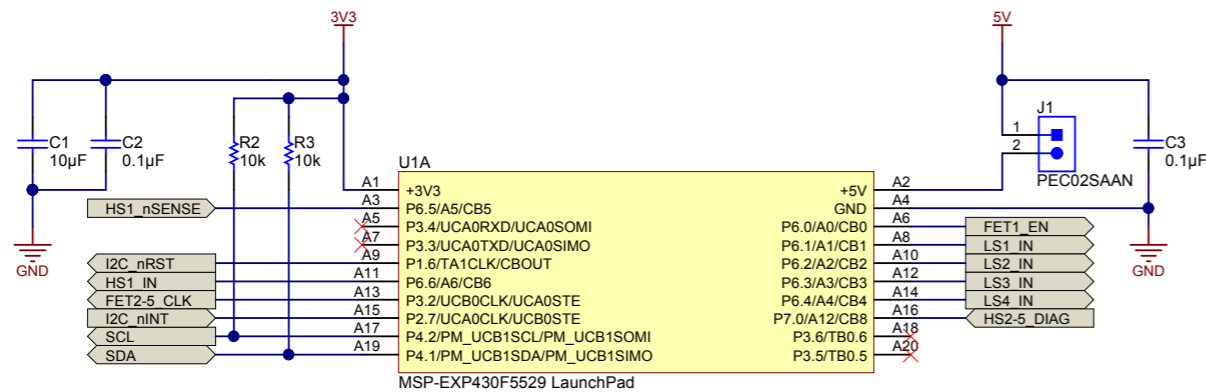
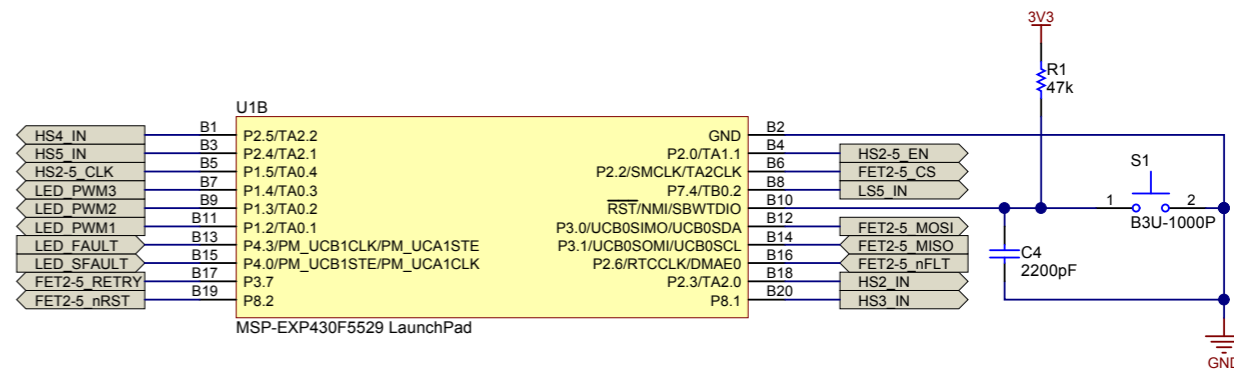


MSP430F55 LaunchPad Pinout

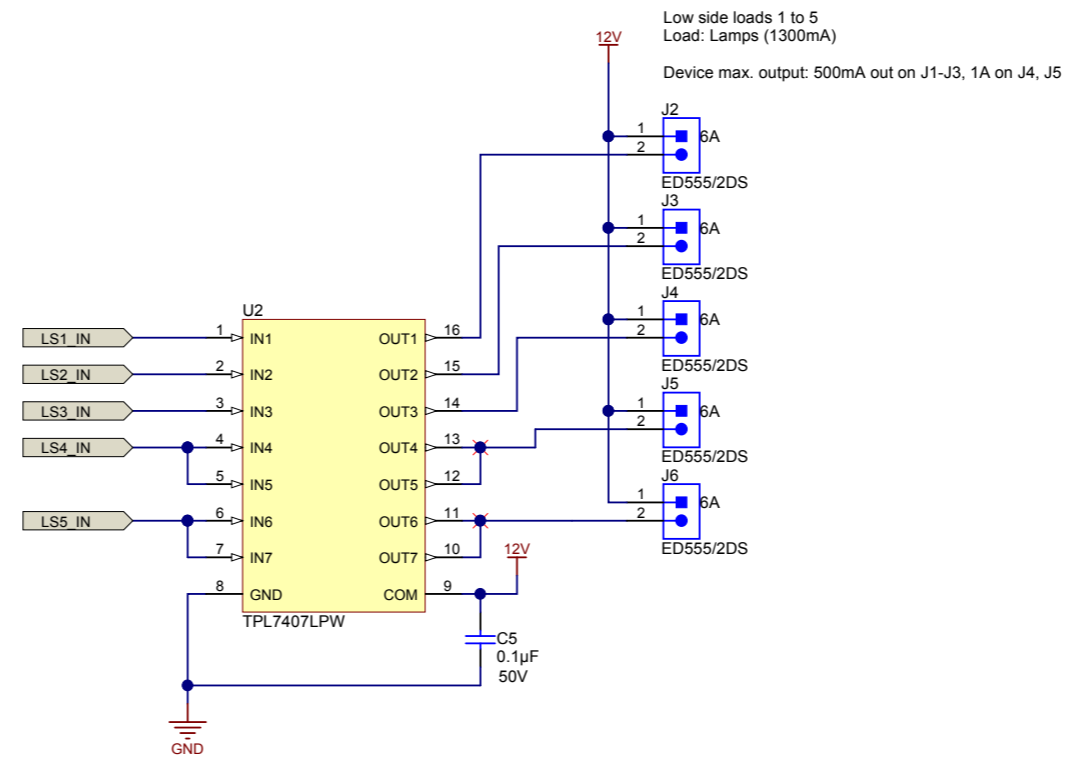


P3.3, P3.4 must not be connected to enable UART PC link
P3.5, P3.6 reserved for MSP430



Low Side Driver

Channels: 1-5



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Project Title: BCM Driver Reference Design		Sheet Title: Low Side Driver: Ch 1-5	
Number: SAT0103	Rev: E1	Assembly Variant: [No Variations]	Sheet: 3 of 12
SVN Rev: Not in version control	Drawn By:	File: TPL7407L_SchDoc	Size: B
Engineer: Derrick Kickel	Contact: http://www.ti.com/support		http://www.ti.com

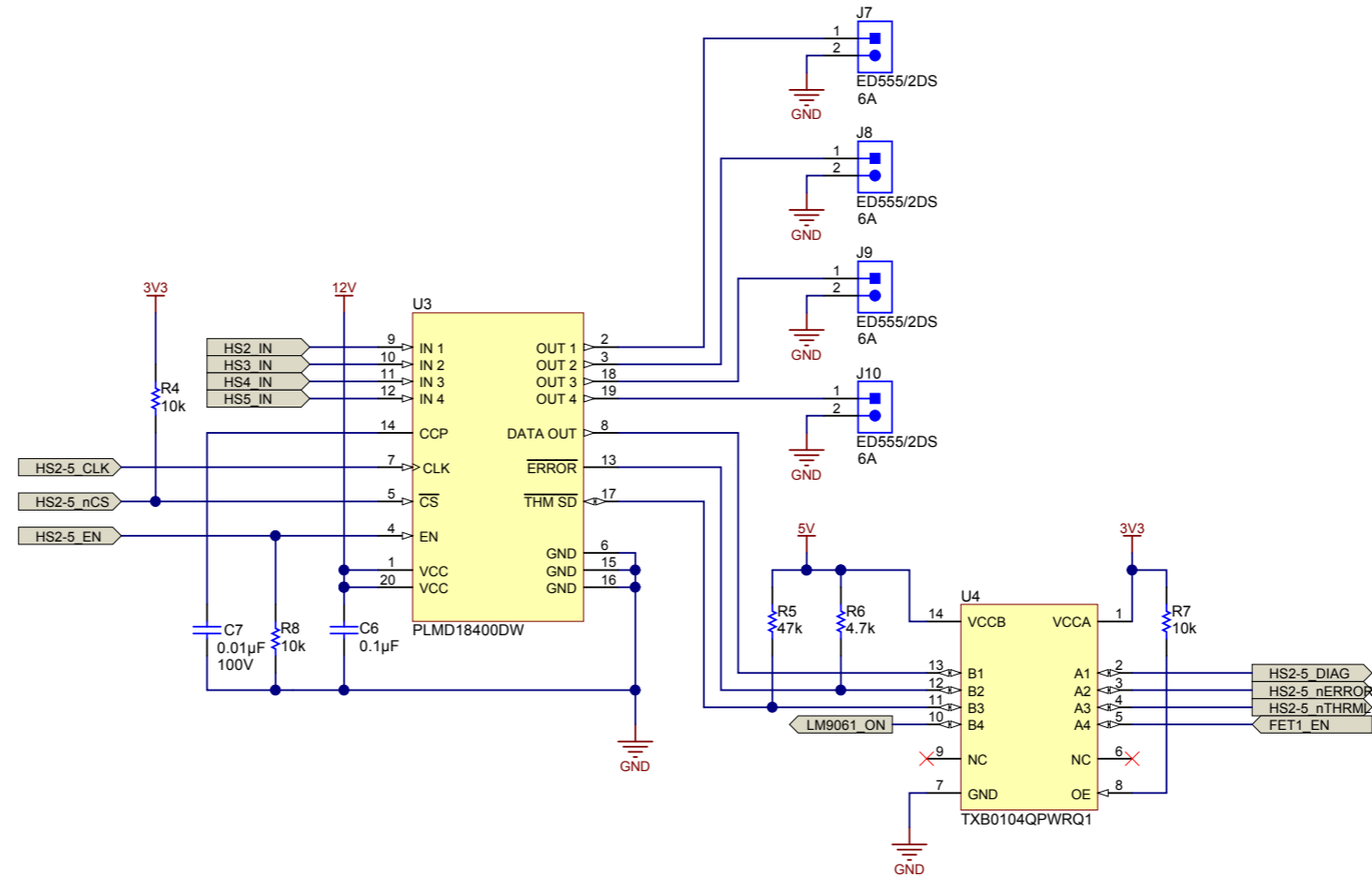


High Side Driver


Channels: 2-5

High side loads 2 to 5
Load: Window actuator + Windshield wiper actuator (4x 250mA relay)

Device max. output: 1A each channel, 3.75A max total

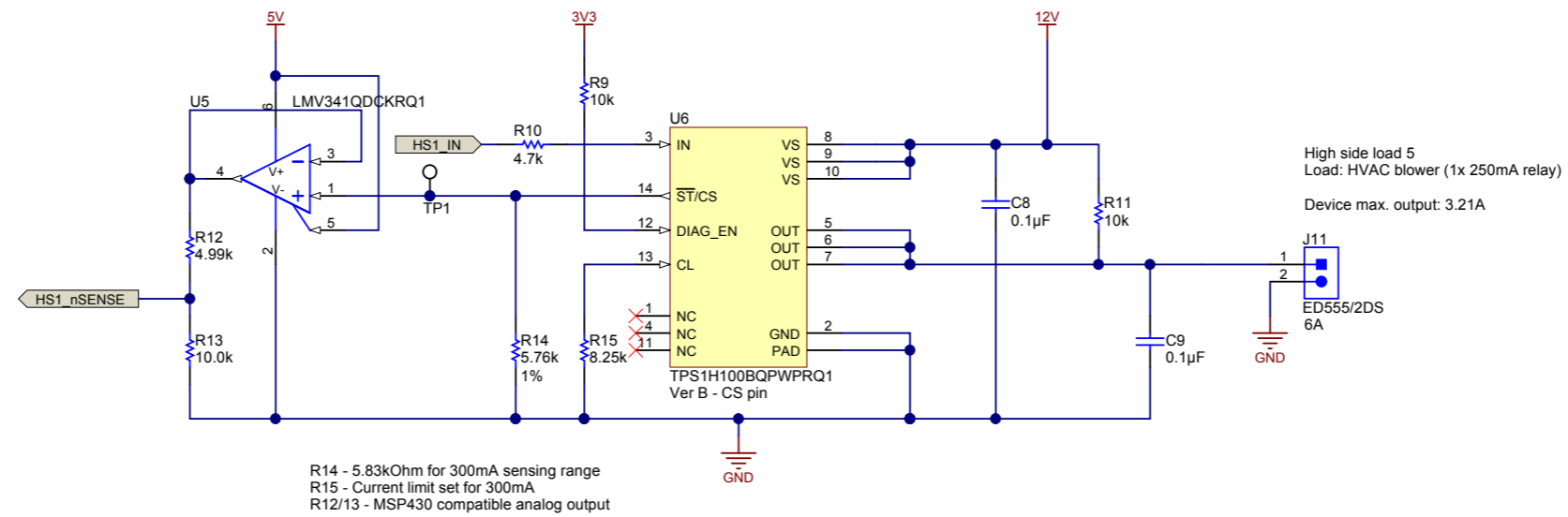


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Number: SAT0103	Rev: E1	Designed for: Public Release	Mod. Date: 11/07/2014
SVN Rev: Not in version control	Assembly Variant: [No Variations]	Project Title: BCM Driver Reference Design	Sheet Title: High Side Driver: Ch 2-5
Drawn By: Derrick Kickel	File: LMD18400.SchDoc	Sheet: 4 of 12	Size: B
Engineer: Derrick Kickel	Contact: http://www.ti.com/support	 http://www.ti.com © Texas Instruments 2014	

High Side Driver

Channel: 5

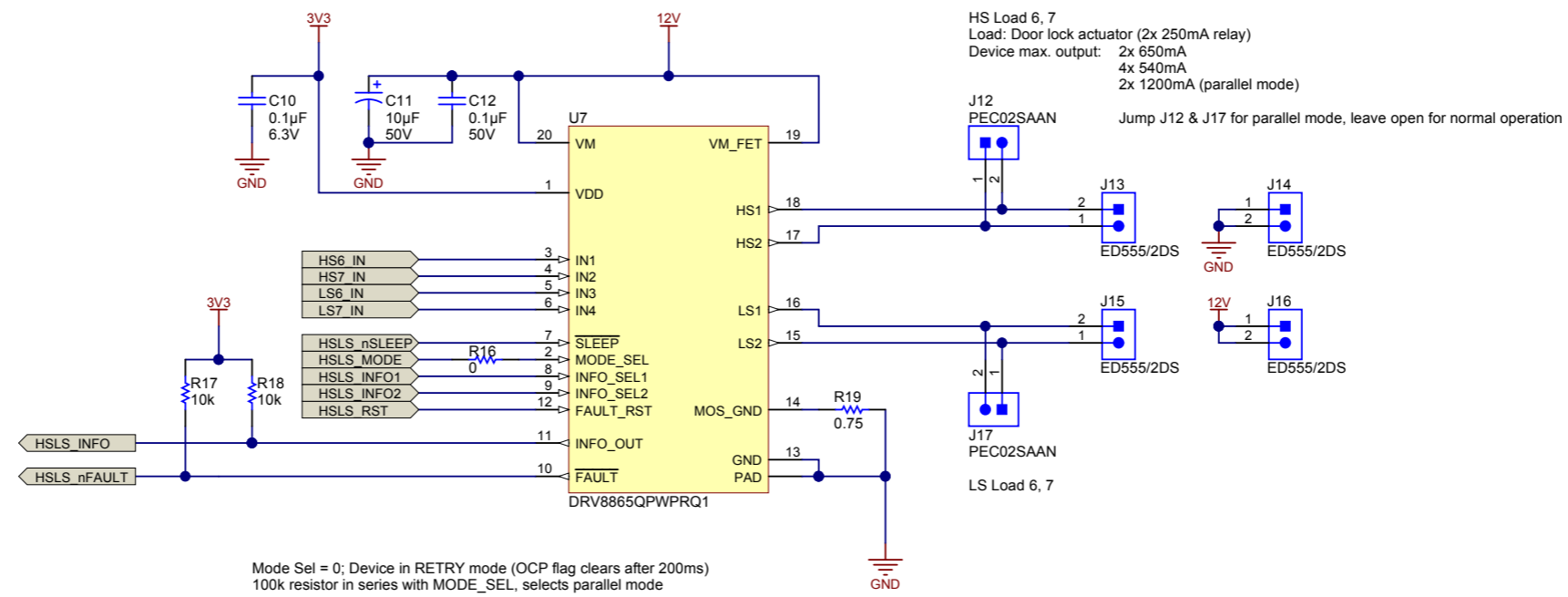


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Project Title: BCM Driver Reference Design		Number: SAT0103	
Sheet Title: High Side Driver: Ch 5		Rev: E1	
SVN Rev: Not in version control		Assembly Variant: [No Variations]	
Drawn By:		Sheet: 5 of 12	
Engineer: Derrick Kickel		File: TPS1H100B.SchDoc	
		Size: B	
		Contact: http://www.ti.com/support	
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High Side/Low Side Driver

HS Channels: 6-7
LS Channels: 6-7

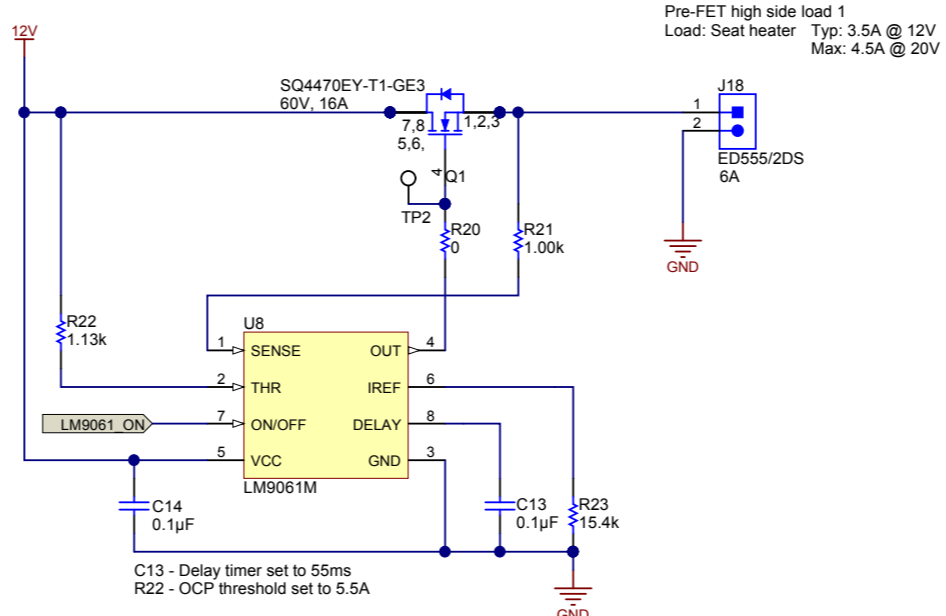


HS Load 6, 7
Load: Door lock actuator (2x 250mA relay)
Device max. output: 2x 650mA
4x 540mA
2x 1200mA (parallel mode)
Jump J12 & J17 for parallel mode, leave open for normal operation

Mode Sel = 0; Device in RETRY mode (OCP flag clears after 200ms)
100k resistor in series with MODE_SEL, selects parallel mode

High Side Pre-FET Driver

Channel: 1



Pre-FET high side load 1
 Load: Seat heater Typ: 3.5A @ 12V
 Max: 4.5A @ 20V

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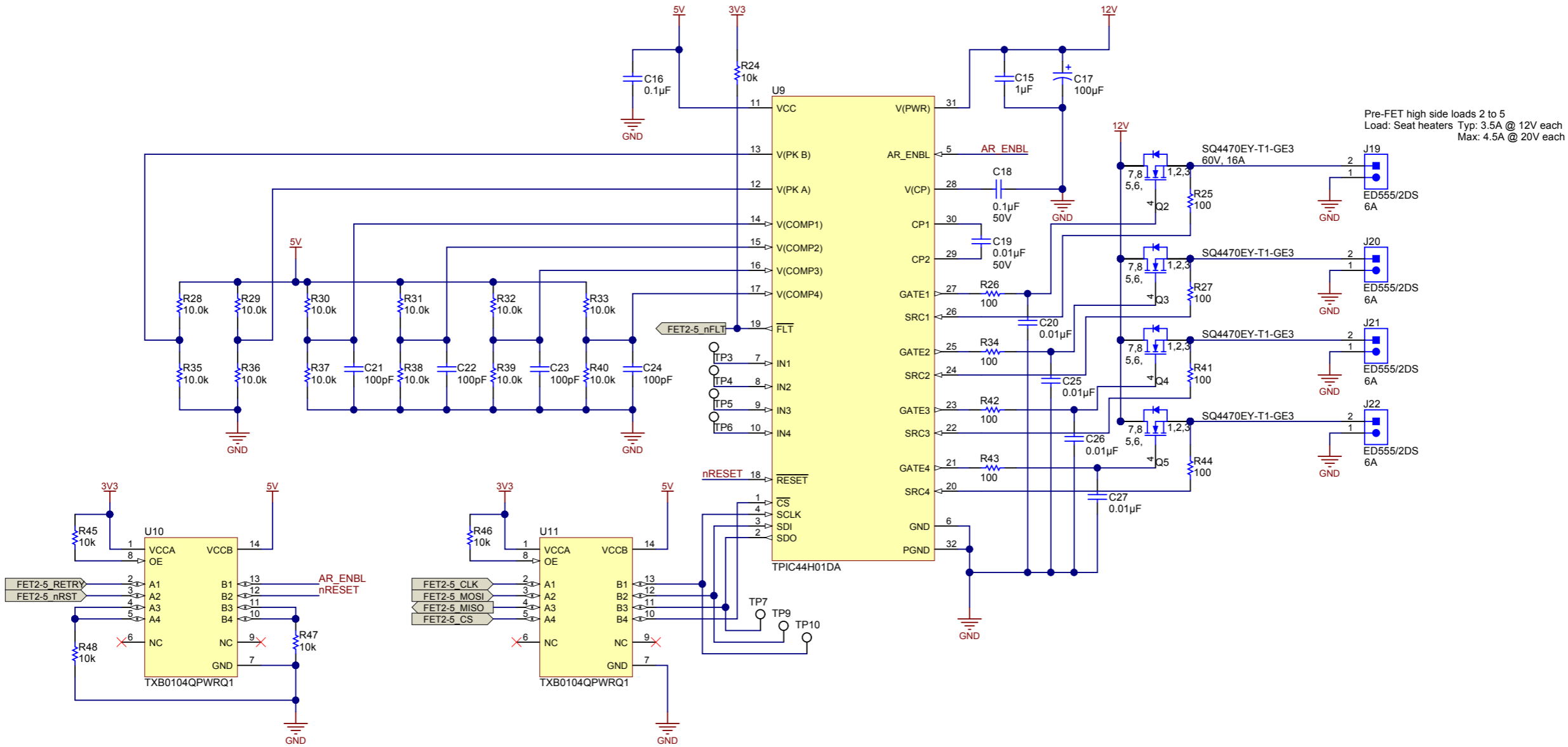
Designed for: Public Release		Mod. Date: 14/07/2014	
Project Title: BCM Driver Reference Design		Number: SAT0103	
Sheet Title: High Side Pre-FET Driver: Ch 1		Rev: E1	Rev: E1
Assembly Variant: [No Variations]		SVN Rev: Not in version control	
File: LM9061.SchDoc		Sheet: 7 of 12	
Contact: http://www.ti.com/support		Drawn By: Derrick Kickel	
Size: B		Engineer: Derrick Kickel	



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High Side Pre-FET Driver

Channels: 2-5



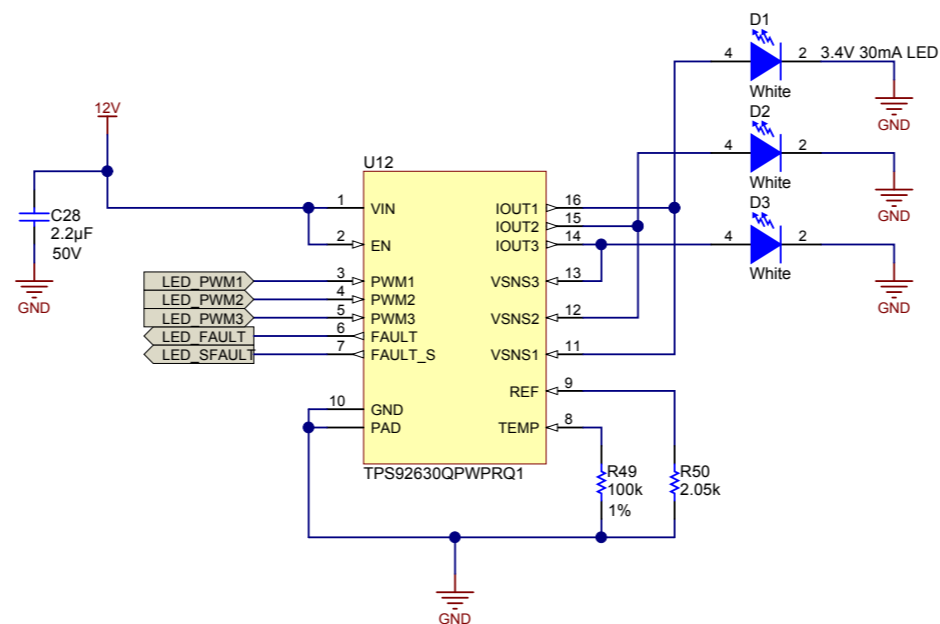
Pre-FET high side loads 2 to 5
Load: Seat heaters Typ: 3.5A @ 12V each
Max: 4.5A @ 20V each

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Designed for: Public Release	Mod. Date: 4/08/2014	
Project Title: BCM Driver Reference Design	Sheet Title: High Side Pre-FET Driver: Ch 2-5	
Number: SAT0103	Rev: E1	http://www.ti.com © Texas Instruments 2014
SVN Rev: Not in version control	Assembly Variant: [No Variations]	
Drawn By:	File: TPIC44H01.SchDoc	
Engineer: Derrick Kickel	Contact: http://www.ti.com/support	

LED Driver

Channels: 1-3



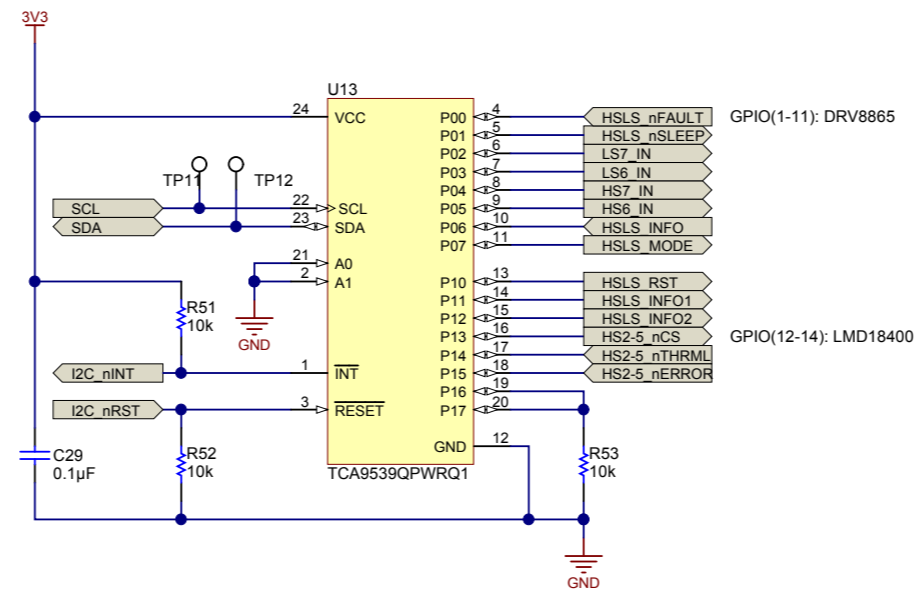
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Designed for: Public Release		Mod. Date: 7/07/2014	
Project Title: BCM Driver Reference Design		Sheet Title: LED Driver: Ch 1-3	
Number: SAT0103	Rev: E1	Assembly Variant: [No Variations]	Sheet: 9 of 12
SVN Rev: Not in version control		File: TPS92630.SchDoc	Size: B
Drawn By: Derrick Kickel		Contact: http://www.ti.com/support	
Engineer: Derrick Kickel		© Texas Instruments 2014	




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I2C GPIO Expansion



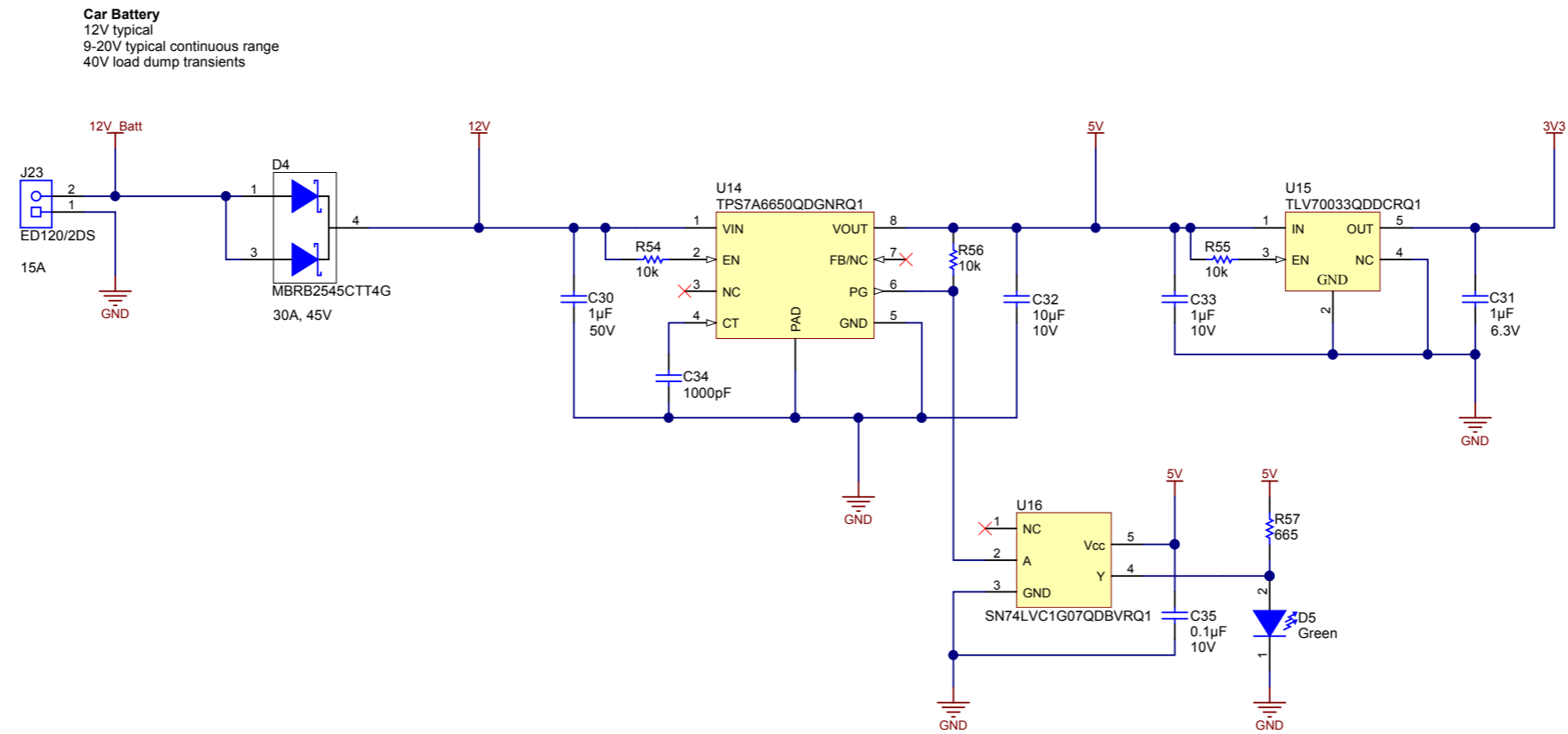
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Number: SAT0103	Rev: E1	Mod. Date: 7/07/2014	 http://www.ti.com
Project Title: BCM Driver Reference Design		Sheet: 10 of 12	
Sheet Title: I2C GPIO Expansion		Size: B	
SVN Rev: Not in version control		Assembly Variant: [No Variations]	
Drawn By: Derrick Kickel		Contact: http://www.ti.com/support	



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Power



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Number: SAT0103	Rev: E1	Mod. Date: 14/07/2014
SVN Rev: Not in version control		Project Title: BCM Driver Reference Design
Drawn By:		Sheet Title: Power
Engineer: Derrick Kickel	Assembly Variant: [No Variations]	Sheet: 11 of 12
	File: Power.SchDoc	Size: B
	Contact: http://www.ti.com/support	http://www.ti.com



H1 NY PMS 440 0025 PH H2 NY PMS 440 0025 PH H3 NY PMS 440 0025 PH H4 NY PMS 440 0025 PH

H5 1902C H6 1902C H7 1902C H8 1902C

FID1 FID2 FID3

PCB Number: SAT0103
PCB Rev: E1

PCB
LOGO
Texas Instruments

You should delete the nylon screws/standoffs and/or the bumpons as needed for your design (or substitute other parts from Hardware.IntLib). Bumpons are cheaper, but provide less clearance.

Deleting anything else from this page may result in your EVM submission being rejected (until you add them back).

Update the Label Text in the Label Table as needed for each Assembly Variant.

You can delete this note too.

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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Designed for: Public Release		Mod. Date: 3/07/2014	
Project Title: BCM Driver Reference Design		Sheet Title: Hardware	
Number: SAT0103	Rev: E1	Assembly Variant: [No Variations]	Sheet: 12 of 12
SVN Rev: Not in version control	Drawn By:	File: Hardware.SchDoc	Size: B
Engineer: Derrick Kickel	Contact: http://www.ti.com/support		
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