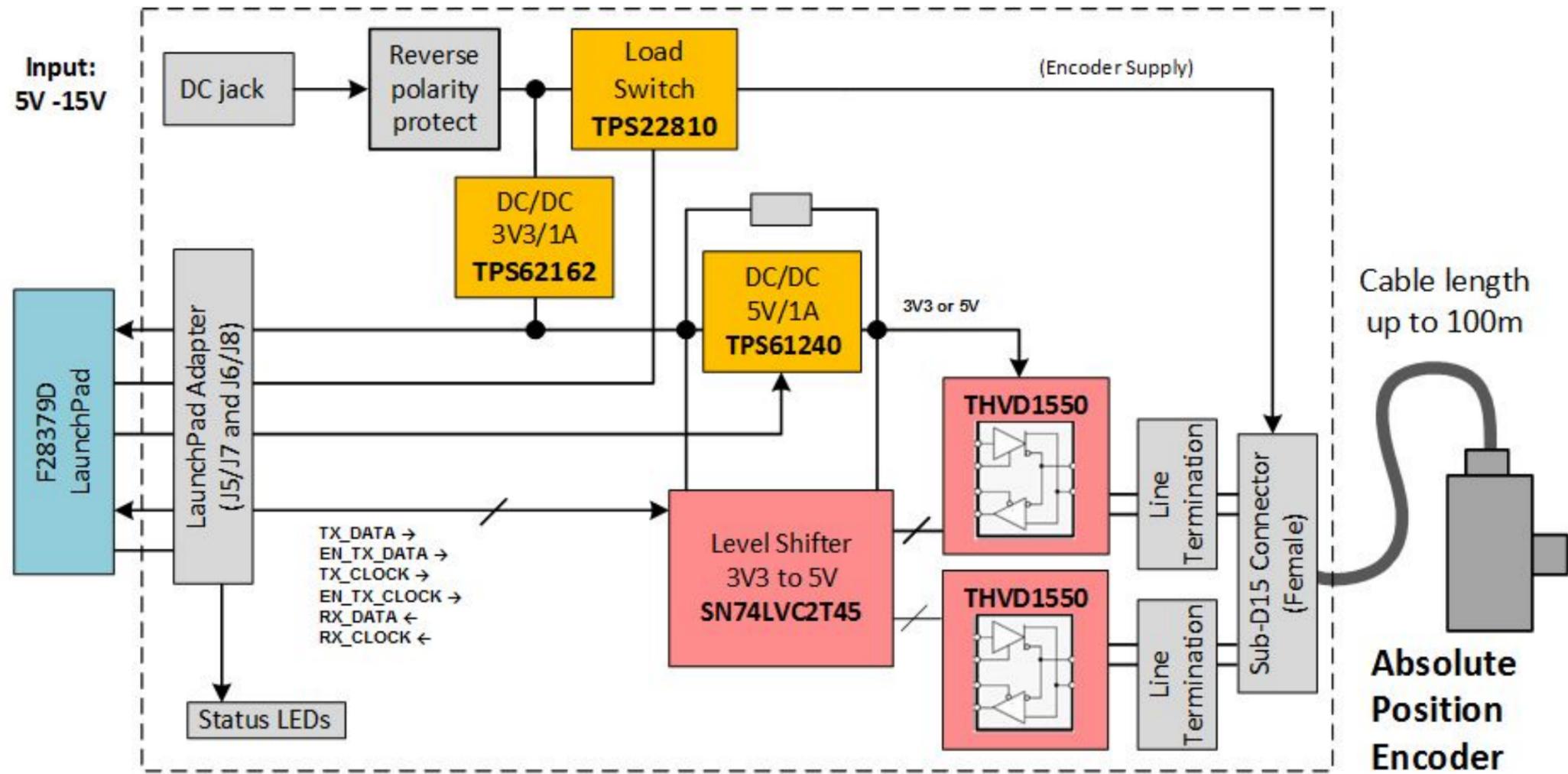


Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
N/A	N/A	N/A	N/A	N/A



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TID #: 01401	Project Title: High EMI-Immunity EnDat BoosterPack	Sheet: 1 of 3	
Number: TIDA-01401	Rev: 1.1	Sheet Title:	http://www.ti.com
SVN Rev: Unknown revision	Assembly Variant: 001	Size: B	
Drawn By:	File: TIDA-01401_CoverSheet_SchDoc	Contact: http://www.ti.com/support	
Engineer: Kristen Mogensen			© Texas Instruments 2017

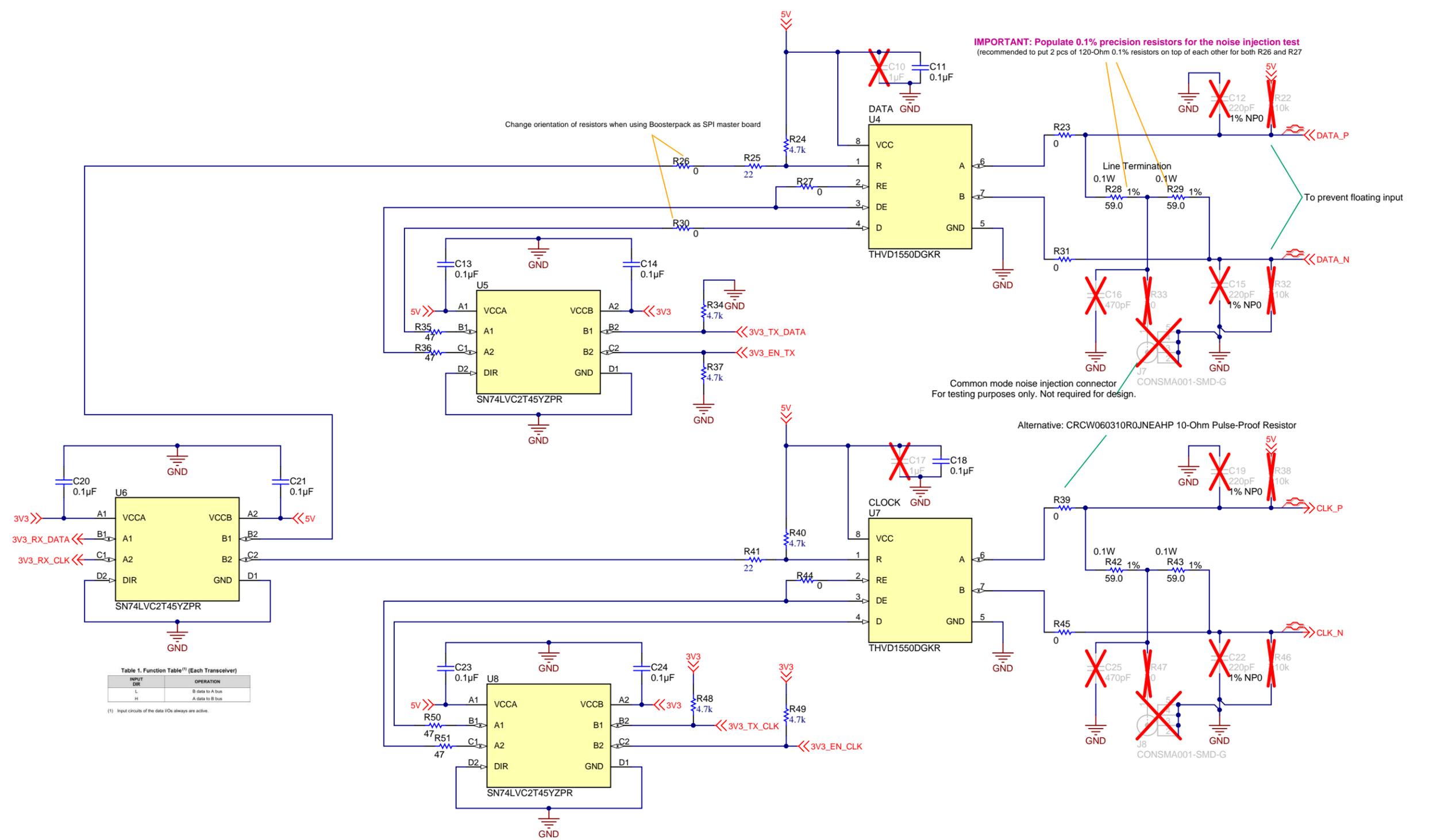


Table 1. Function Table⁽¹⁾ (Each Transceiver)

INPUT DIR	OPERATION
L	B data to A bus
H	A data to B bus

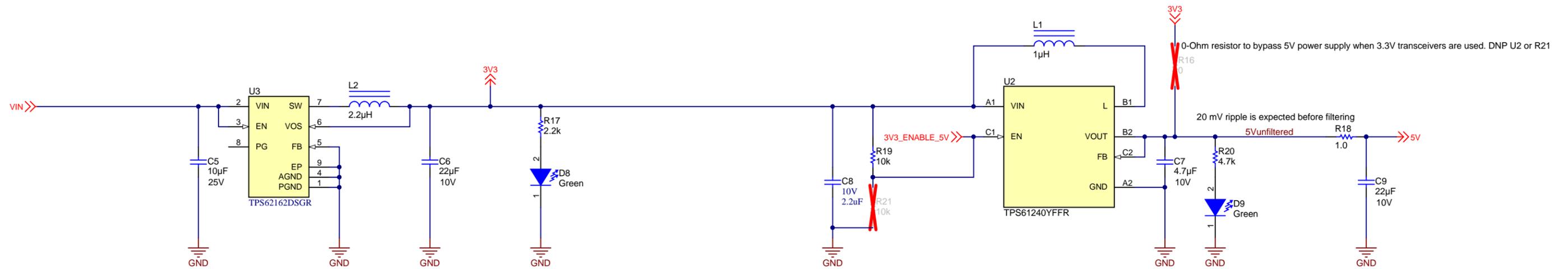
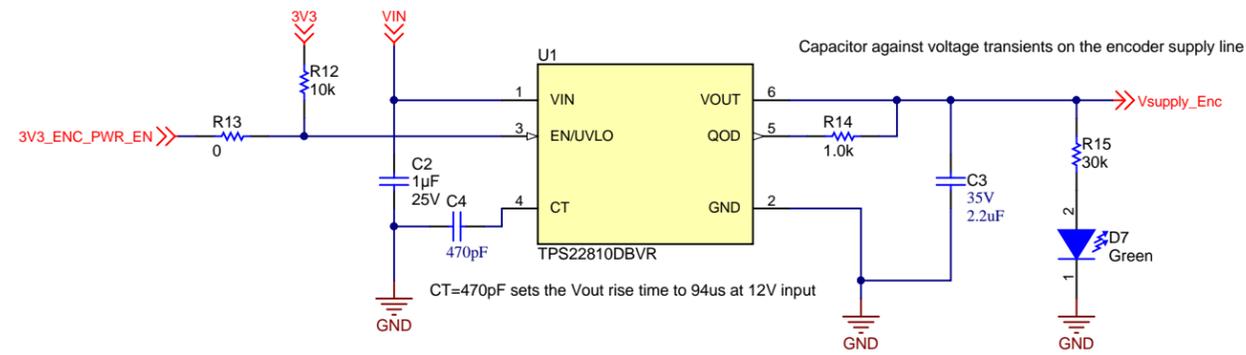
(1) Input circuits of the data I/Os always are active.

High-level input voltage (D, DE, or RE inputs), V _{IH}	2	V _{CC}	V
Low-level input voltage (D, DE, or RE inputs), V _{IL}	0	0.8	V

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TID #: 01401	Project Title: High EMI-Immunity EnDat BoosterPack	
Number: TIDA-01401	Rev: 1.1	Sheet Title:
SVN Rev: Unknown revision	Assembly Variant: 001	Sheet: 2 of 3
Drawn By:	File: TIDA-01401_Transceivers.SchDoc	Size: B
Engineer: Kristen Mogensen	Contact: http://www.ti.com/support	

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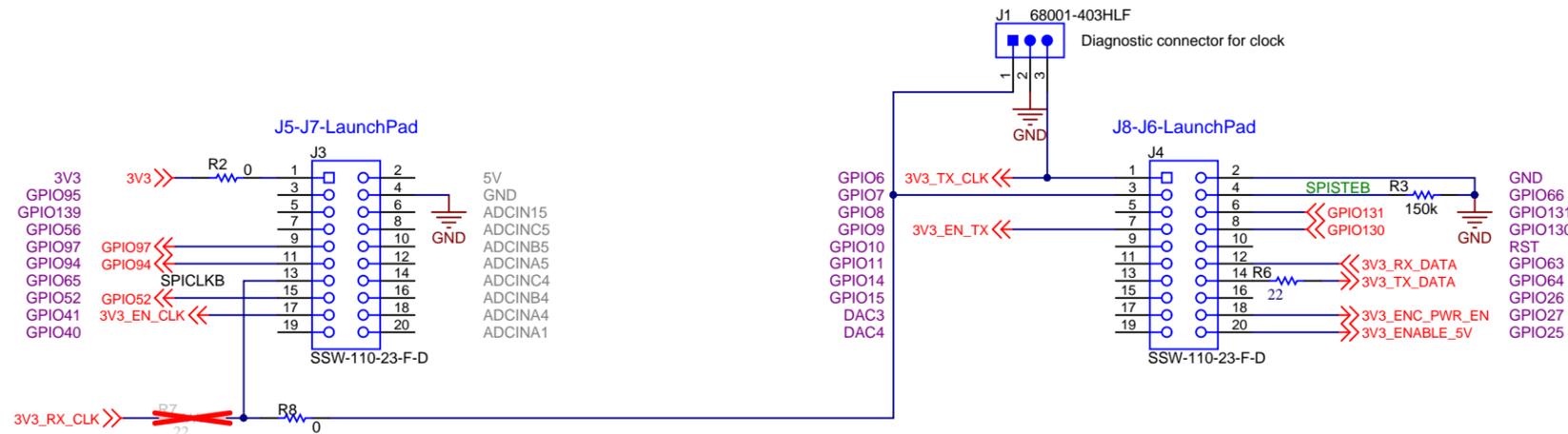


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TID #: 01401	Project Title: High EMI-Immunity EnDat BoosterPack	
Number: TIDA-01401	Rev: 1.1	Sheet: 2 of 3
SVN Rev: Unknown revision	Assembly Variant: 001	Size: B
Drawn By:	File: TIDA-01401_PowerSupply_SchDoc	http://www.ti.com
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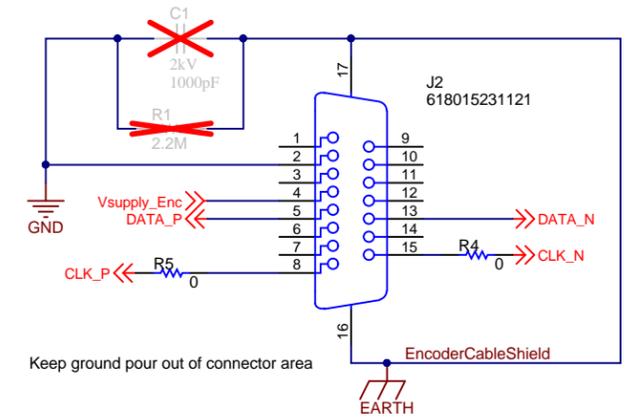


LaunchPad Connectors



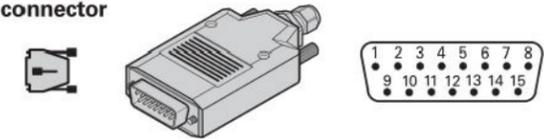
LAUNCHXL-F28379D				TIDA-01401 rev E2			
J5	J7	J8	J6	J3		J4	
3V3	5V	PWM4A	GND	3V3	NC	TX_CLK	GND
GPIO95	GND	PWM4B	SPIBCS/GPIO66	NC	GND	SPICLK	GND
GPIO139	ADCIN15	PWM5A	GPIO131	NC	NC	NC	NC
GPIO56	ADCINC5	PWM5B	GPIO130	NC	NC	TX_EN	NC
GPIO97	ADCINB5	PWM6A	RESETn	LED	NC	NC	NC
GPIO94	ADCINA5	PWM6B	SPIBSIMO	LED	NC	NC	SIMO
SPIBCLK/GPIO65	ADCINC4	GPIO14	SPIBSOMI	SPICLK	NC	NC	SOMI
GPIO52	ADCINB4	GPIO15	GPIO26	LED	NC	NC	NC
GPIO41	ADCINA4	DAC3	GPIO27	EN_CLK	NC	NC	Enc_Enable
GPIO40	ADCINA1	DAC4	GPIO25	NC	NC	NC	Enable 5V

Encoder / RS-485 Data Connector



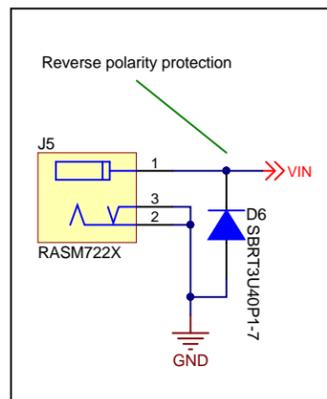
EIB 392

15-pin D-sub connector

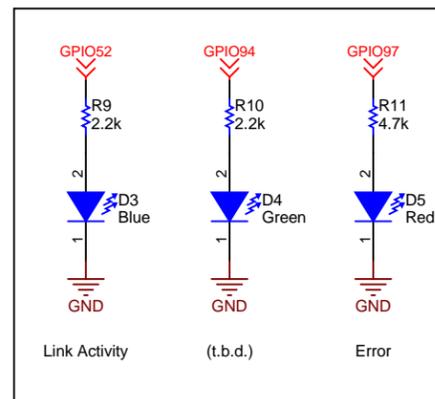


Pin	Voltage supply				Position values			
	4	12	2	10	5	13	8	15
EnDat	Up	Sensor	0V	Sensor	DATA	DATA	CLOCK	CLOCK
	Brown/ Green	Blue	White/ Green	White	Gray	Pink	Violet	Yellow

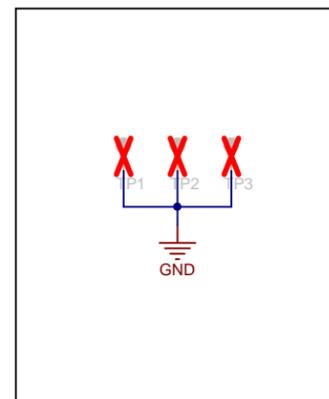
Supply Voltage



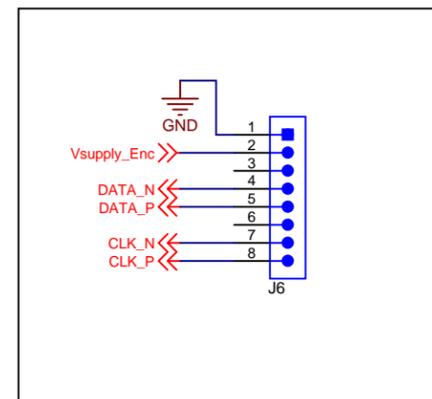
Indicator LEDs



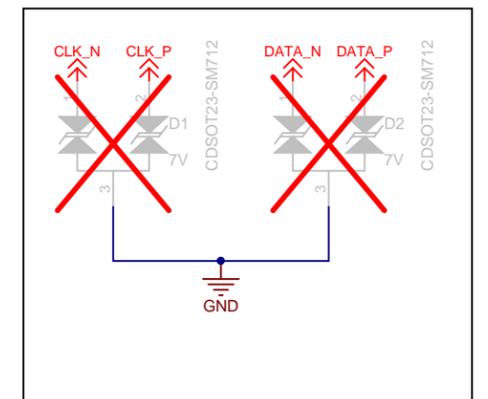
GND test points



Encoder / RS-485 Data Connector



TVS for unshielded cable test



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TID #: 01401	Project Title: High EMI-Immunity EnDat BoosterPack	
Number: TIDA-01401	Rev: 1.1	Sheet Title:
SVN Rev: Unknown revision	Assembly Variant: 001	Sheet: 2 of 3
Drawn By:	File: TIDA-01401_Interface.SchDoc	Size: B
Engineer: Kristen Mogensen	Contact: http://www.ti.com/support	

A

A



PCB LOGO
Pb-Free Symbol

PCB LOGO
FCC disclaimer

B

B

Variant/Label Table	
Variant	Label Text
001	ChangeMe!
002	ChangeMe!

LBL1
PCB Label
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.

D

D

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TID #: 01401	Project Title: High EMI-Immunity EnDat BoosterPack		
Number: TIDA-01401	Rev: 1.1	Sheet: 3 of 3	
SVN Rev: Unknown revision	Assembly Variant: 001	Size: B	
Drawn By: Kristen Mogensen	File: TIDA-01401_EVM_Hardware.SchDoc	Contact: http://www.ti.com/support	

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