

## INDEX

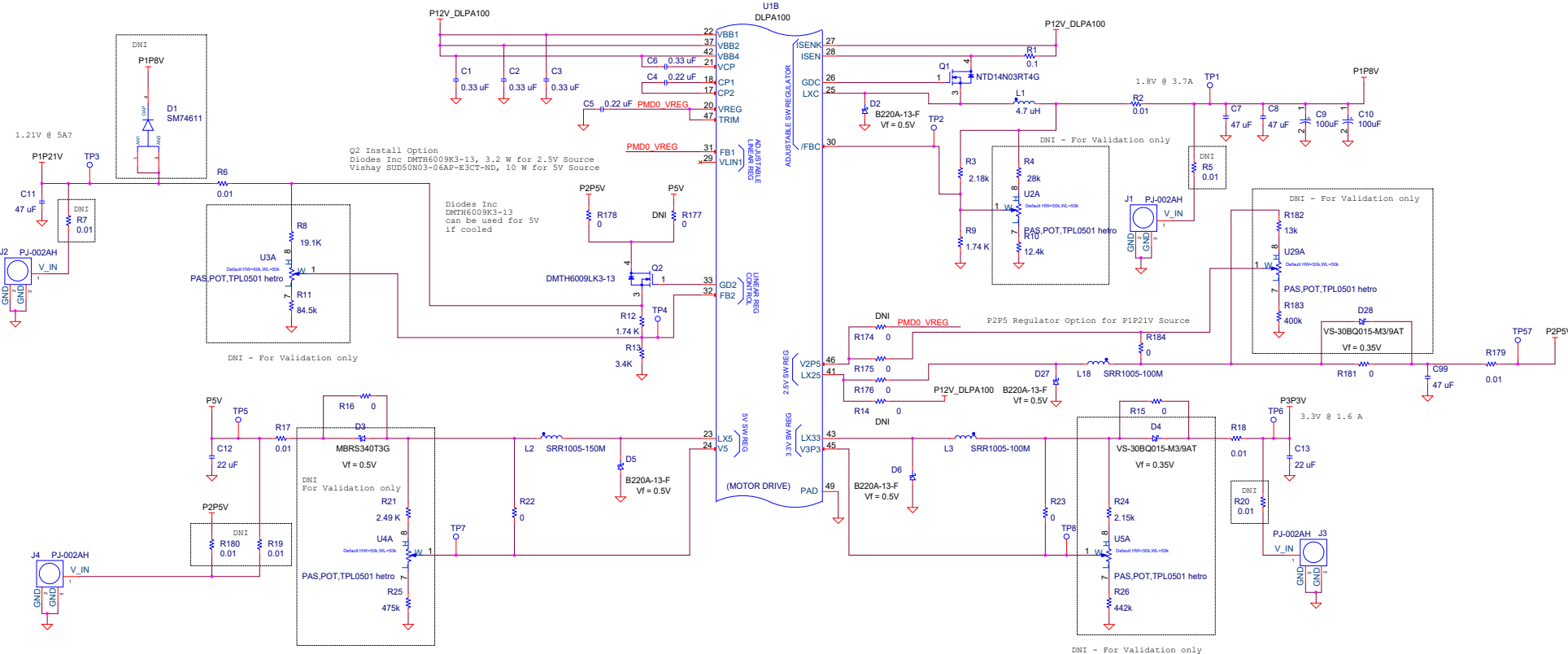
Sheet 1: Title  
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	Initial Release	1/1/2019	
B	Revision B - see Sheet 9	9/9/2019	
C	Revision C - see Sheet 9	12/6/2019	
D	Revision D - see Sheet 9	9/16/2020	
E	Revision E - see Sheet 9	11/20/2020	
F	Revision F - see Sheet 9	01/05/2021	



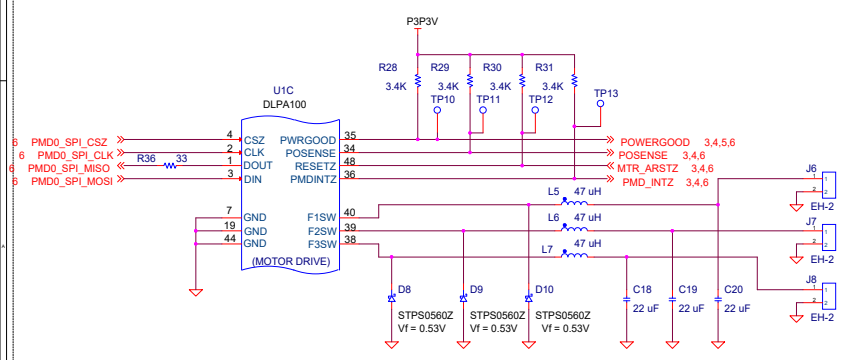
ESD - 2516476  
 PCB - 2516477  
 CCA - 2516478

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		ENGR	B. Uhing		2019-01-01					
		SYST	A. Dewa		2019-01-01					
		PRJ	J. Kordel		2019-01-01					
		QA	---		---					
NEXT ASSY	USED ON					TITLE	DVH7540/6540 DLPA100 POWER CARD			
APPLICATION		SW	Cadence Capture V.16.6			<b>A3</b>	DRAWING NO	2516476	REV	F
				SCALE		SHEET 1 of 10				

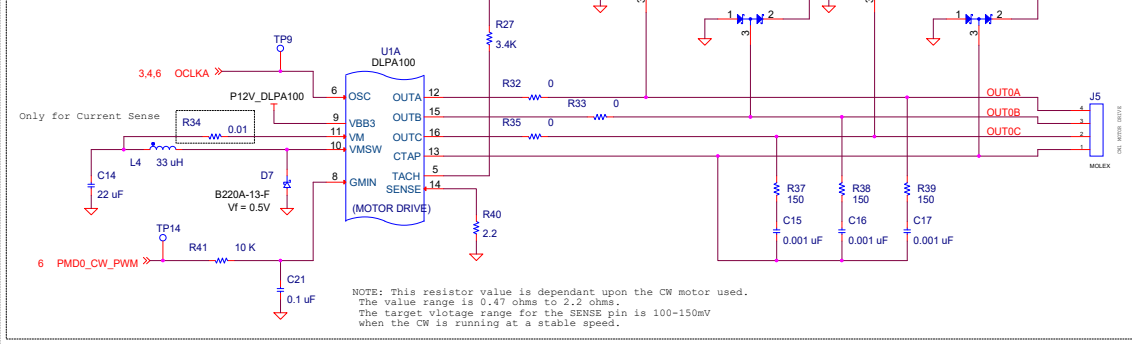


DNI - For Validation only

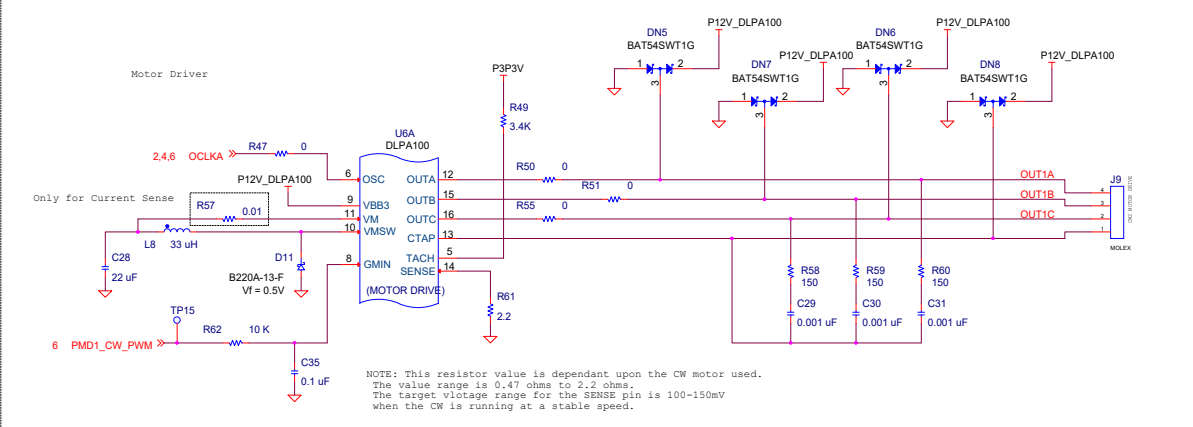
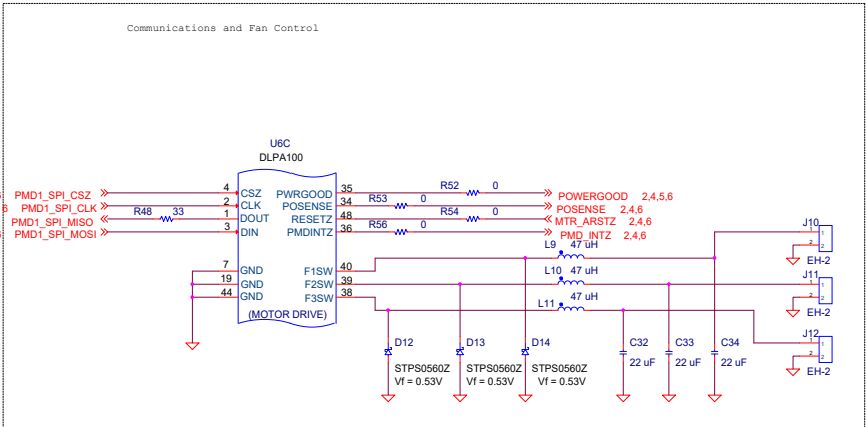
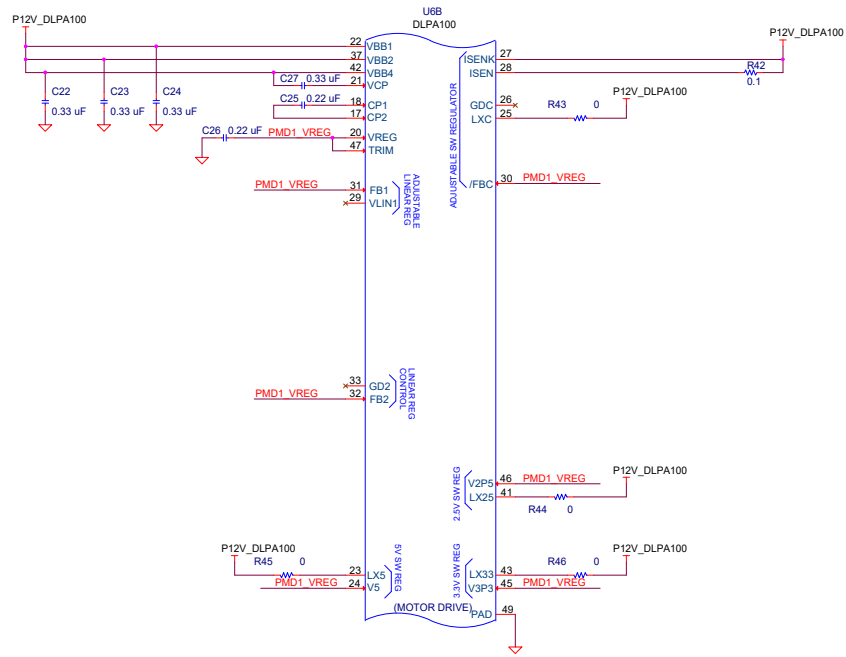
Communications and Fan Control

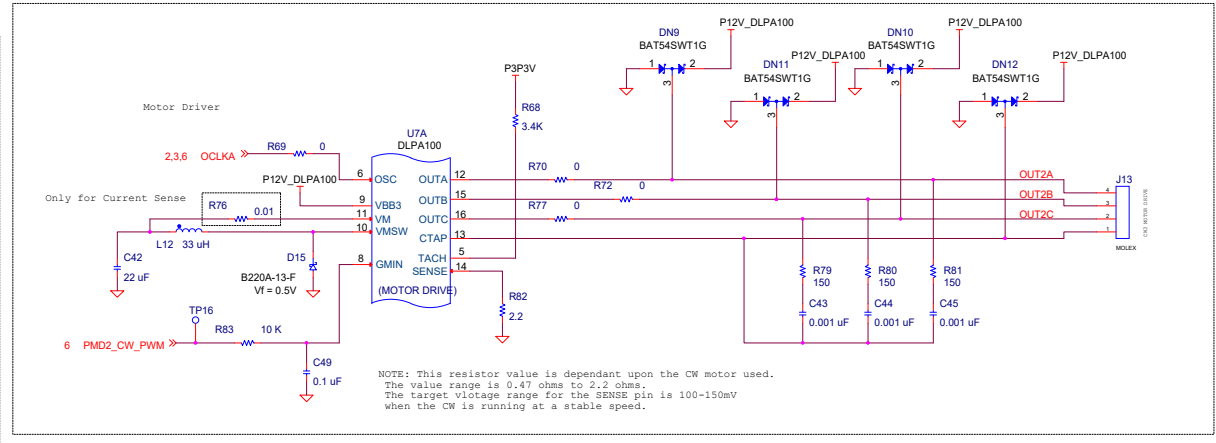
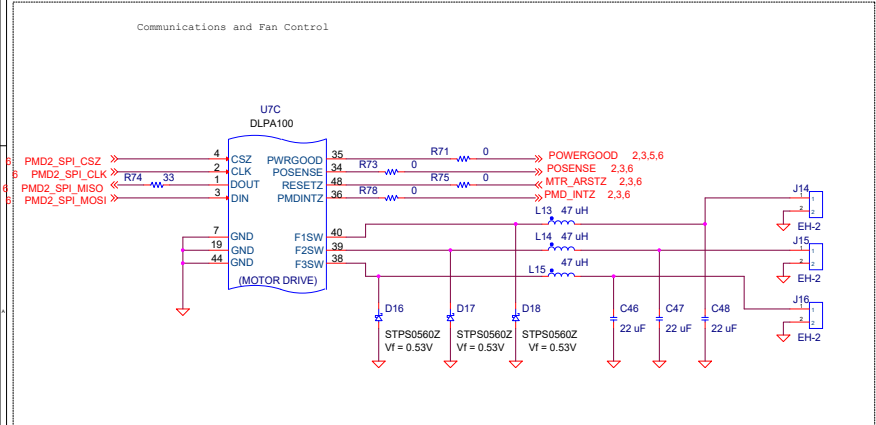
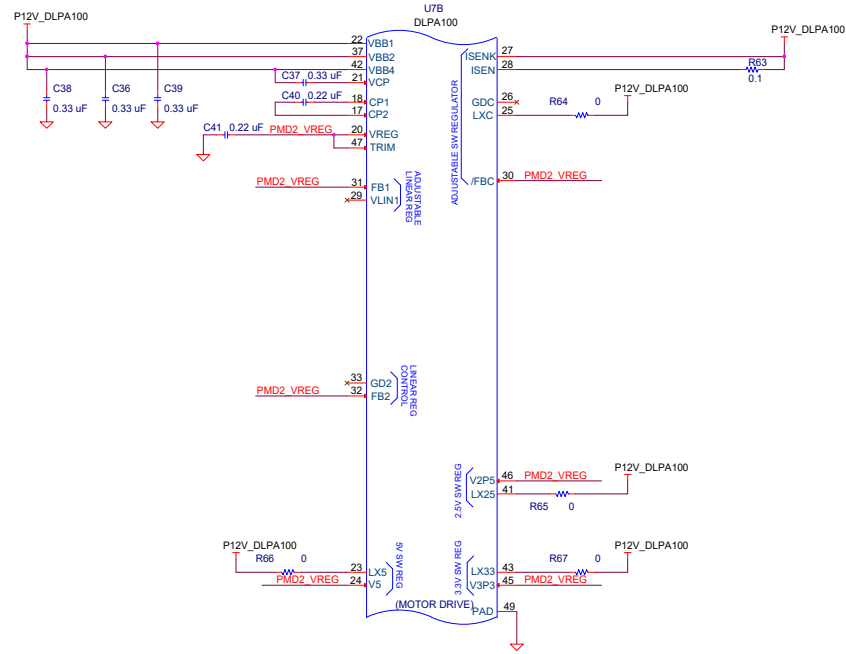


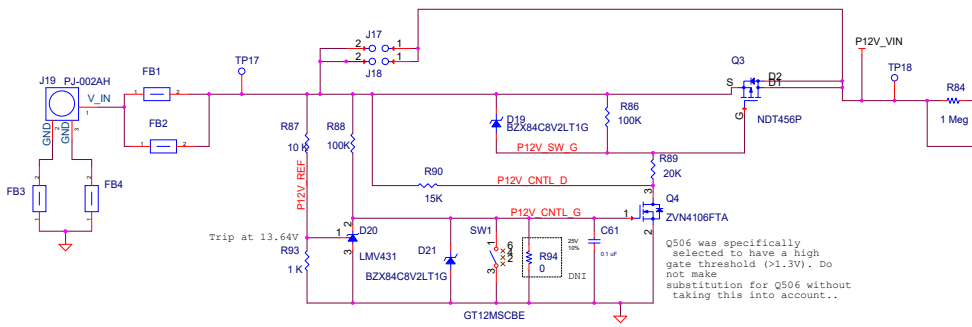
Motor Driver



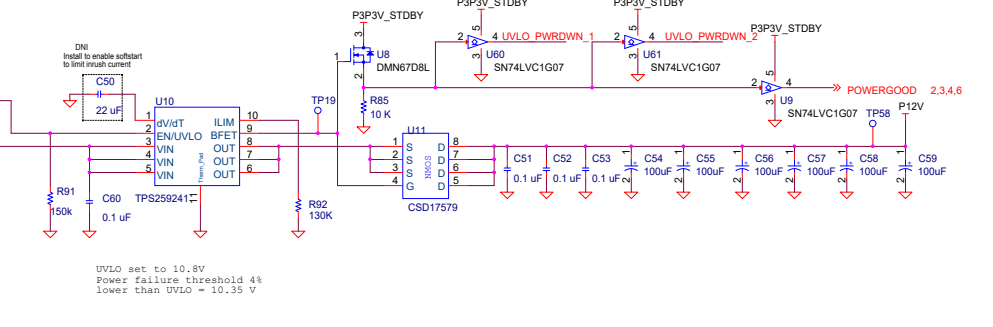
NOTE: This resistor value is dependant upon the CW motor used. The value range is 0.47 ohms to 2.2 ohms. The target vlotage range for the SENSE pin is 100-150mV when the CW is running at a stable speed.



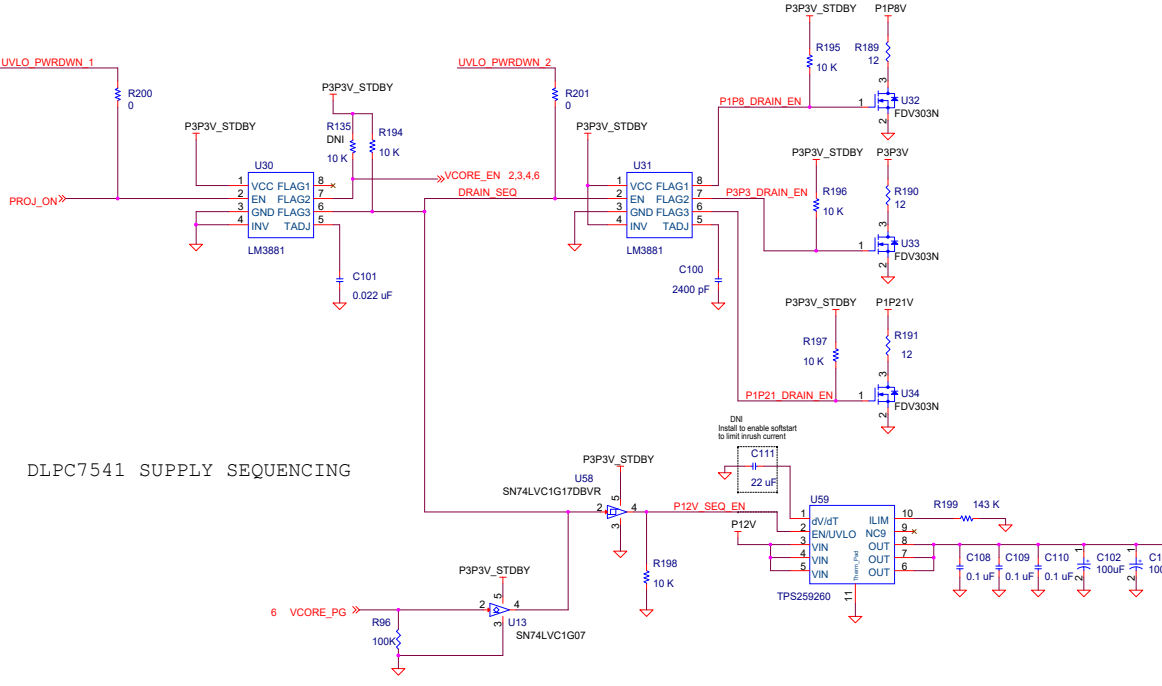




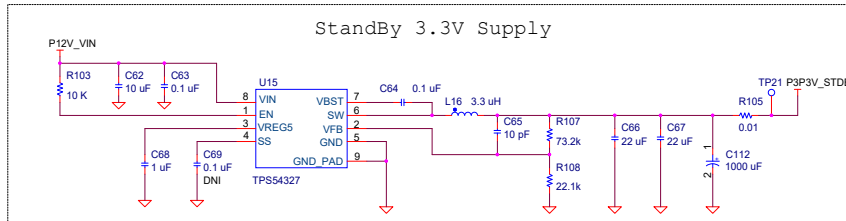
19V Protection



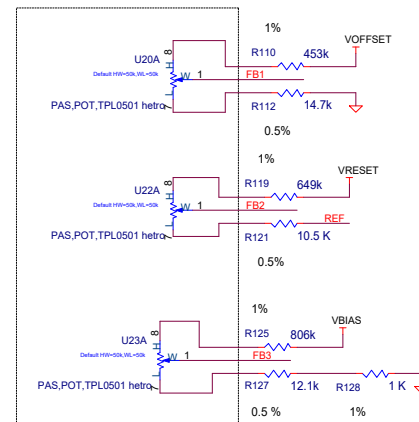
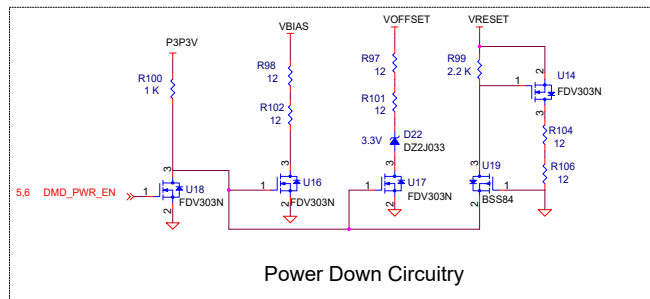
12V UVLO Monitor and Back Current Prevention



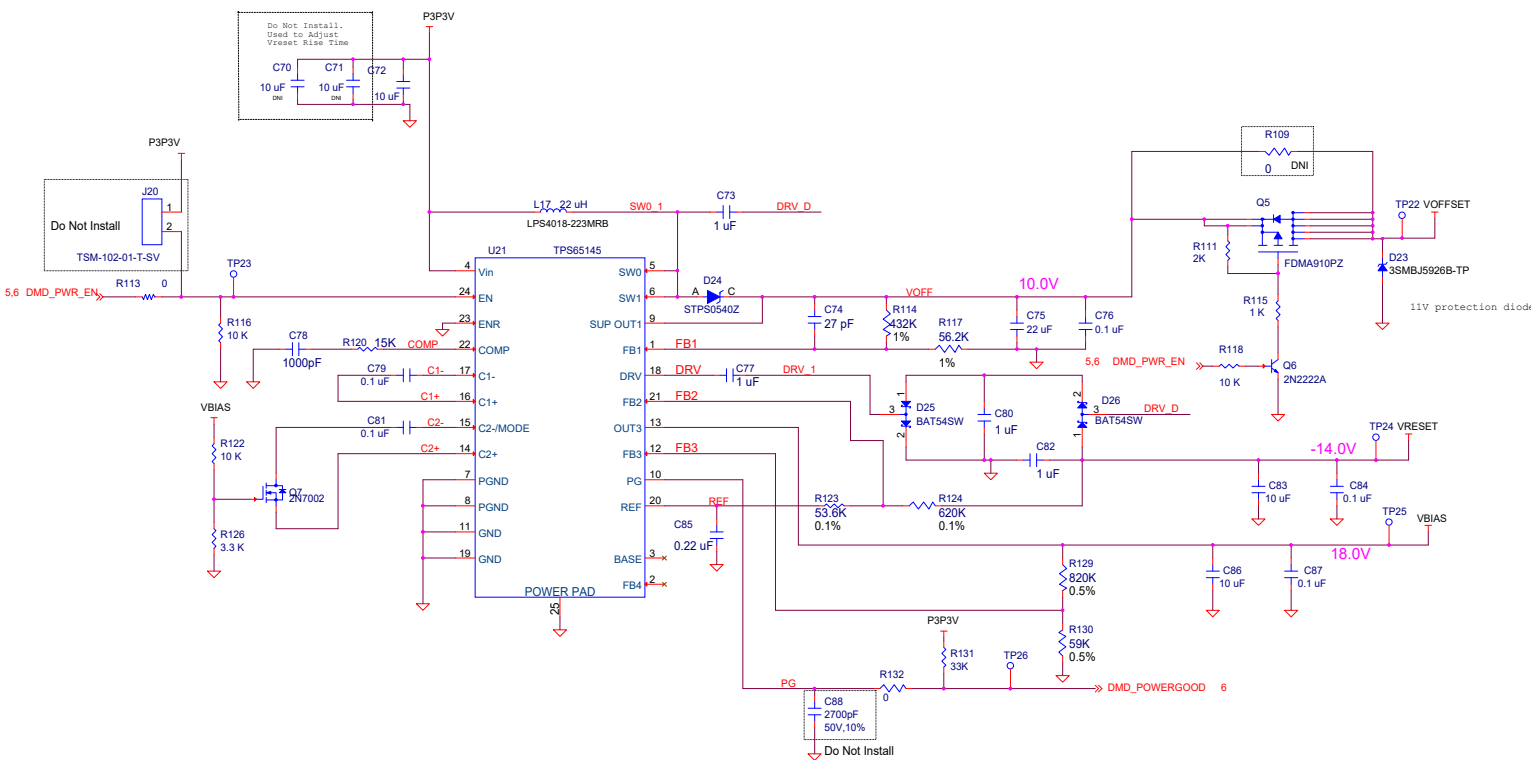
DLPC7541 SUPPLY SEQUENCING

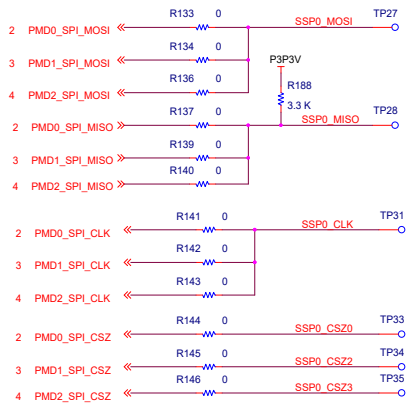


StandBy 3.3V Supply



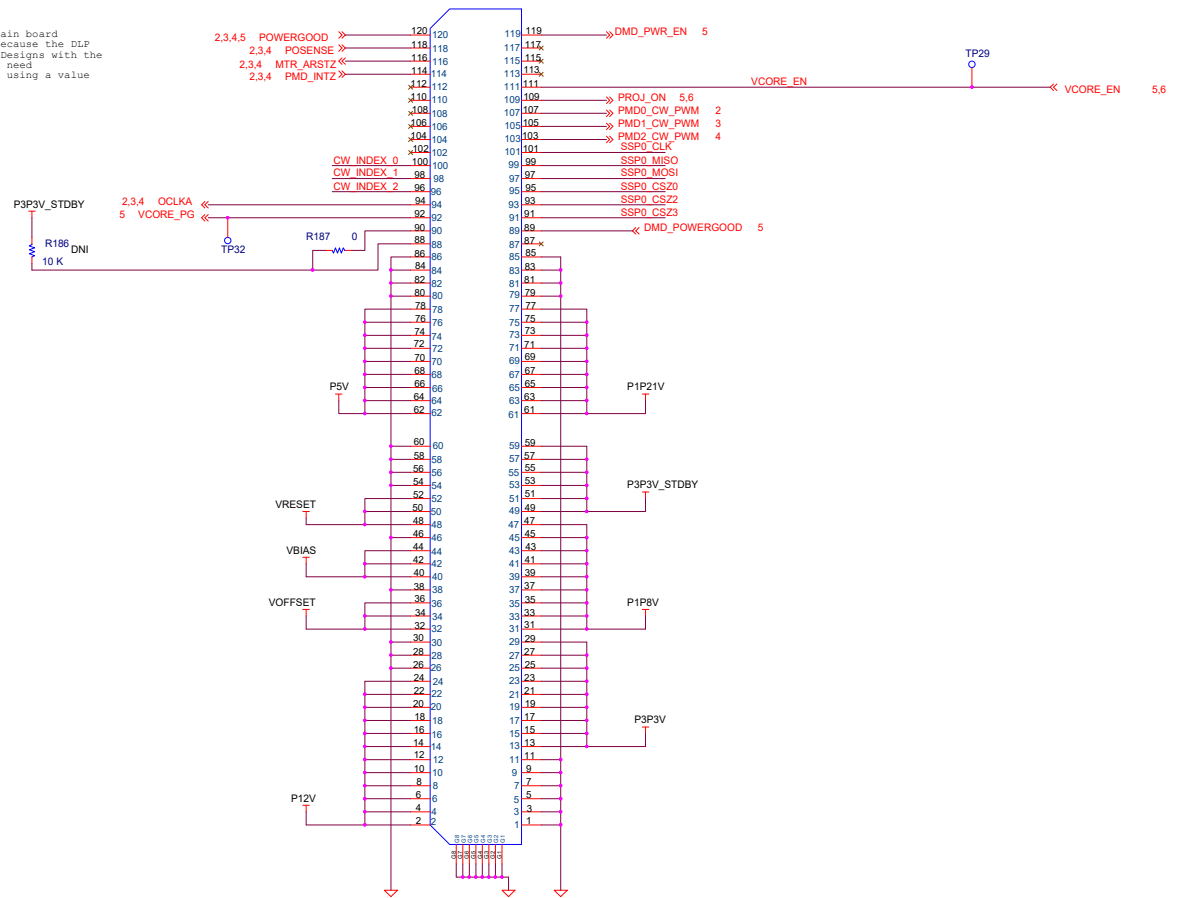
DNI - For Validation only



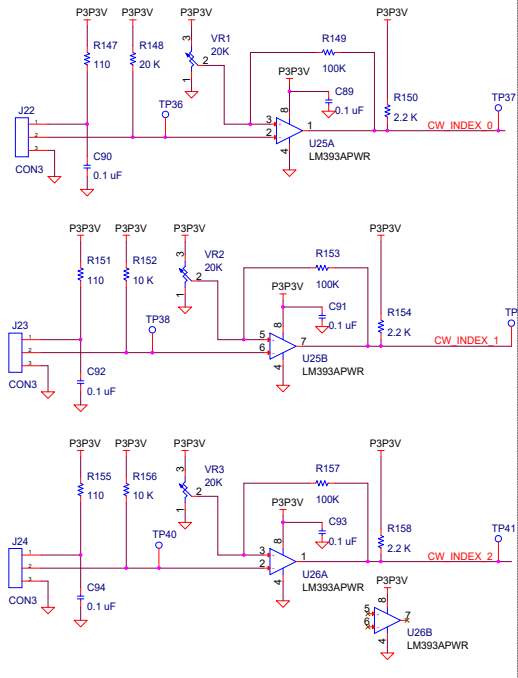


The pull-up on SPI0\_MISO on the DLPC7540 main board reference design (R553) is only present because the DLP reference design is two separate boards. Designs with the DLPC7540 and DLA100 on the same PCB only need 1 pull-up on SPI0\_MISO, and TI recommends using a value of 3.3 kohm - see R188

MAIN BOARD CONNECTOR  
PLACE ON BOTTOM SIDE



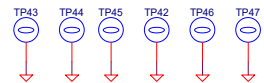
CW Indices



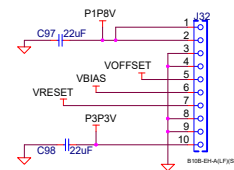
MOUNTING HOLES



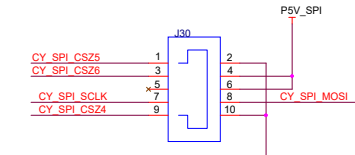
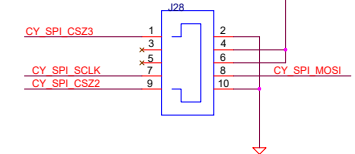
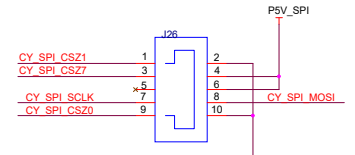
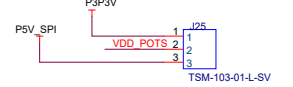
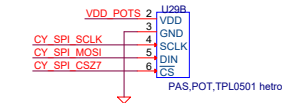
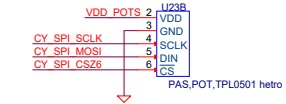
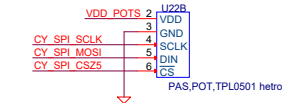
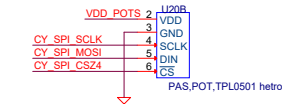
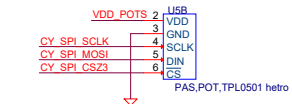
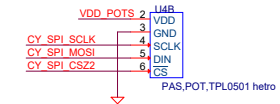
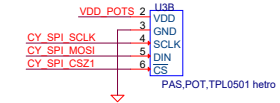
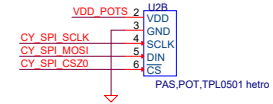
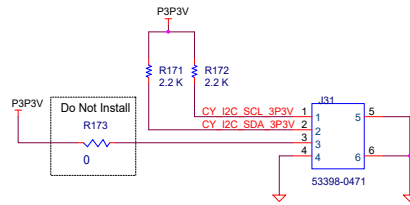
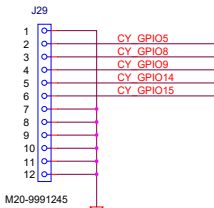
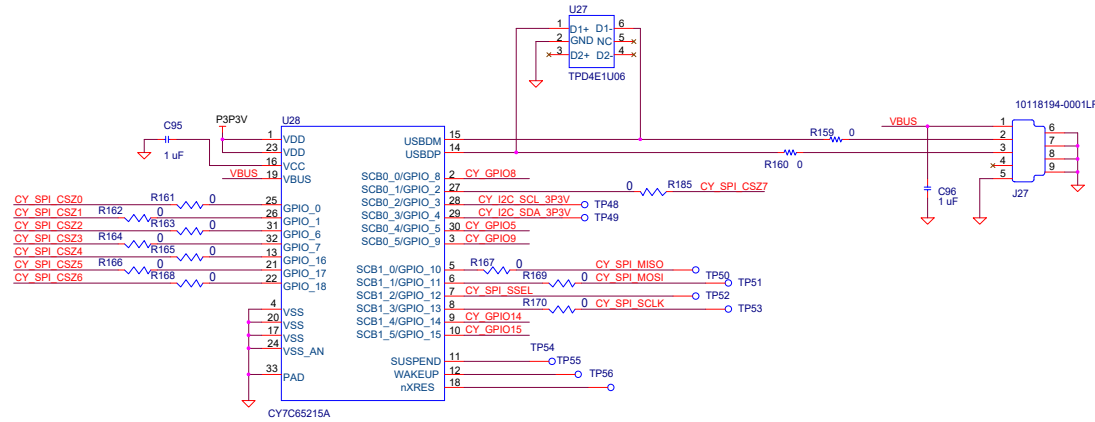
GROUND HOOKS



Alternate power connection for DMD Card.



This Sheet for TI System Validation Only - Not Needed in Production





# Revisions

Rev A  
Original Release

Rev B  
Sheets 2, 3, 4  
J6, J7, J8, J10, J11, J12, J14, J15, J16 changed to top entry

Sheet 5  
Corret Q6 footprint (swap base and emitter pins)  
Change C74 to 27 pF

Sheet 6  
Change R135 to DNI  
Add R188 (10 K)  
Change R148 to 20 K

Layout / Silkscreen Updates  
J22, J23, J24 footprints swap pins 1 and 3  
Correct Silkscreen for J5, J9, J13  
D24 switch polarity of silkscreen symbol  
J22, J23, J24 add silkscreen identifiers

Rev C  
Sheet 5:  
Added: U30, U31, U32, U33, U34, U58, U59,  
R193, R194, R195, R196, R197, R198, R199,  
C100, C101, C102, C103, C104, C105, C106, C107, C108, C109, C110, C111  
Removed: U12, U24, R138

Silk Update: Change SW1 silk to "POWER"

Rev D  
Sheet 5:  
Added U60, R200, R201 for pull-the-plug powerdown sequencing  
C69 channed to DNI

Sheet 7:  
Changed R188 to 3.3k ohm

Rev E  
Sheet 5:  
Added U61, C112  
Removed R195  
Disconnected U60 output from U31 enable  
U30 flag 3 remains P12V\_DLPA100 enable, added DrainSEQ enable to same flag  
U30 flag 2 changed to VCore\_en  
U30 flag 1 changed to NC  
Changed C101 to 0.022 uF  
Changed C100 to 2400 pF

Rev F  
Sheet 5:  
U15 VIN changed to P12V\_VIN

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	ISSUE DATE 01/05/2021	SCALE		SHEET <b>9</b> OF <b>10</b>	

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