


NOTES, UNLESS OTHERWISE SPECIFIED:

1. The netname "DMD\_P3P3V" represents connection to the +3.3V digital power plane.
2. The symbol  represents connection to the digital ground plane.
3. A "Z" suffix on a signal name indicates an active low signal.
4. All components with designators "U", "D", "Y" and "Q" are electrostatic discharge sensitive.
5. All resistor values are in ohms, 1/16W and 5% unless otherwise specified.



		OWN	OSCAR GUERRA	DATE	6/17/2023	<b>TEXAS INSTRUMENTS</b> <small>© COPYRIGHT 2003 TEXAS INSTRUMENTS ALL RIGHTS RESERVED</small>	
		ENGR				TITLE	
		SYST				DLP470TE DMD Board	
		PRJ				DRAWING NO	
		QA				REV	
NEXT ASSY	USED ON					<b>D</b>	DLP104
APPLICATION		SW				SCALE	SHEET 1 of 8

J500

HPC FMC CONNECTOR

From  
Secondary  
Controller

From  
Primary  
Controller

PAGE 3

A/B DMD DATA (DD\_AP[15:0], DD\_AN[15:0], DD\_BP[15:0], DD\_BN[15:0])

A/B DMD CLK (DCLK\_AP, DCLK\_AN, DCLK\_BP, DCLK\_BN)

A/B SCTRL (SCTRL\_AN, SCTRL\_AP, SCTRL\_BN, SCTRL\_BP)

C/D DMD DATA (DD\_CP[15:0], DD\_CN[15:0], DD\_DP[15:0], DD\_DN[15:0])

C/D DMD CLK (DCLK\_CP, DCLK\_CN, DCLK\_DP, DCLK\_DN)

C/D SCTRL (SCTRL\_CN, SCTRL\_CP, SCTRL\_DN, SCTRL\_DP)

DAD CONTROL (STROBE, MODE[0], SEL[1:0], ADDR[3:0], OEZ)

SCP CONTROL (CLK, DO, DI, ENZ, IRQZ)

DMD\_RSTZ

U1  
VREG  
3.3V->1.8V

3.3V

U7

DMD Power Supplies

PAGE 4

U10, U11, U12  
Level Translators  
3.3V->1.8V

VOFFSET

VBIAS

VRESET

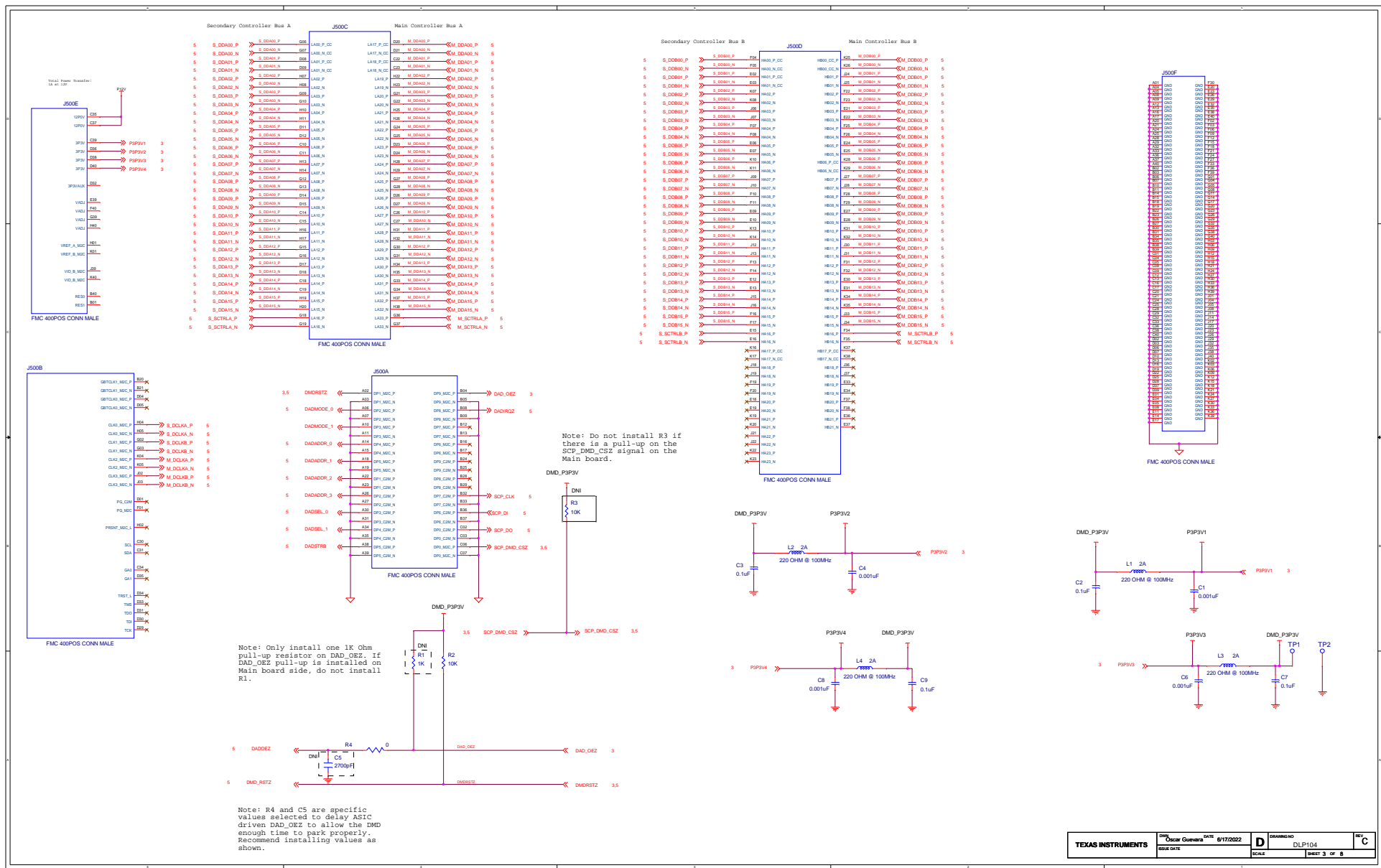
PG\_OFFSET

EN\_OFFSET

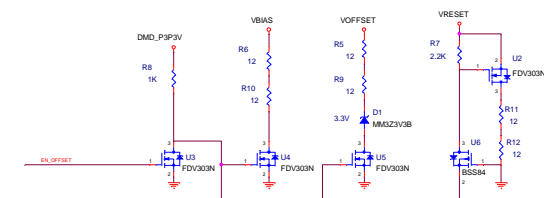
U8

DLP470TE

PAGE 5 & 6

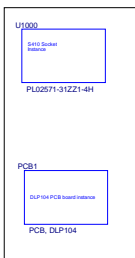
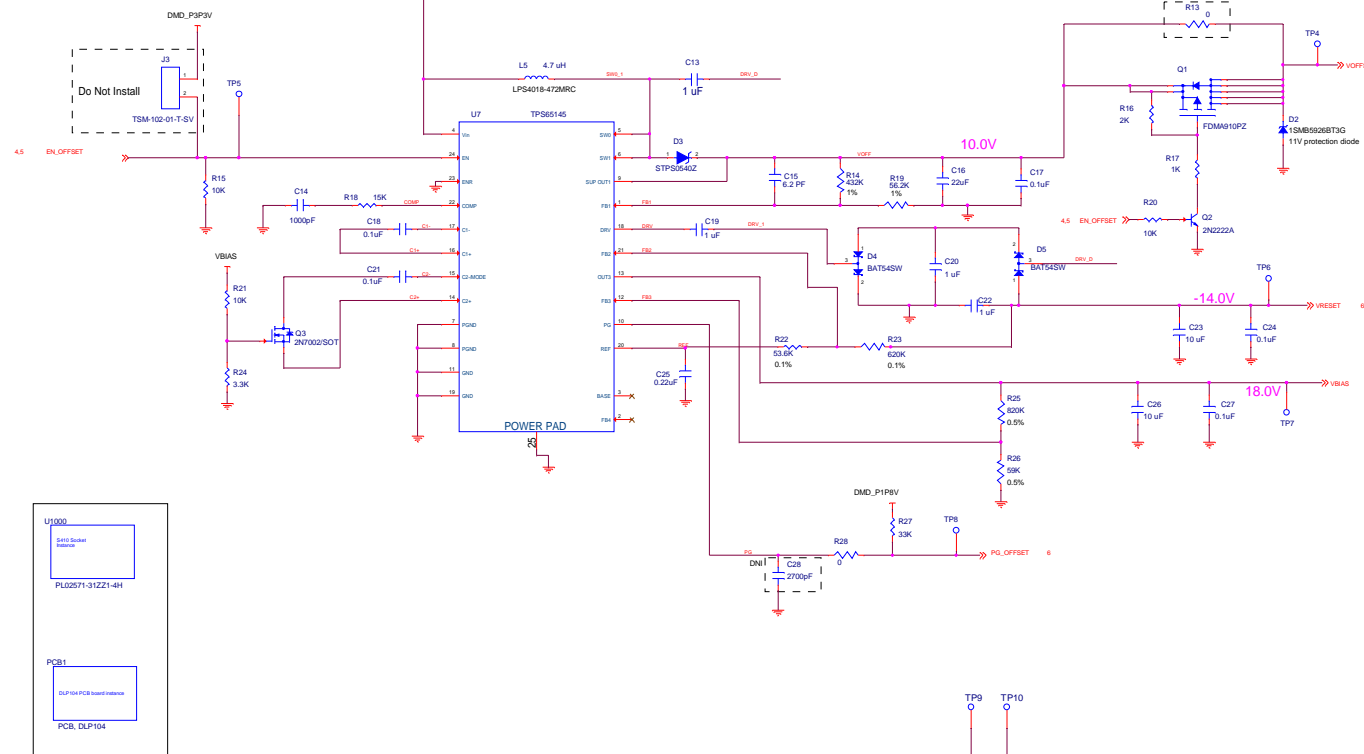
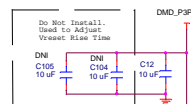
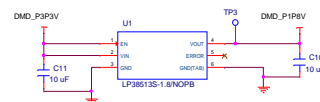


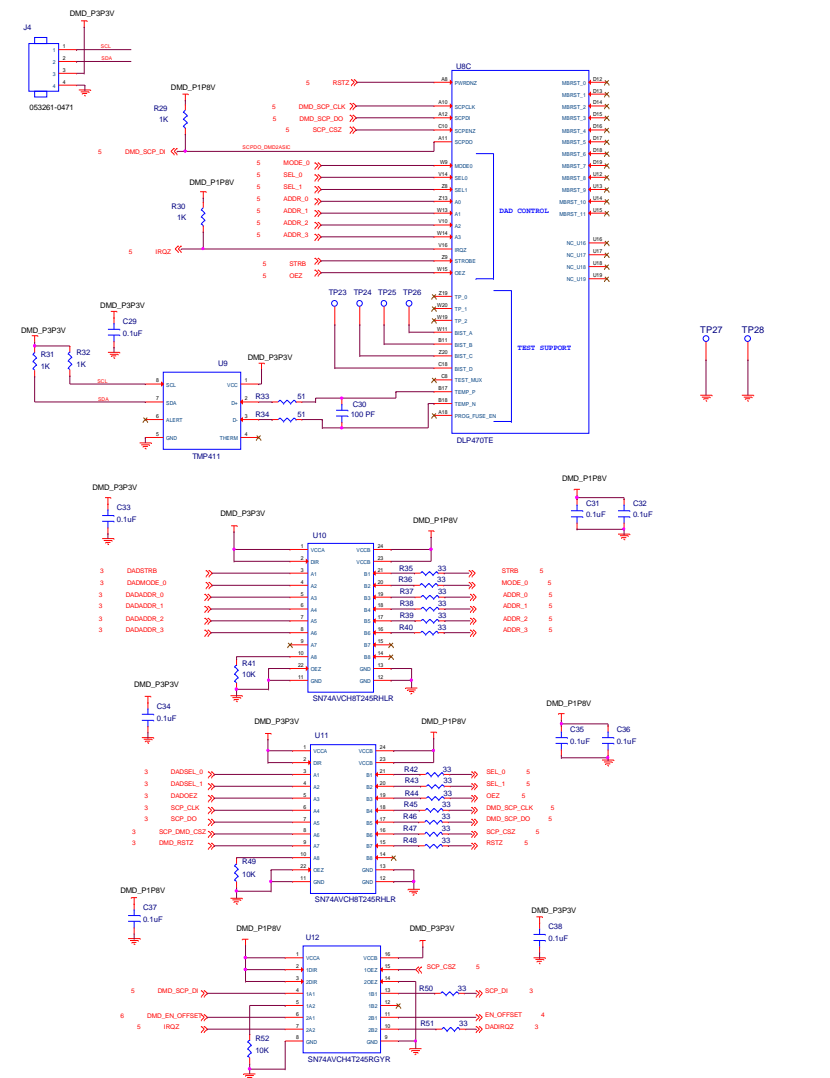
## Power Down Circuitry



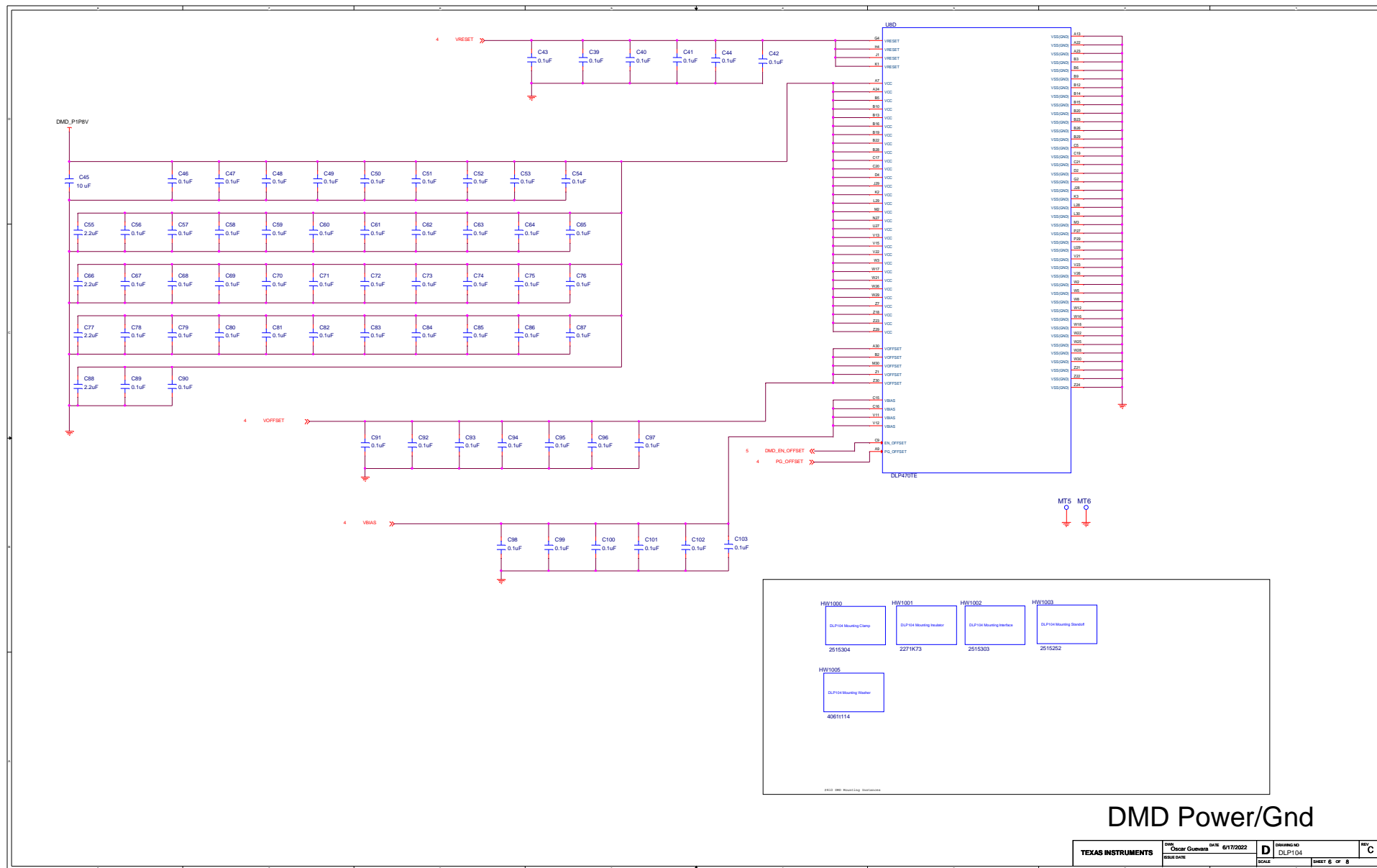
## DMD Power Supplies

TEXAS INSTRUMENTS	DESIGNER	Oscar Guzman	DATE	6/17/2022	DRAWING NO.	DLP104	SHEET 4 OF 8	REV.	C
	ISSUE DATE								





<b>TEXAS INSTRUMENTS</b>	DWN <b>Oscar Guevara</b> DATE <b>6/17/2022</b>	<b>D</b>	DRAWING NO <b>DLP104</b>	REV <b>C</b>
	ISSUE DATE			



## DMD Power/Gnd

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	ISSUE DATE					

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Revision A:  
Initial Release

Revision B:  
R25 tolerance changed from 0.5% to 0.1%  
R26 tolerance changed from 0.5% to 0.1%

Revision C:  
Removed J1 & J2 Flex Cable Interface  
Added J500 FMC Connector

**TEXAS INSTRUMENTS**

DWN	Oscar Guevara	DATE	6/17/2022
ISSUE DATE			

B

DRAWING NO	DLP104
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**EV**  
**C**

SCALE	SHEET 7 OF 8
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	ISSUE DATE								