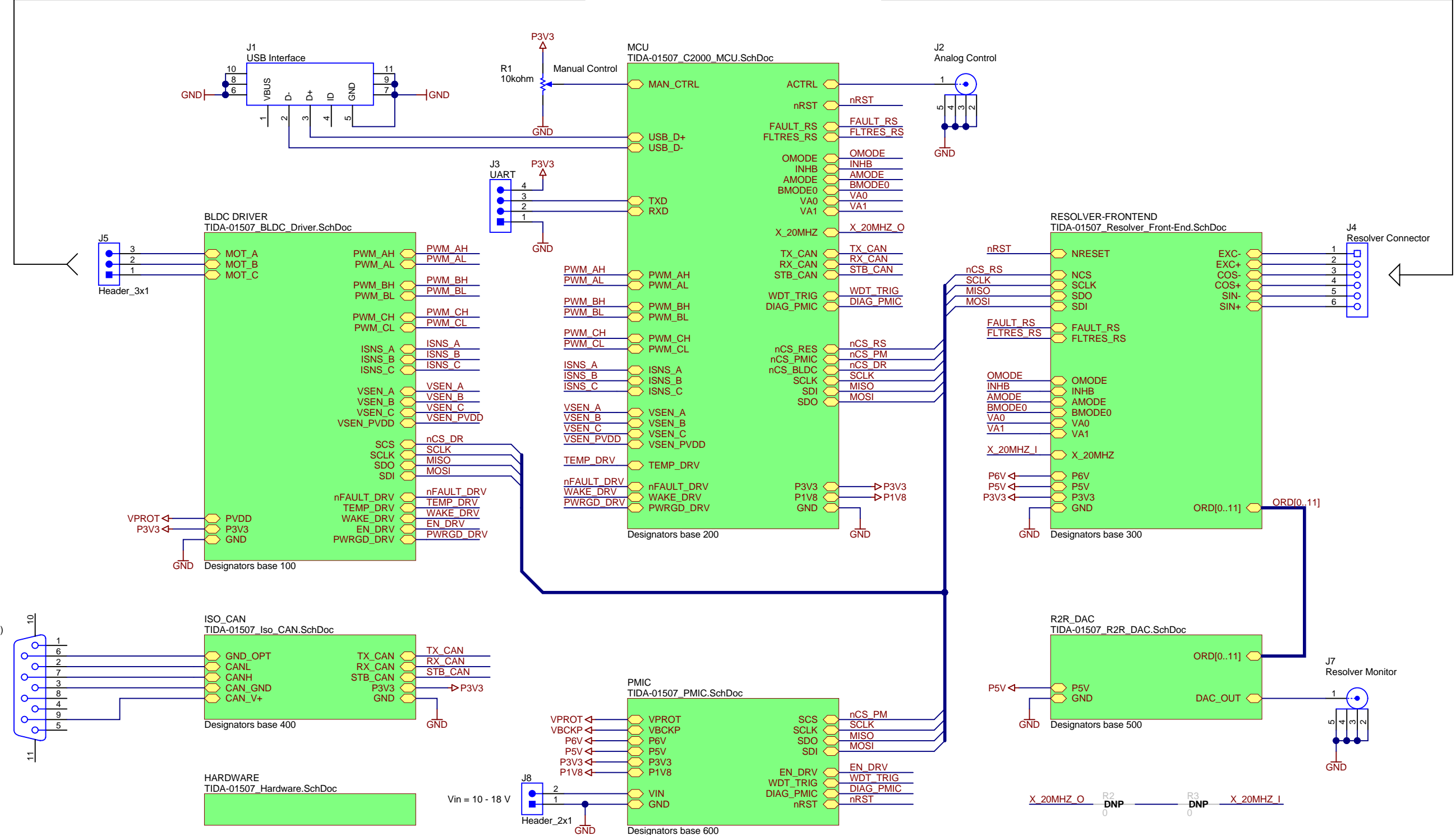
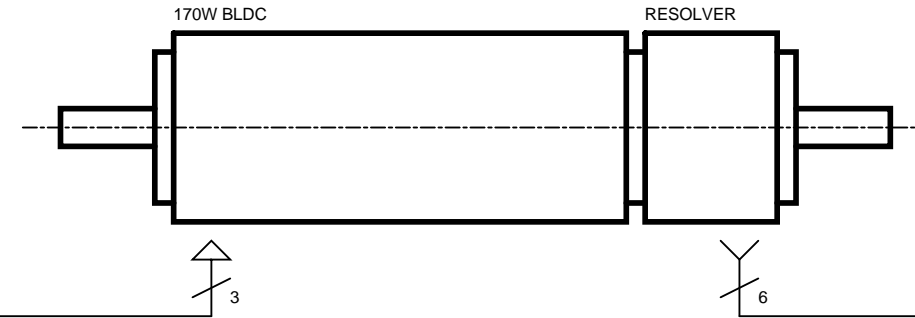


Revision History

Rev	ECN #	Approved Date	Approved by	Notes
E1	N/A	N/A	N/A	Initial Version

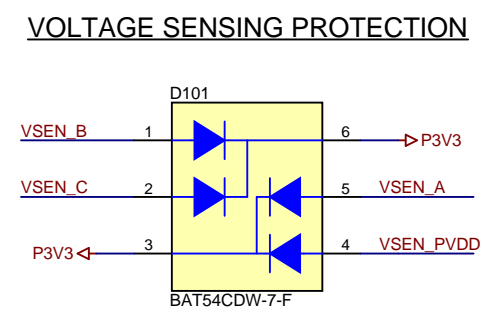
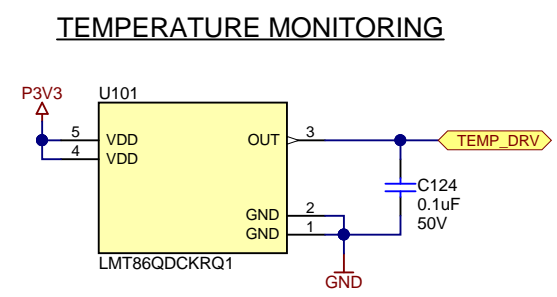
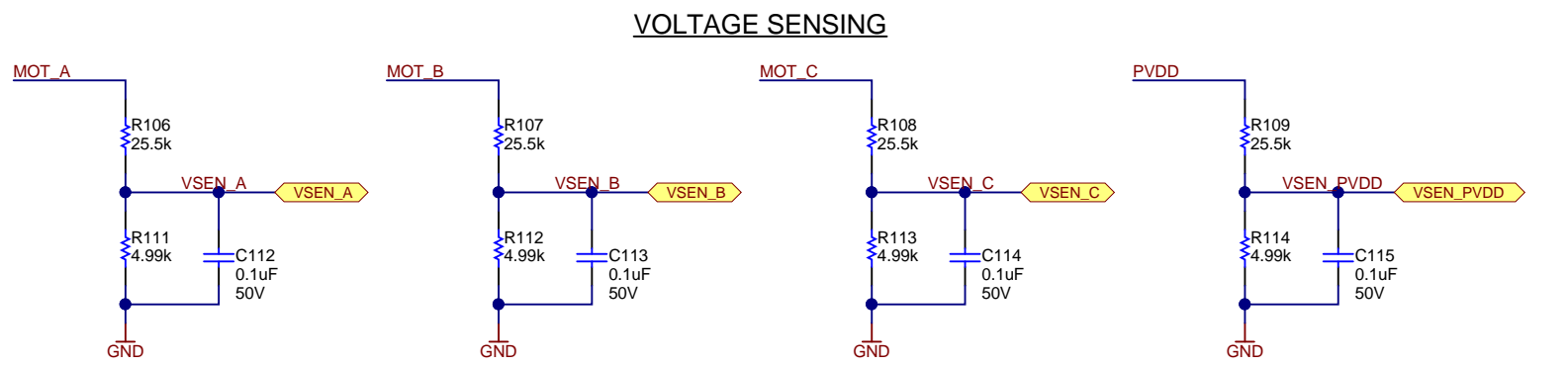
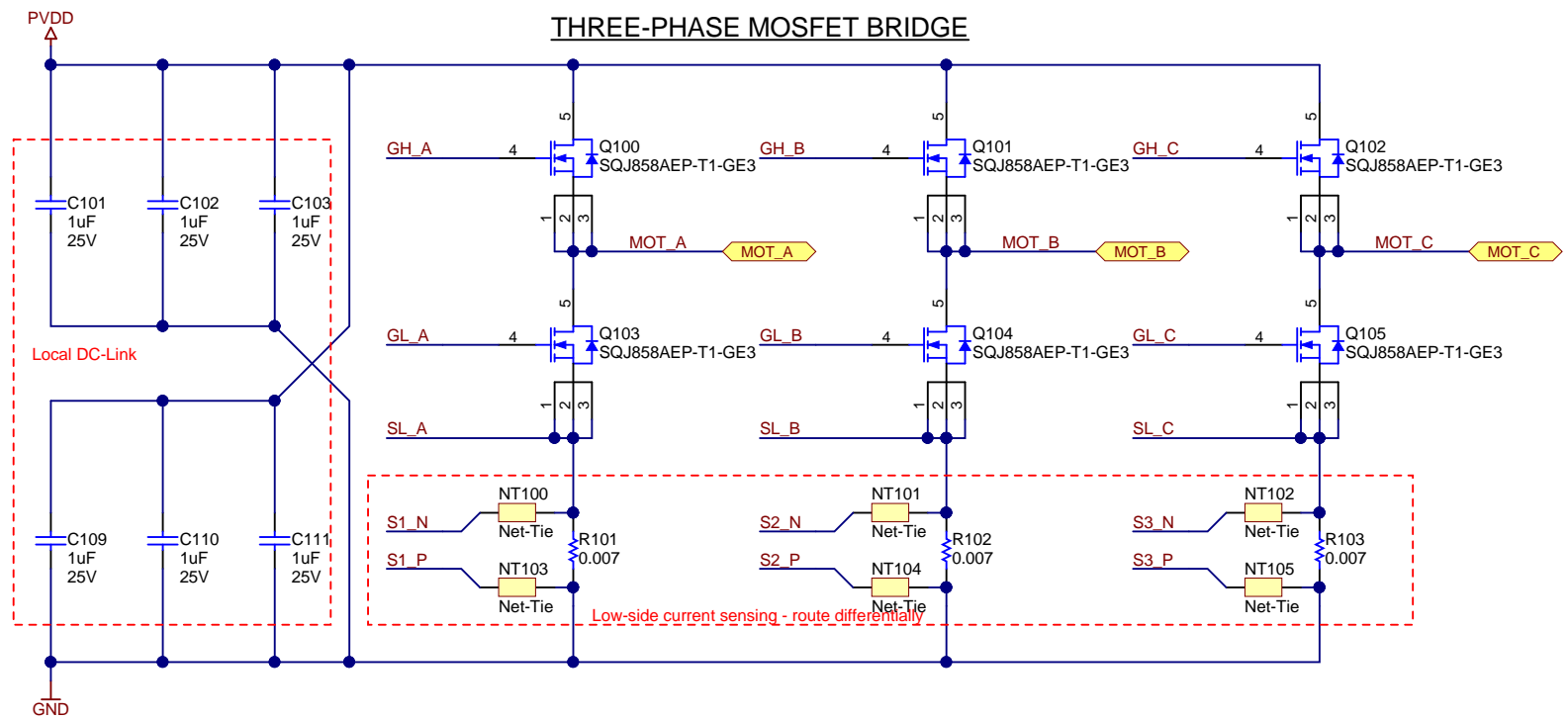
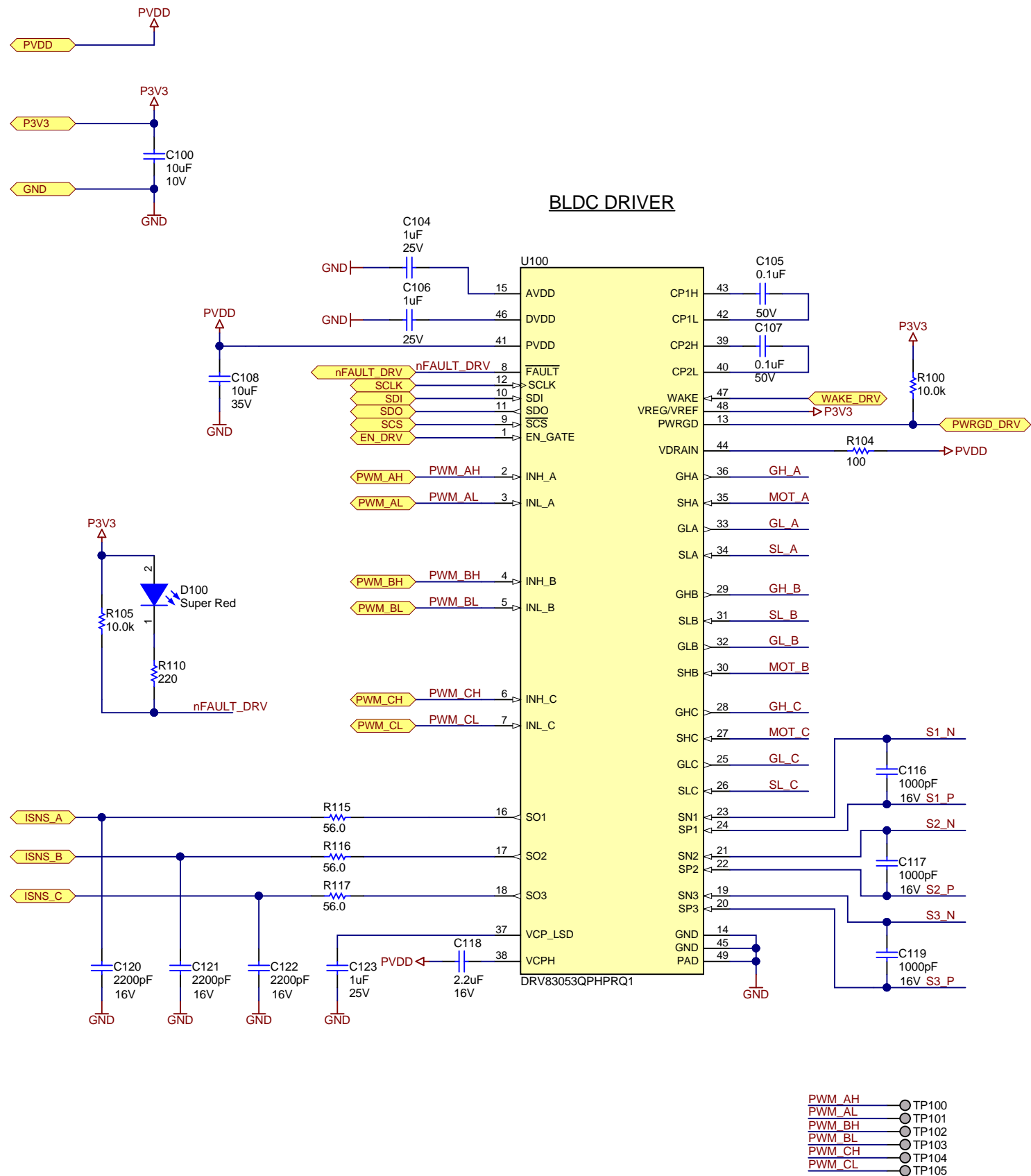


Orderable: N/A	Designed for: Public Release	Mod. Date: 04-Jul-18
TID #: TIDA-01507	Project Title: TIDA-01507	
Number: TIDA-01507	Rev: E1	Sheet Title: Block Diagram
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 1 of 8
Drawn By:	File: TIDA-01507_CoverSheet_SchDoc	Size: B
Engineer: Jiri Panacek	Contact: http://www.ti.com/support	

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Motor Phases are labeled A, B, C in order to stay compatible with the DS and TIDA-00901

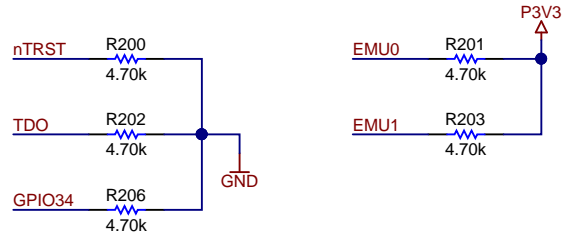
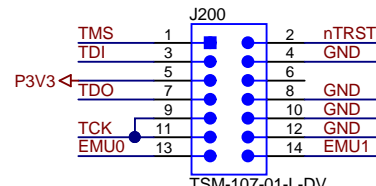




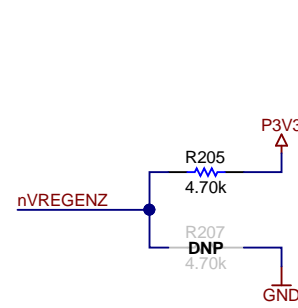
NOTE: This block is based on ti.com/TOOL/TIDA-00901

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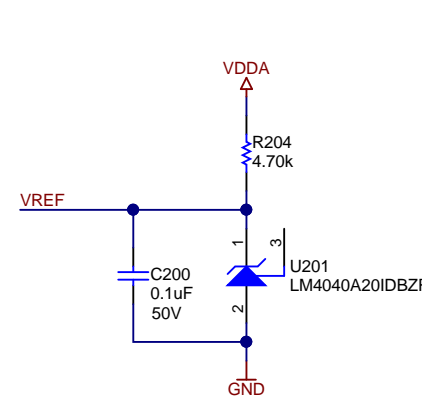
JTAG 14-PIN & BOOT OPTIONS



INTERNAL V-REG DISABLE

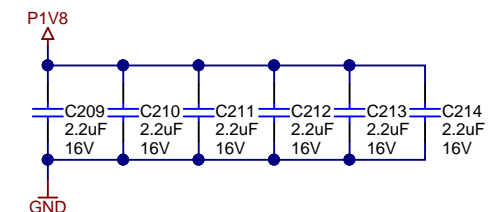
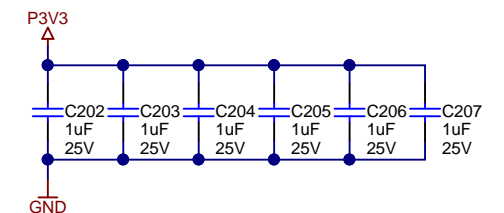
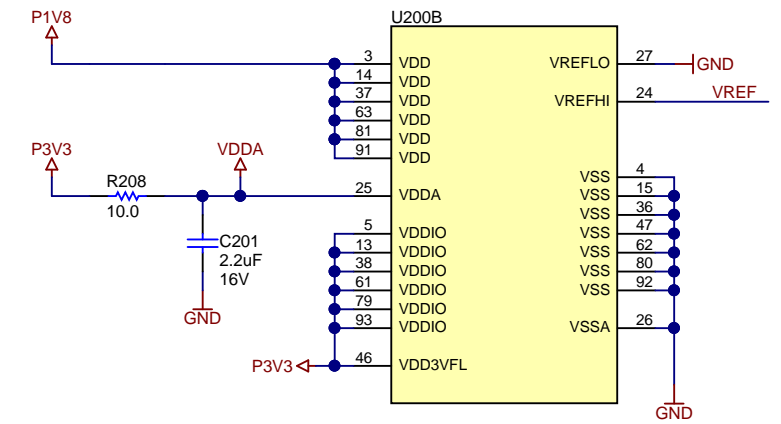


VOLTAGE REFERENCE (OPTIONAL)

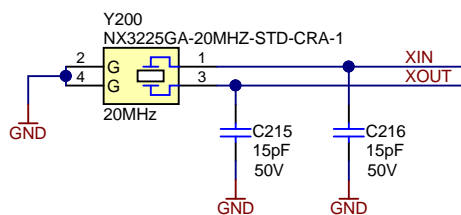


MCU POWER SUPPLY PINS BYPASSING

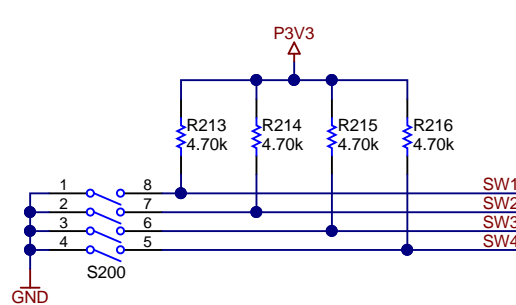
VDD: When using internal VREG, place one 1.2- μ F capacitor between each VDD pin and ground. Higher value capacitors may be used.
 VDDIO: Digital I/O and Flash Power Pin. Single supply source when VREG is enabled. Place a 2.2- μ F decoupling capacitor on each pin.
 VDDA: Analog Power Pin. Tie with a 2.2- μ F capacitor (typical) close to the pin.



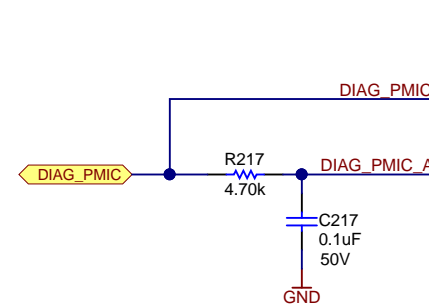
X-TAL OSCILLATOR



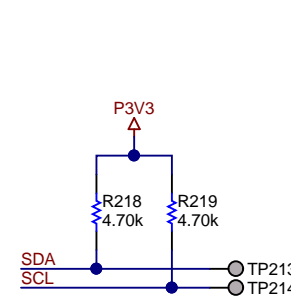
DIP-SWITCH CONFIGURATION



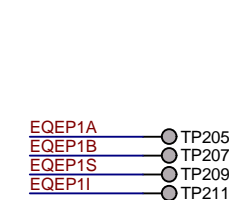
PMIC DIAG



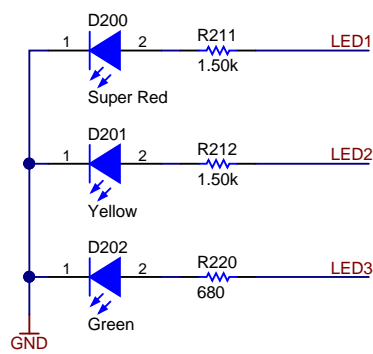
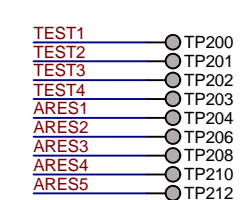
I2C TESTPOINTS



ENCODER TESTPOINTS



RESERVE

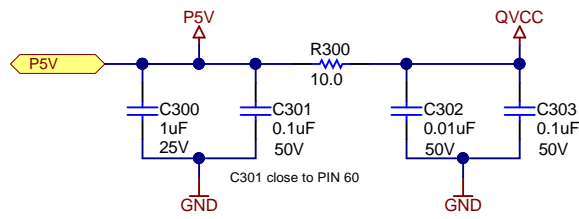


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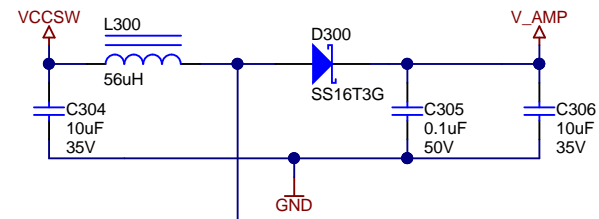
Orderable: N/A	Designed for: Public Release	Mod. Date: 19-Jul-18
TID #: TIDA-01507	Project Title: TIDA-01507	
Number: TIDA-01507	Rev: E1	Sheet Title: C2000 MCU
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 3 of 8
Drawn By:	File: TIDA-01507_C2000_MCU.SchDoc	Size: B
Engineer: Jiri Panacek	Contact: http://www.ti.com/support	



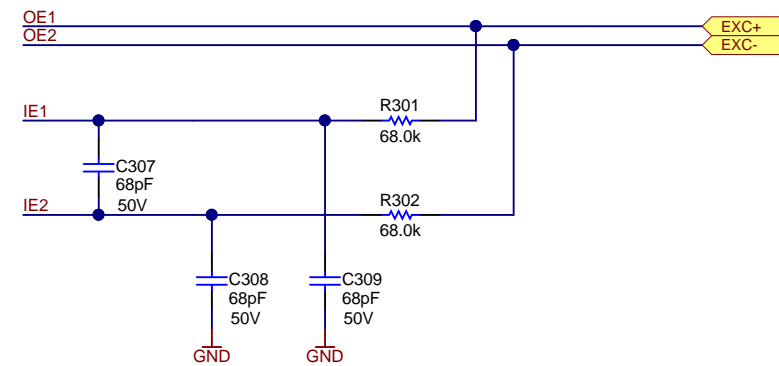
DIGITAL & ANALOG DECOUPLING FILTER



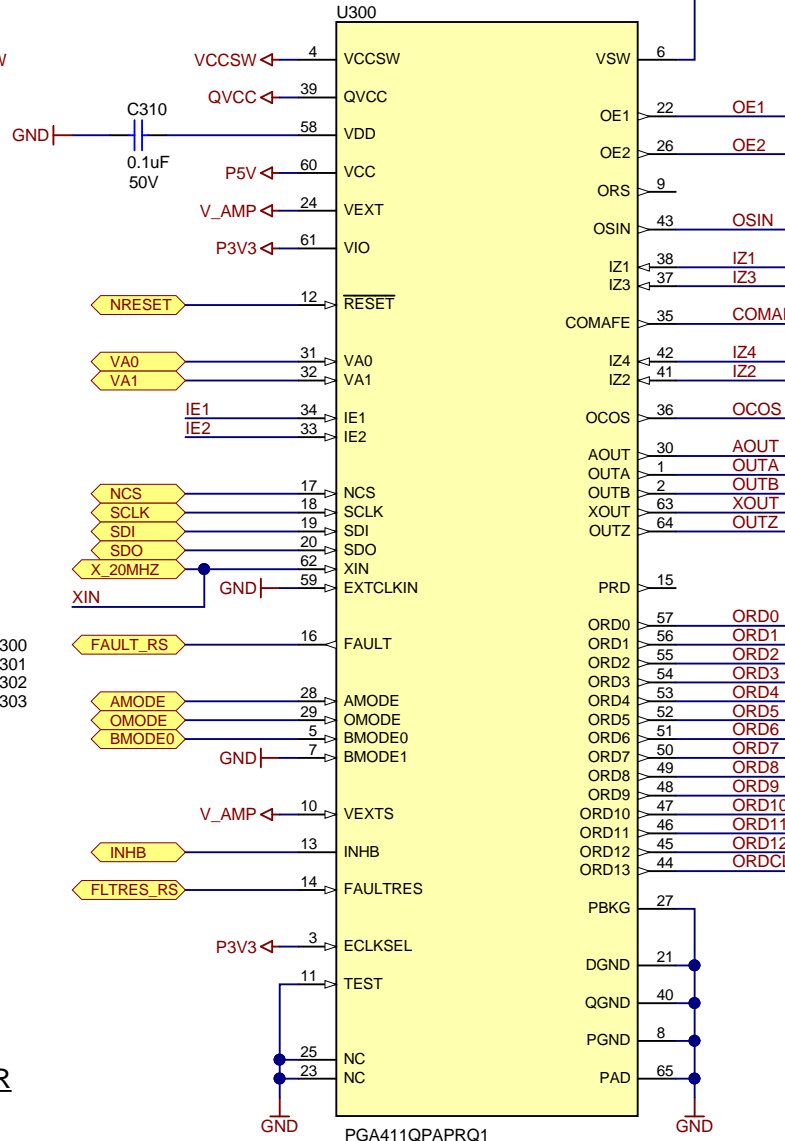
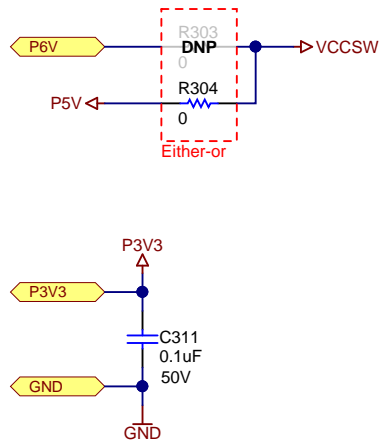
EXCITER AMPLIFIER BOOST CONVERTER



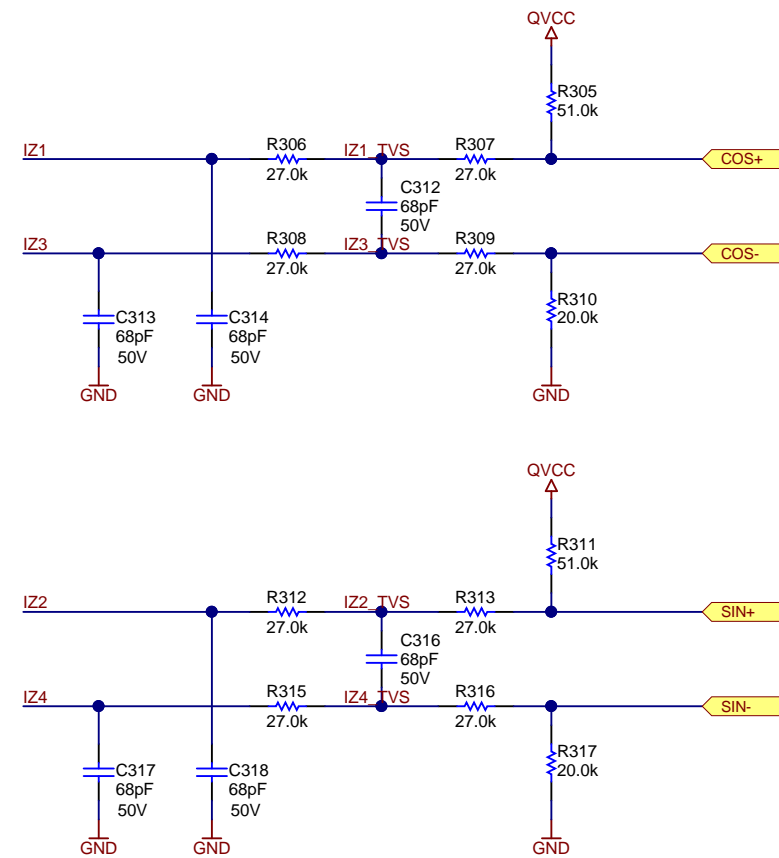
RESOLVER EXCITER OUTPUT + FEEDBACK



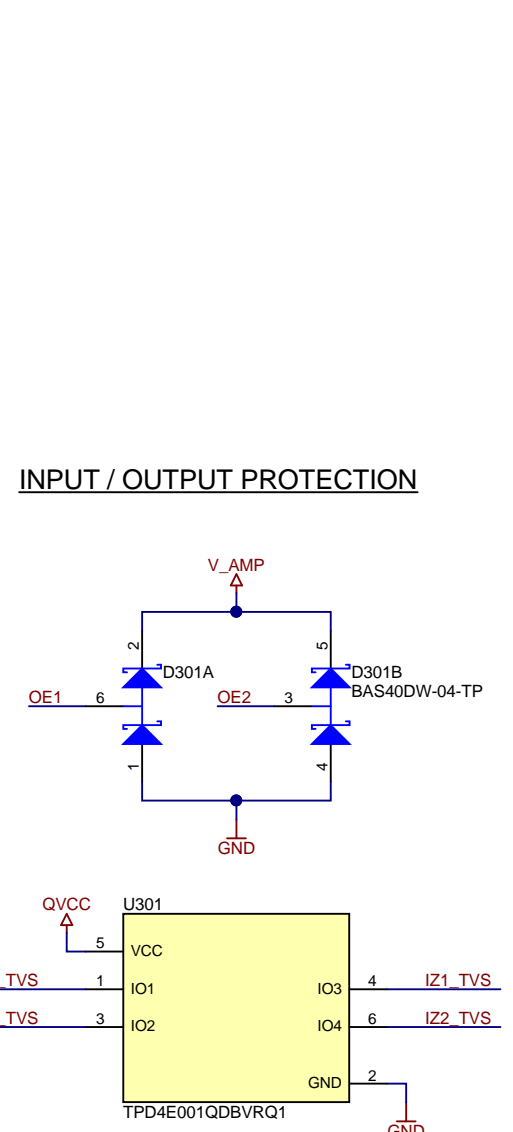
EXCITER BOOST DC-DC VIN SELECTOR



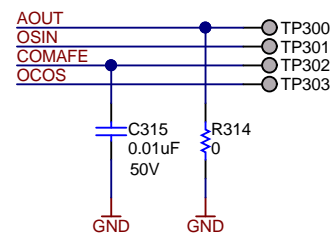
RESOLVER ANALOG FRONT-END



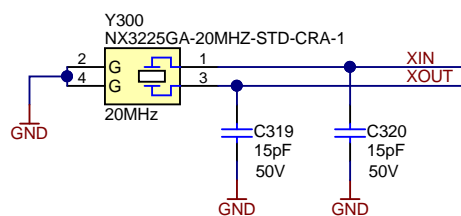
RESOLVER CONNECTOR



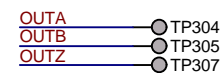
MONITOR AFE



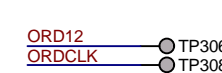
X-TAL OSCILLATOR



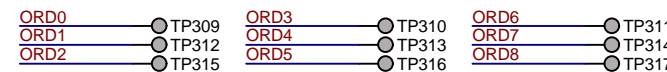
MONITOR INC. ENCODER



MONITOR ORD



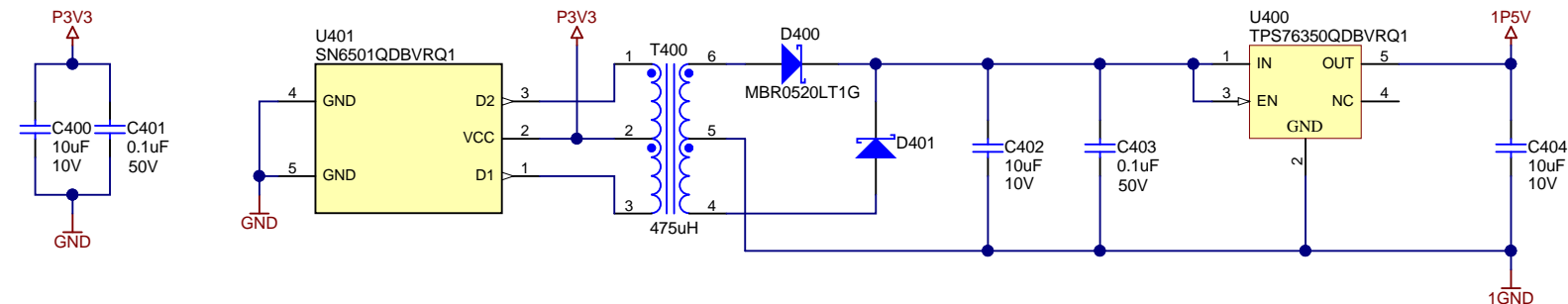
MONITOR ENCODER



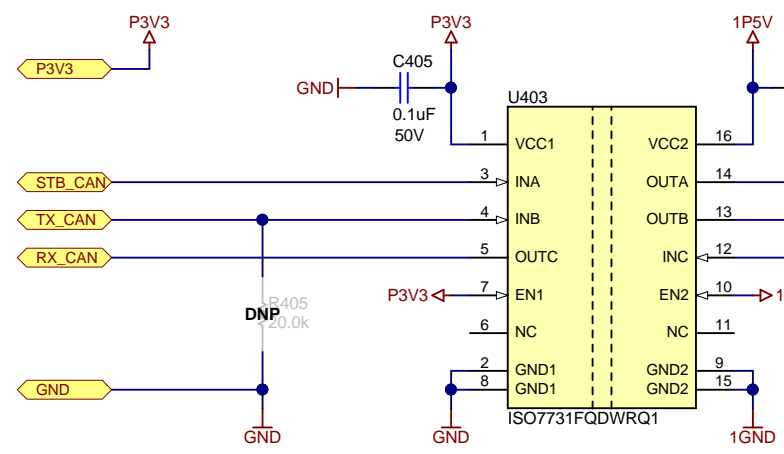
NOTE: This block is inspired by ti.com/TOOL/TIDA-00796
More component optimized version, Symbol is different

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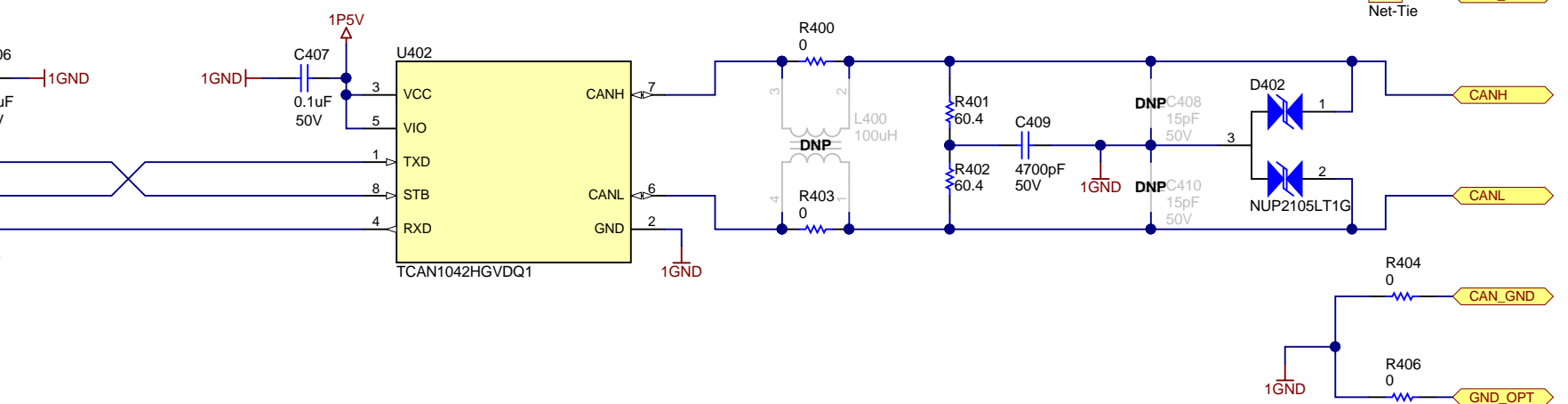
ISOLATED 5V POWER SUPPLY



ISOLATED INTERFACE



CAN TRANSCEIVER



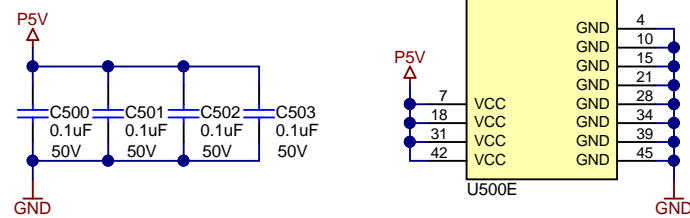
NOTE: This block is inspired by ti.com/TOOL/TIDA-01255

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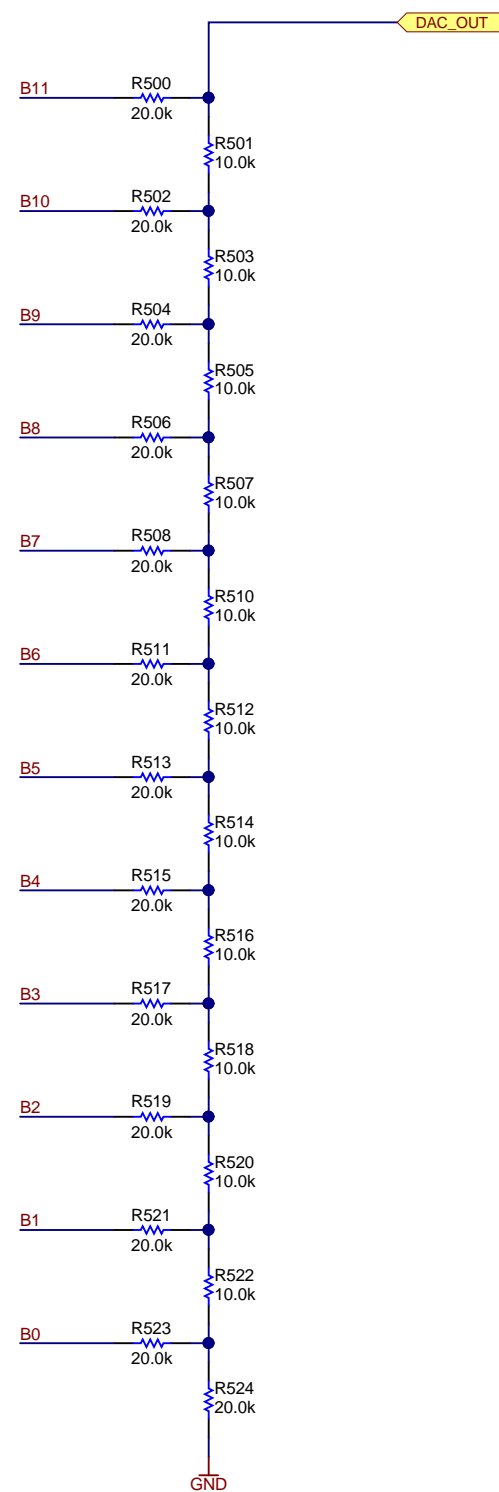
Orderable: N/A	Designed for: Public Release	Mod. Date: 18-Jul-18
TID #: TIDA-01507	Project Title: TIDA-01507	
Number: TIDA-01507	Rev: E1	Sheet Title: Isolated CAN Interface
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 5 of 8
Drawn By:	File: TIDA-01507_Iso_CAN.SchDoc	Size: B
Engineer: Jiri Panacek	Contact: http://www.ti.com/support	



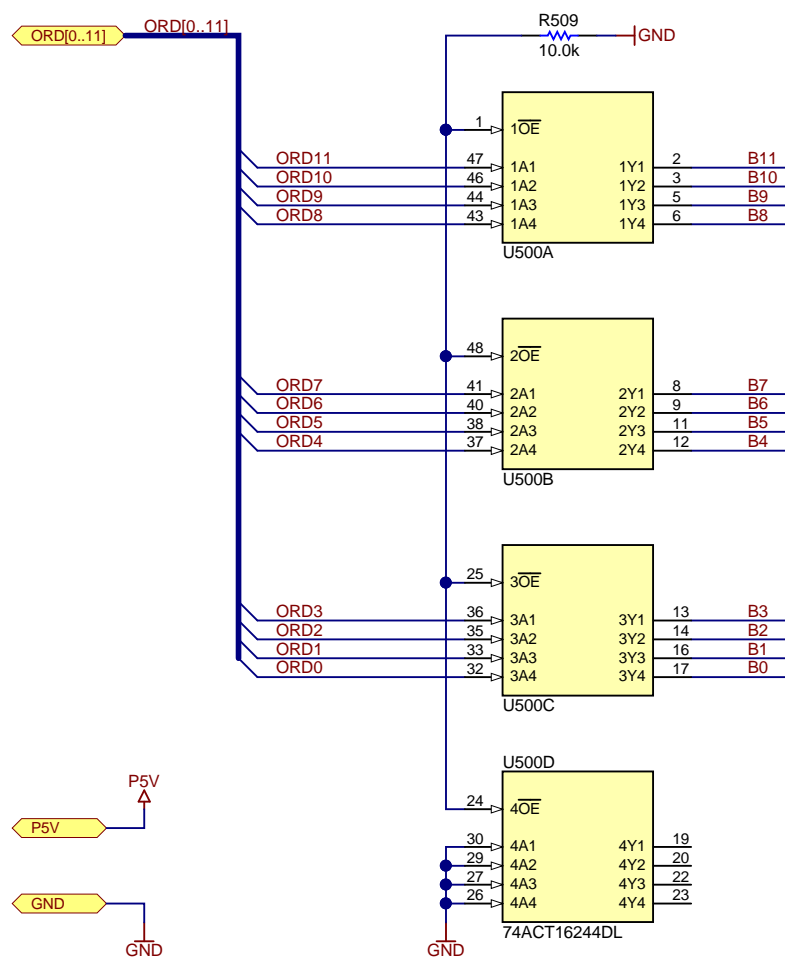
POWER SUPPLY BIAS



R-2R DAC NETWORK



BUFFER FOR THE DAC

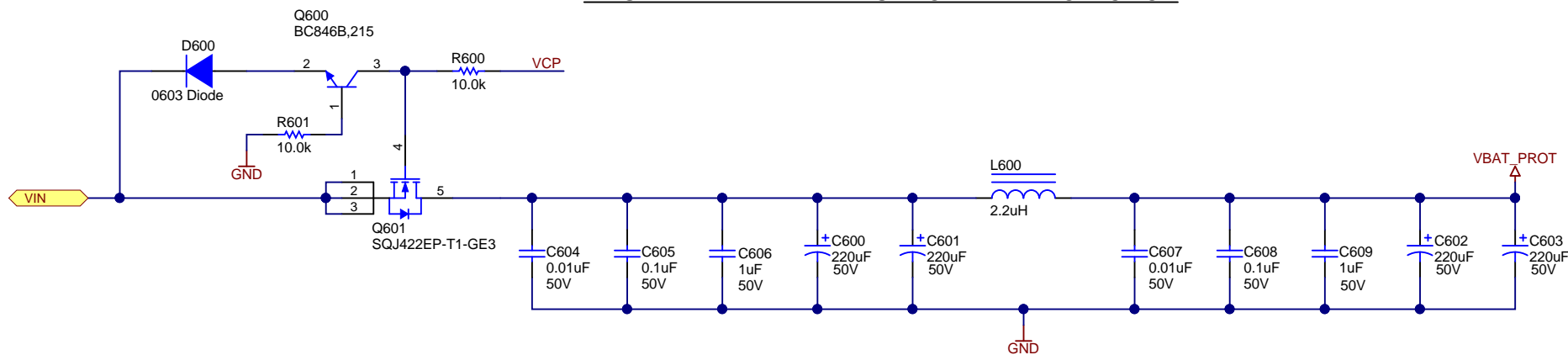


Orderable: N/A	Designed for: Public Release	Mod. Date: 18-Jul-18
TID #: TIDA-01507	Project Title: TIDA-01507	
Number: TIDA-01507	Rev: E1	Sheet Title: R-2R DAC
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 6 of 8
Drawn By:	File: TIDA-01507_R2R_DAC.SchDoc	Size: B
Engineer: Jiri Panacek	Contact: http://www.ti.com/support	

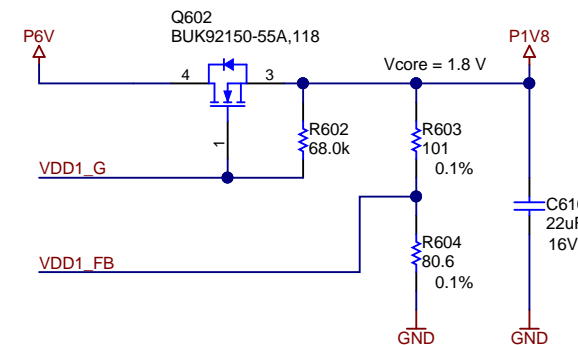
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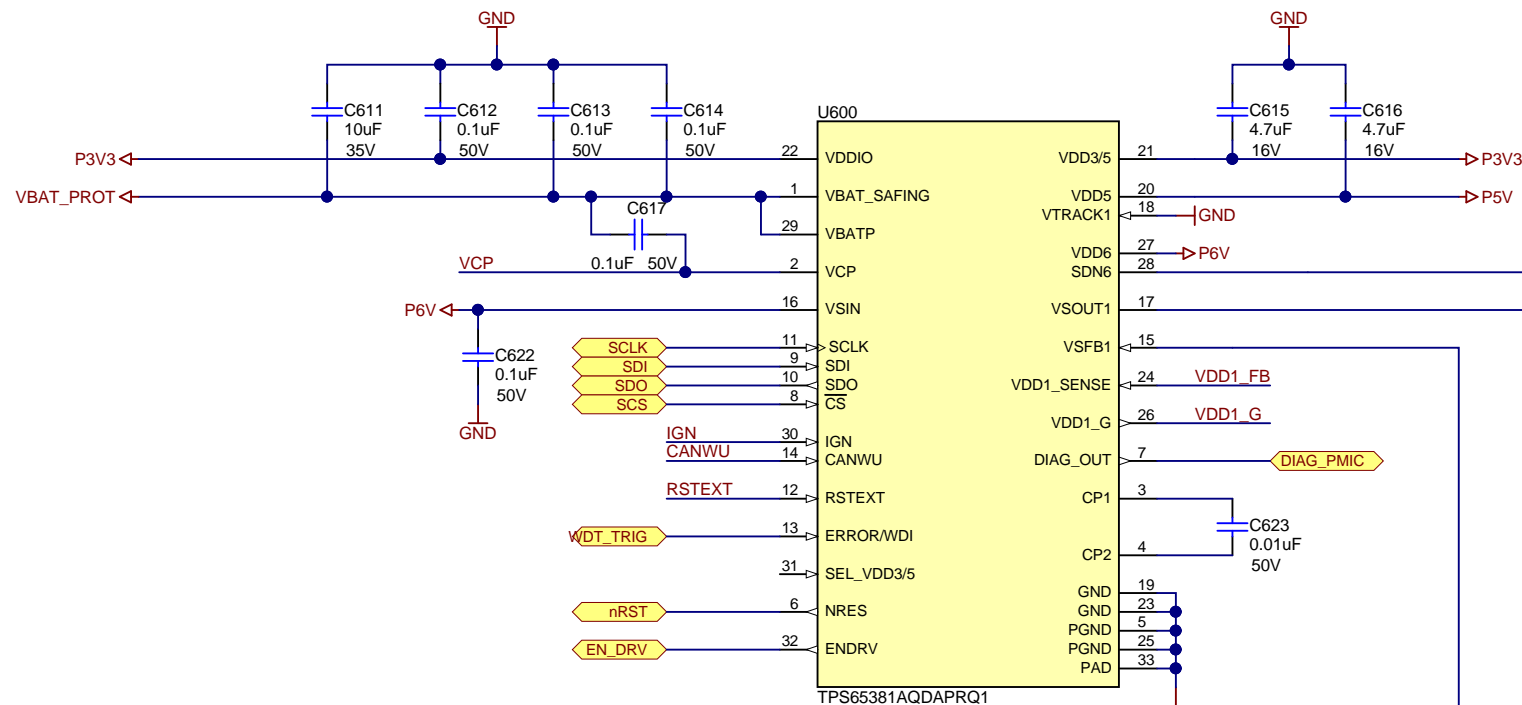
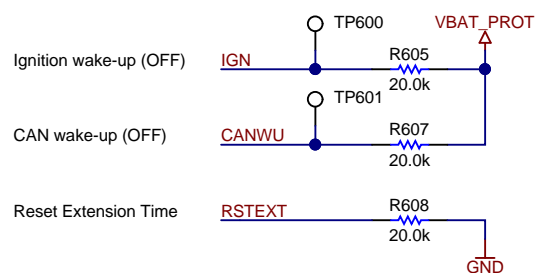
INPUT FILTER AND REVERSE POLARITY PROTECTION



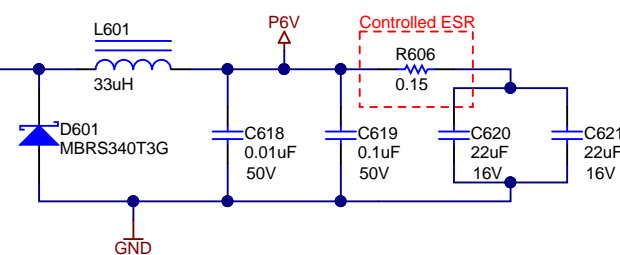
VCORE LIN. REGULATOR



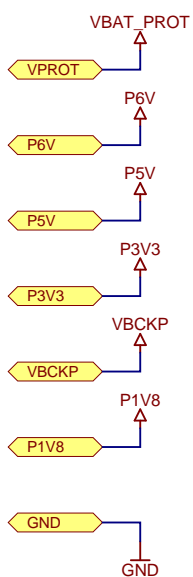
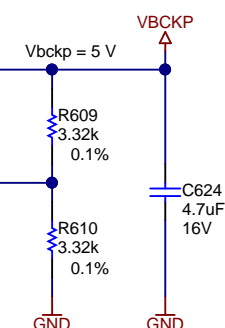
CONFIGURATION



DC-DC PRE-REGULATOR



EXTRA LDO

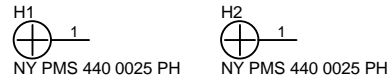


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Orderable: N/A	Designed for: Public Release	Mod. Date: 04-Jul-18
TID #: TIDA-01507	Project Title: TIDA-01507	
Number: TIDA-01507	Rev: E1	Sheet Title: Power Management
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 7 of 8
Drawn By:	File: TIDA-01507_PMIC.SchDoc	Size: B
Engineer: Jiri Panacek	Contact: http://www.ti.com/support	



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PCB Number: TIDA-01507
PCB Rev: E1

Logo1
PCB
LOGO
WEEE logo

PCB
LOGO

Variant/Label Table	
Variant	Label Text
001	Development
002	TBD

ZZ1
Label Assembly Note
This Assembly Note is for PCB labels only

ZZ2
Assembly Note
This Assembly Note will show in the PcbDoc and associated outputs

ZZ3
Assembly Note
This Assembly Note will show in the PcbDoc and associated outputs

ZZ4
Assembly Note
This Assembly Note will show in the PcbDoc and associated outputs

Orderable: N/A	Designed for: Public Release	Mod. Date: 04-Jul-18	
TID #: TIDA-01507	Project Title: TIDA-01507	Sheet: 8 of 8	
Number: TIDA-01507	Rev: E1	Sheet Title: Hardware	http://www.ti.com © Texas Instruments 2018
SVN Rev: Version control disabled	Assembly Variant: 001	Size: B	
Drawn By: Jiri Panacek	File: TIDA-01507_Hardware.SchDoc	Contact: http://www.ti.com/support	

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