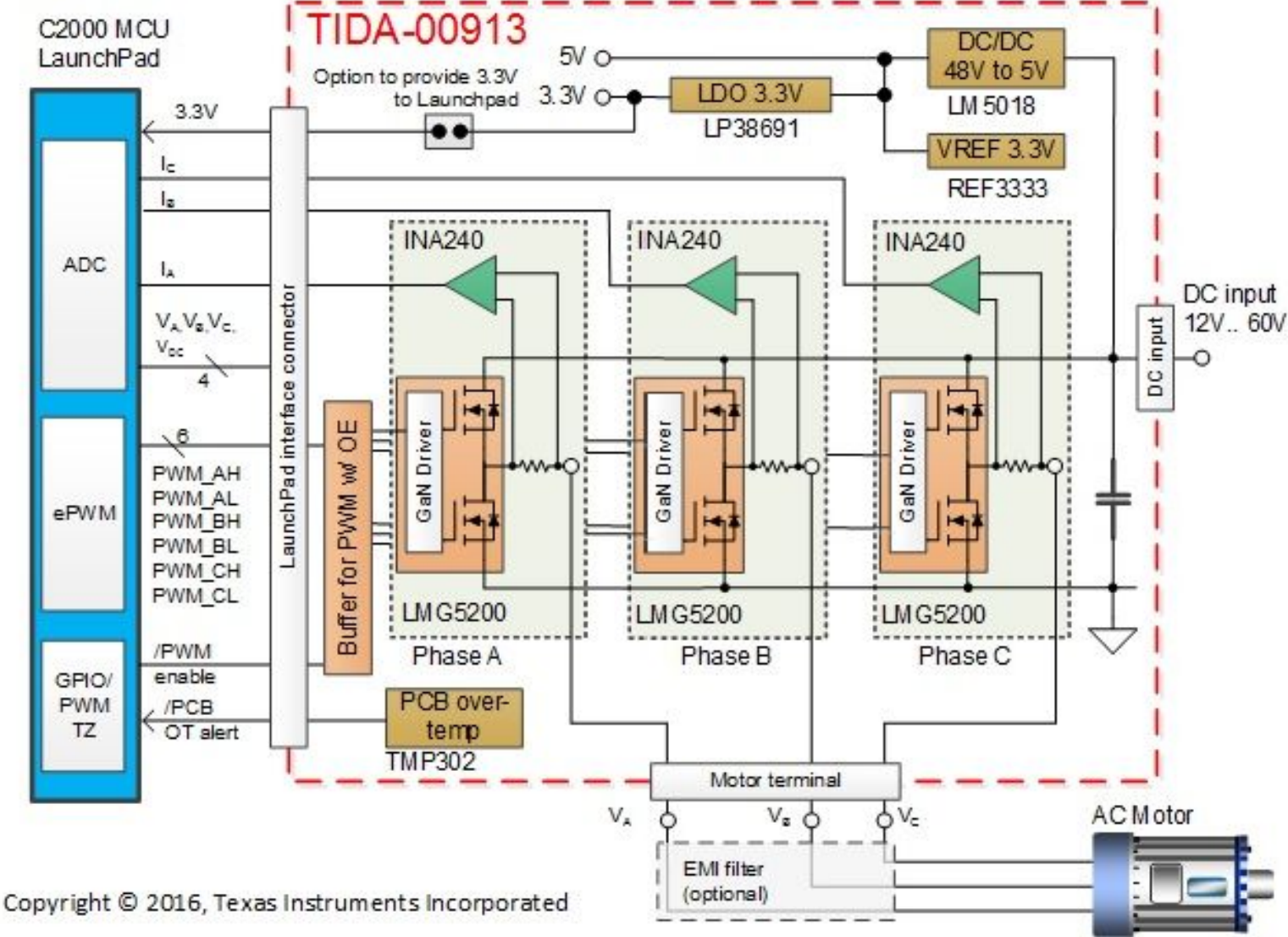


Revision History

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



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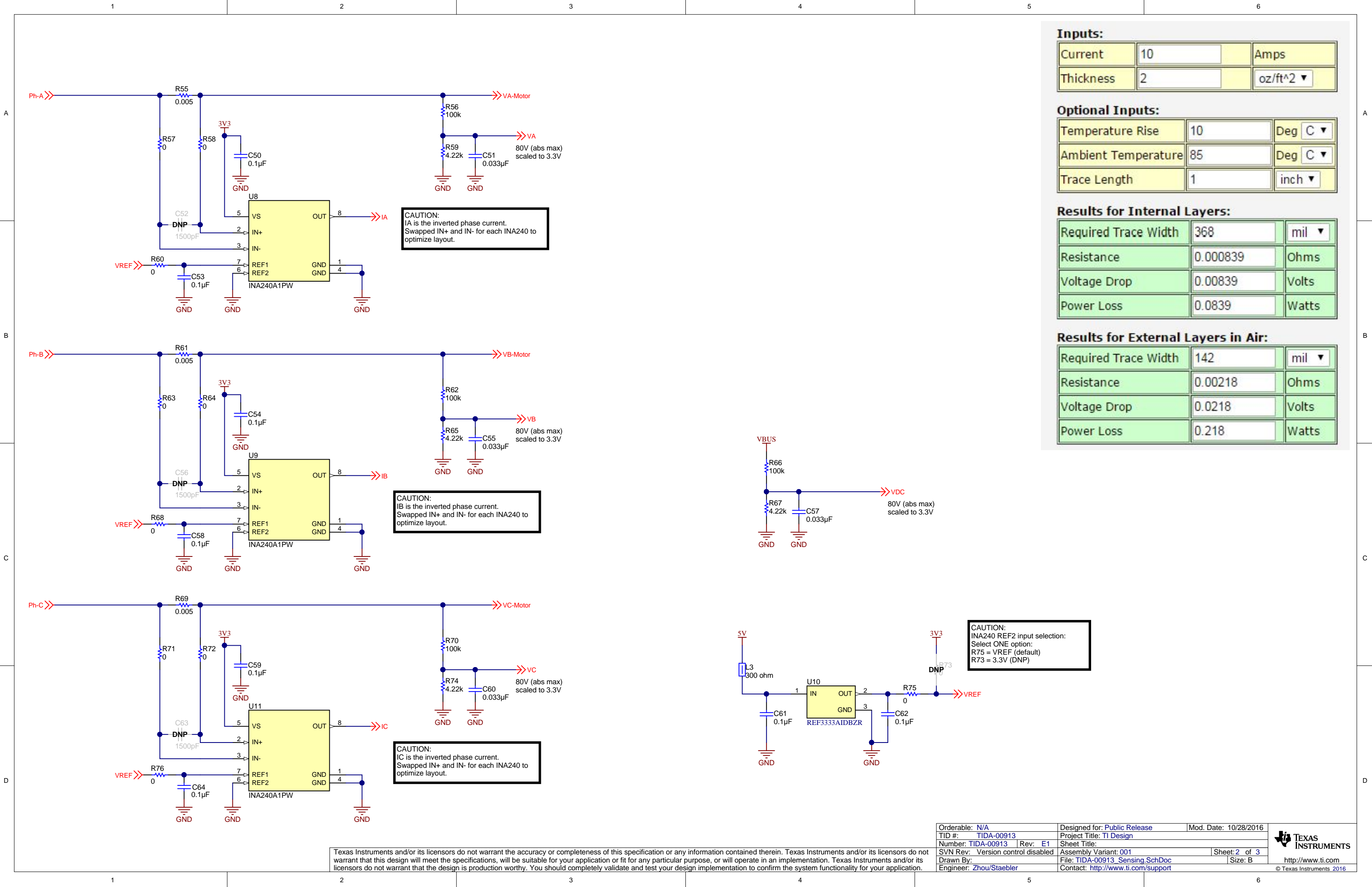
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Orderable: N/A	Designed for: Public Release	Mod. Date: 10/28/2016
TID #: TIDA-00913	Project Title: TI Design	
Number: TIDA-00913	Rev: E1	Sheet Title:
SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 1 of 3
Drawn By:	File: TIDA-00913_CS.SchDoc	Size: B
Engineer: Zhou/Staebler	Contact: http://www.ti.com/support	

TEXAS INSTRUMENTS

<http://www.ti.com>

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Inputs:

Current	10	Amps
Thickness	2	oz/ft^2 ▾

Optional Inputs:

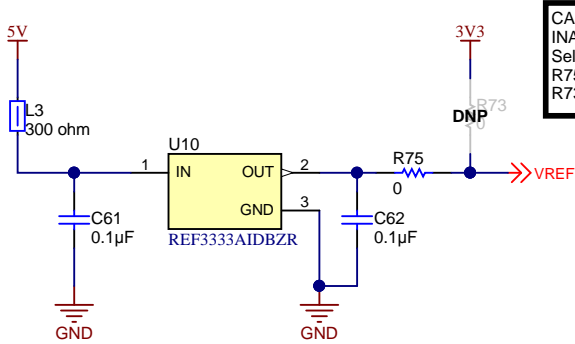
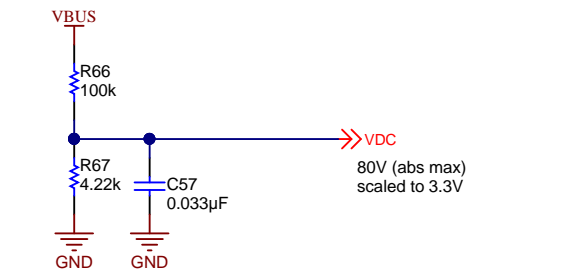
Temperature Rise	10	Deg C ▾
Ambient Temperature	85	Deg C ▾
Trace Length	1	inch ▾

Results for Internal Layers:

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

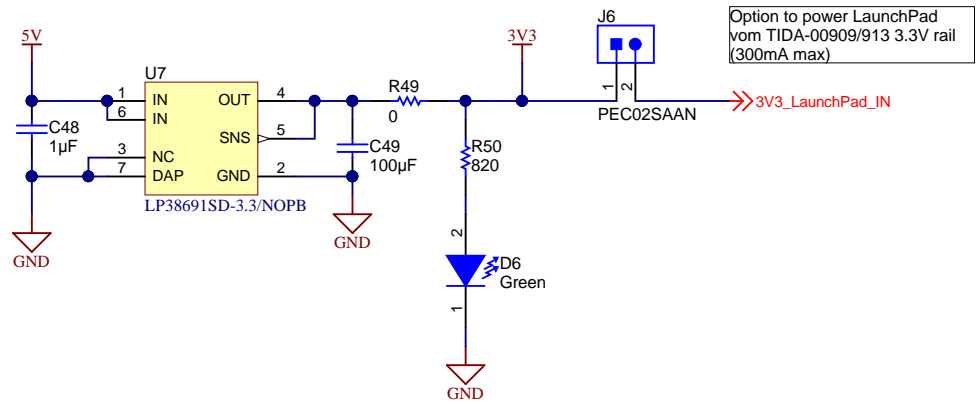
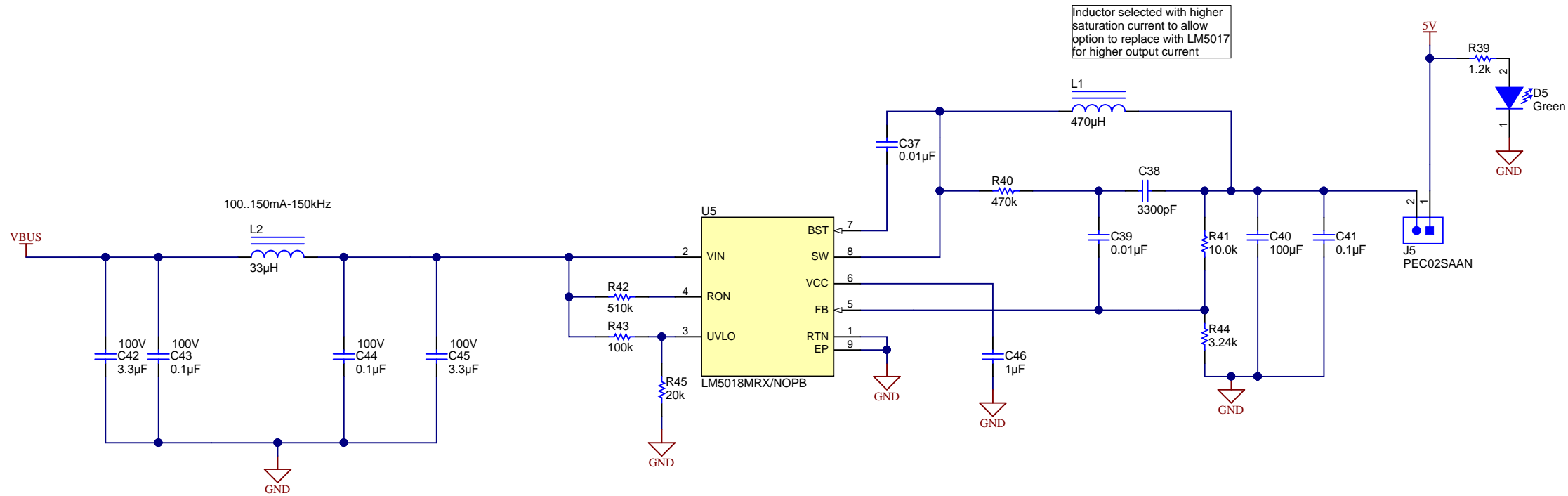
Results for External Layers in Air:

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



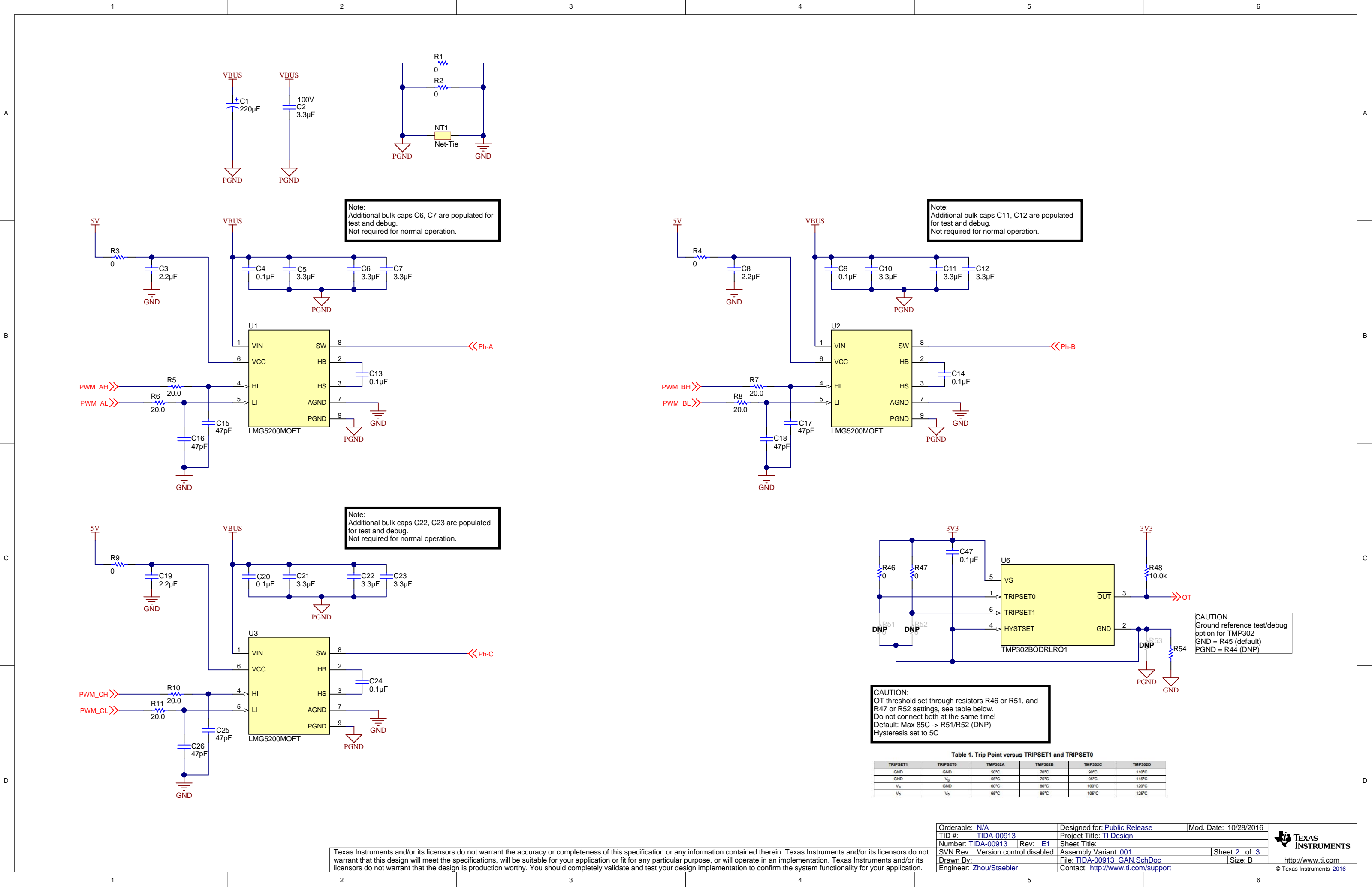
CAUTION:
INA240 REF2 input selection:
Select ONE option:
R75 = VREF (default)
R73 = 3.3V (DNP)

H1
MECH
691352510002



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SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 2 of 3
Drawn By:	File: TIDA-00913_PS.SchDoc	Size: B
Engineer: Zhou/Staebler	Contact: http://www.ti.com/support	



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:
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 85°C -> R51/R52 (DNP)
Hysteresis set to 5°C

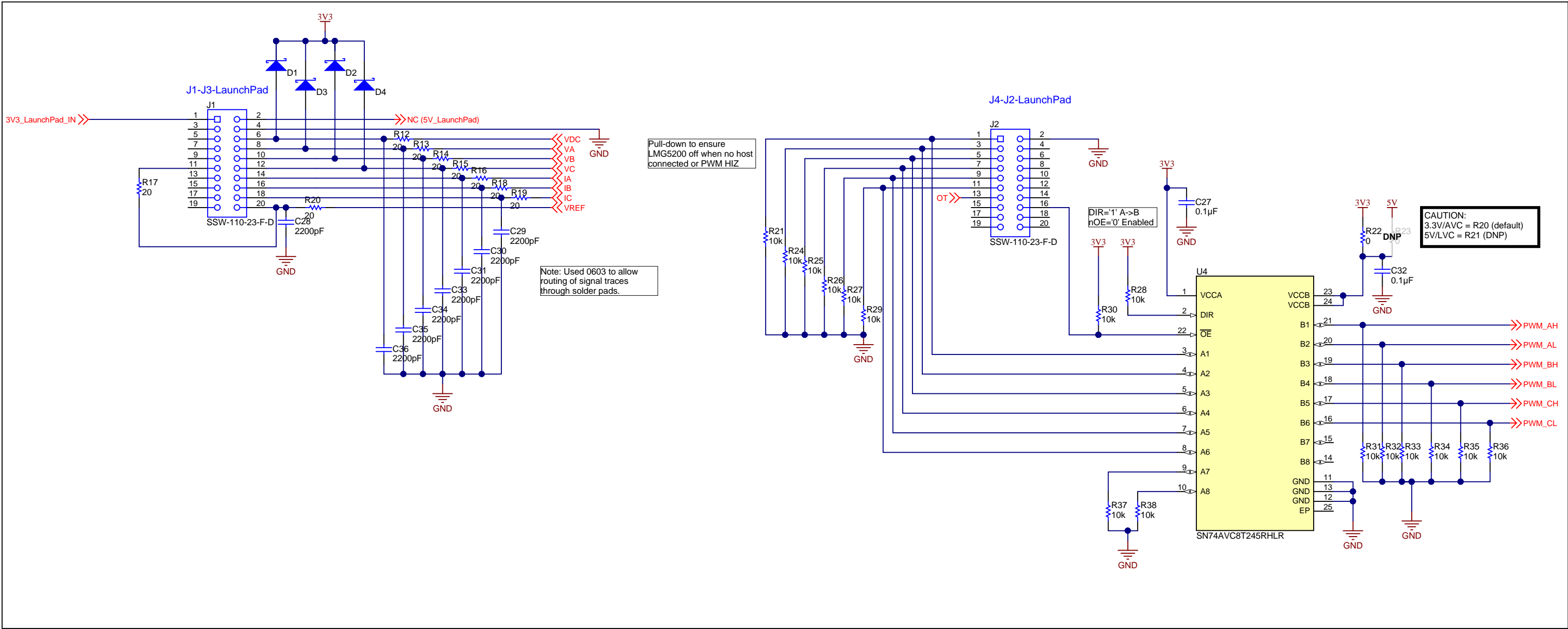
CAUTION:
Ground reference test/debug option for TMP302
GND = R45 (default)
PGND = R44 (DNP)

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 _B	GND	60°C	80°C	100°C	120°C
V _B	V _B	65°C	85°C	105°C	125°C

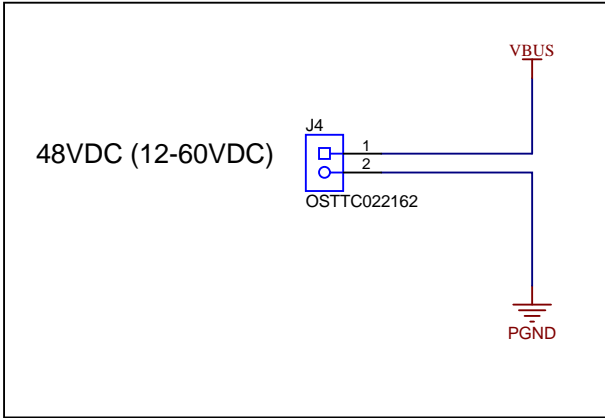
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SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 2 of 3
Drawn By:	File: TIDA-00913_GAN.SchDoc	Size: B
Engineer: Zhou/Staebler	Contact: http://www.ti.com/support	

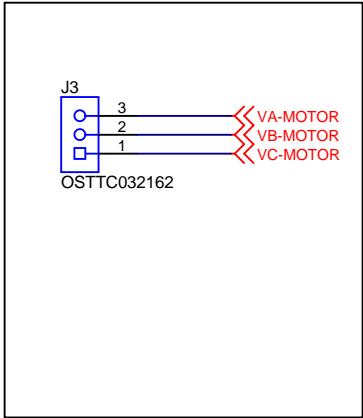
LaunchPad Interface



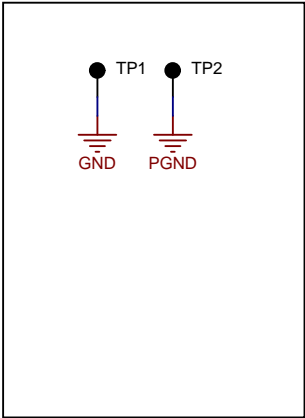
VIN Connector



Motor Connector



Test Points



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SVN Rev: Version control disabled	Assembly Variant: 001	Sheet: 3 of 3
Drawn By:	File: TIDA-00913_Interface.SchDoc	Size: B
Engineer: Zhou/Staebler	Contact: http://www.ti.com/support	



PCB
LOGO
Pb-Free Symbol

PCB
LOGO
FCC disclaimer



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.

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