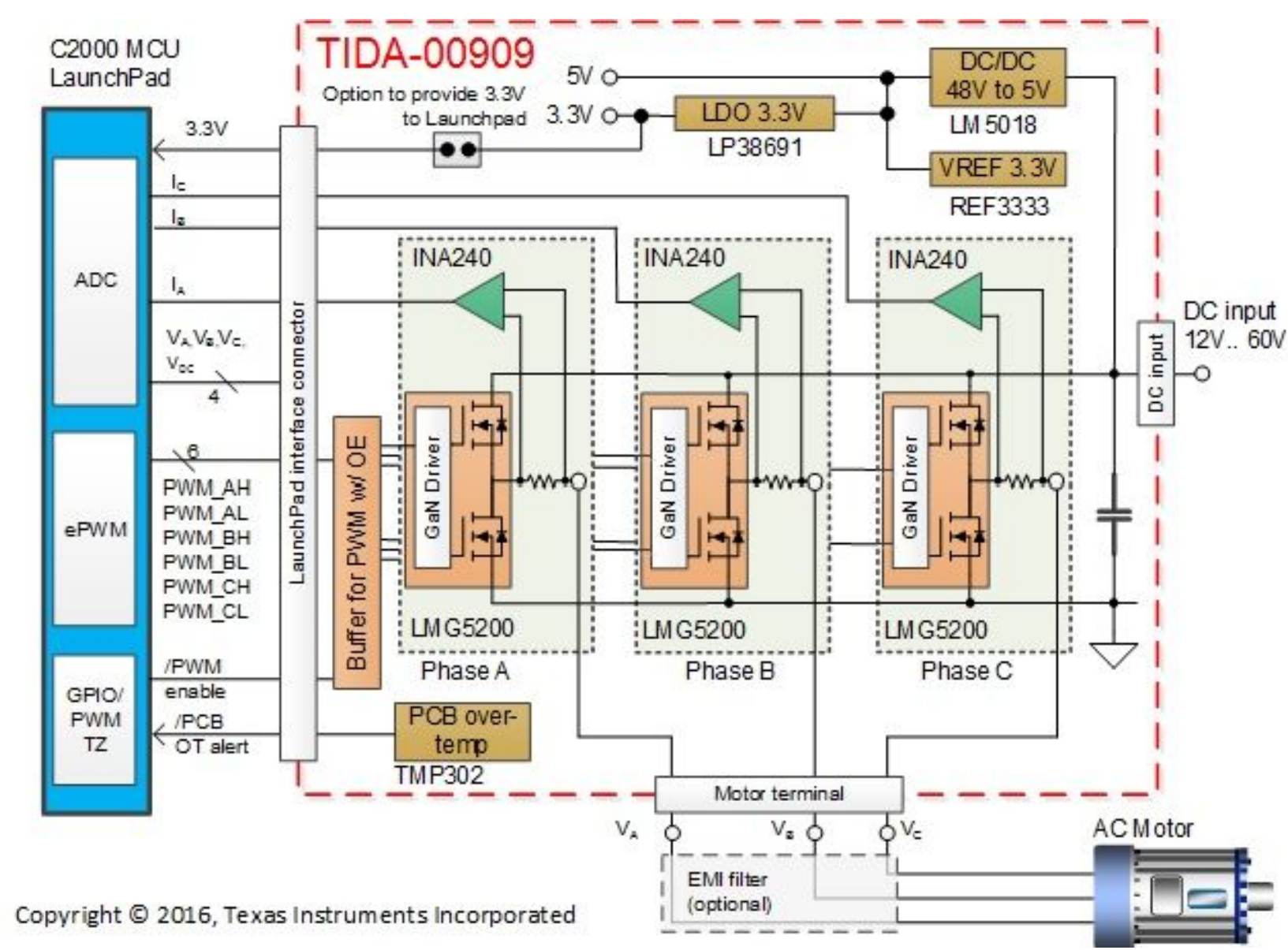


Revision History				
Rev	ECN #	Approved Date	Approved by	Notes
N/A	N/A	N/A	N/A	N/A

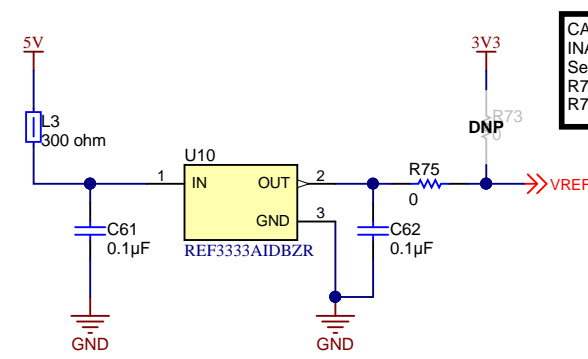
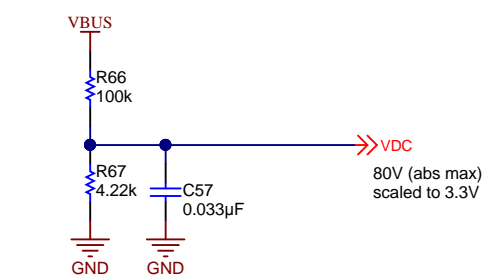
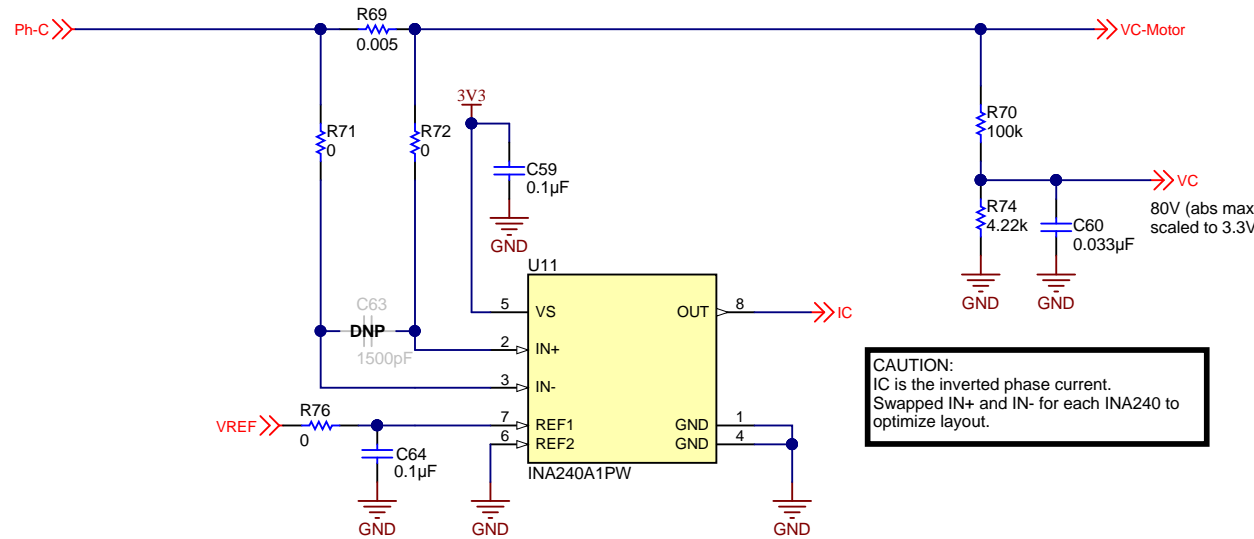
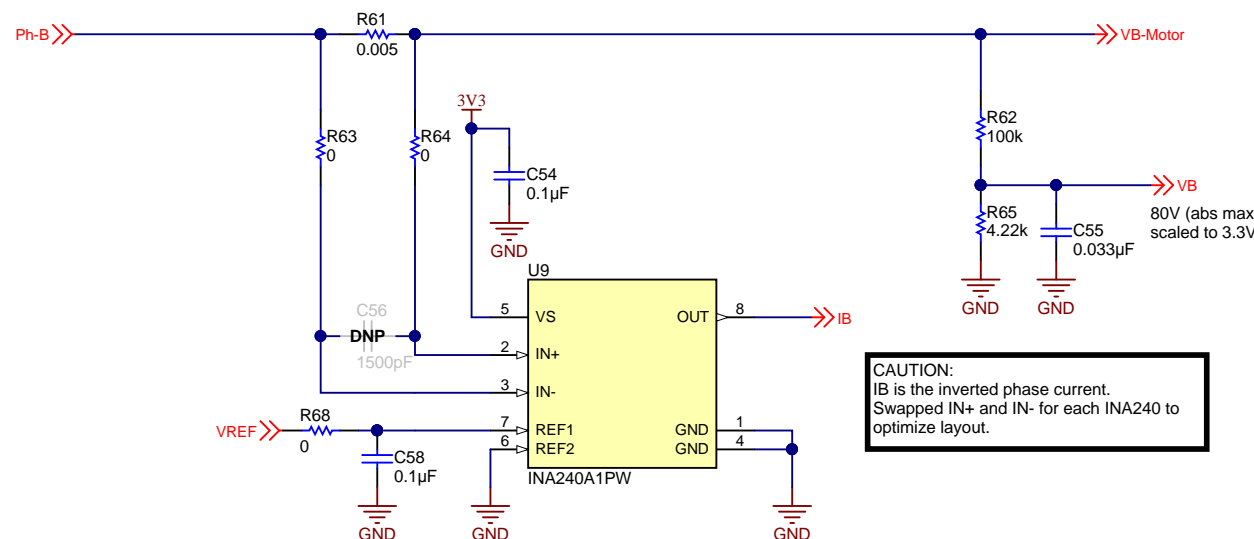
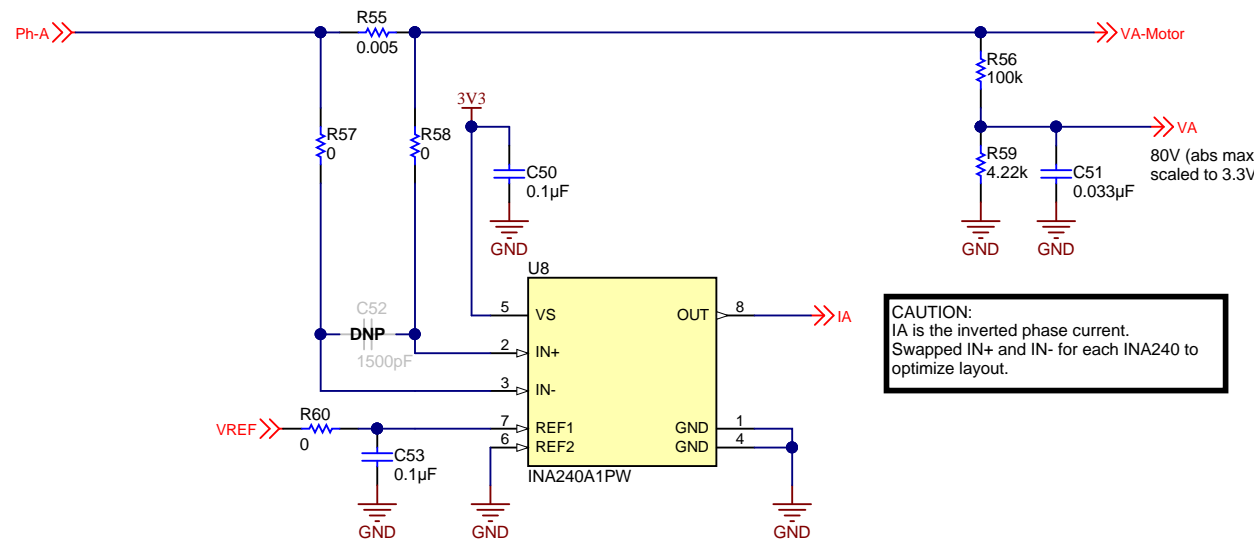


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Orderable: N/A	Designed for: Public Release	Mod. Date: 10/28/2016
TID #: TIDA-00909	Project Title: TI Design	
Number: TIDA-00909	Rev: E1	Sheet Title:
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 1 of 3
Drawn By:	File: TIDA-00909_CS.SchDoc	Size: B
Engineer: Zhou/Staebler	Contact: http://www.ti.com/support	





CAUTION:
 INA240 REF2 input selection:
 Select ONE option:
 R75 = VREF (default)
 R73 = 3.3V (DNP)

Inputs:

Current	10	Amps
Thickness	2	oz/ft^2

Optional Inputs:

Temperature Rise	10	Deg C
Ambient Temperature	85	Deg C
Trace Length	1	inch

Results for Internal Layers:

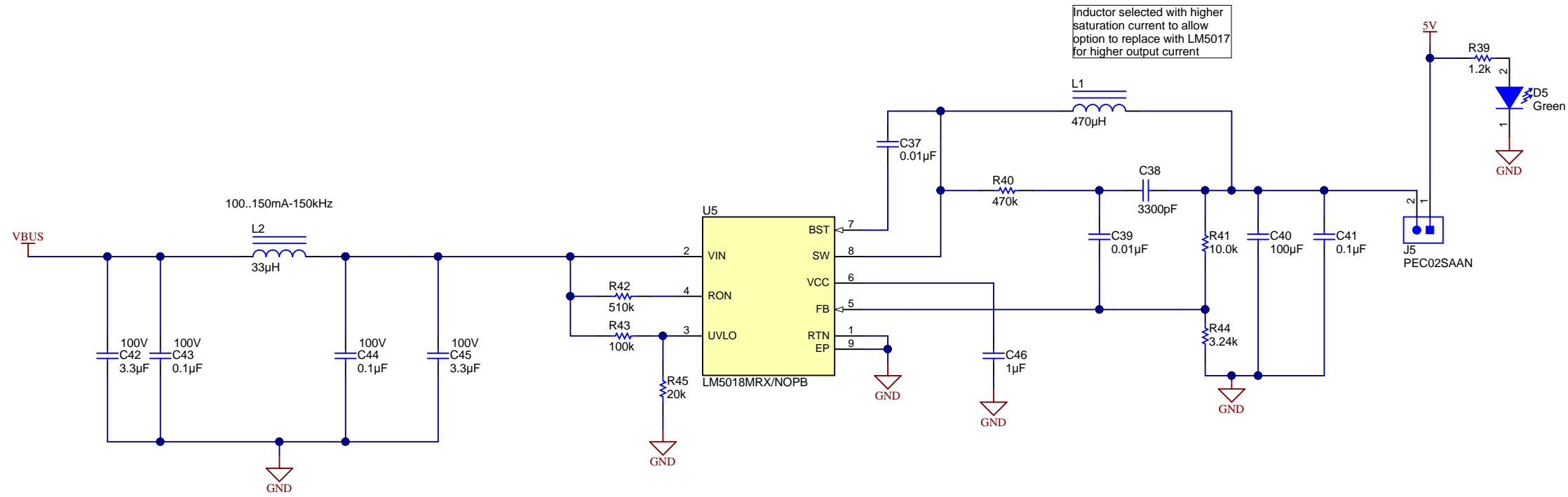
Required Trace Width	368	mil
Resistance	0.000839	Ohms
Voltage Drop	0.00839	Volts
Power Loss	0.0839	Watts

Results for External Layers in Air:

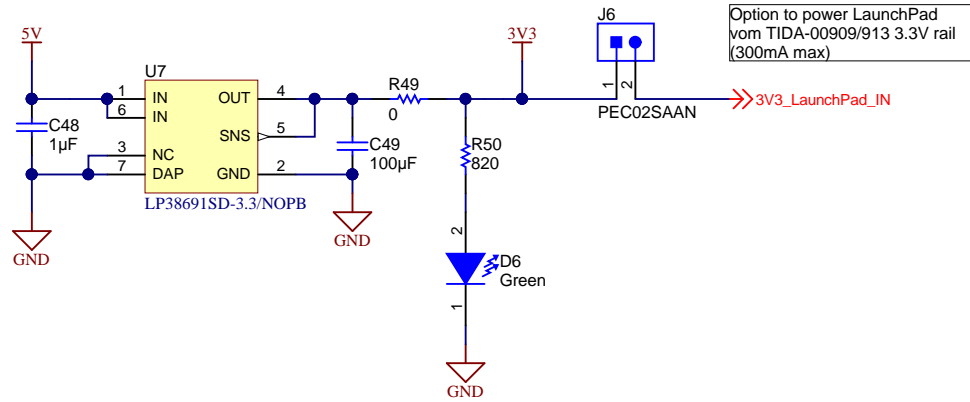
Required Trace Width	142	mil
Resistance	0.00218	Ohms
Voltage Drop	0.0218	Volts
Power Loss	0.218	Watts

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H1
MECH
691352510002



Inductor selected with higher saturation current to allow option to replace with LM5017 for higher output current

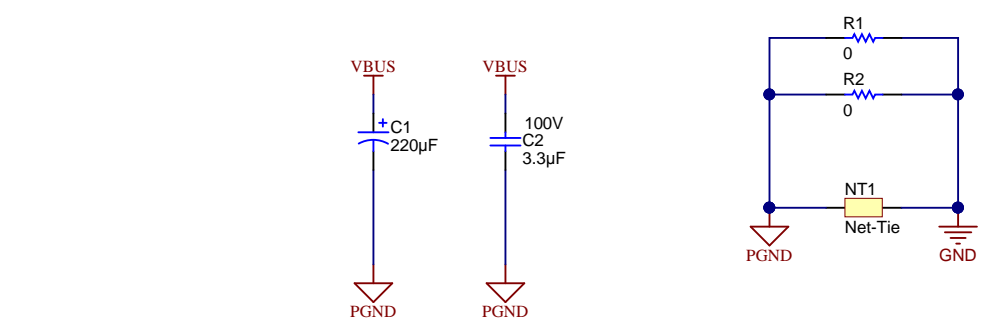


Option to power LaunchPad vom TIDA-00909/913 3.3V rail (300mA max)

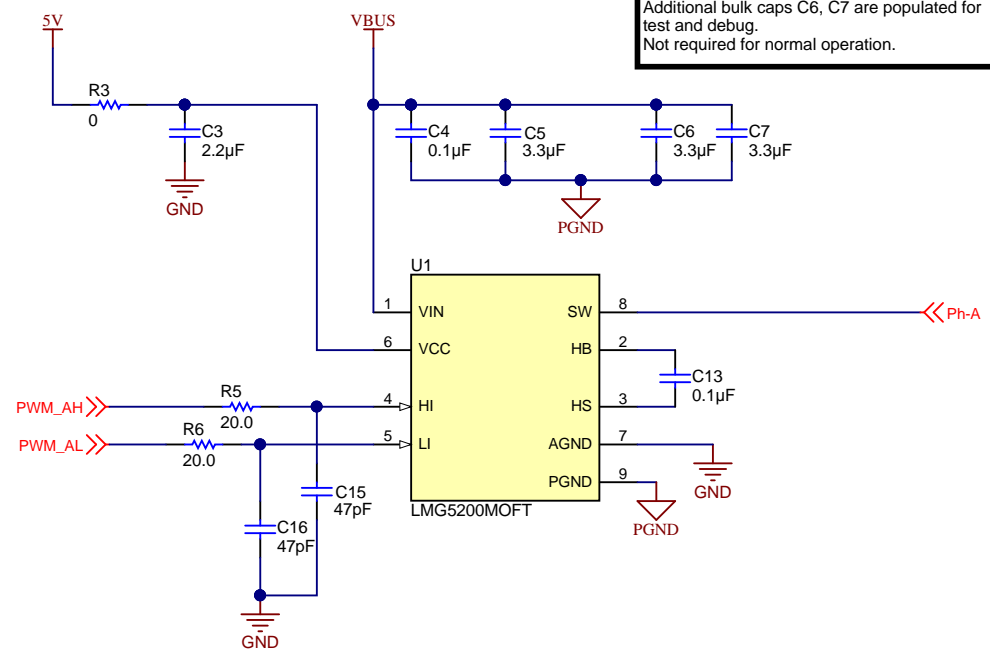
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Number: TIDA-00909	Rev: E1	Sheet: 2 of 3
SVN Rev: Version control disabled	Assembly Variant: 001	Size: B
Drawn By:	File: TIDA-00909_PS_SchDoc	http://www.ti.com
Engineer: Zhou/Staebler	Contact: http://www.ti.com/support	© Texas Instruments 2016

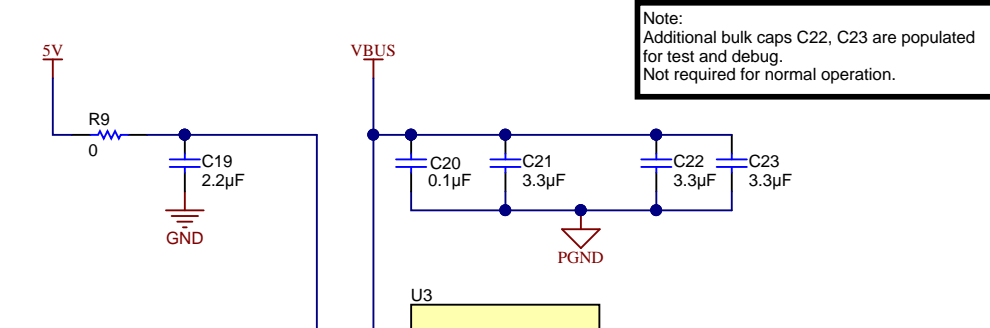
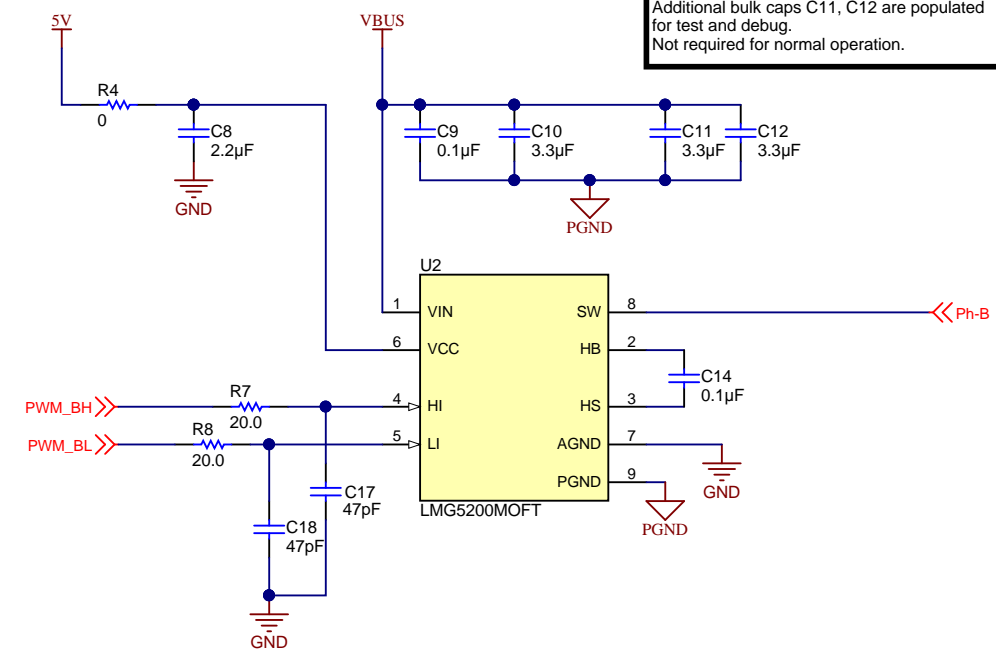




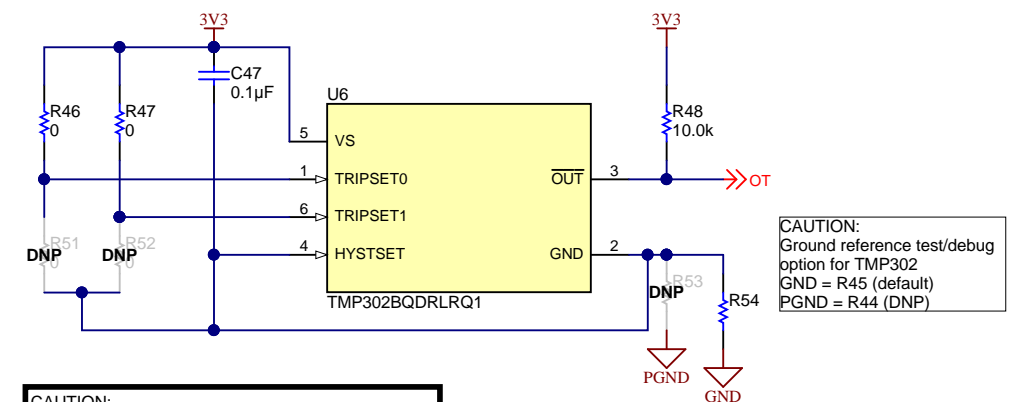
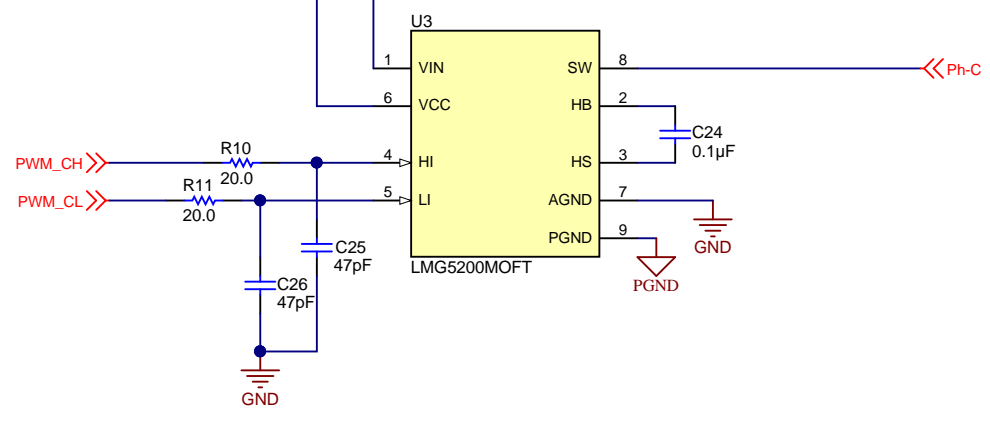
Note:
Additional bulk caps C6, C7 are populated for test and debug.
Not required for normal operation.



Note:
Additional bulk caps C11, C12 are populated for test and debug.
Not required for normal operation.



Note:
Additional bulk caps C22, C23 are populated for test and debug.
Not required for normal operation.



CAUTION:
Ground reference test/debug option for TMP302
GND = R45 (default)
PGND = R44 (DNP)

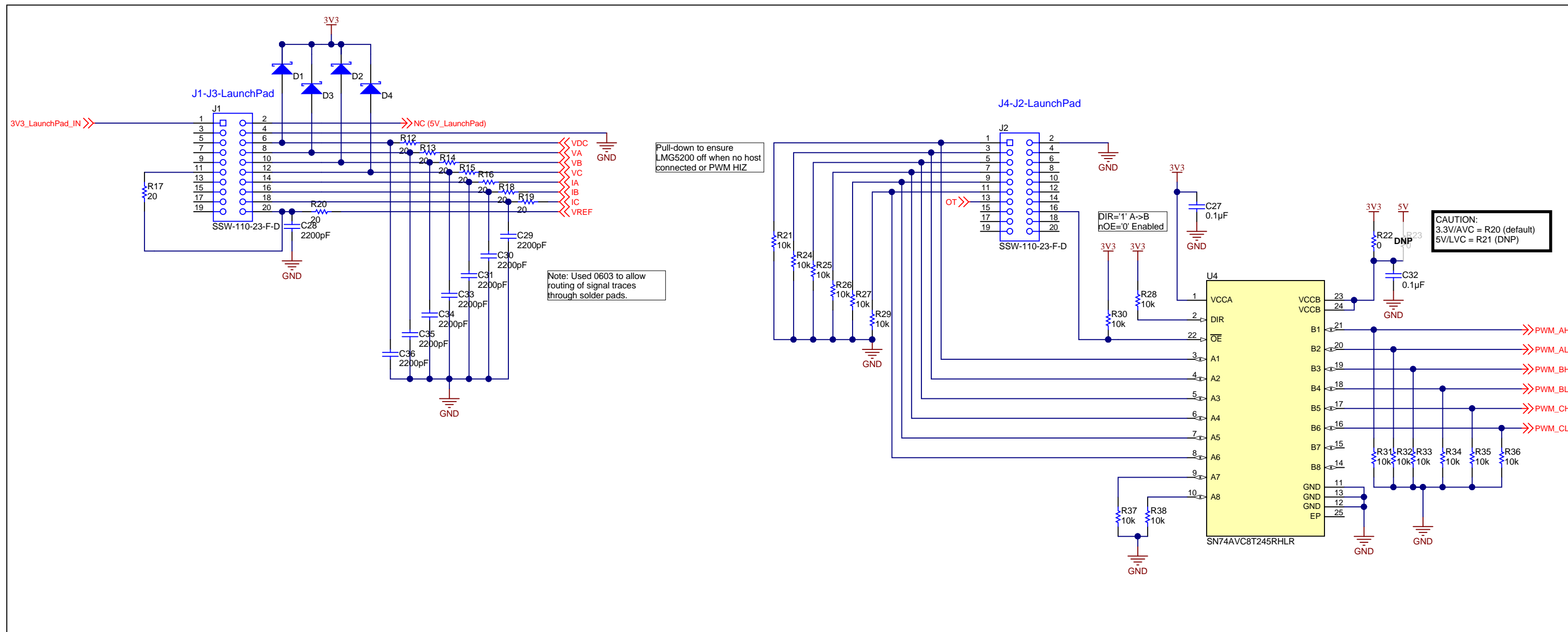
CAUTION:
OT threshold set through resistors R46 or R51, and R47 or R52 settings, see table below.
Do not connect both at the same time!
Default: Max 85C -> R51/R52 (DNP)
Hysteresis set to 5C

Table 1. Trip Point versus TRIPSET1 and TRIPSET0

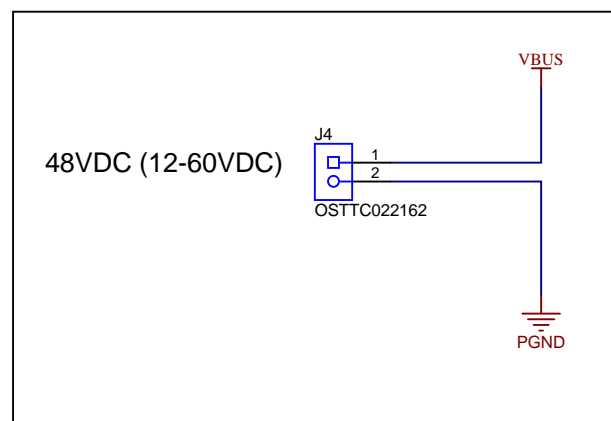
TRIPSET1	TRIPSET0	TMP302A	TMP302B	TMP302C	TMP302D
GND	GND	50°C	70°C	90°C	110°C
GND	V _B	55°C	75°C	95°C	115°C
V _A	GND	60°C	80°C	100°C	120°C
V _A	V _B	65°C	85°C	105°C	125°C

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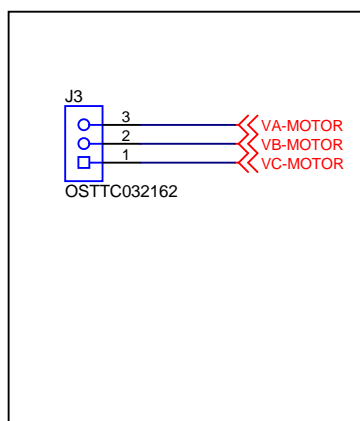
LaunchPad Interface



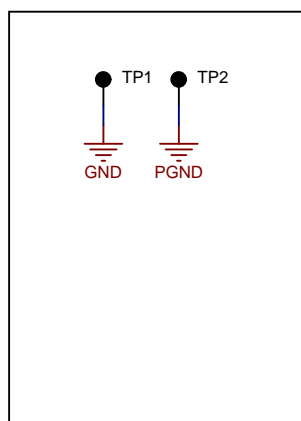
VIN Connector



Motor Connector



Test Points



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Drawn By:	File: TIDA-00909_Interface.SchDoc	Size: B
Engineer: Zhou/Staebler	Contact: http://www.ti.com/support	



PCB LOGO
Pb-Free Symbol

PCB LOGO
FCC disclaimer



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.

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