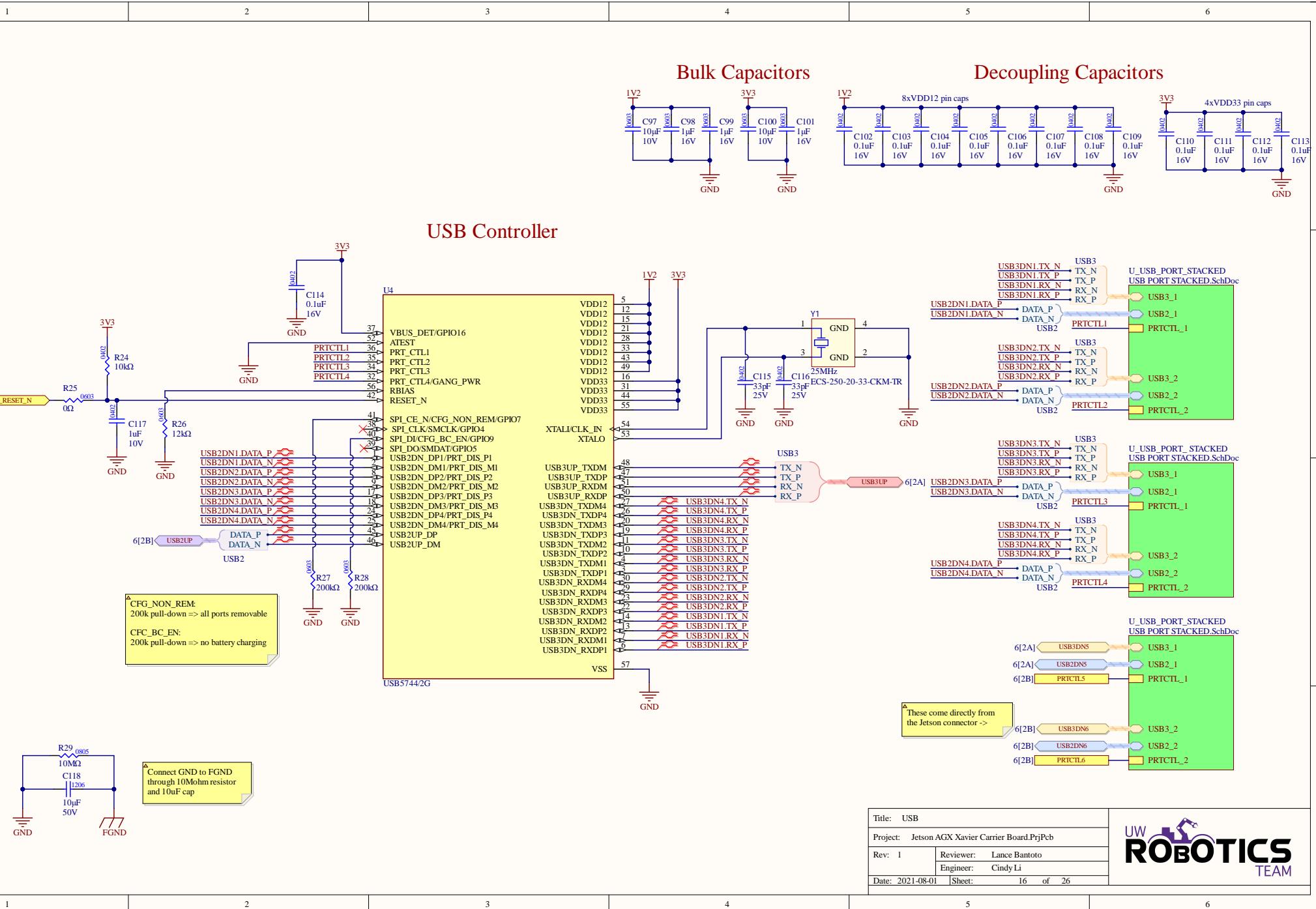


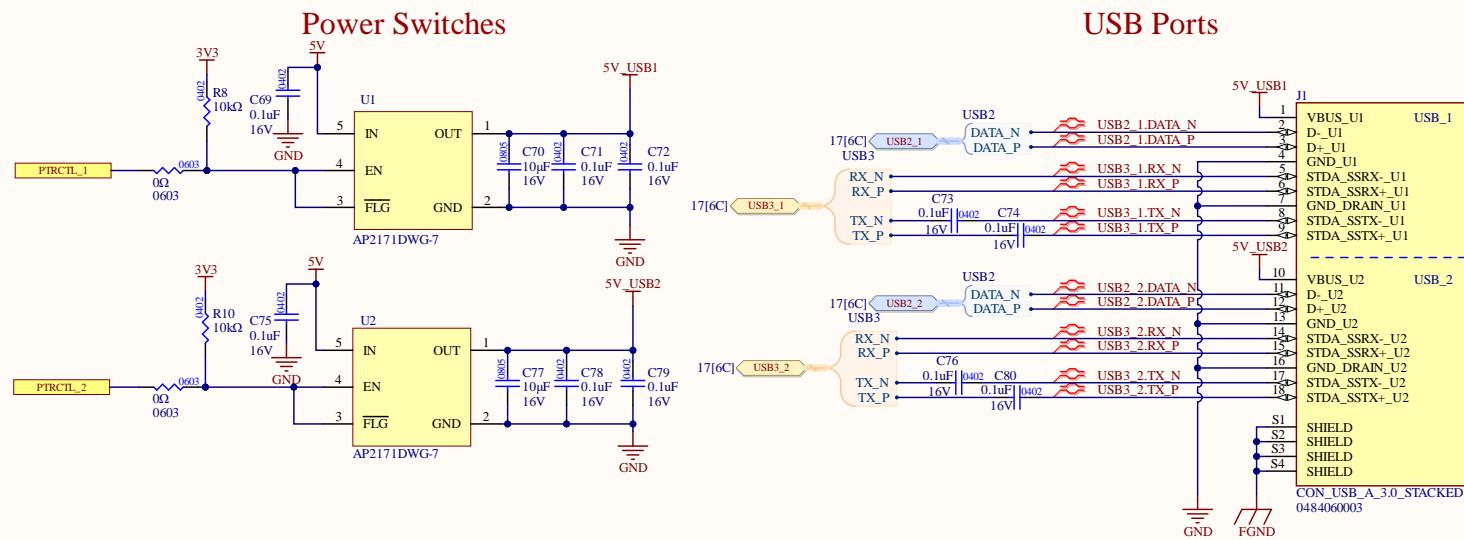
|   |                                  |
|---|----------------------------------|
| Title: Jetson AGX PCIe                          |                                  |
| Project: Jetson AGX Xavier Carrier Board.PnjPcb |                                  |
| Rev: 1  | Reviewer: Lance Bantoto          |
| Engineer: Cindy Li, Chealsie Bains              | Date: 2021-08-01 Sheet: 14 of 26 |



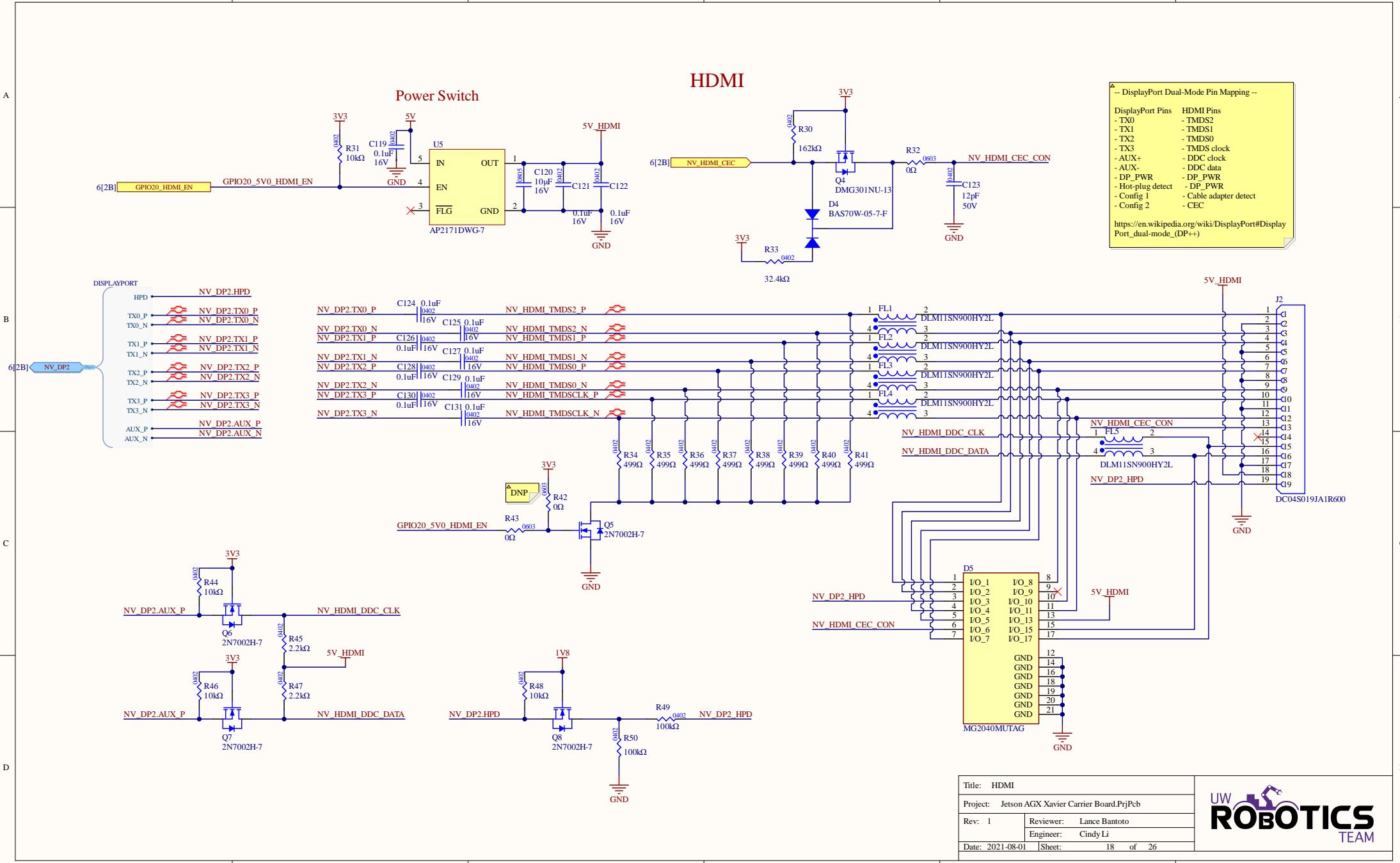


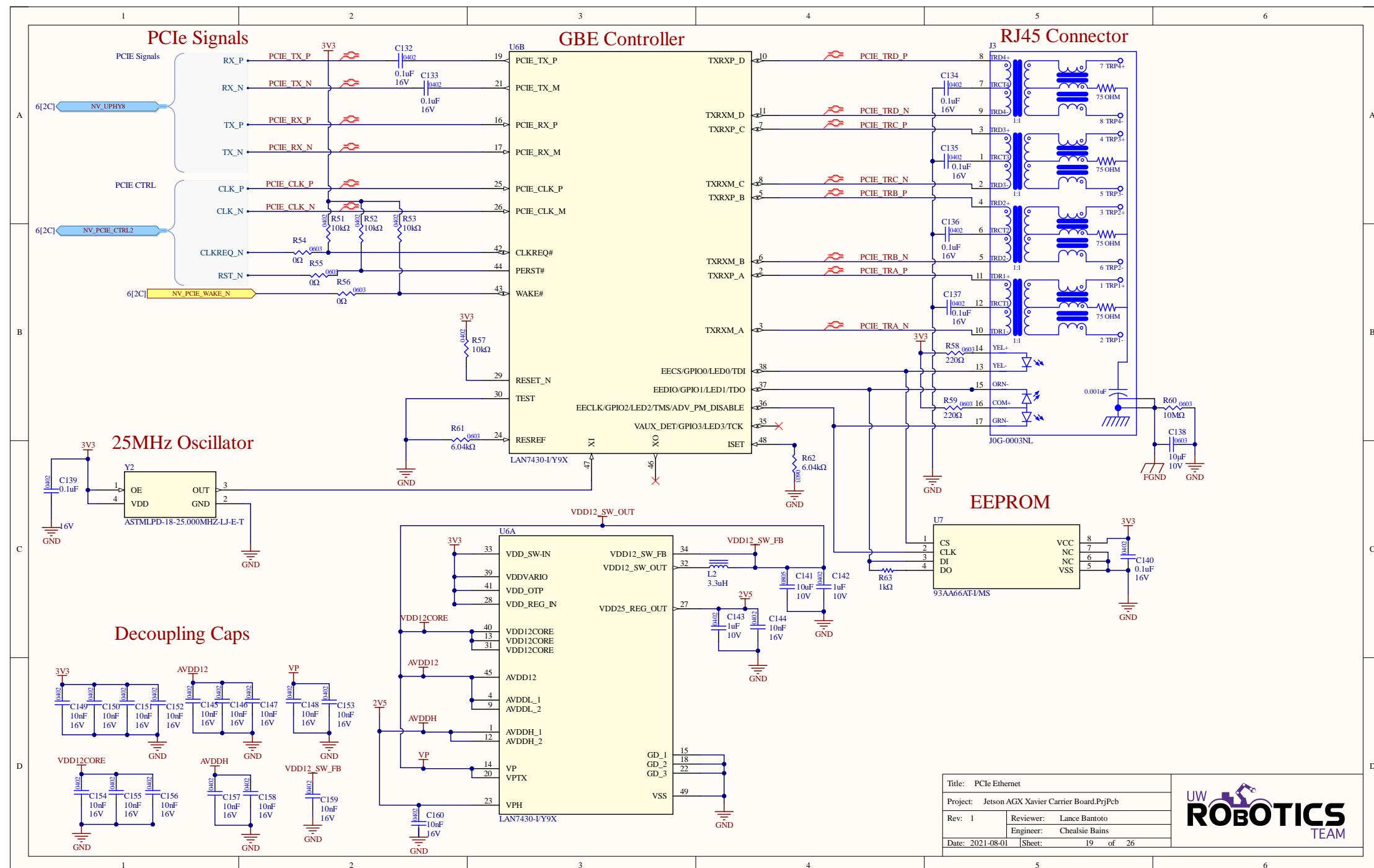
|   |                                  |
|---|----------------------------------|
| Title: System                                   |                                  |
| Project: Jetson AGX Xavier Carrier Board.PrjPcb |                                  |
| Rev: 1  | Reviewer: Lance Bantoto          |
| Engineer: Chealsie Bains                        | Date: 2021-08-01 Sheet: 15 of 26 |

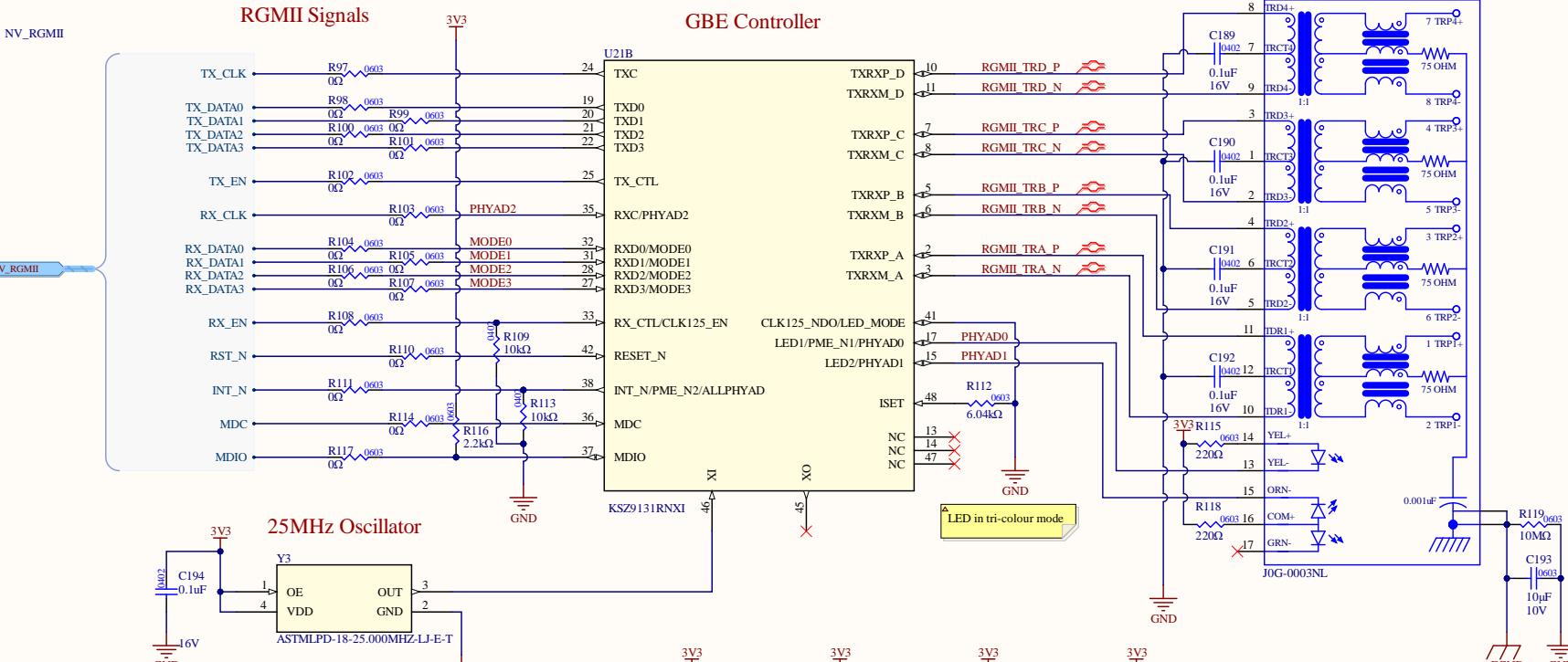




|   |                         |
|---|-------------------------|
| Title: USB Port                                 |                         |
| Project: Jetson AGX Xavier Carrier Board.PnjPcb |                         |
| Rev: 1  | Reviewer: Lance Bantoto |
| Engineer: Cindy Li                              |                         |
| Date: 2021-08-01                                | Sheet: 17 of 26         |





**RJ45 Ethernet Connector**

Title: RGMII Ethernet

Project: Jetson AGX Xavier Carrier Board.PrjPcb

Rev: 1 Reviewer: Lance Bantoto

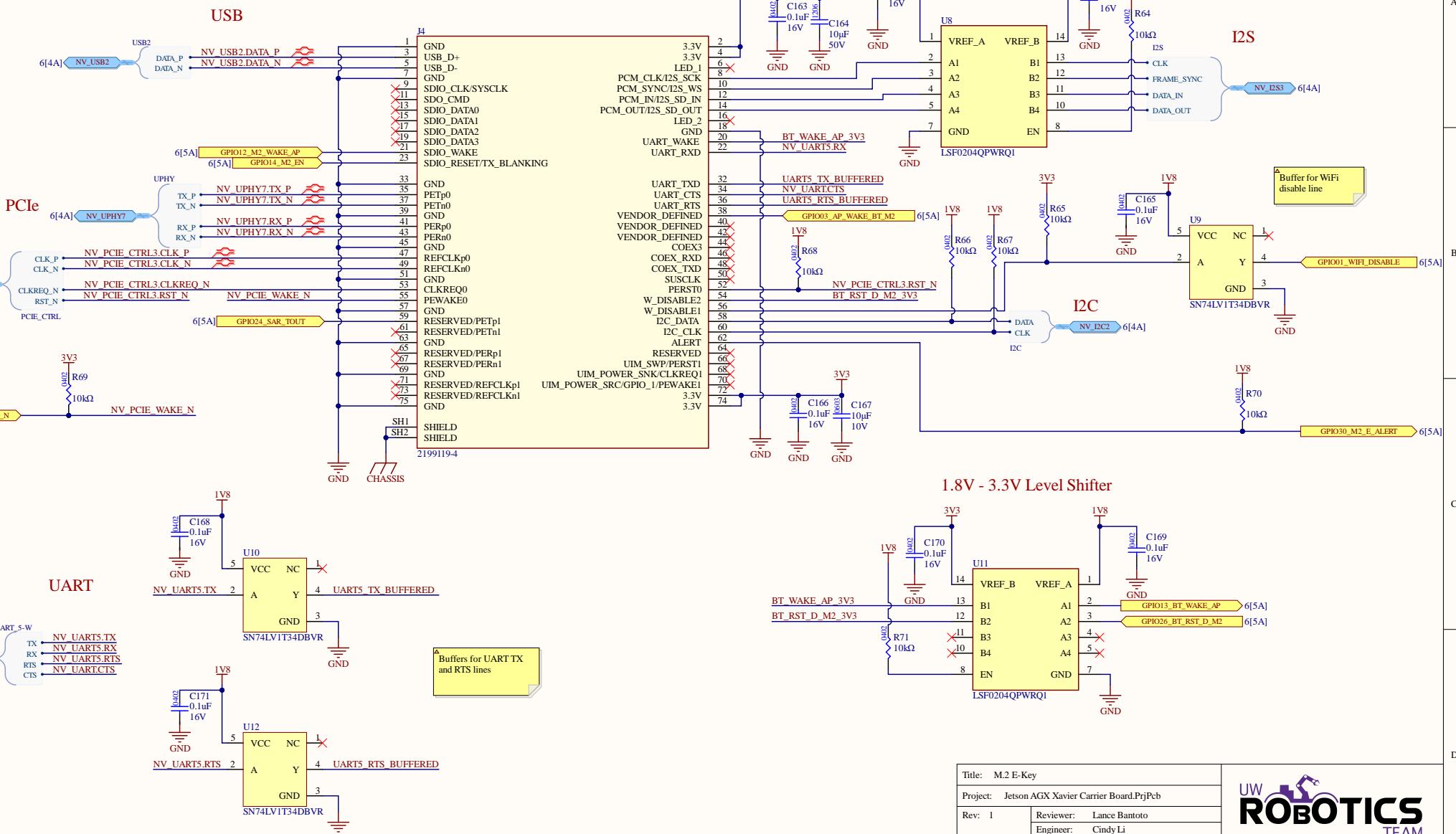
Engineer: Chealsie Bains

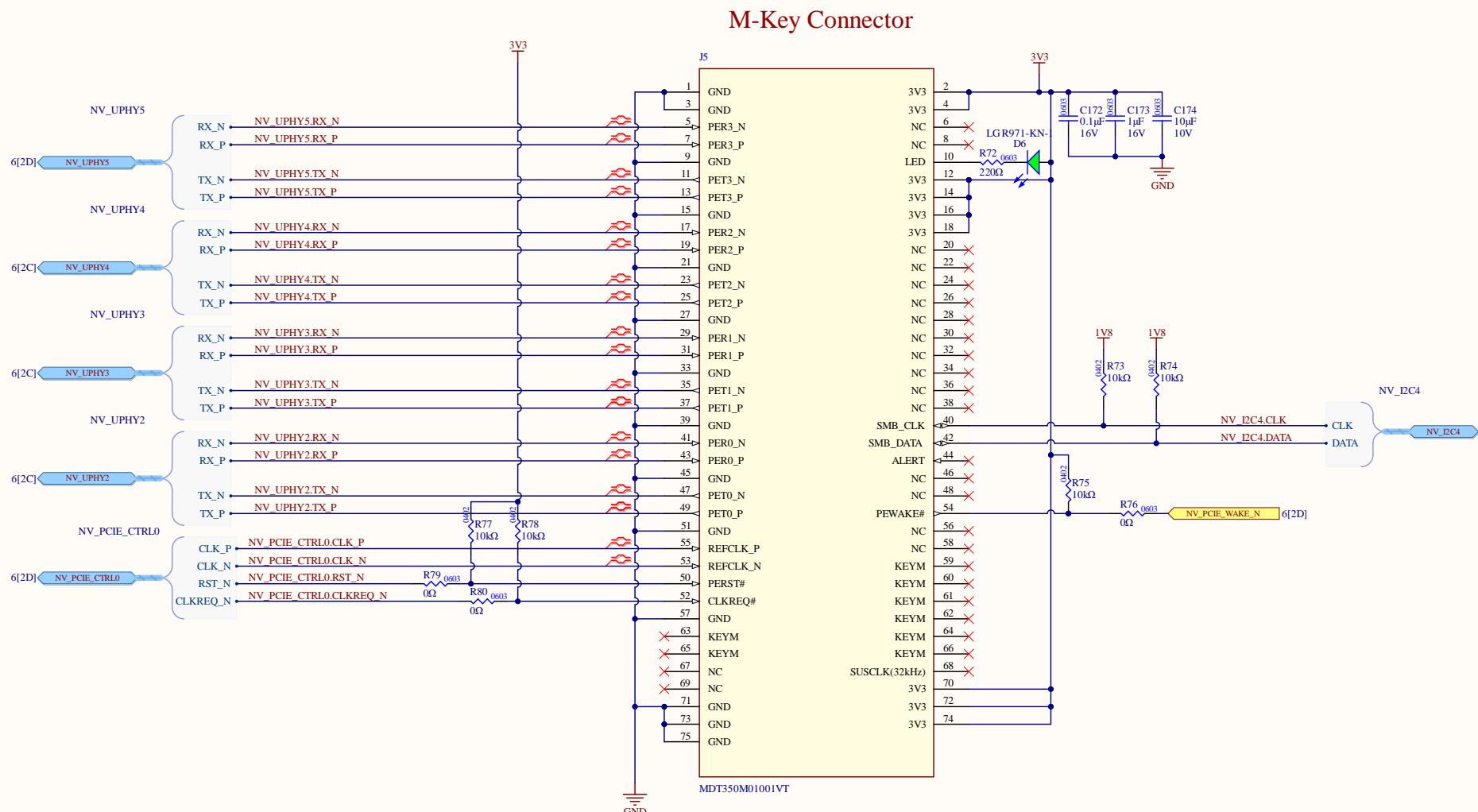
Date: 2021-08-01 Sheet: 20 of 26



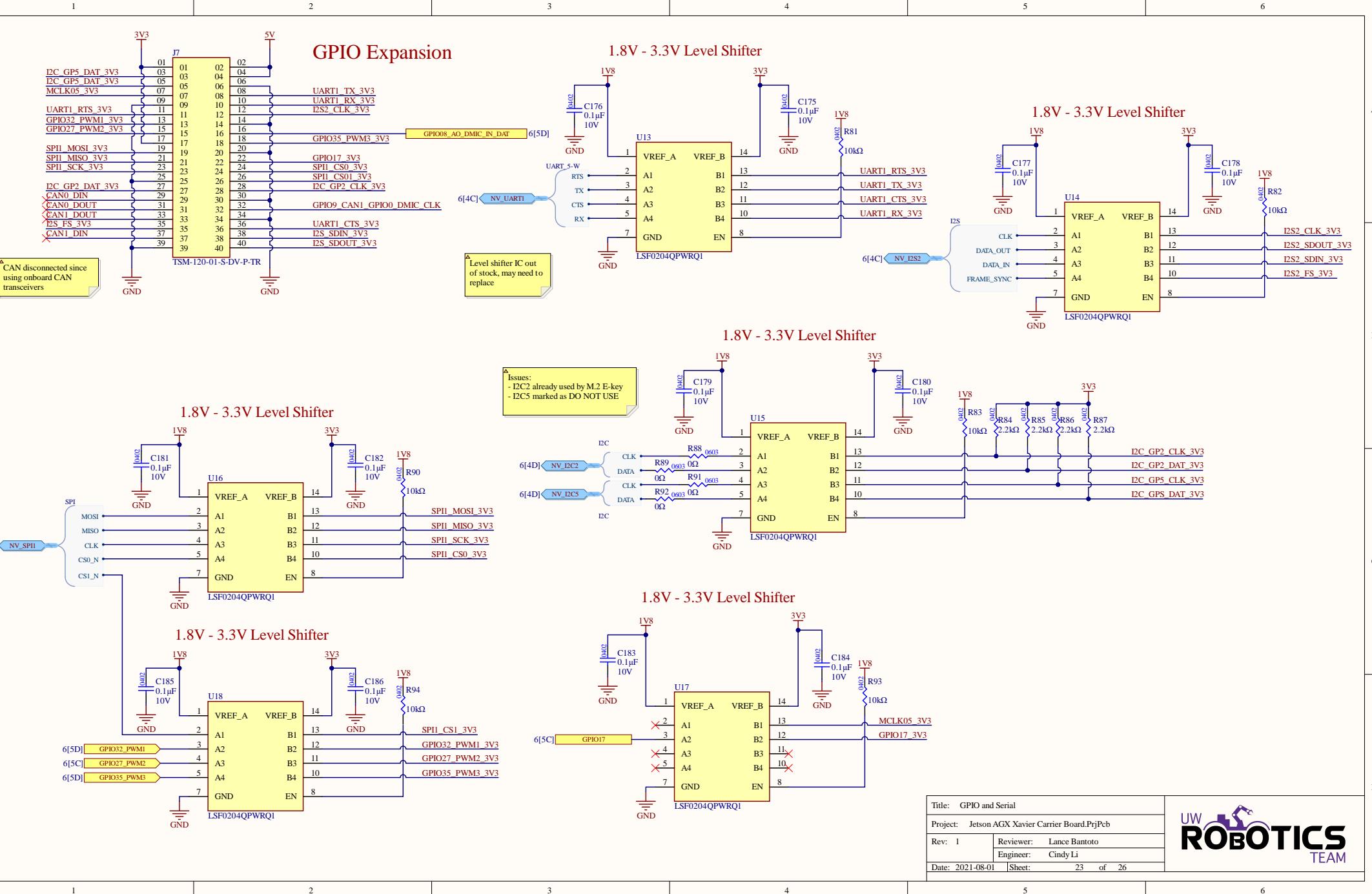
## 1.8V - 3.3V Level Shifter

## M.2 E-Key Wifi/Bluetooth Connector

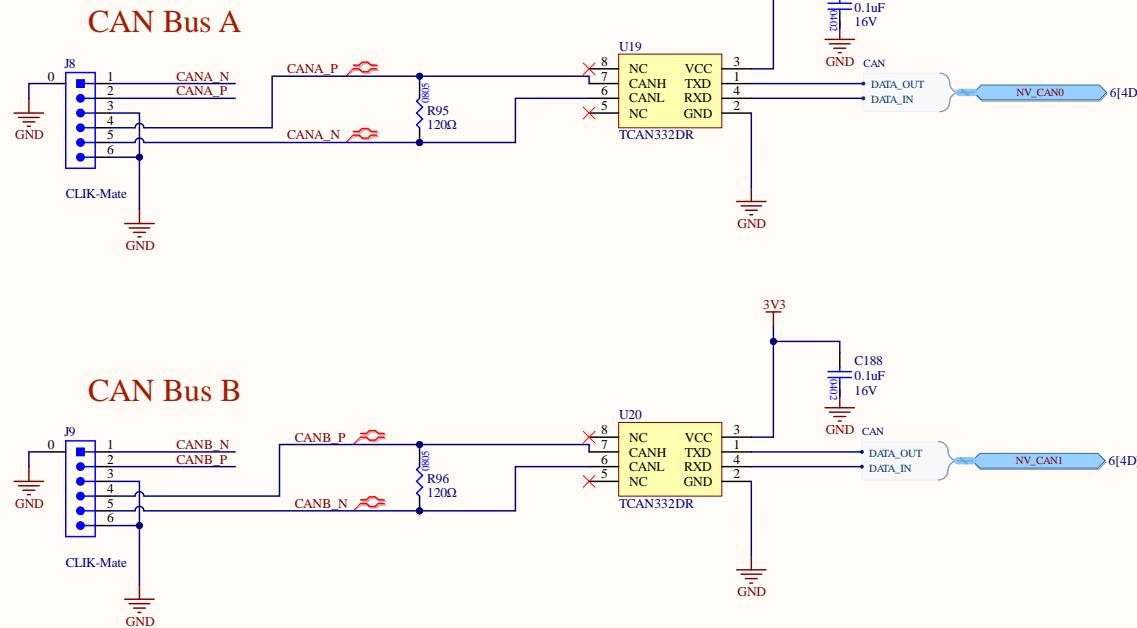




|   |                                  |
|---|----------------------------------|
| Title: M.2 M-Key                                |                                  |
| Project: Jetson AGX Xavier Carrier Board.PrjPcb |                                  |
| Rev: 1  | Reviewer: Lance Bantoto          |
| Engineer: Chealsie Bains                        | Date: 2021-08-01 Sheet: 22 of 26 |



# CAN Transceivers

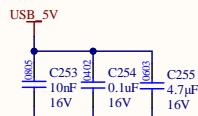


|   |                         |
|---|-------------------------|
| Title: CAN                                      |                         |
| Project: Jetson AGX Xavier Carrier Board.PnjPcb |                         |
| Rev: 1  | Reviewer: Lance Bantoto |
| Engineer: Cindy Li                              |                         |
| Date: 2021-08-01                                | Sheet: 24 of 26         |



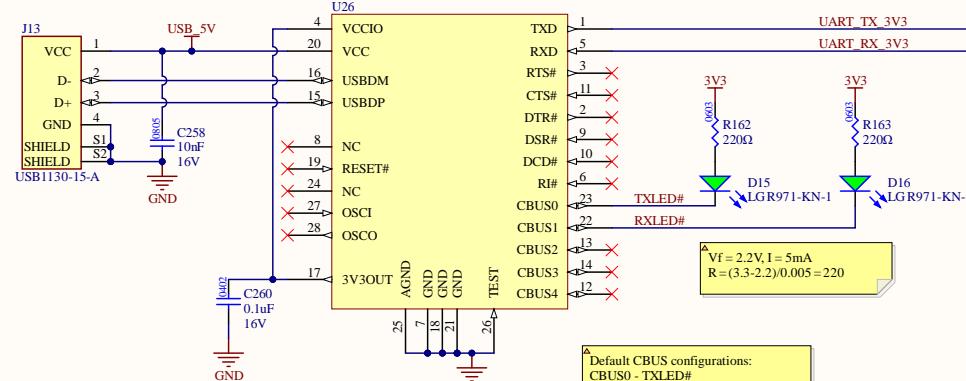
A

A



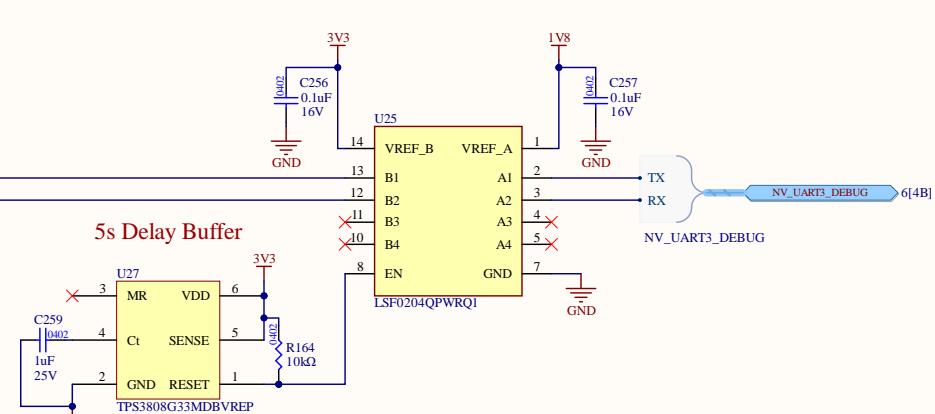
### UART to USB

#### USB-A 2.0 Connector



Default CBUS configurations:  
CBUS0 - TXLED#  
CBUS1 - RXLED#  
CBUS2 - TXDEN  
CBUS3 - PWREN#  
CBUS4 - SLEEP#

### 1.8V - 3.3V Level Shifter



Title: Debug UART

Project: Jetson AGX Xavier Carrier Board.PjPcb

Rev: 1 Reviewer: Lance Bantoto

Engineer: Chealsie Bains

Date: 2021-08-01 Sheet: 25 of 26

A

A

B

B

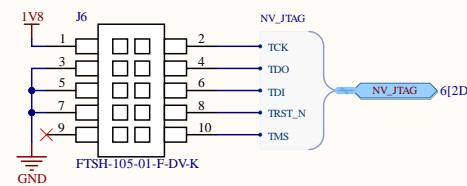
C

C

D

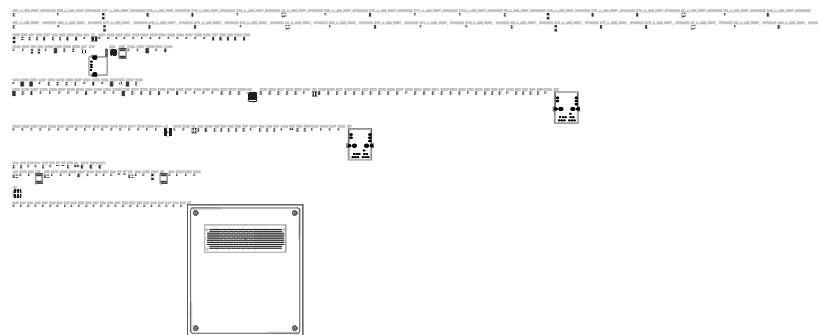
D

## JTAG



|   |                         |
|---|-------------------------|
| Title: JTAG                                     |                         |
| Project: Jetson AGX Xavier Carrier Board.PrjPcb |                         |
| Rev: 1  | Reviewer: Lance Bantoto |
|   | Engineer: Cindy Li      |
| Date: 2021-08-01                                | Sheet: 26 of 26         |





20'-0"



# Board Stack Report