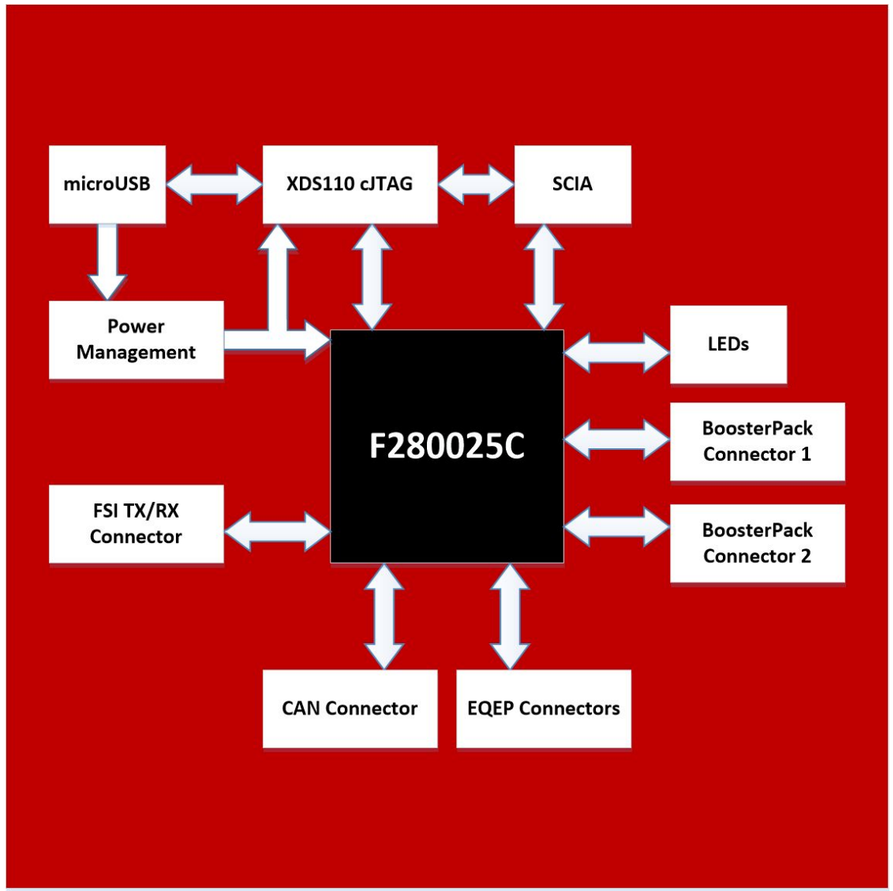




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|---|---|---|---|
| Orderable: LAUNCHXL-F280025C | | Designed for: Public Release | Mod. Date: 2/2/2022 |
| TID #: N/A | | Project Title: LAUNCHXL-F280025C | |
| Number: MCU089 | Rev: B | Sheet Title: | |
| SVN Rev: Not in version control | | Assembly Variant: 001 | Sheet: 1 of 8 |
| Drawn By: | | File: MCU089B_Block_Diagram.SchDoc | Size: B |
| Engineer: Kevin Allen | | Contact: http://www.ti.com/support | |

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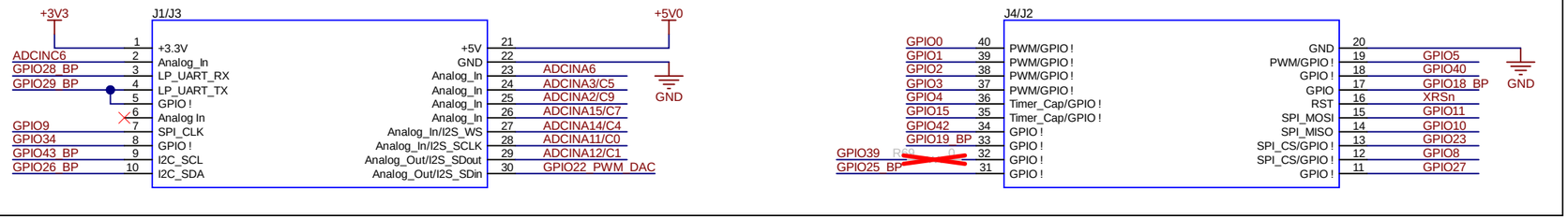
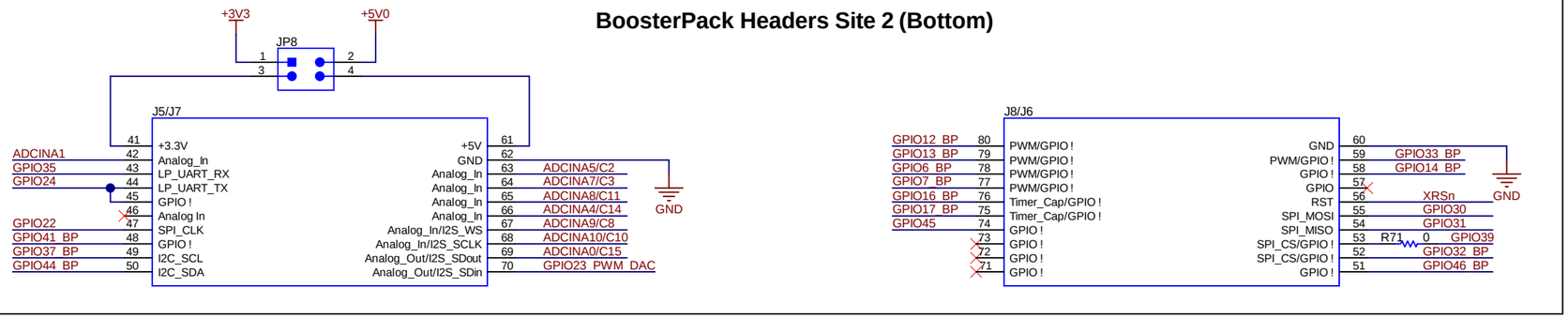
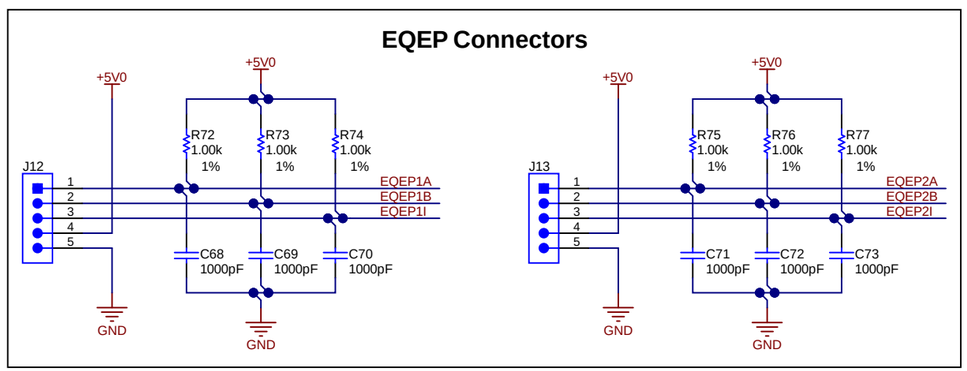
## BoosterPack Headers Site 1 (Top)



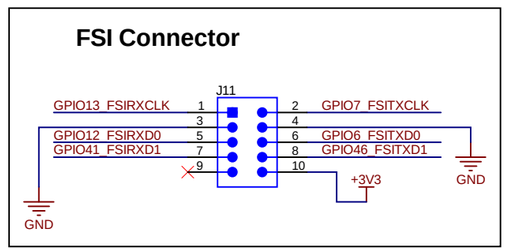

## BoosterPack Headers Site 2 (Bottom)



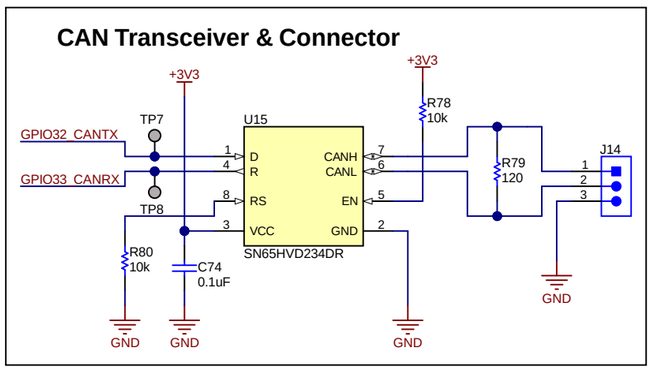

## EQEP Connectors




## FSI Connector




## CAN Transceiver & Connector






| | | | |
|---|---|---|---|
| Orderable: LAUNCHXL-F280025C | | Designed for: Public Release | Mod. Date: 2/2/2022 |
| TID #: N/A | | Project Title: LAUNCHXL-F280025C | |
| Number: MCU089 | Rev: B | Sheet Title: | |
| SVN Rev: Not in version control | | Assembly Variant: 001 | Sheet: 2 of 8 |
| Drawn By: | | File: MCU089B_Connectors.SchDoc | Size: B |
| Engineer: Kevin Allen | | Contact: http://www.ti.com/support | |

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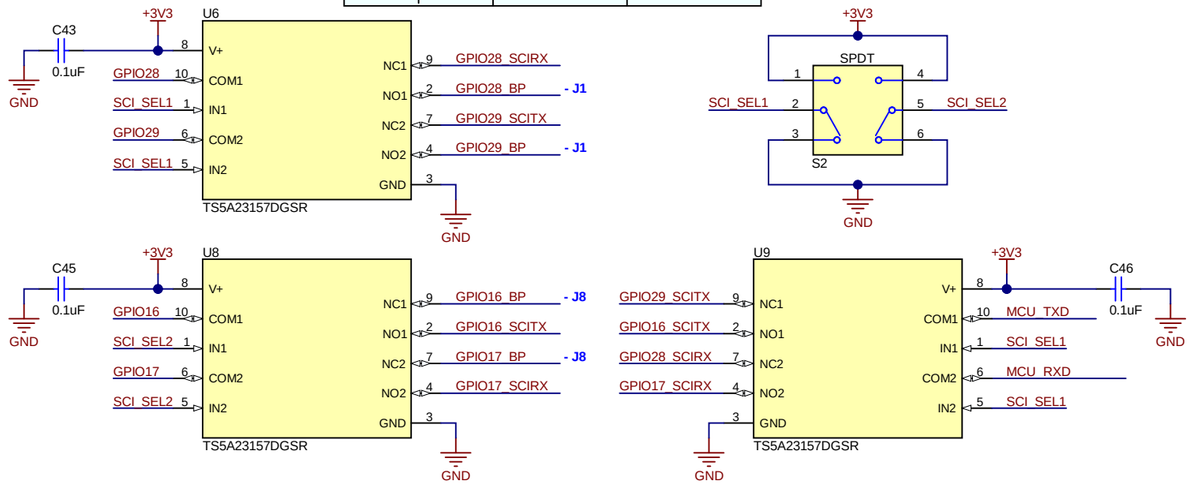
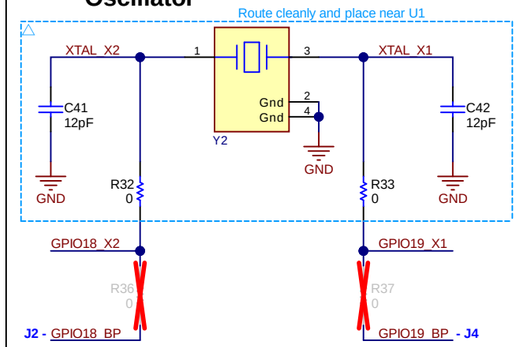
## UART Routing

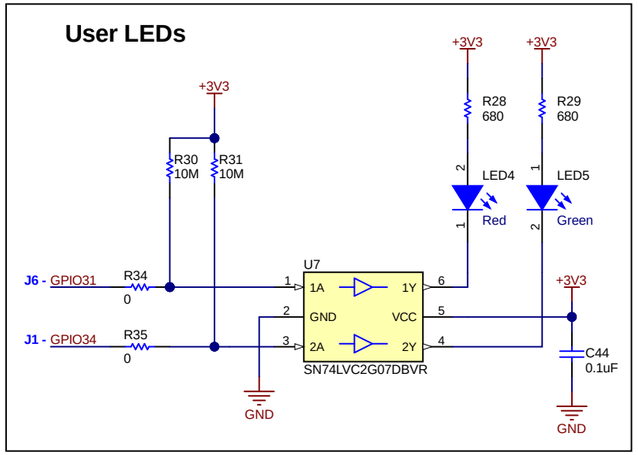
| SCI_SEL1 | SCI_SEL2 | GPIO28/29 Route | GPIO16/17 Route | |
|---|---|---|---|---|
| 0 | 0 | XDS110 COM Port | BP | - DEFAULT |
| 0 | 1 | XDS110 COM Port | NC | |
| 1 | 0 | BP | BP | |
| 1 | 1 | BP | XDS110 COM Port | |



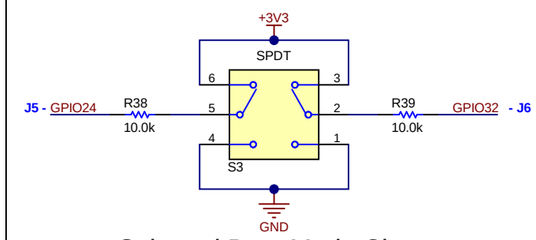

## Oscillator




## User LEDs



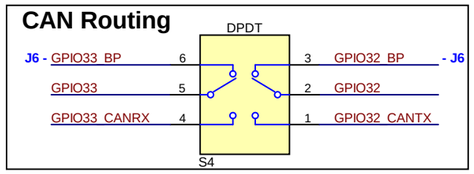

## Boot Mode Select



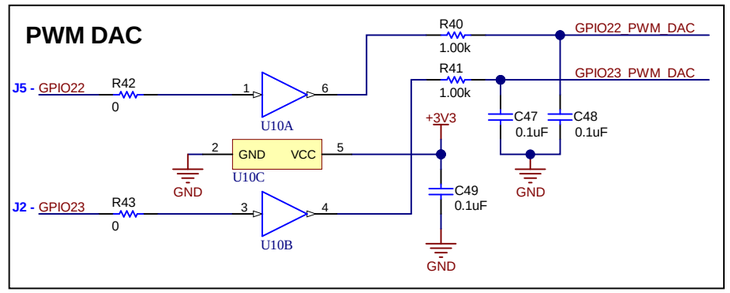

### Selected Boot Mode Chart

| Mode # | GPIO24 | GPIO32 | Boot Mode |
|---|---|---|---|
| 00 | 0 | 0 | Boot from Parallel GPIO |
| 01 | 0 | 1 | Boot from SCI / Wait Mode |
| 02 | 1 | 0 | Boot from CAN |
| 03 | 1 | 1 | Boot from Flash |

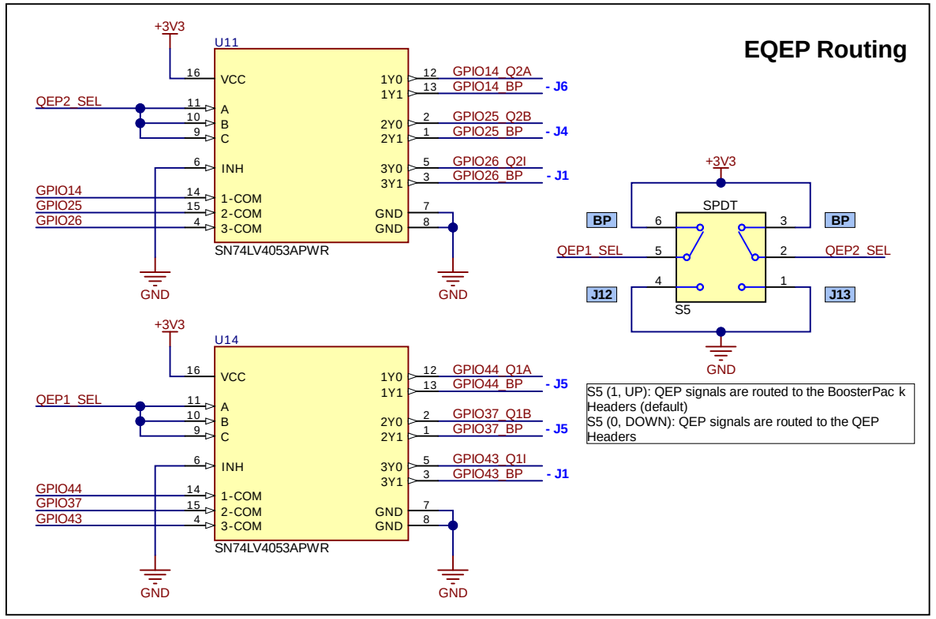
## CAN Routing



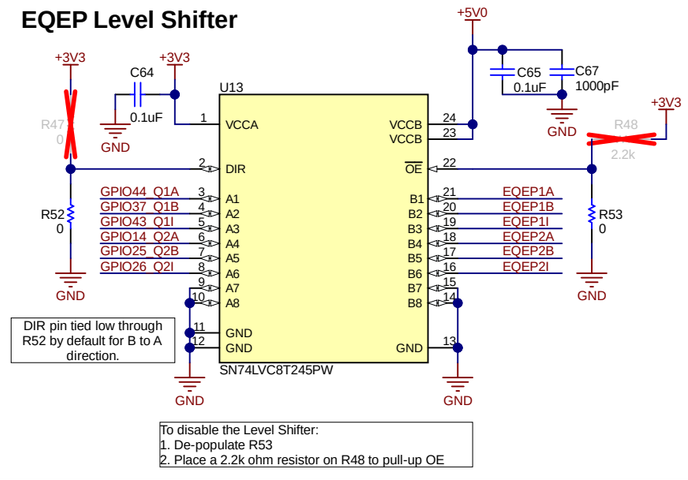

## PWM DAC



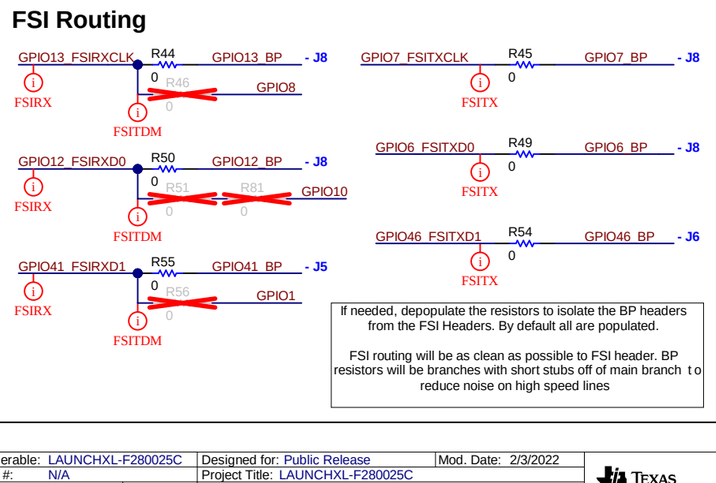

## EQEP Routing




## EQEP Level Shifter




## FSI Routing






| | | | |
|---|---|---|---|
| Orderable: LAUNCHXL-F280025C | | Designed for: Public Release | Mod. Date: 2/3/2022 |
| TID #: N/A | | Project Title: LAUNCHXL-F280025C | |
| Number: MCU089 | Rev: B | Sheet Title: | |
| SVN Rev: Not in version control | | Assembly Variant: 001 | Sheet: 3 of 8 |
| Drawn By: | | File: MCU089B_AltRouting_Misc.SchDoc | Size: B |
| Engineer: Kevin Allen | | Contact: http://www.ti.com/support | |

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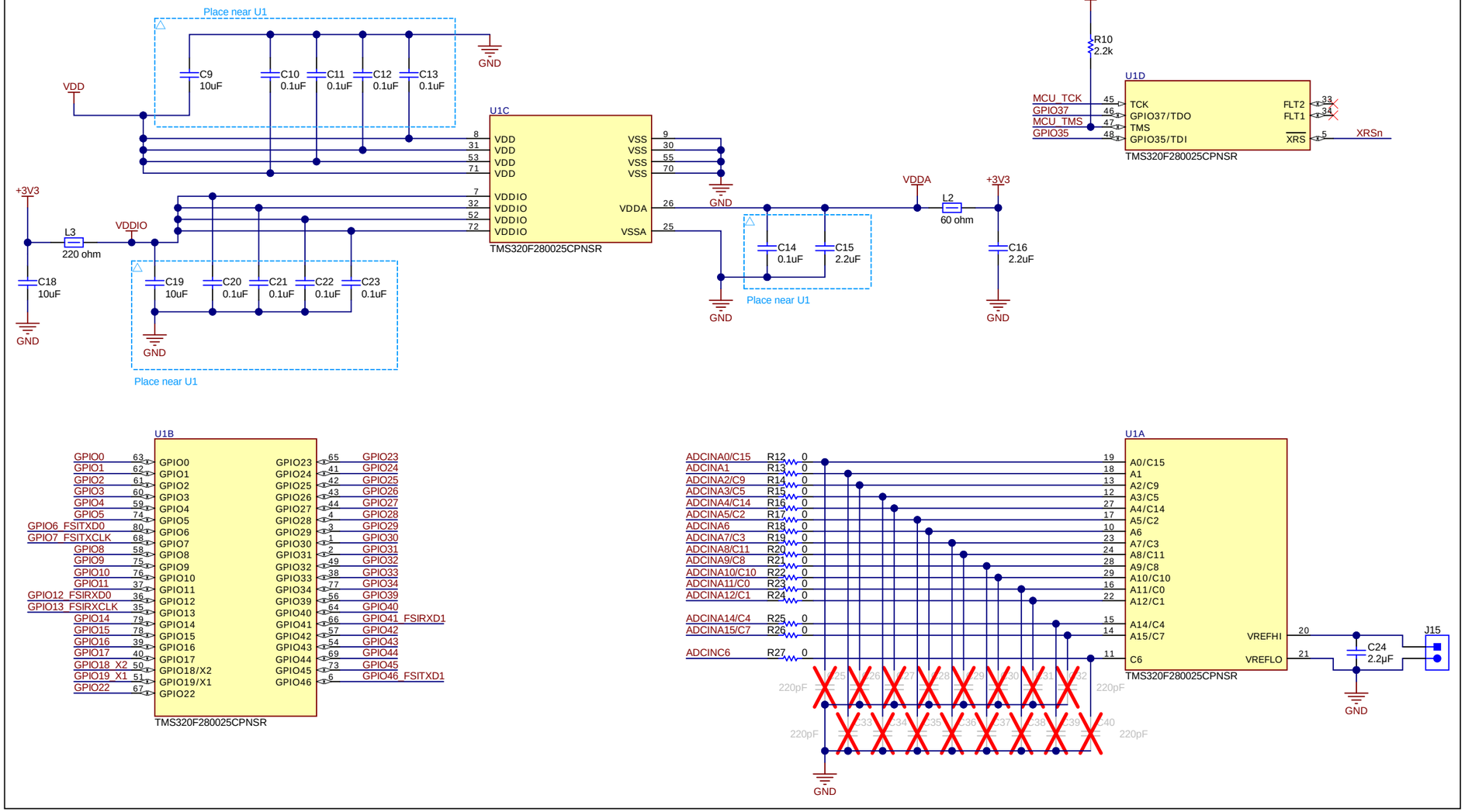
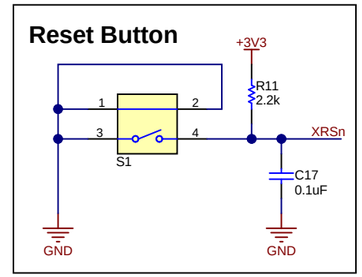
## F28002x Device




## Reset Button






| | | | |
|---|---|---|---|
| Orderable: LAUNCHXL-F280025C | | Designed for: Public Release | Mod. Date: 2/2/2022 |
| TID #: N/A | | Project Title: LAUNCHXL-F280025C | |
| Number: MCU089 | Rev: B | Sheet Title: | |
| SVN Rev: Not in version control | | Assembly Variant: 001 | Sheet: 4 of 8 |
| Drawn By: | | File: MCU089B_F280025C_Device.SchDoc | Size: B |
| Engineer: Kevin Allen | | Contact: http://www.ti.com/support | |

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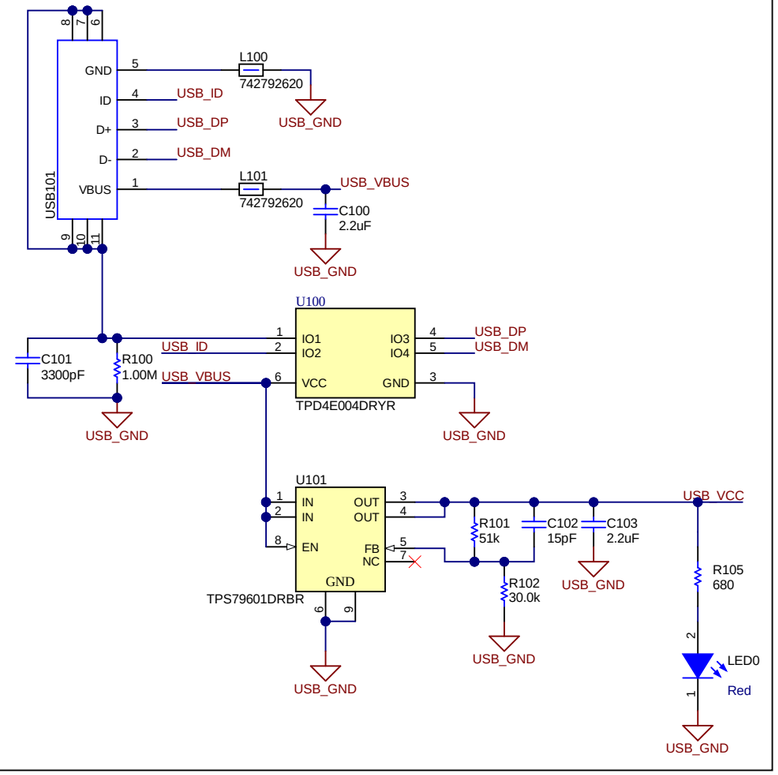
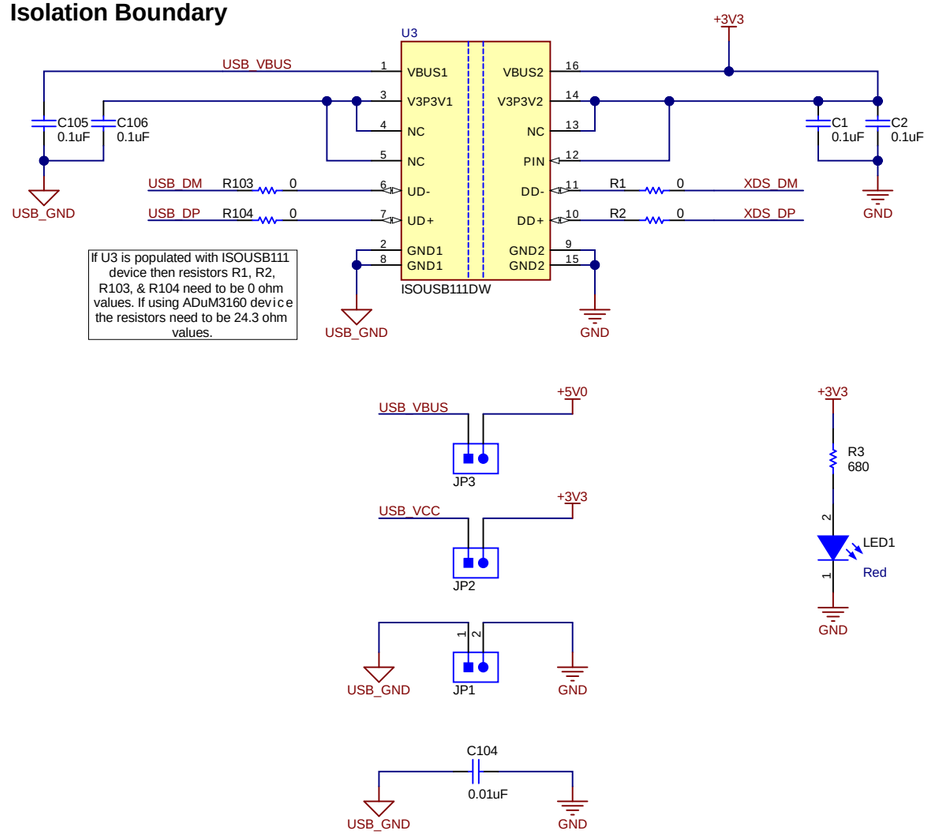
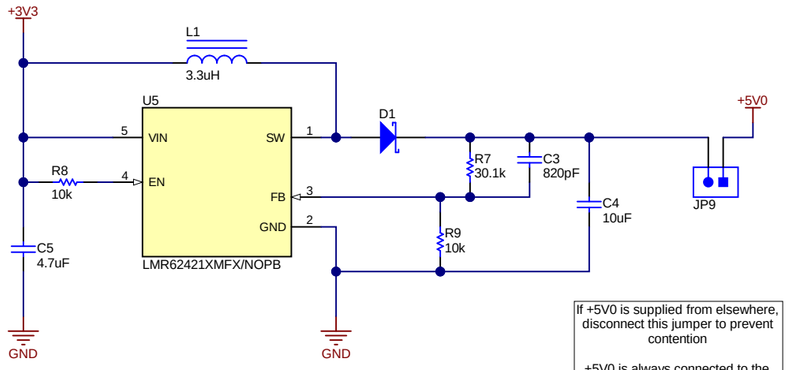
## USB & XDS Power



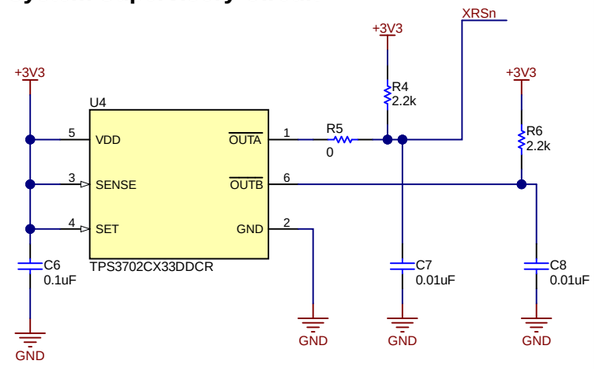

## Isolation Boundary



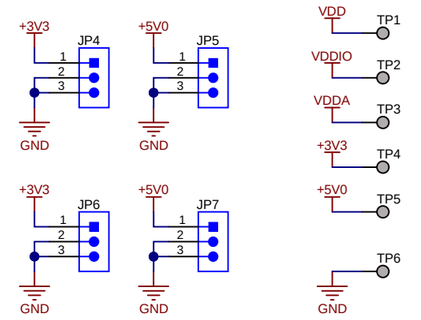

## 3.3V to 5V Boost




## System Supervisory Circuit




## Power Headers and Test Points



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| TID #: N/A | | Project Title: LAUNCHXL-F280025C | |
| Number: MCU089 | Rev: B | Sheet Title: | |
| SVN Rev: Not in version control | | Assembly Variant: 001 | Sheet: 6 of 8 |
| Drawn By: | | File: MCU089B_XDS110_USB_Power.SchDoc | Size: B |
| Engineer: Kevin Allen | | Contact: http://www.ti.com/support | |

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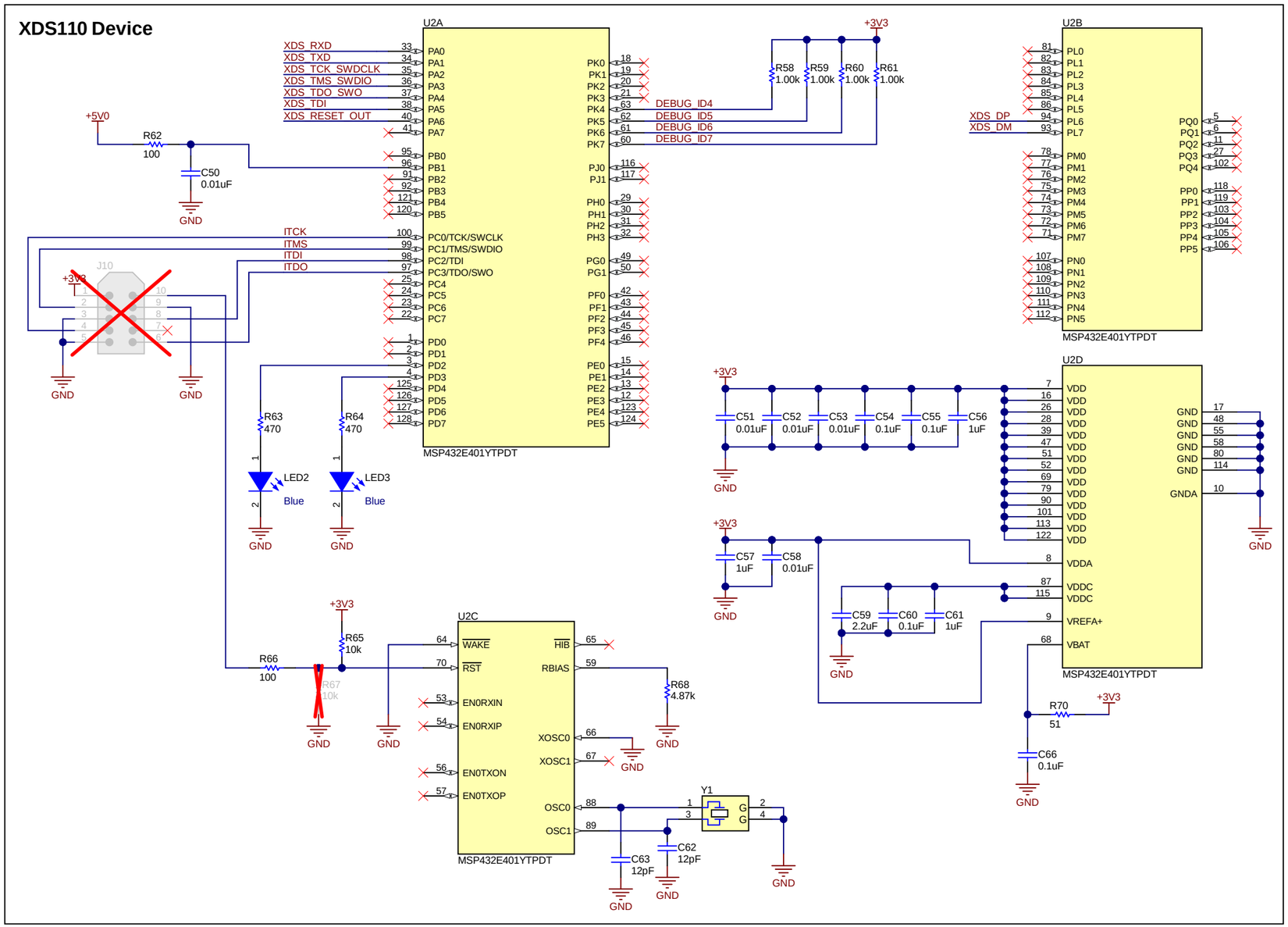
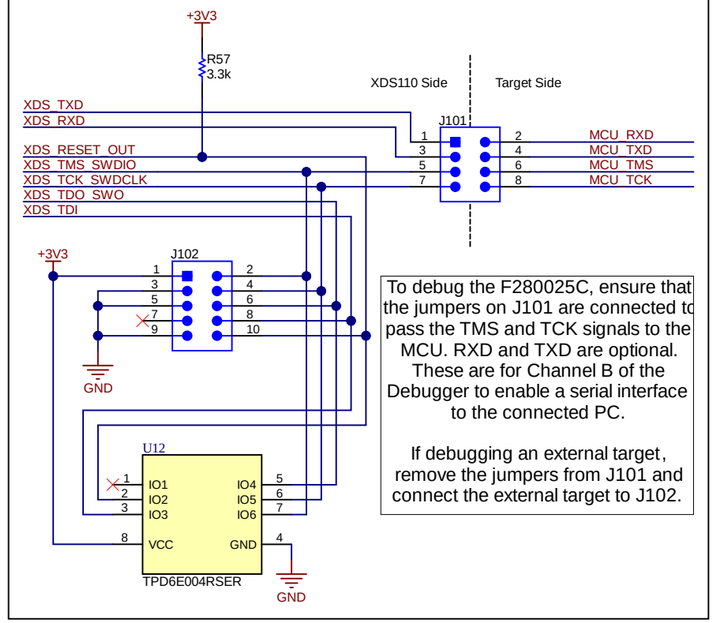
## XDS110 Device




## XDS110 Target Interface



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| TID #: N/A | | Project Title: LAUNCHXL-F280025C | |
| Number: MCU089 | Rev: B | Sheet Title: | |
| SVN Rev: Not in version control | | Assembly Variant: 001 | Sheet: 7 of 8 |
| Drawn By: | | File: MCU089B_XDS110_MCU.SchDoc | Size: B |
| Engineer: Kevin Allen | | Contact: http://www.ti.com/support | |

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FID1 FID2 FID3 FID4 FID5 FID6

MH1 MH2 MH3 MH4

PCB Number: MCU089
PCB Rev: B

Logo1
PCB
LOGO
Texas Instruments

CE Logo1

Logo3
PCB
LOGO
FCC disclaimer

Logo4
PCB
LOGO
WEEE logo

Logo5
PCB
LOGO
Texas Instruments

M1 M2 M3 M4 M5 M6 M7 M8 M9

ZZ1
Assembly Note
These assemblies are ESD sensitive, ESD precautions shall be observed.

ZZ2
Assembly Note
These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.

ZZ3
Assembly Note
These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.



| | | | |
|---|---|---|---|
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| Number: MCU089 | Rev: B | Sheet Title: | |
| SVN Rev: Not in version control | | Assembly Variant: 001 | Sheet: 8 of 8 |
| Drawn By: | | File: MCU089B_Hardware.SchDoc | Size: B |
| Engineer: Kevin Allen | | Contact: http://www.ti.com/support | |

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