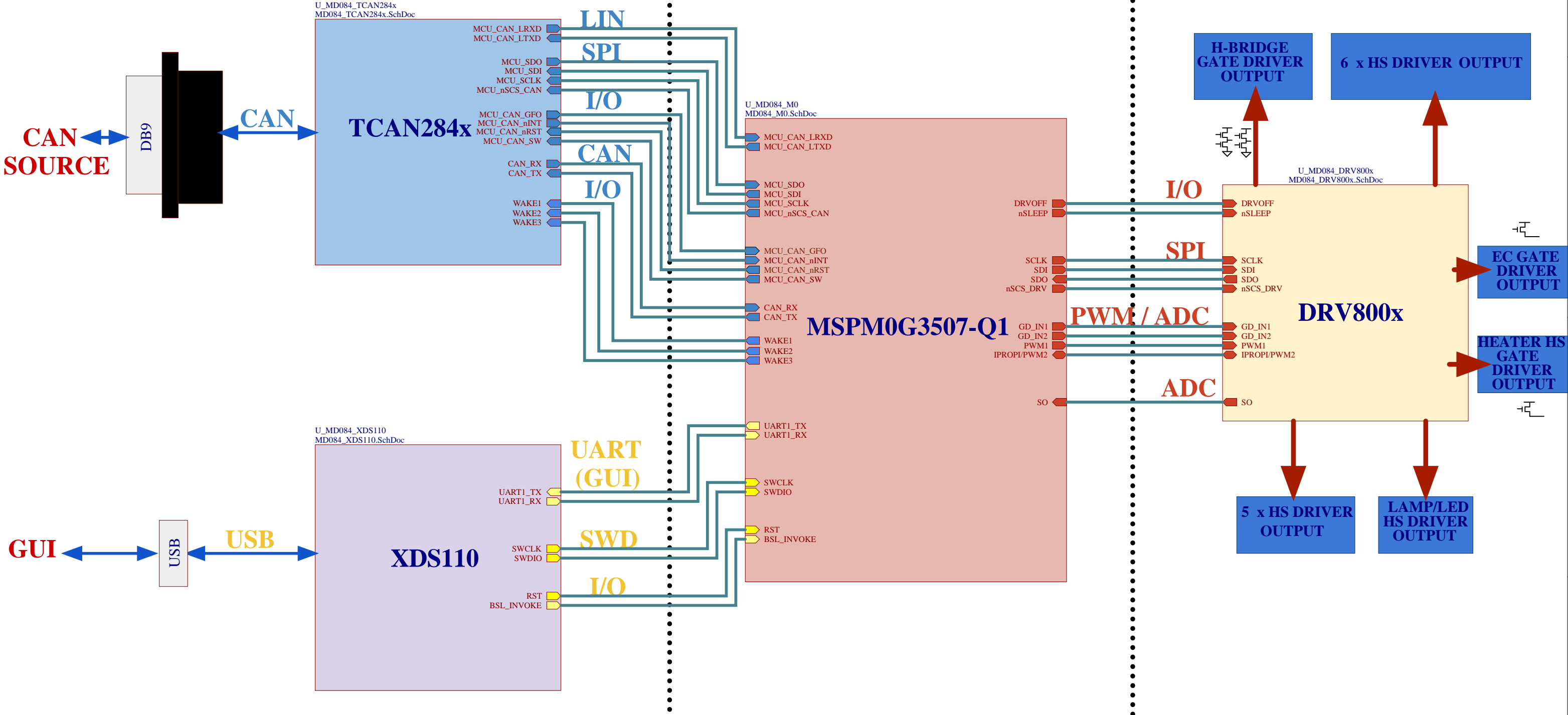


DRV800x-Q1 TOP LEVEL SCHEMATIC

INTERFACE/ DEBUGGER

PROCESSING

DRIVER + OUTPUTS

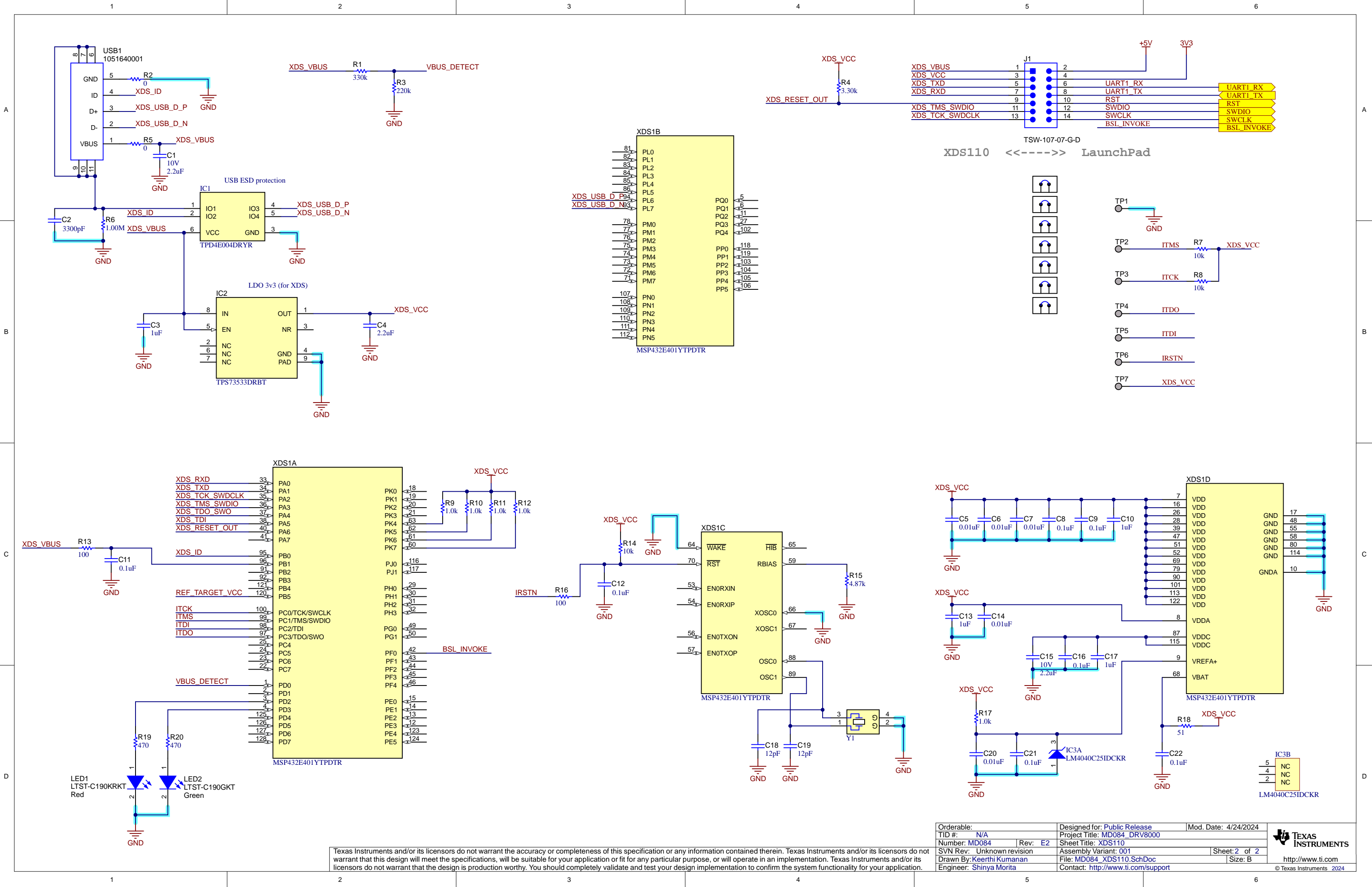


U_MD084_Hardware
MD084_Hardware.SchDoc

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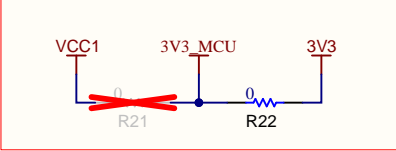
Orderable:	Designed for: Public Release	Mod. Date: 4/22/2024
TID #: N/A	Project Title: MD084_DRV8000	
Number: MD084	Rev: E2	Sheet Title: TOP LEVEL SCHEMATIC
SVN Rev:	Assembly Variant: 001	Sheet: 1 of 3
Drawn By: Keerthi Kumanan	File: MD084_DRV800x_Top_Level.SchDoc	Size: B
Engineer: Shinya Morita	Contact: http://www.ti.com/support	

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MCU POWER (VDD) SELECTION

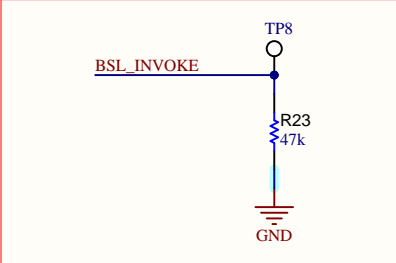


NOTE:

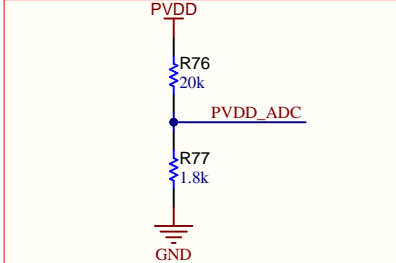
VCC1 is 3.3V source from CAN transceiver TCAN284x

3.3V is from a 3.3 V LDO. The input to the LDO is the 5 V from the USB line.

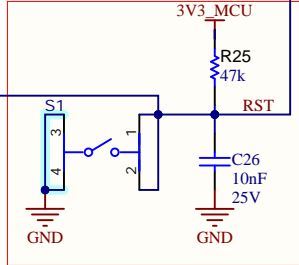
BSL INVOKE



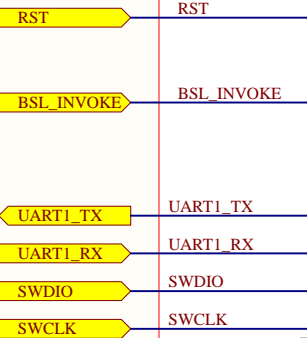
PVDD MONITORING



RESET BUTTON



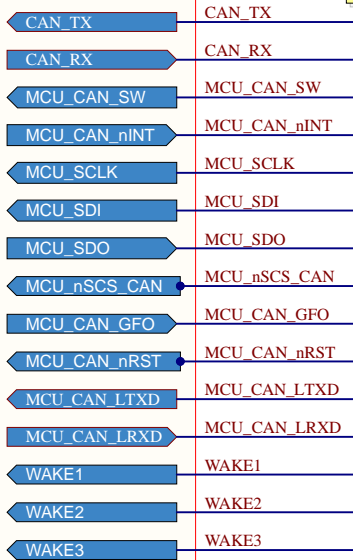
Debugger	Pin
UART1_TX	PB4
UART1_RX	PB5
SWDIO	PA19
SWCLK	PA20
RST	nRST



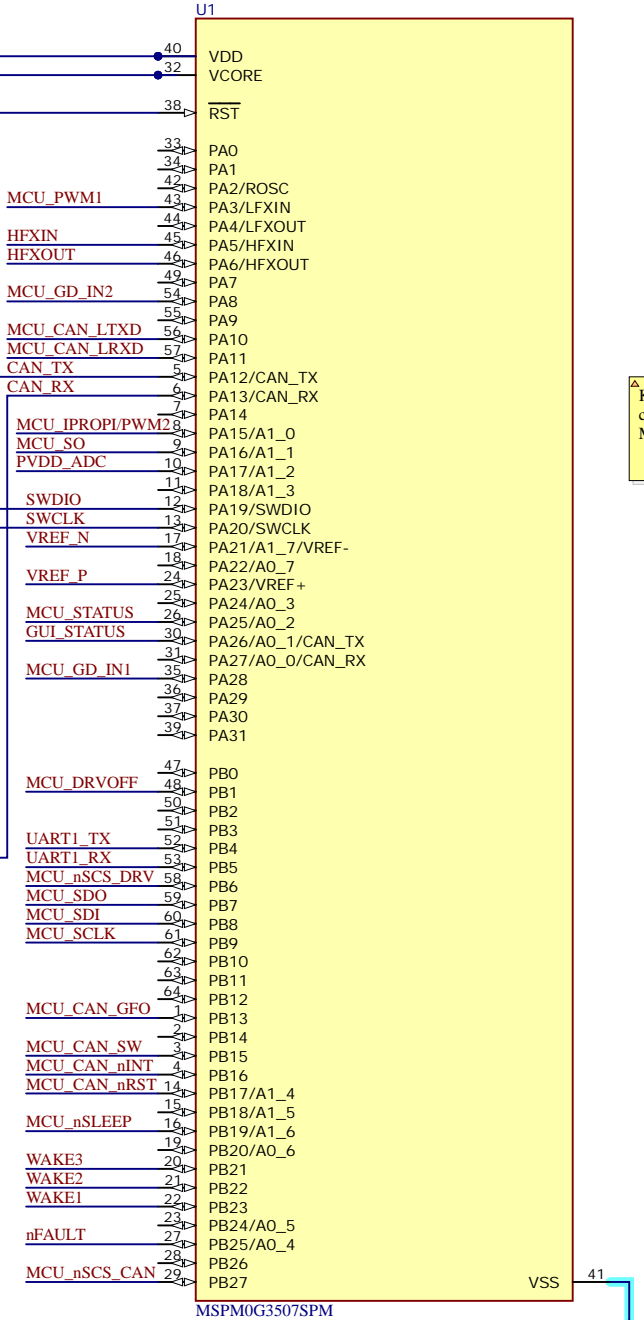
NOTE on UART:

TX/RX signals are with respect to the M0.

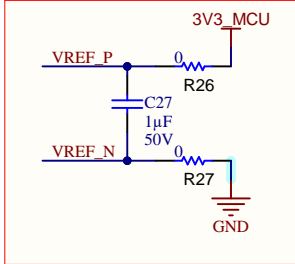
XDS110 <-----> M0



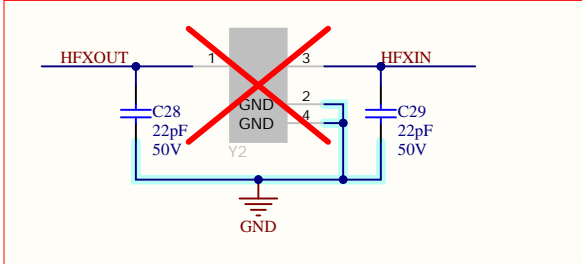
MSPM0G3507-Q1



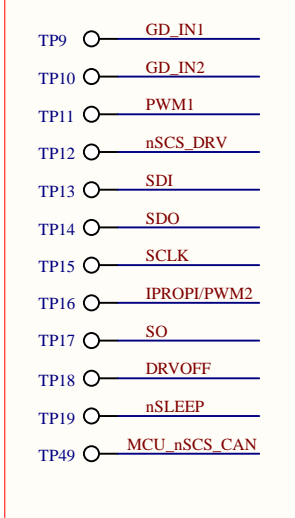
EXTERNAL REFERENCE



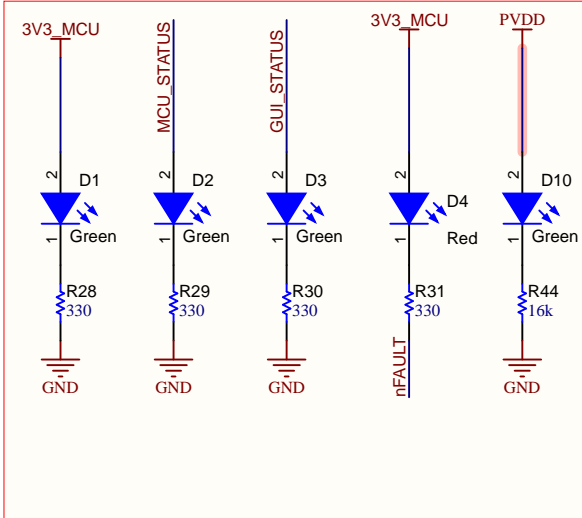
HIGH FREQUENCY CRYSTAL



TESTPOINTS



STATUS LEDS



A

B

C

D

A

B

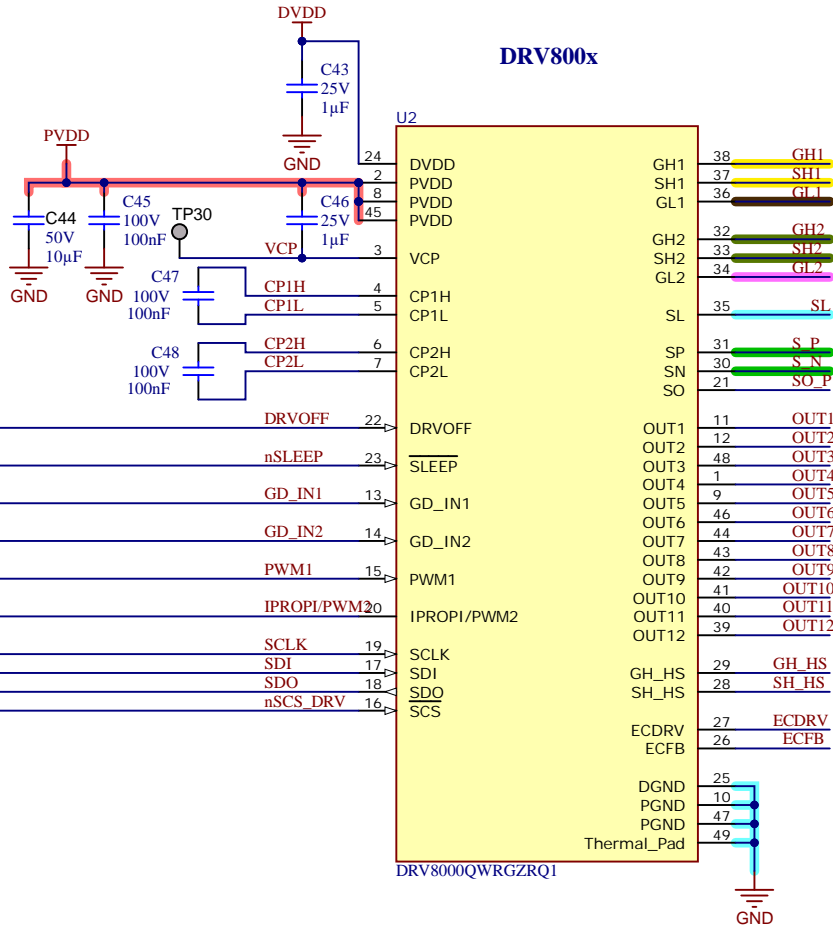
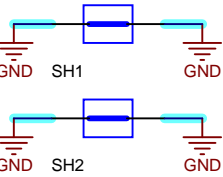
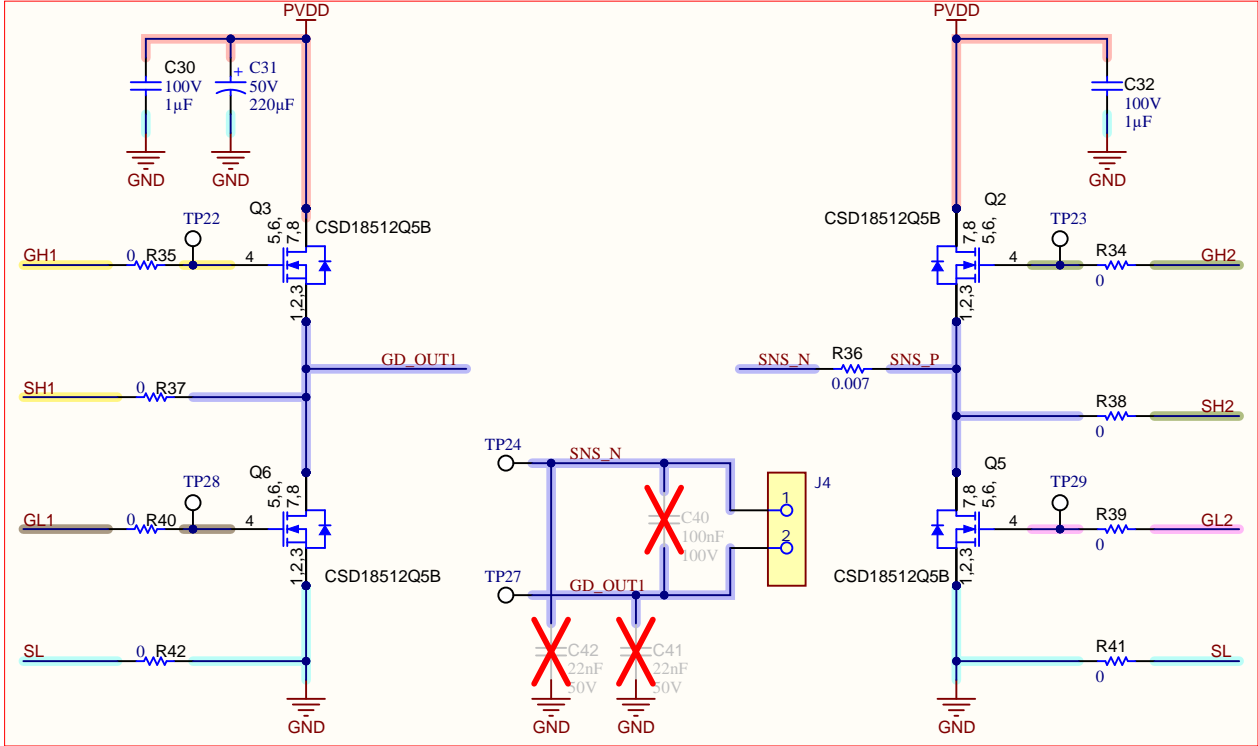
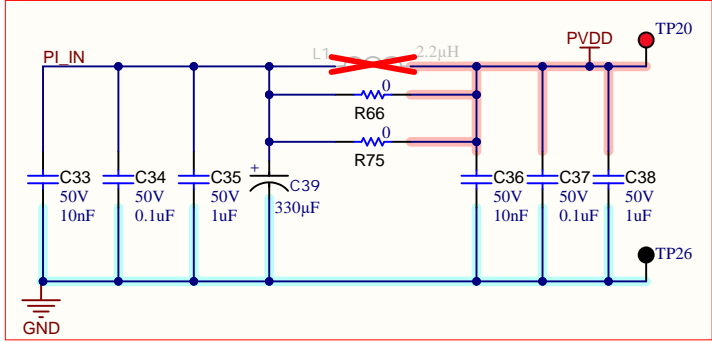
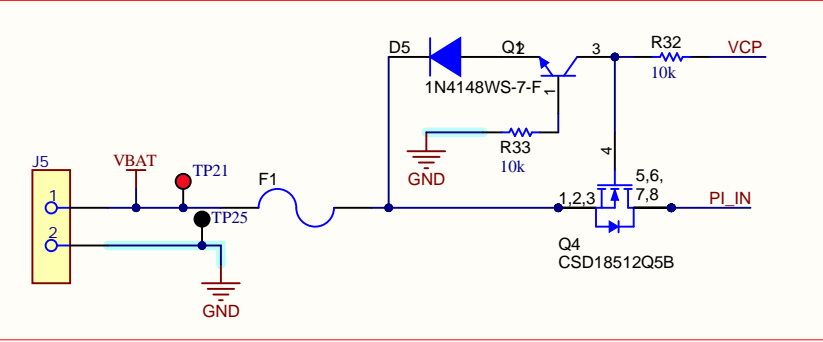
C

D

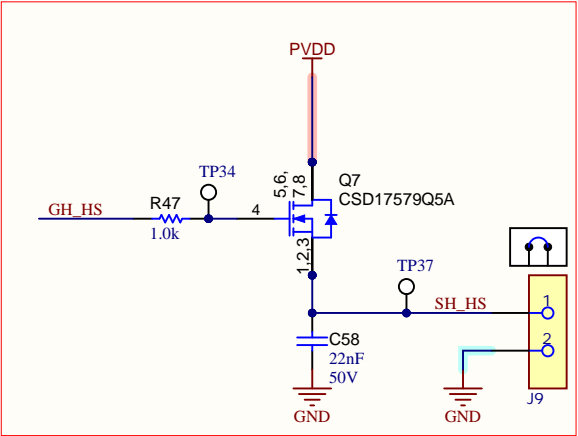
SUPPLY WITH REVERSE POLARITY PROTECTION

INPUT PI FILTER

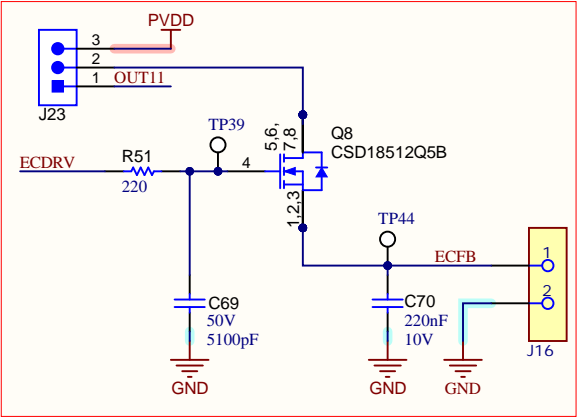
H-BRIDGE GATE DRIVER



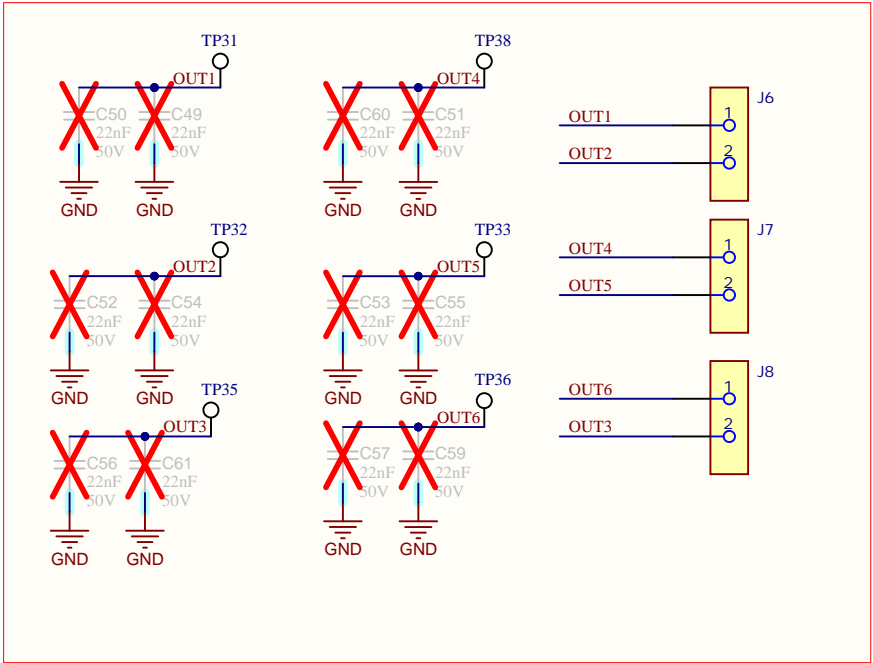
HEATER HS GATE DRIVER



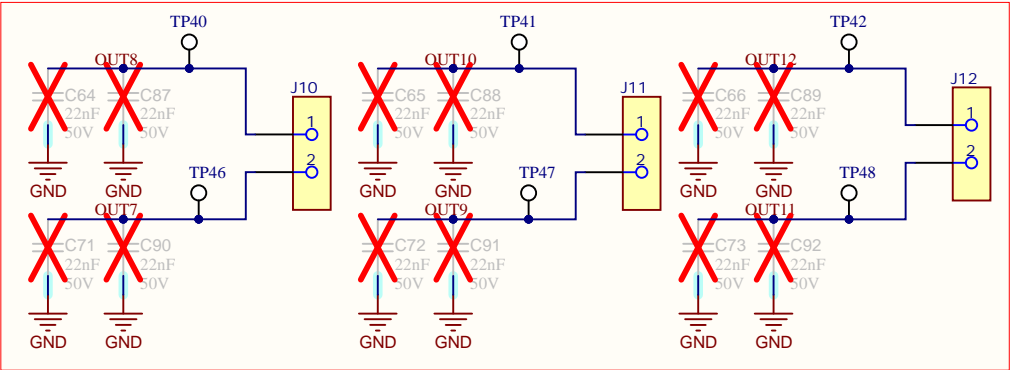
ELECTROCHROMIC GLASS HS DRIVER



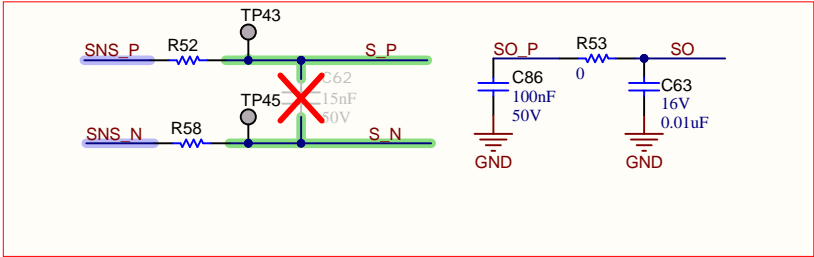
HALF-BRIDGE DRIVERS



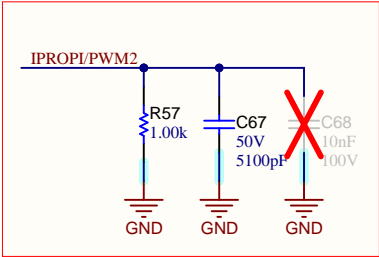
HIGH-SIDE DRIVERS



CSA INPUT AND OUTPUT FILTERING

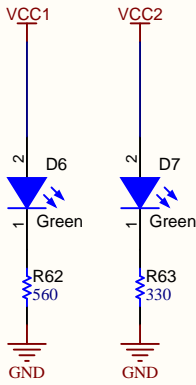


RIPROPI

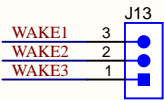


M0 <-----> DRV800x

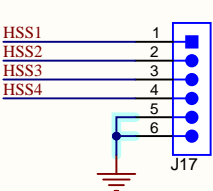
STATUS LEDs



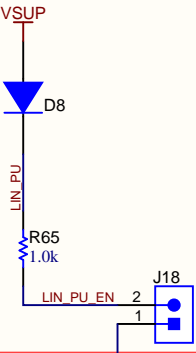
WAKE INPUTS



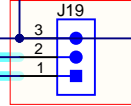
CAN HIGH-SIDE DRIVERS



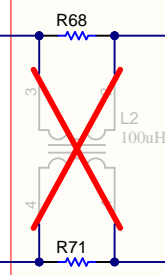
LIN
COMMANDER MODE



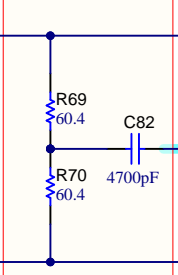
LIN
MONITOR



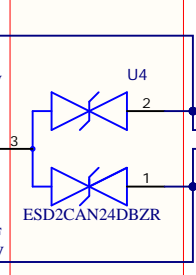
COMMON MODE
CHOKE



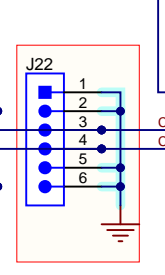
SPLIT
TERMINATION



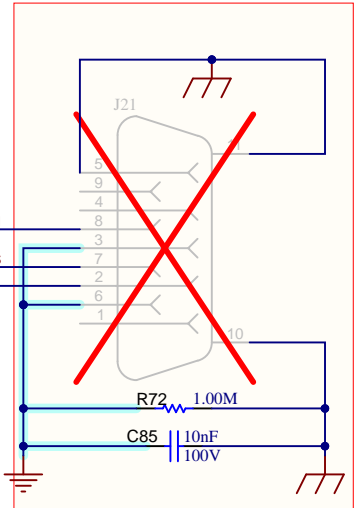
TVS
DIODES



CAN
MONITOR



DB9 CONNECTOR



M0 <-----> TCAN284x

H1
SJ-5303 (CLEAR)

H2
SJ-5303 (CLEAR)

H3
SJ-5303 (CLEAR)

H4
SJ-5303 (CLEAR)

FID1

FID2

FID3

PCB Number: MD084

PCB Rev: E2

PCB
LOGO

Texas Instruments

CE Mark

PCB
LOGO

FCC disclaimer

PCB
LOGO

WEEE logo

CAUTION HOT SURFACE

CAUTION HOT SURFACE

PCB
LOGO

CAUTION. READ USER GUIDE BEFORE USE

LBL1

PCB Label

THT-14-423-10

Size: 0.65" x 0.20 "

ZZ1

Label Assembly Note

This Assembly Note is for PCB labels only

ZZ2

Assembly Note

These assemblies are ESD sensitive, ESD precautions shall be observed.

ZZ3

Assembly Note

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

ZZ4

Assembly Note

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

Variant/Label Table	
Variant	Label Text
001	DRV8000-Q1EVM

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