

Notes - Unless otherwise noted

1. Resistances values in Ohms

2. Capacitance values in microfarads (uF)

3. All 0.1uF and 0.01uF capacitors are decoupling and should be placed near the IC they are shown with.

REVISION HISTORY			
REV	DESCRIPTION	DATE	ENG
A1	INITIAL SCHEMATIC	04-08-2011	AIY
A2	REMOVED ANALOG SWITCHES CHANGED FEEDBACK	05-12-2011	AKS
A3	CHANGED THE SIZE OF THE SENSE RESISTORS ADDED PULL-UP/PULL-DOWN ON SPI LINES REMOVED 0-OHM RESISTORS ON CURRENT SENSE	05-25-2011	AKS
B1	FIXED DRV8301 CURRENT SENSE POLARITY NO-POP ALL EXTERNAL CURRENT SENSE COMPONENTS CHANGED C14 TO 25V 0805 PACKAGE FETS CHANGED TO VISHAY SUM110N06-3M9H CHANGED CURRENT SENSE RESISTORS TO 2mOHM RECONFIGURED DC BUS CAPS SPLIT POWER CONNECTOR INTO TWO CONNECTORS	07-14-2011	JPW
C1	LAYOUT CHANGES TO IMPROVE GROUND CONNECTIONS FOR DE-COUPLING CAPACITORS C10, C14, C72 CREATED BOM VARIANT FOR DRV8302 CHANGED R12, R13, R21 TO 1K CHANGED R43, R47 TO 1K (DRV8302 ONLY)	08-12-2011	AKS
D1	POPULATED EXTERNAL GAIN OP-AMPS AND CHANGED CONNECTIONS FOR THESE TO DAUGHTER CARD	01-18-2012	

Page 1 - Title - Index - Revisions

Page 2 - Block Diagram


Page 3 - DRV8301/DRV8302

Page 4 - Isolation Circuitry

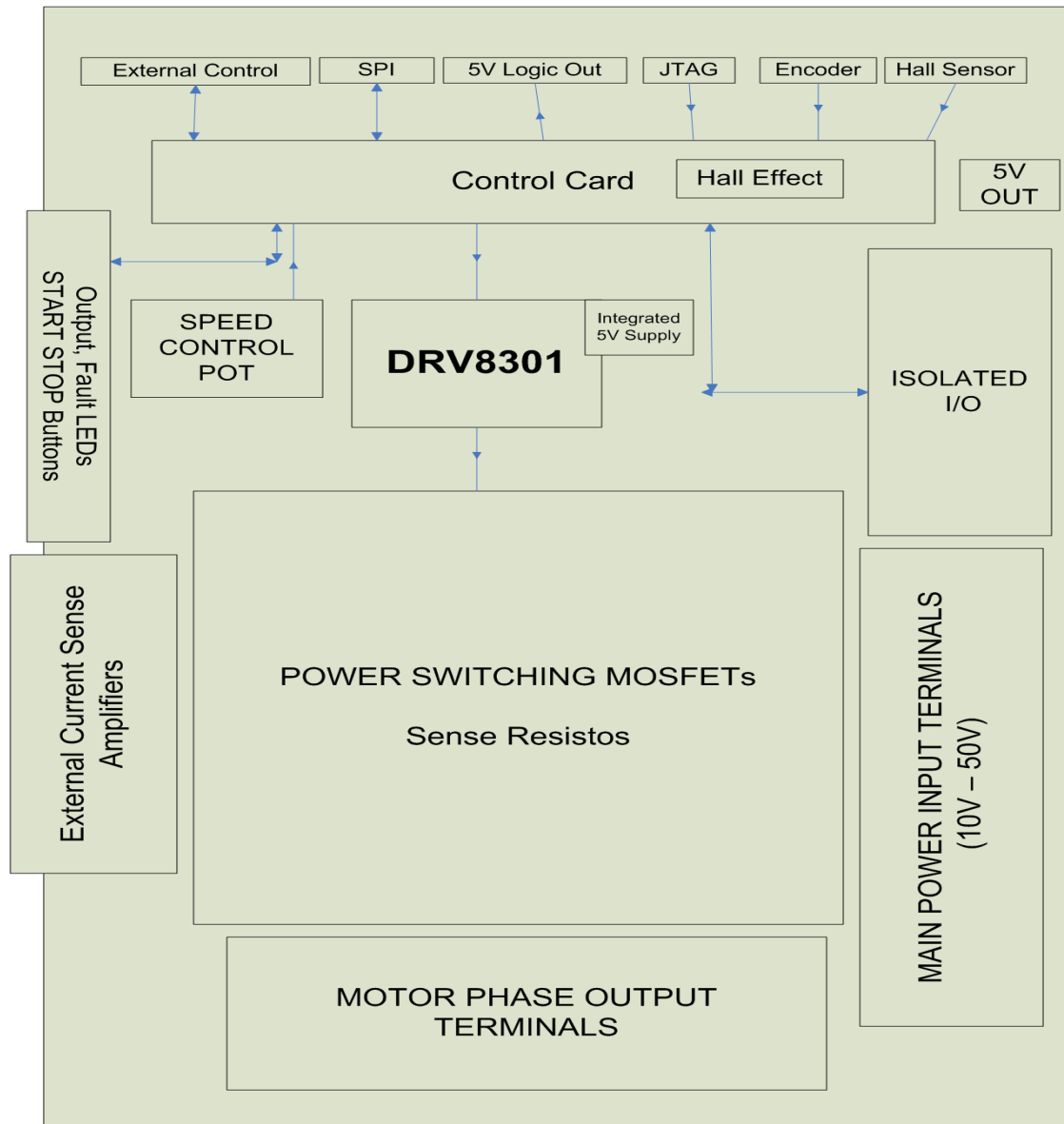
Page 5 - DIMM Socket - Connectors - Switches

Page 6 - Power Input - Voltage Regulators - Current Sense Amplifiers

Page 7 - Half Bridges - Motor Output

	D3 Engineering 1057 E Henrietta Rd Rochester, NY 14623 p. (585) 429-1550 f. (585) 429-1551 www.d3engineering.com		
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		3V6D5	<Doc>
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DRV8301 EVM Block Diagram



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Block Diagram

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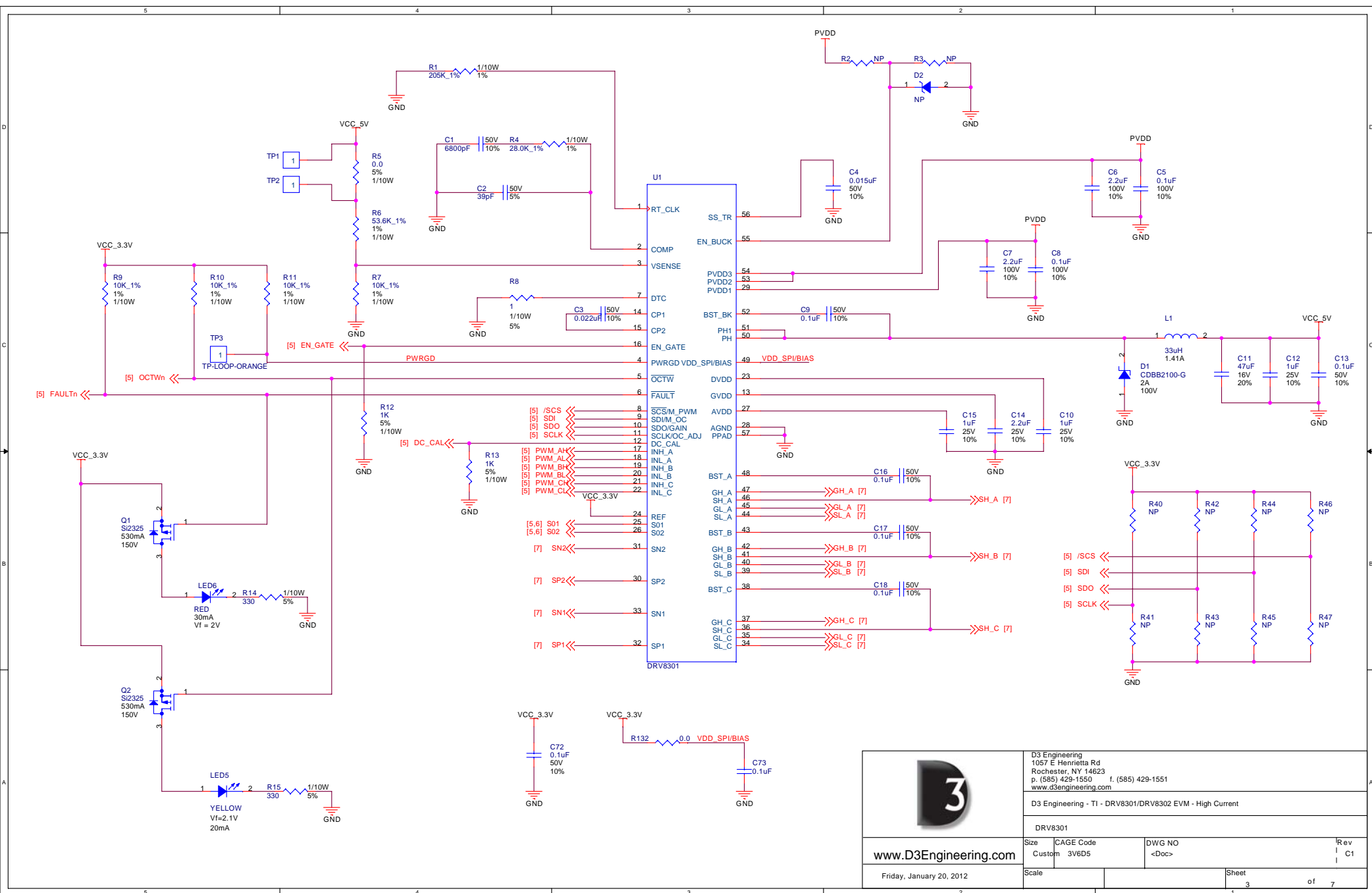
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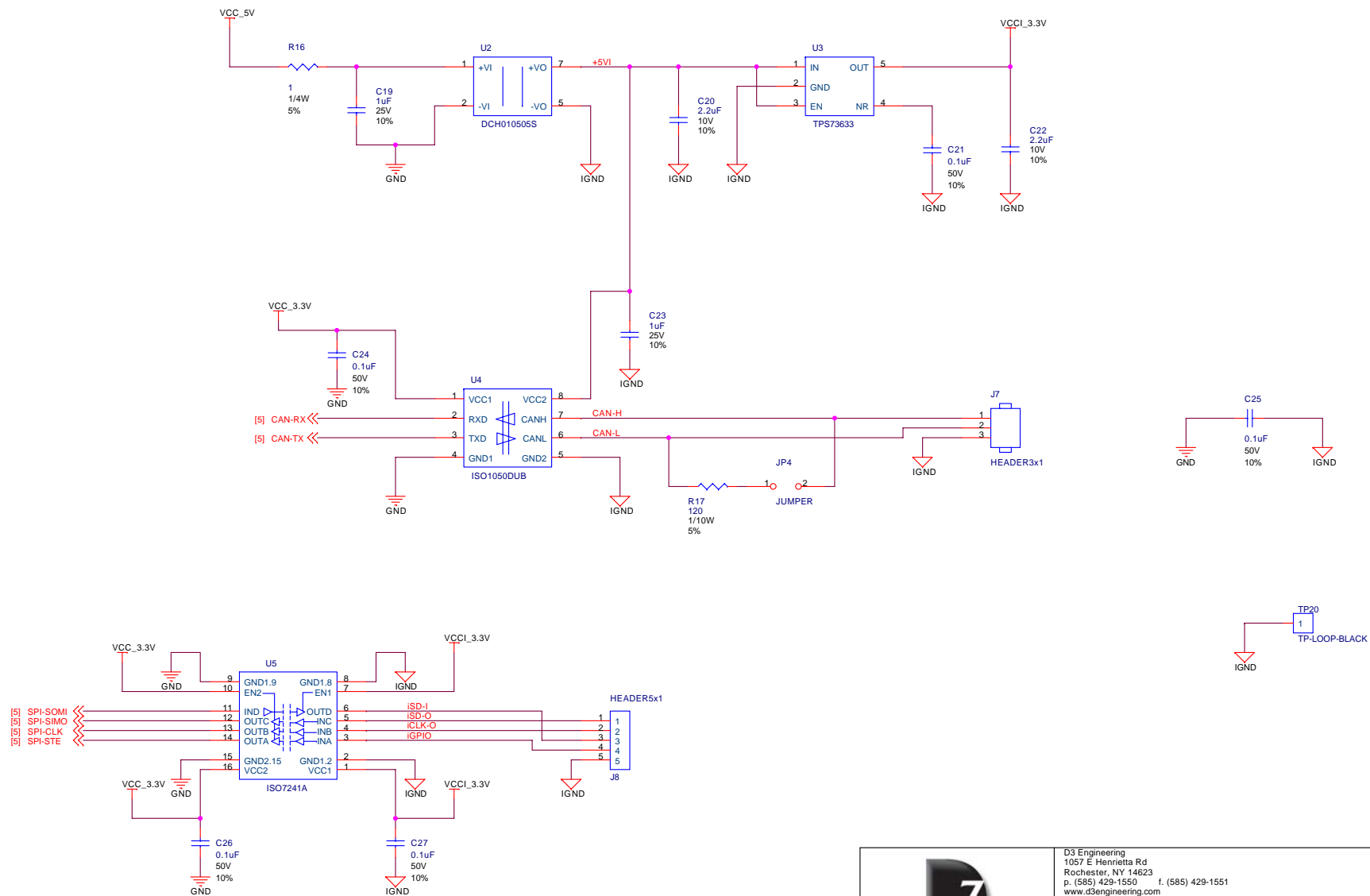
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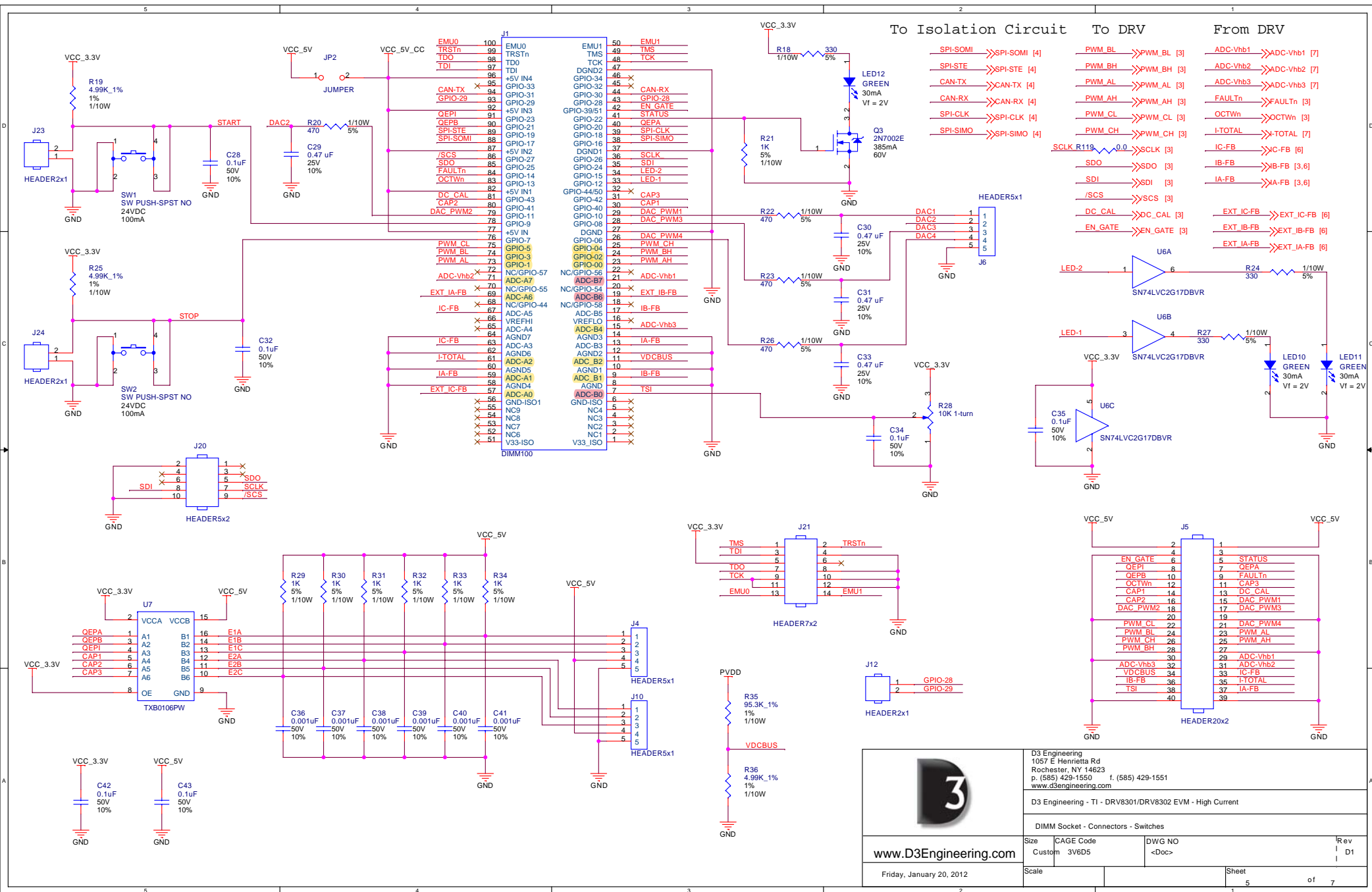
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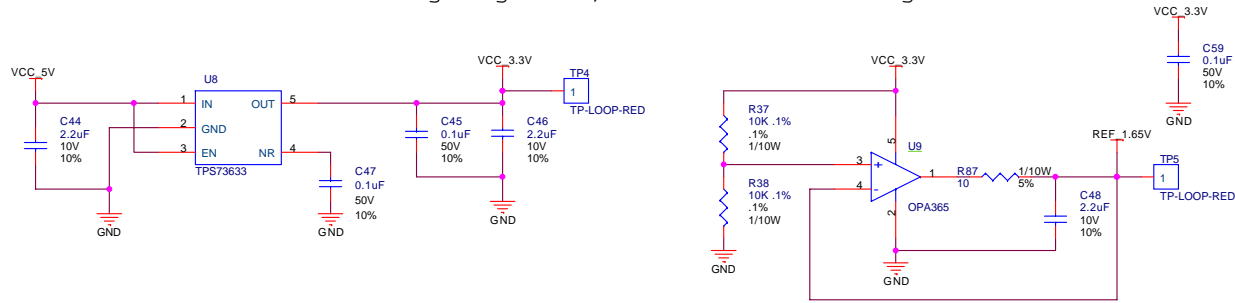




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	Size Custom	CAGE Code 3V6D5	DWG NO <Doc> I C1
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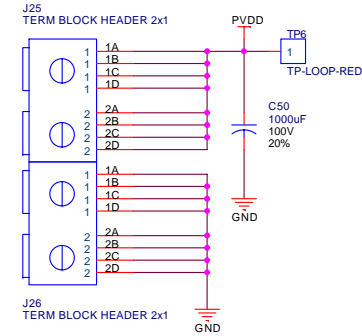


3.3V Voltage Regulator, 1.65V Reference Voltage

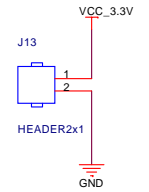


MAIN POWER IN

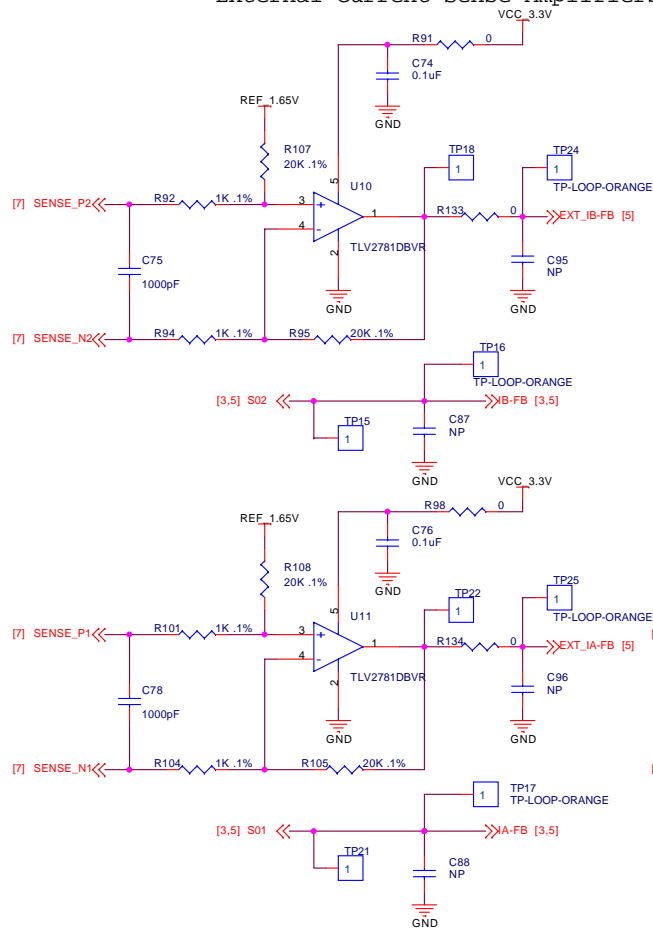
PVDD
NOM = 48V
MAX = 60V



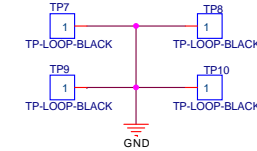
User Power Access



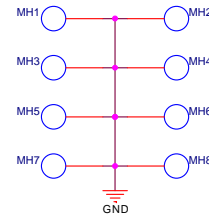
External Current Sense Amplifiers



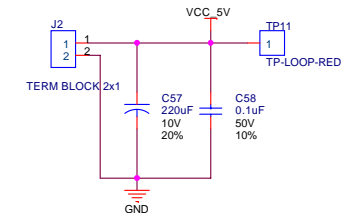
Ground Test Points



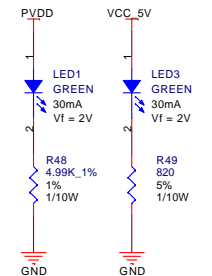
Mounting Holes



5V Output



Power Indicator LEDs



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Size	CAGE Code	DWG NO	Rev
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