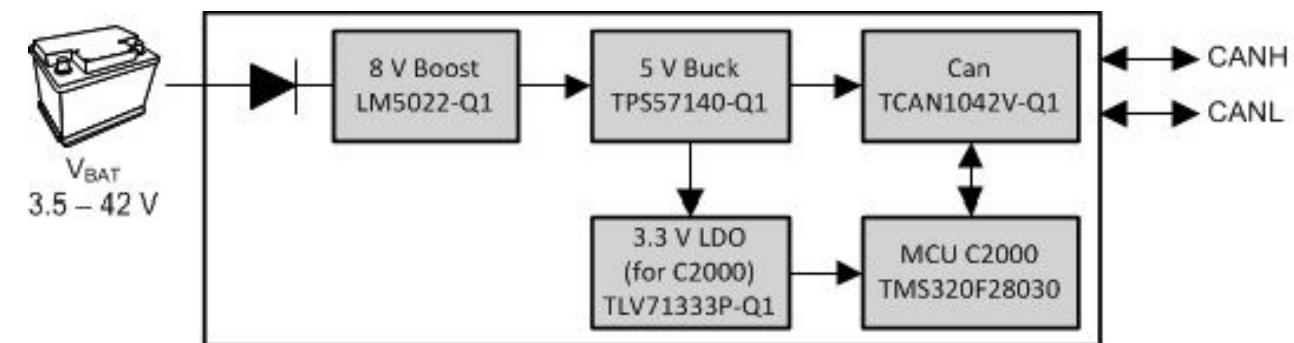



Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
N/A	N/A	N/A	N/A	N/A

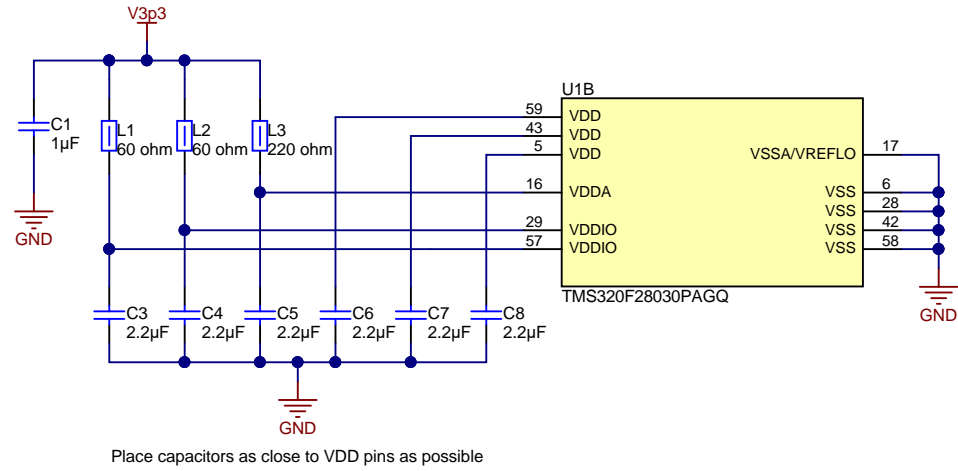


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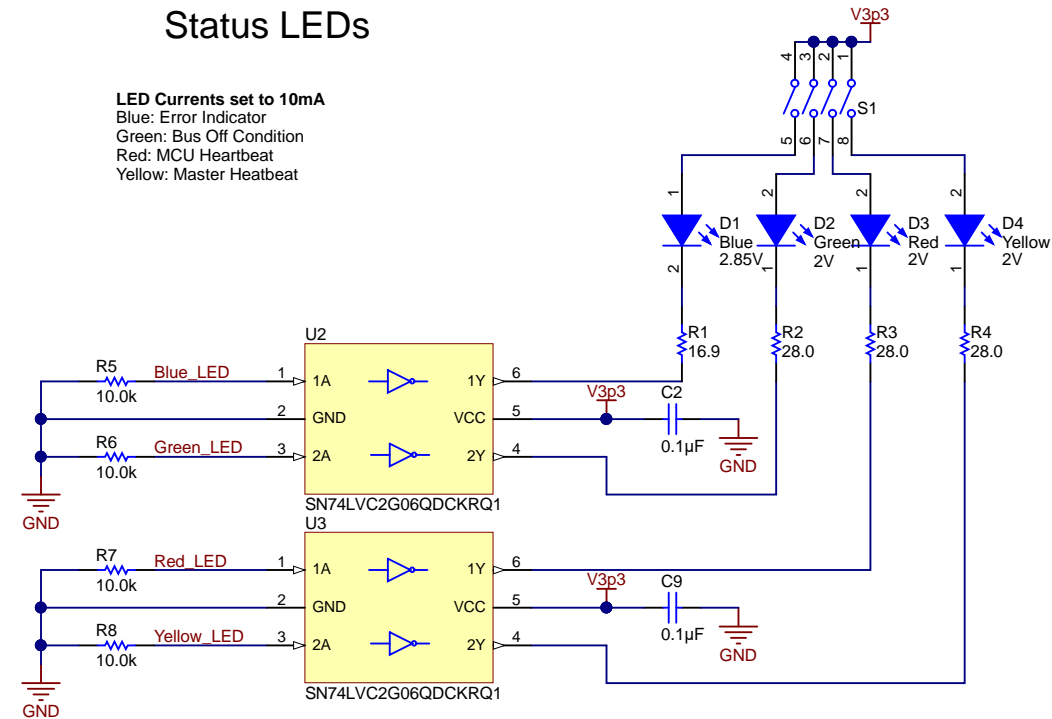
Orderable: N/A	Designed for: Public Release	Mod. Date: 7/7/2017	 <a href="http://www.ti.com">http://www.ti.com</a> © Texas Instruments 2016
TID #: TIDA-01429	Project Title: Discrete SBC Boost Buck		
Number: TIDA-01429	Rev: E1	Sheet Title:	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 1 of 4	
Drawn By:	File: TIDA-01429_Boost_Buck_CoverSheet.SchDoc	Size: B	
Engineer: John Griffith	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>		

### C2000 Power Connections - TMS320F29030Q

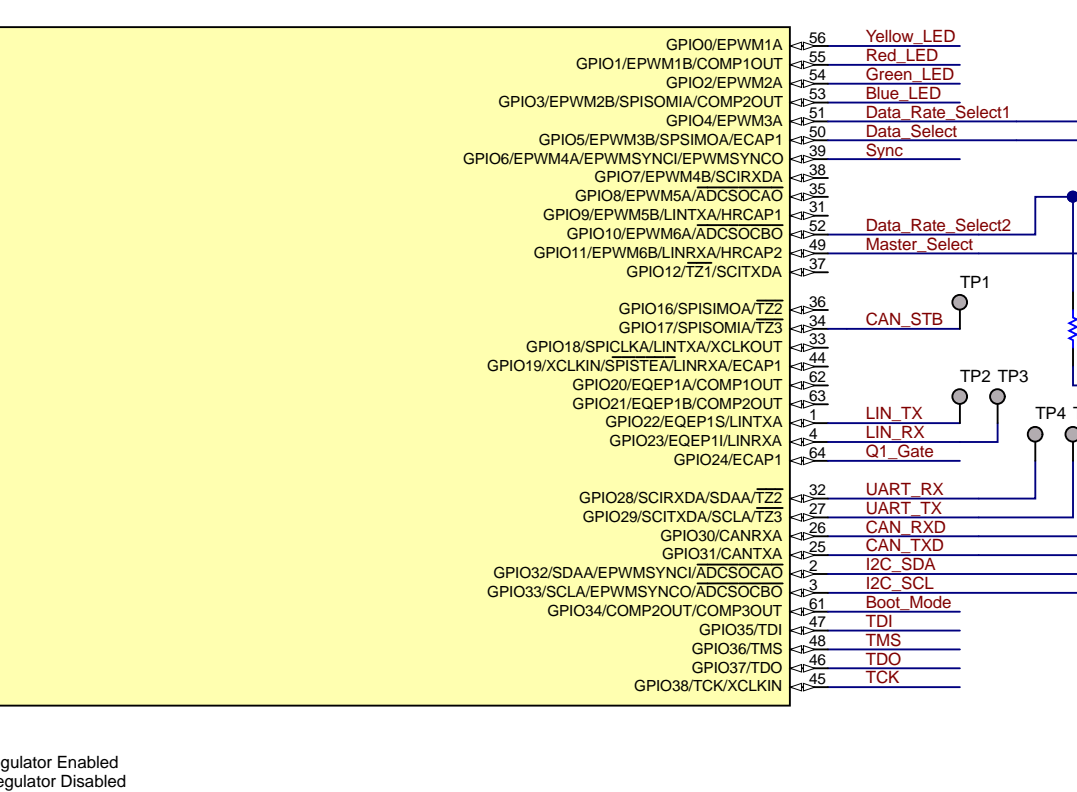
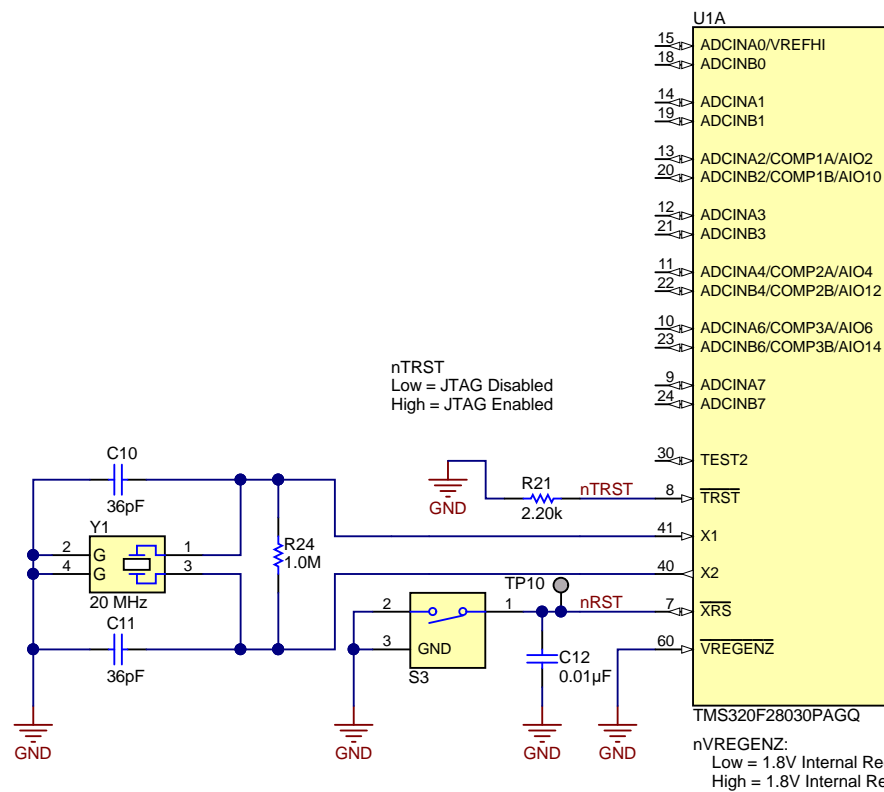


### Status LEDs

LED Currents set to 10mA  
 Blue: Error Indicator  
 Green: Bus Off Condition  
 Red: MCU Heartbeat  
 Yellow: Master Heartbeat

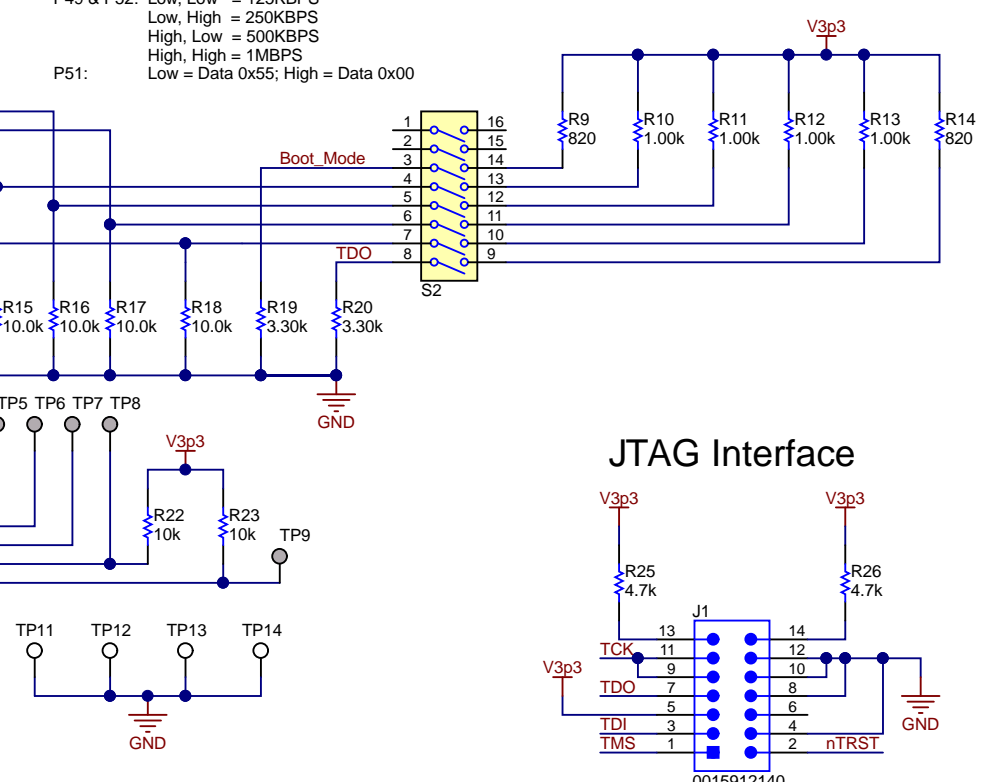


### C2000 Peripheral Connections - TMS320F28030Q

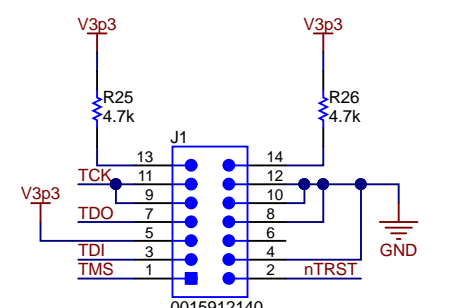


### Mode Selection DIP Switches

Resistor Selection  
 P50: Low = Slave; High = Master  
 P49 & P52: Low, Low = 125KBPS  
 Low, High = 250KBPS  
 High, Low = 500KBPS  
 High, High = 1MBPS  
 P51: Low = Data 0x55; High = Data 0x00

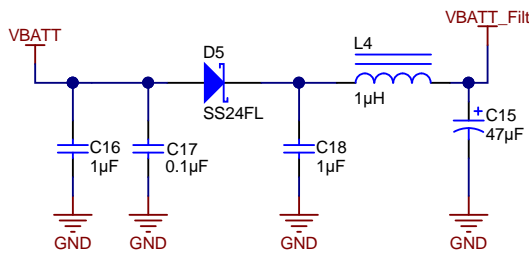


### JTAG Interface

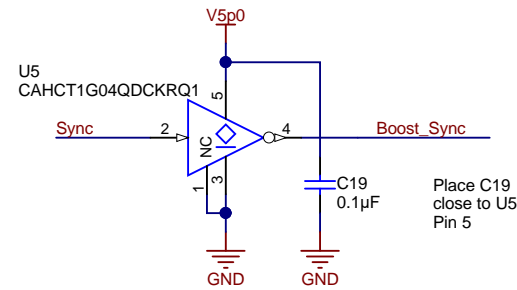


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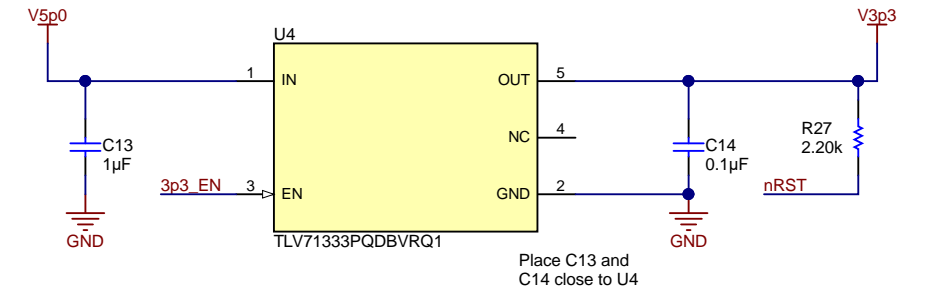
### Reverse Battery Protection and Conducted Emissions Filter



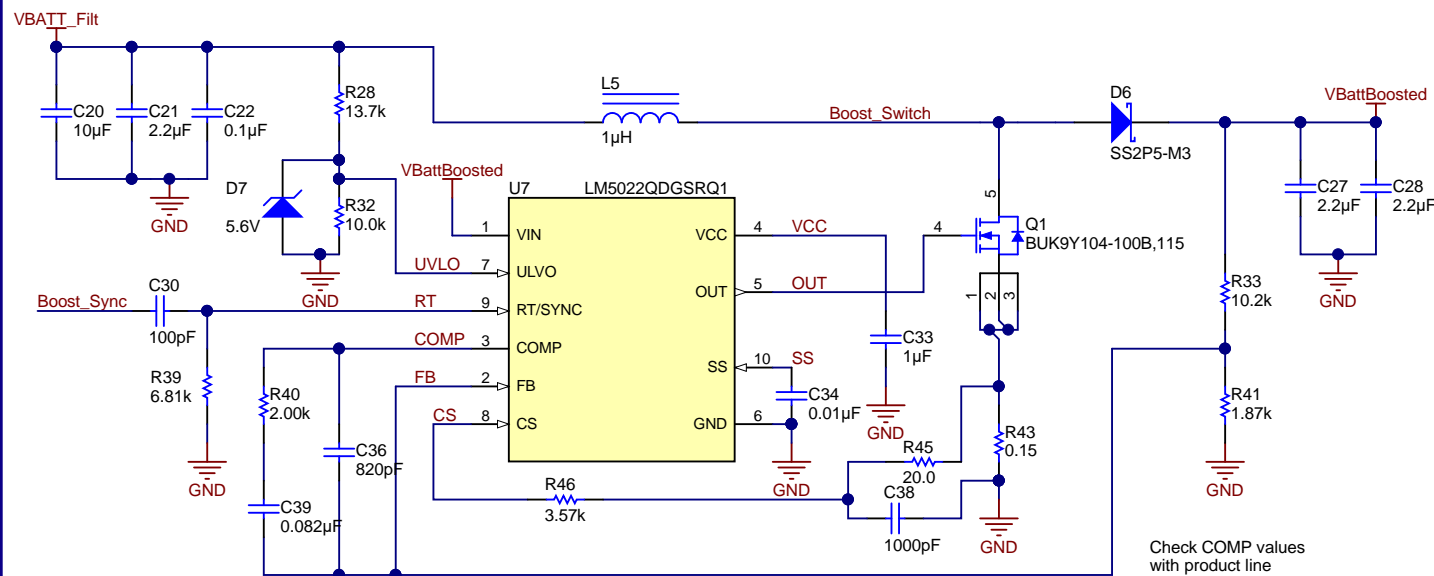
### Level Shifting Sync Clock for Boost



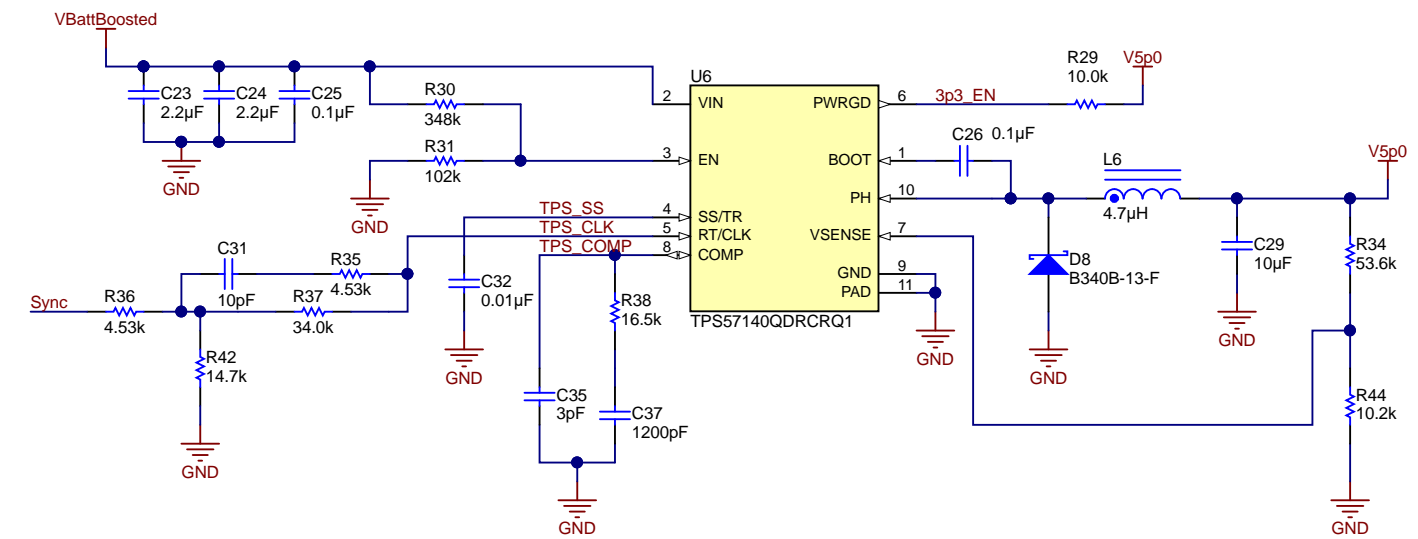
### 3.3V 150mA LDO for C2000



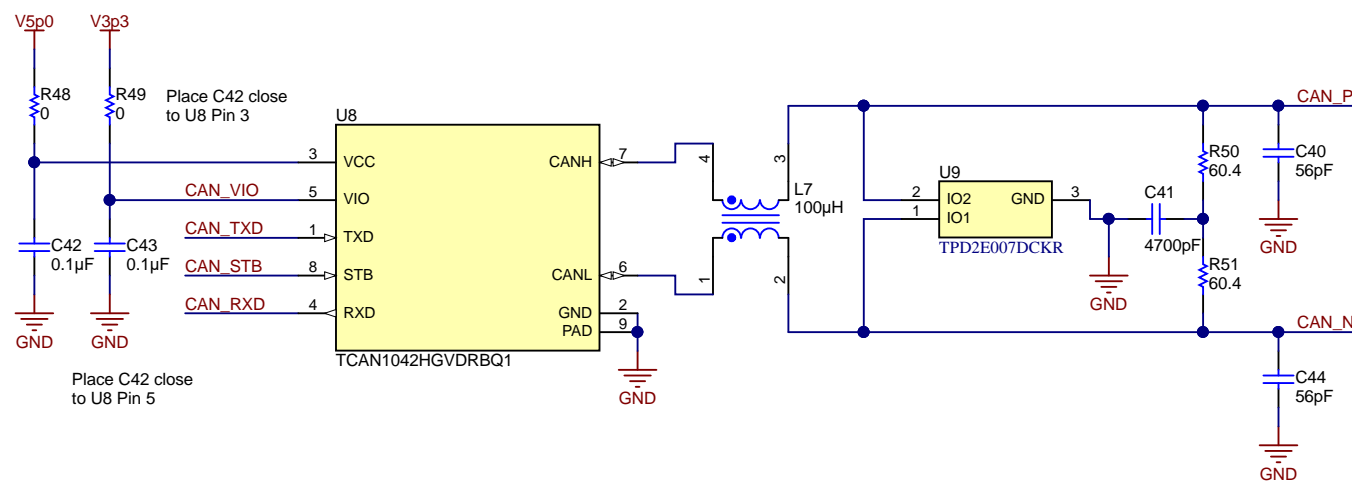
### Automotive, 65V Wide VIN, adjustable, Asynchronous Boost Controller



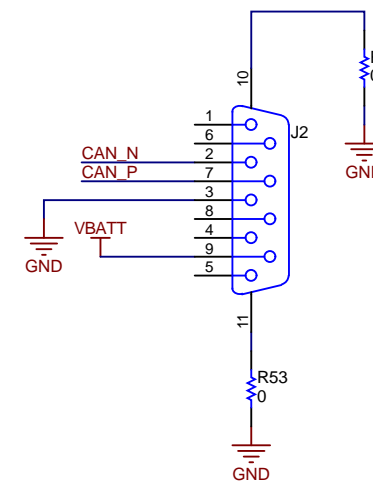
### Automotive, 42V Wide VIN, adjustable, 1.5 Amp, Asynchronous Buck Converter



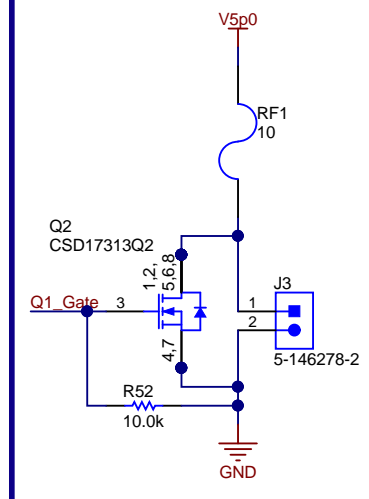
### 5MBPS CAN FD Transceiver with I/O Level Shifting in DFN Package



### External Connector - Female, 9-Pin, DSUB, R/A

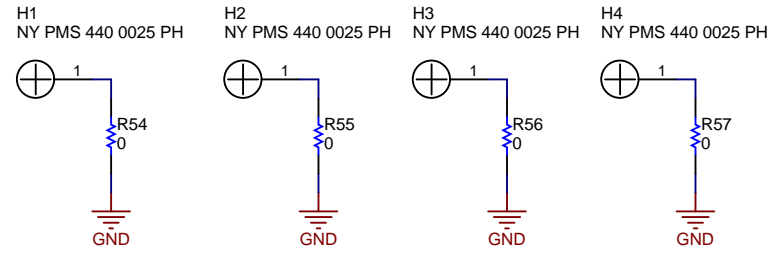


### Load Resistor



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Orderable: N/A	Designed for: Public Release	Mod. Date: 6/23/2017
TID #: TIDA-01429	Project Title: Discrete SBC Boost Buck	
Number: TIDA-01429	Rev: E1	Sheet Title:
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 3 of 4
Drawn By:	File: TIDA-01429 Boost_Buck_Main.SchDoc	Size: B
Engineer: John Griffith	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	

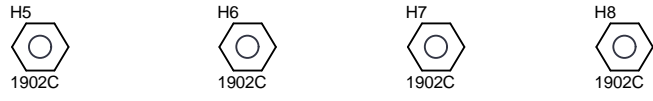


PCB Number: TIDA-01429  
PCB Rev: E1

PCB LOGO  
Texas Instruments

PCB LOGO  
Pb-Free Symbol

PCB LOGO  
FCC disclaimer



Variant/Label Table	
Variant	Label Text
001	Standard Build

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.

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Orderable: N/A	Designed for: Public Release	Mod. Date: 6/22/2017	<p>TEXAS INSTRUMENTS http://www.ti.com © Texas Instruments 2016</p>
TID #: TIDA-01429	Project Title: Discrete SBC Boost Buck		
Number: TIDA-01429	Rev: E1	Sheet Title:	
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 4 of 4	
Drawn By:	File: TIDA-01429 Boost Buck Hardware.SchDoc	Size: B	
Engineer: John Griffith	Contact: http://www.ti.com/support		

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