

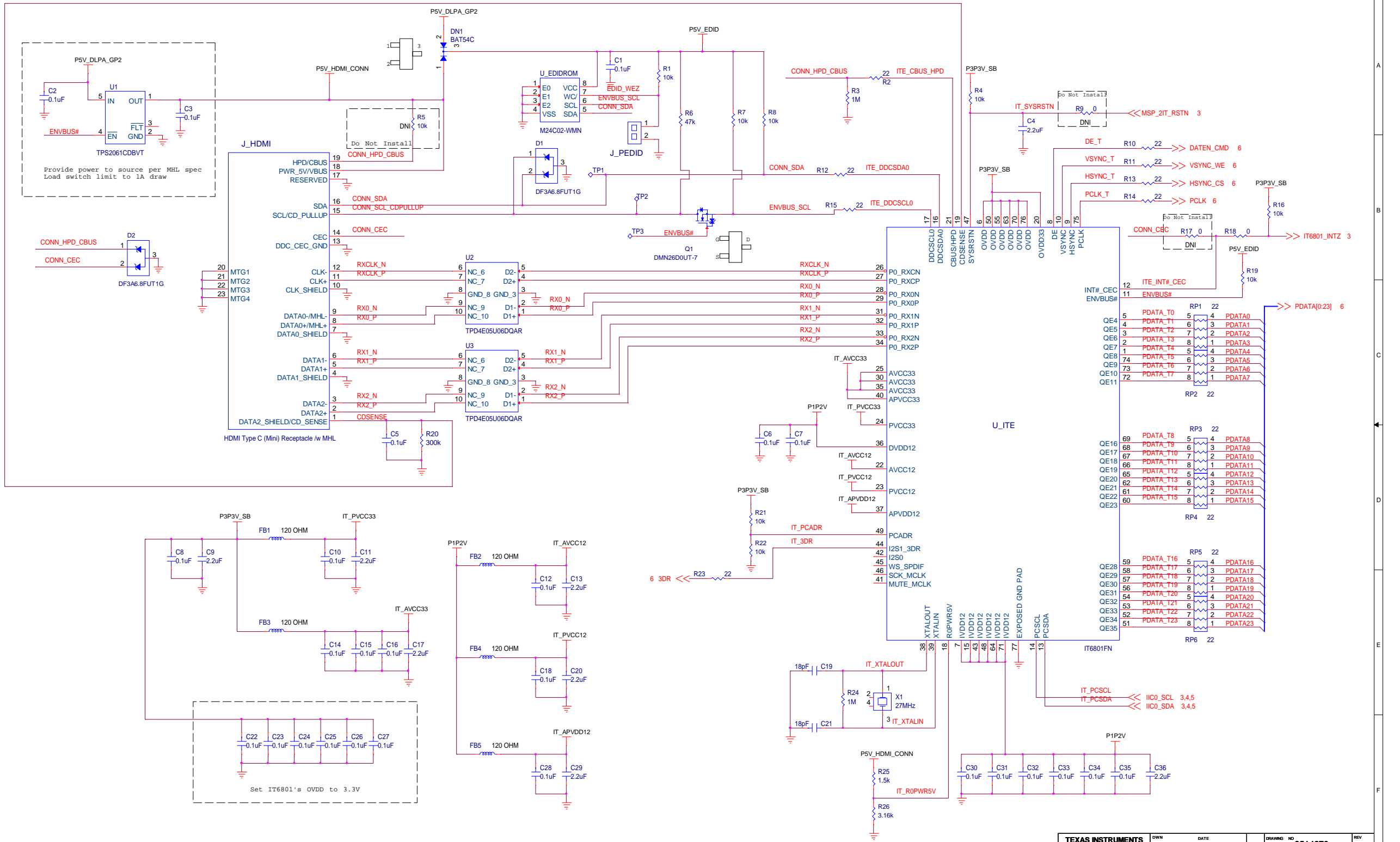
COMPUTER GENERATED DRAWING - DO NOT REVISE MANUALLY				
REVISIONS				
REV		DESCRIPTION	DATE	APPROVED
A	ECO 2144961	Initial release	10/8/2014	NG
B	2147248	Refer to page 12	12/16/2014	NG

A  
B  
C  
D  
E  
F

A  
B  
C  
D  
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F

ESD 2514273  
PCB 2514274  
CCA 2514275

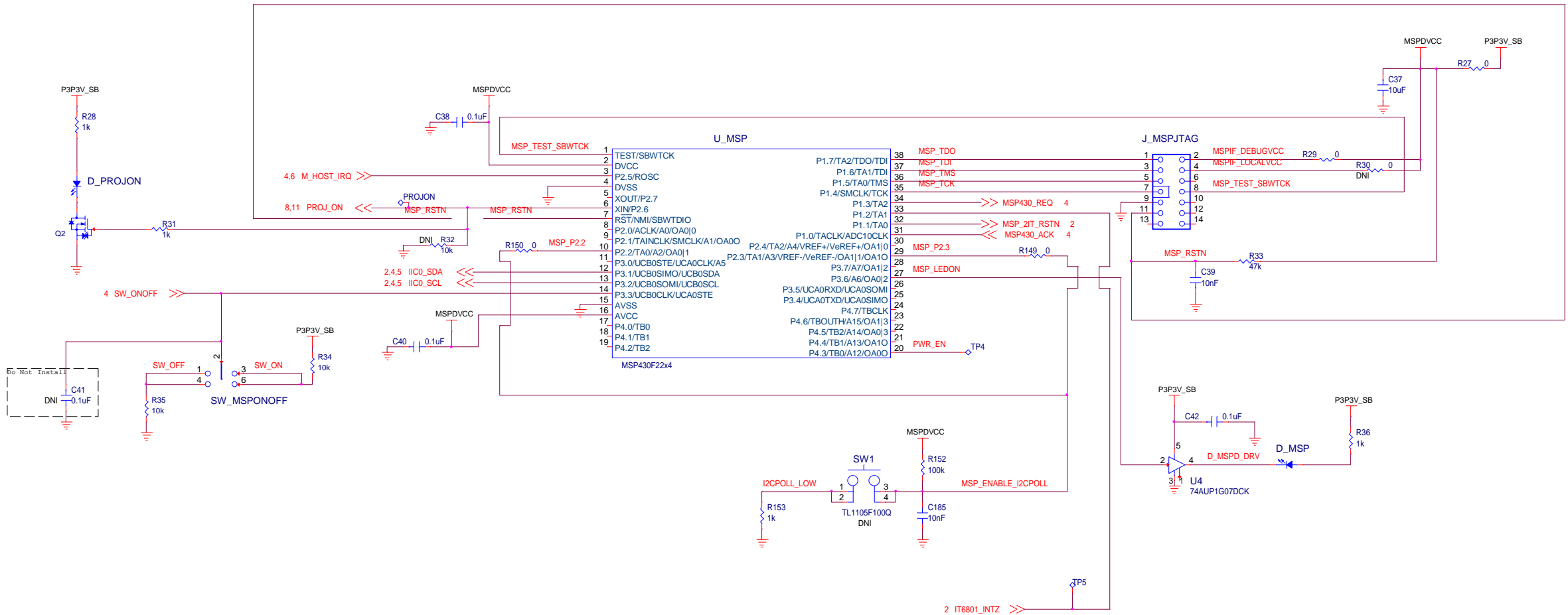
DWN	Kevin Lowderman	DATE	04/30/2015	<b>TEXAS INSTRUMENTS - DLP® Products</b>	
ENGR	Kevin Lowderman	DATE	04/30/2015	(C) COPYRIGHT 2014 Texas Instruments Inc. All Rights Reserved	
SYS	Dan Morgan	DATE	????	TITLE	TIDA_00576 DLPDLCR4710EVM
APVD	Jeff Dennis	DATE	????	DRAWING NO	2514273
QA	????	DATE	????	REV	B
				11 x 17	OrCAD Capture 16.6
				SHEET	1 of 13



Provide power to source per MHL spec  
Load switch limit to 1A draw

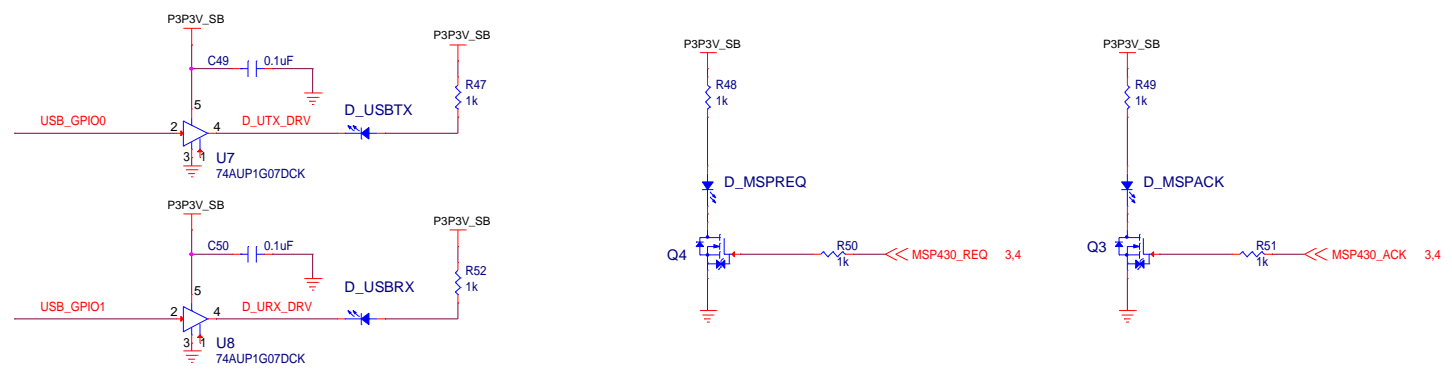
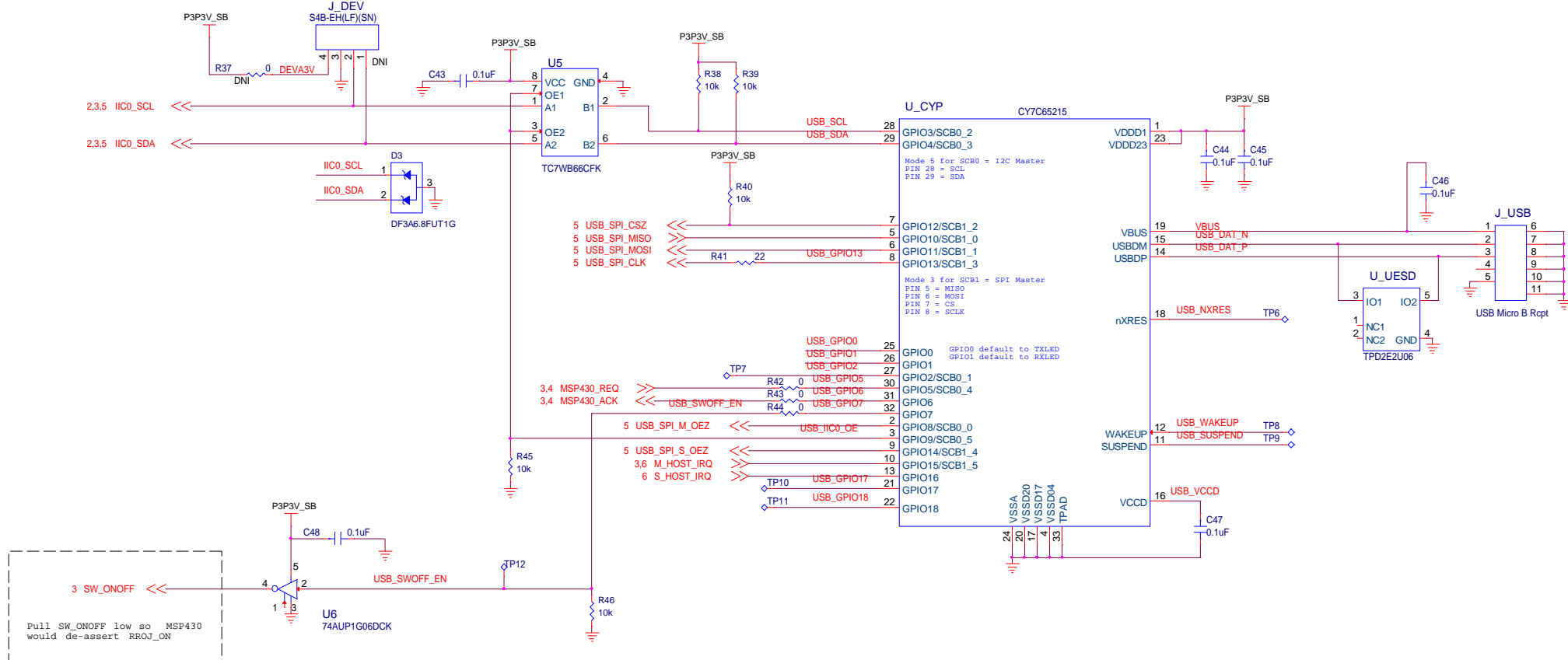
HDMI Type C (Mini) Receptacle w/ MHL

Set IT6801's OVDD to 3.3V



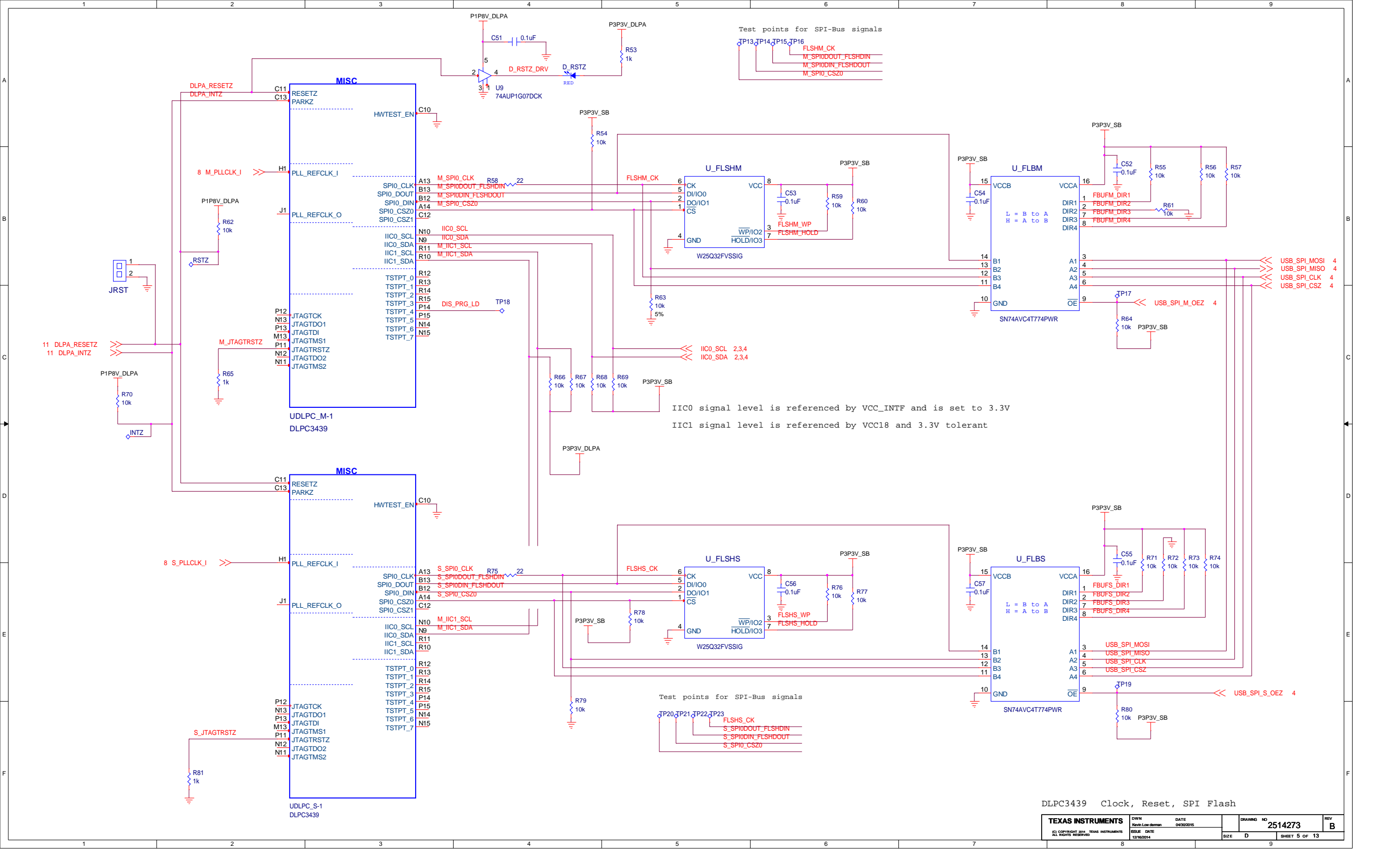
MSP430

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	Lowdown	04/20/2015	B
DRAWING NO <b>2514273</b>		SHEET 3 OF 13	
SIZE <b>D</b>	ISSUE DATE 12/16/2014		



USB Interface

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	Issue/Revision	04/02/2015		
SIZE D	SHEET 4 OF 13			



Test points for SPI-Bus signals

- TP13 FLSHM\_CK
- TP14 M\_SPIOOUT\_FLSHDIN
- TP15 M\_SPIODIN\_FLSHDOUT
- TP16 M\_SPIODIN\_FLSHDOUT
- TP16 M\_SPIO\_CS20

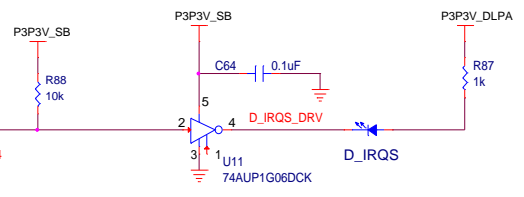
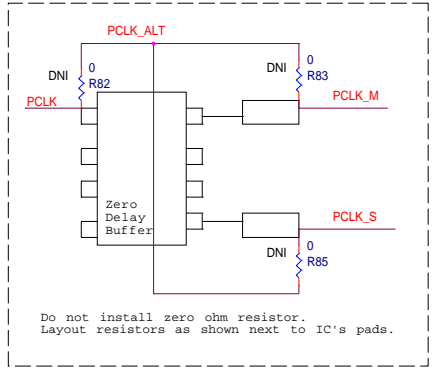
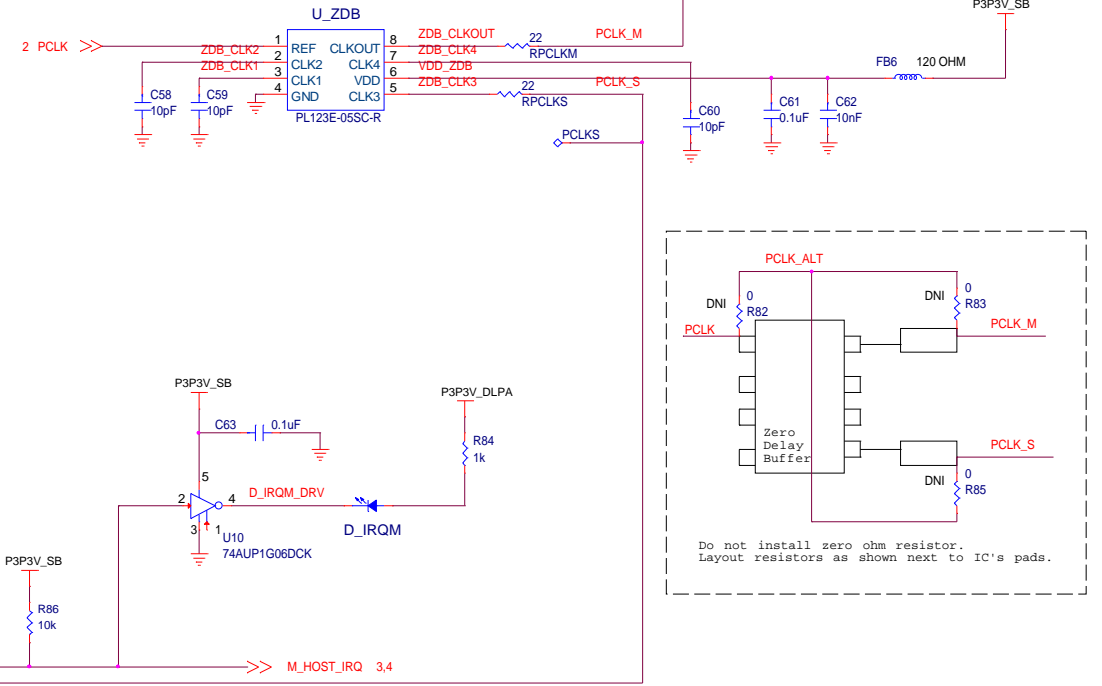
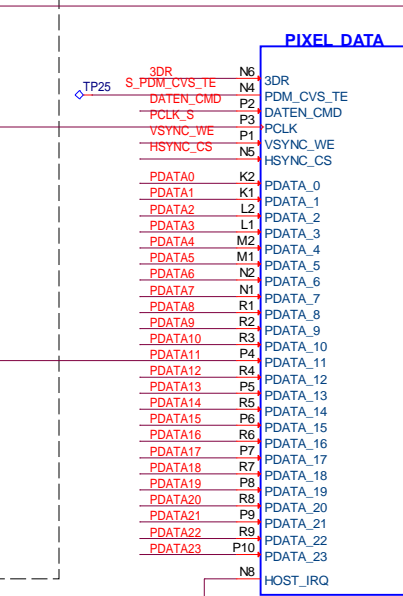
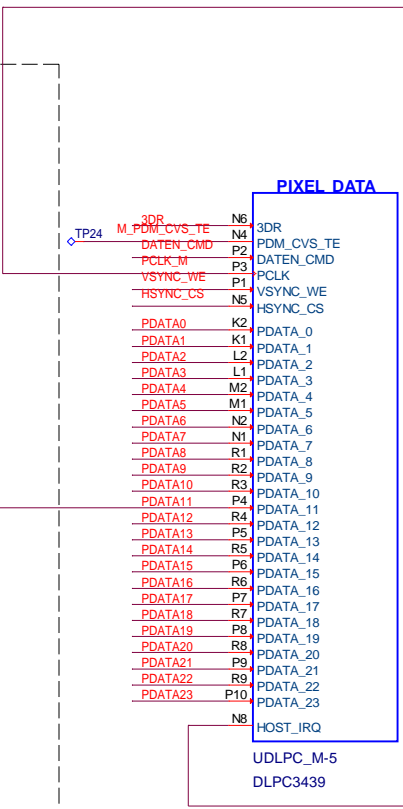
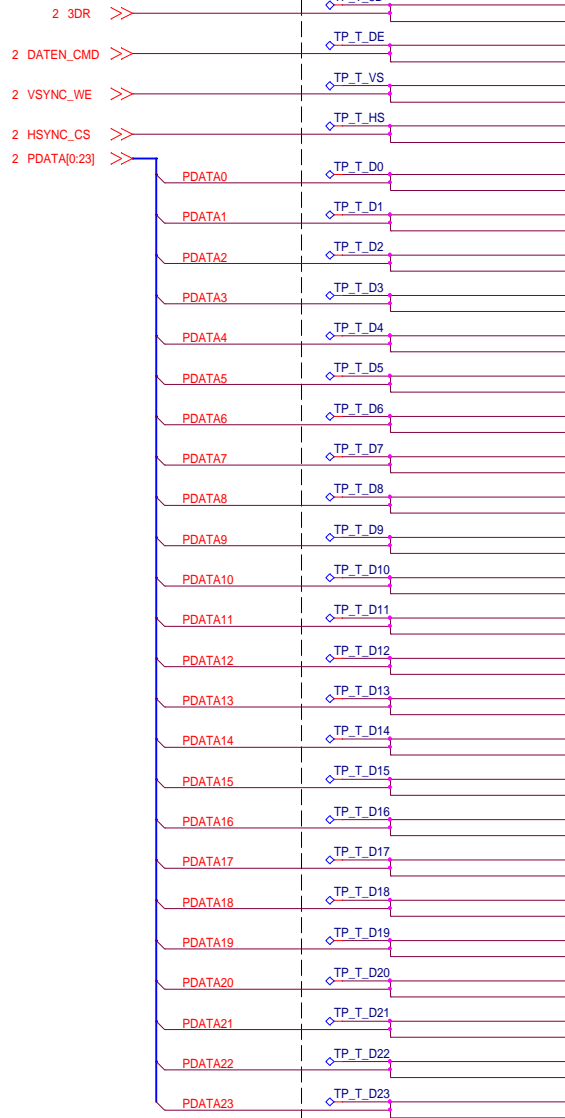
IIC0 signal level is referenced by VCC\_INTF and is set to 3.3V  
 IIC1 signal level is referenced by VCC18 and 3.3V tolerant

DLPC3439 Clock, Reset, SPI Flash

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	<small>ISSUE DATE</small> 12/16/2014	<small>SIZE</small> D		

Tree route signals to U\_DLPCM and U\_DLPCS. Match the two branches of each route to within 50 mils

Test points for U\_DLPCM and UDLPCS signals



DLPC3439 Video Input Port

**DMD INTERFACE**

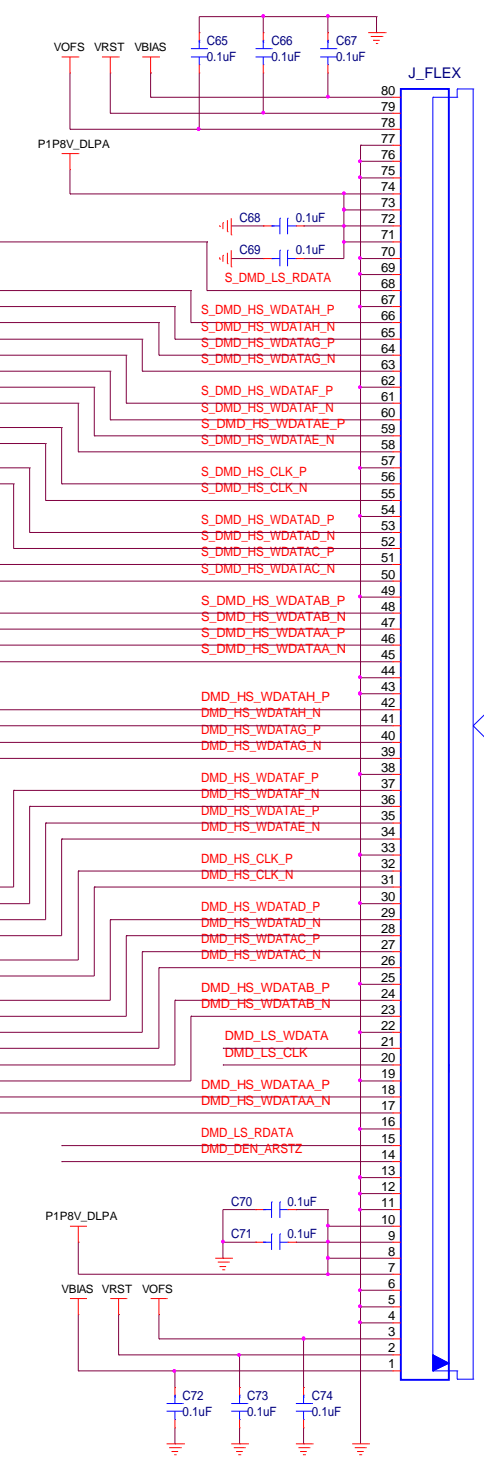
DMD_LS_CLK	A1
DMD_LS_WDATA	A2
DMD_DEN_ARSTZ	B1
DMD_LS_RDATA	B2
DMD_HS_WDATAH_P	A3
DMD_HS_WDATAH_N	B3
DMD_HS_WDATAG_P	A4
DMD_HS_WDATAG_N	B4
DMD_HS_WDATAF_P	A5
DMD_HS_WDATAF_N	B5
DMD_HS_WDATAE_P	A6
DMD_HS_WDATAE_N	B6
DMD_HS_CLK_P	A7
DMD_HS_CLK_N	B7
DMD_HS_WDATAD_P	A8
DMD_HS_WDATAD_N	B8
DMD_HS_WDATAC_P	A9
DMD_HS_WDATAC_N	B9
DMD_HS_WDATAB_P	A10
DMD_HS_WDATAB_N	B10
DMD_HS_WDATAA_P	A11
DMD_HS_WDATAA_N	B11

UDLPC\_S-2  
DLPC3439

**DMD INTERFACE**

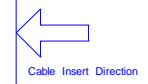
DMD_LS_CLK	A1	LS_CLK	R89	43	DMD_LS_CLK
DMD_LS_WDATA	A2	LS_WDATA	R90	43	DMD_LS_WDATA
DMD_DEN_ARSTZ	B1				DMD_DEN_ARSTZ
DMD_LS_RDATA	B2				DMD_LS_RDATA
DMD_HS_WDATAH_P	A3				DMD_HS_WDATAH_P
DMD_HS_WDATAH_N	B3				DMD_HS_WDATAH_N
DMD_HS_WDATAG_P	A4				DMD_HS_WDATAG_P
DMD_HS_WDATAG_N	B4				DMD_HS_WDATAG_N
DMD_HS_WDATAF_P	A5				DMD_HS_WDATAF_P
DMD_HS_WDATAF_N	B5				DMD_HS_WDATAF_N
DMD_HS_WDATAE_P	A6				DMD_HS_WDATAE_P
DMD_HS_WDATAE_N	B6				DMD_HS_WDATAE_N
DMD_HS_CLK_P	A7				DMD_HS_CLK_P
DMD_HS_CLK_N	B7				DMD_HS_CLK_N
DMD_HS_WDATAD_P	A8				DMD_HS_WDATAD_P
DMD_HS_WDATAD_N	B8				DMD_HS_WDATAD_N
DMD_HS_WDATAC_P	A9				DMD_HS_WDATAC_P
DMD_HS_WDATAC_N	B9				DMD_HS_WDATAC_N
DMD_HS_WDATAB_P	A10				DMD_HS_WDATAB_P
DMD_HS_WDATAB_N	B10				DMD_HS_WDATAB_N
DMD_HS_WDATAA_P	A11				DMD_HS_WDATAA_P
DMD_HS_WDATAA_N	B11				DMD_HS_WDATAA_N

UDLPC\_M-2  
DLPC3439

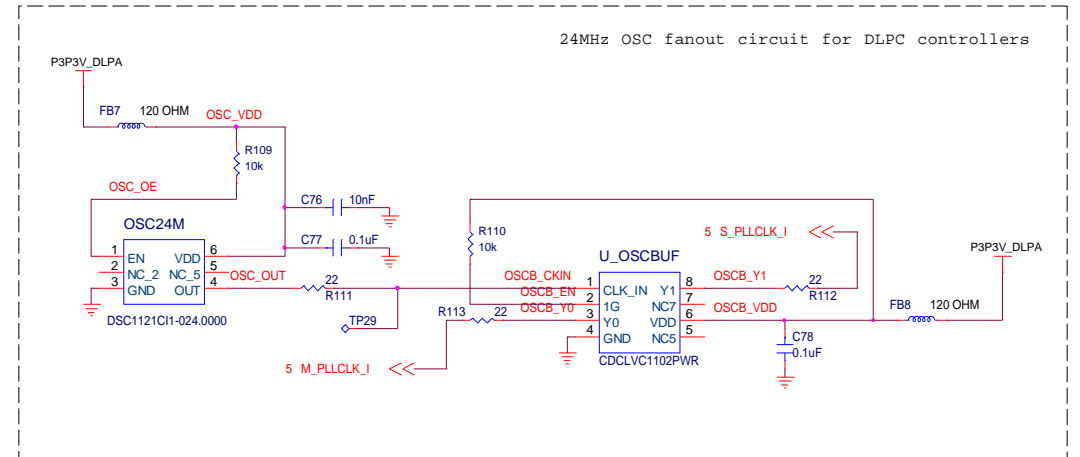
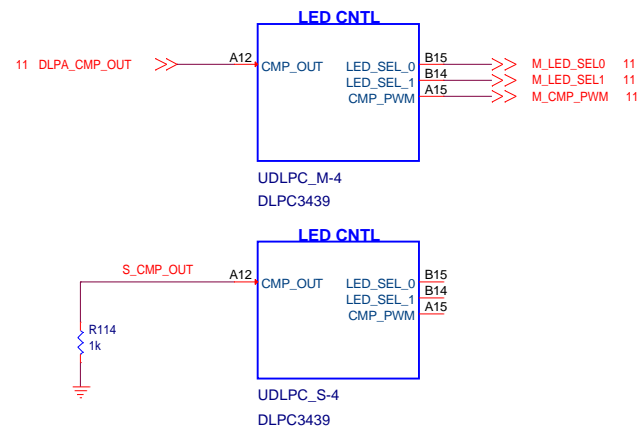
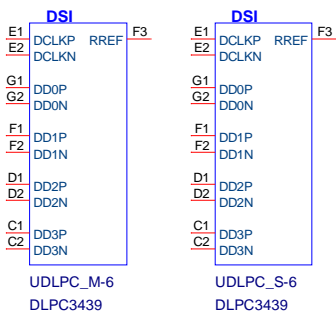
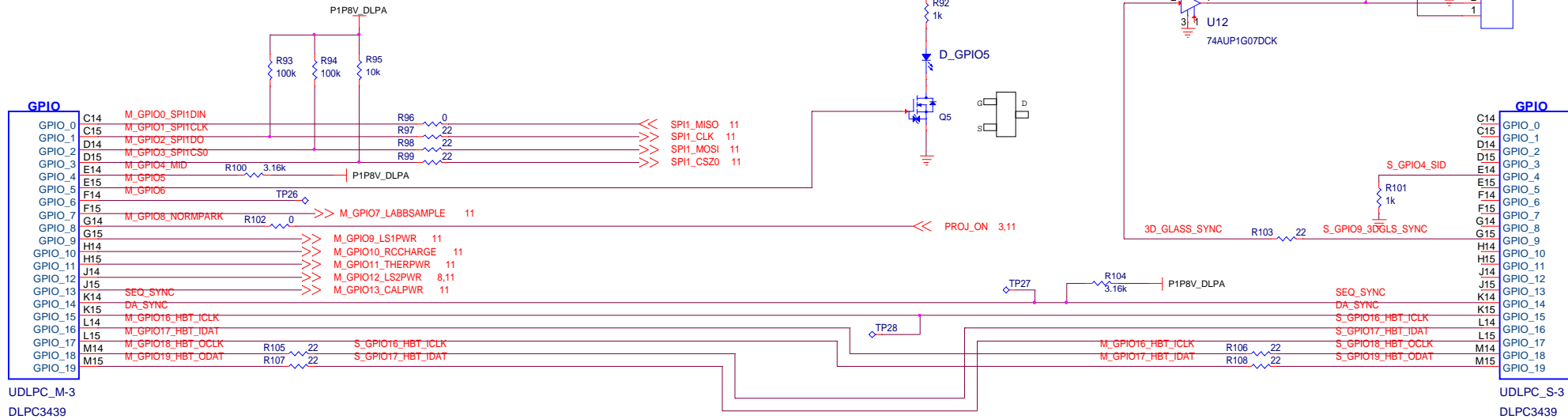


Test points for DMD signals

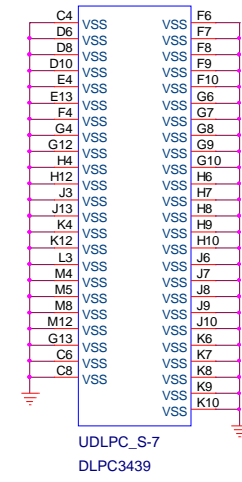
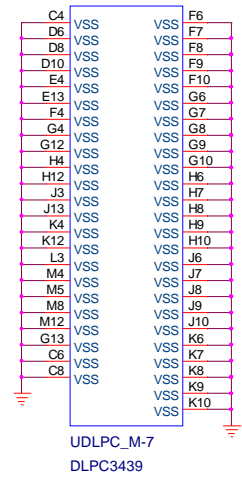
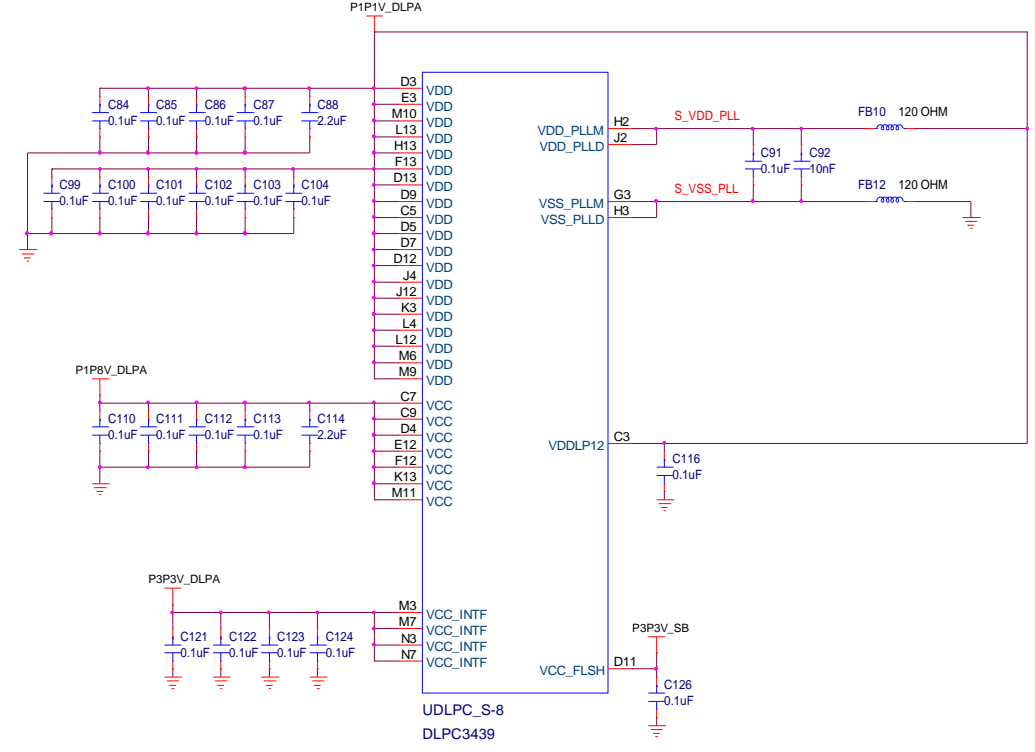
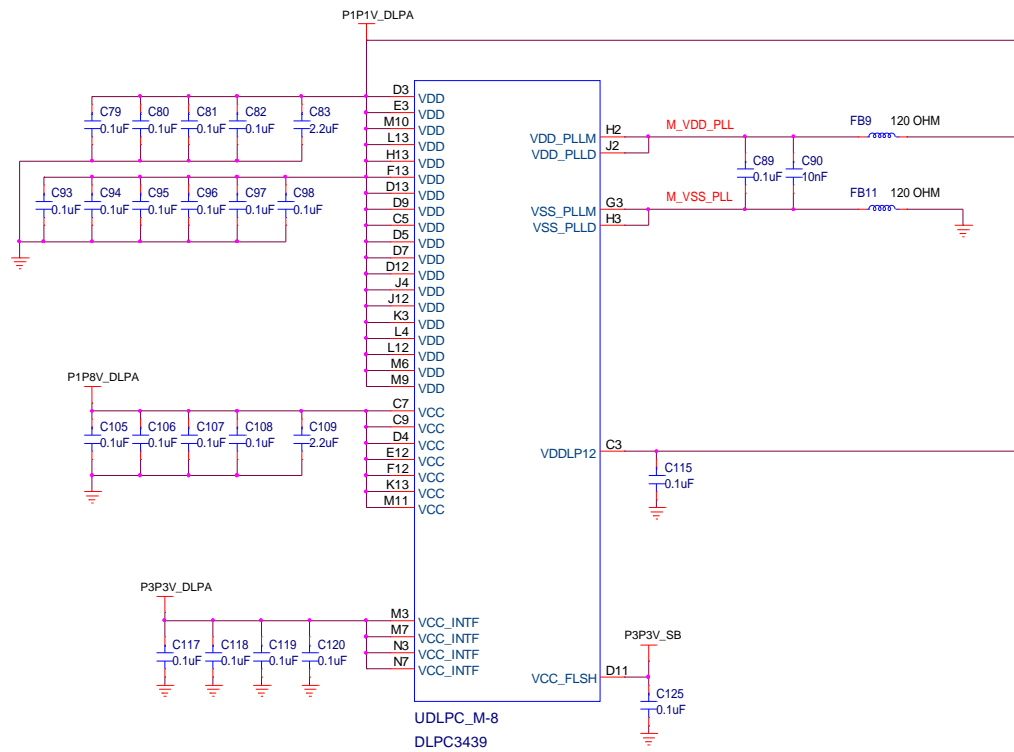
S_HP	S_DMD_HS_WDATAH_P
S_HN	S_DMD_HS_WDATAH_N
S_FP	S_DMD_HS_WDATAF_P
S_FN	S_DMD_HS_WDATAF_N
S_CKP	S_DMD_HS_CLK_P
S_CKN	S_DMD_HS_CLK_N
S_CP	S_DMD_HS_WDATAC_P
S_CN	S_DMD_HS_WDATAC_N
LS_CLK	DMD_LS_CLK
LS_WD	DMD_LS_WDATA
ARSTZ	DMD_DEN_ARSTZ
LS_RD	DMD_LS_RDATA
LS_SRD	S_DMD_LS_RDATA
HP	DMD_HS_WDATAH_P
HN	DMD_HS_WDATAH_N
FP	DMD_HS_WDATAF_P
FN	DMD_HS_WDATAF_N
CKP	DMD_HS_CLK_P
CKN	DMD_HS_CLK_N
CP	DMD_HS_WDATAC_P
CN	DMD_HS_WDATAC_N



DLPC3439 DMD Interface



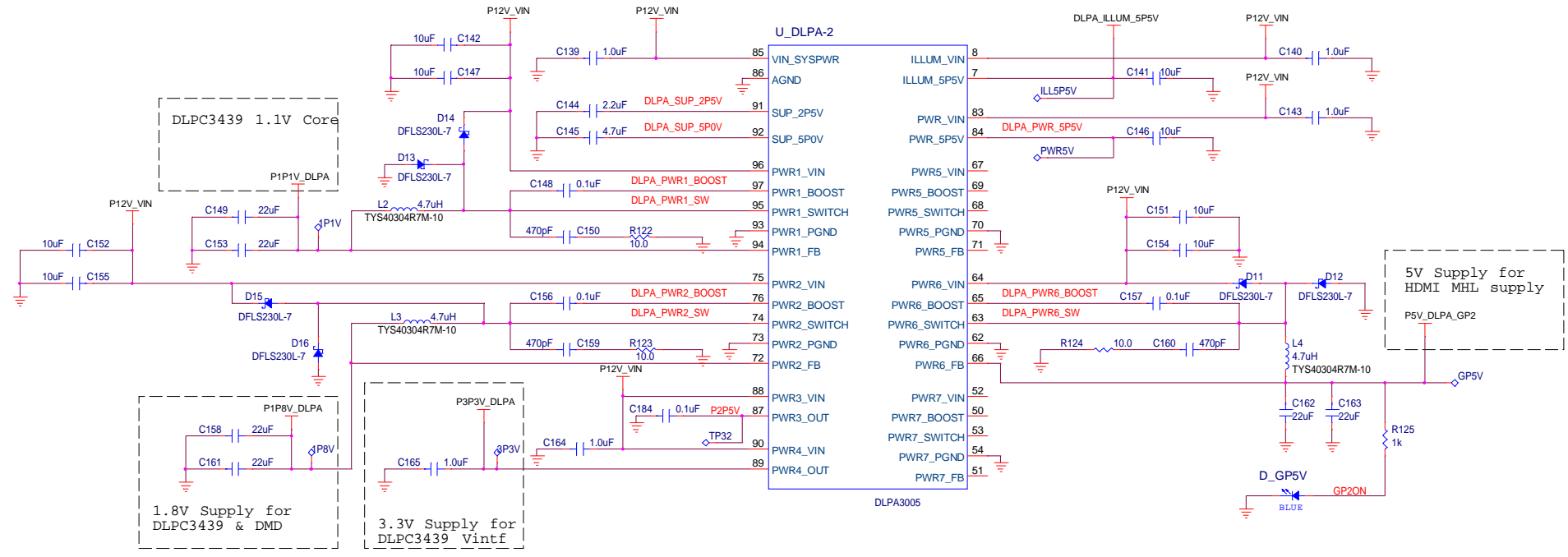
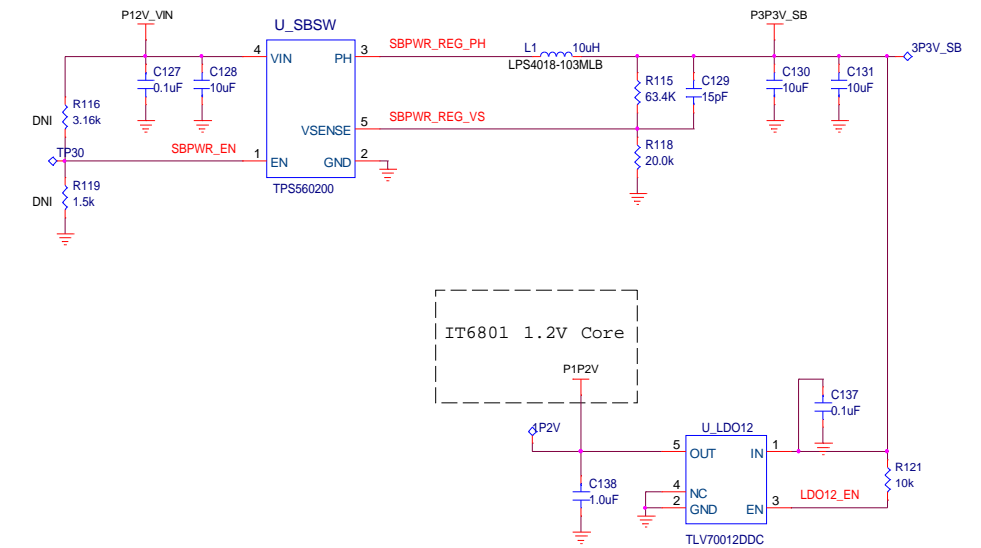
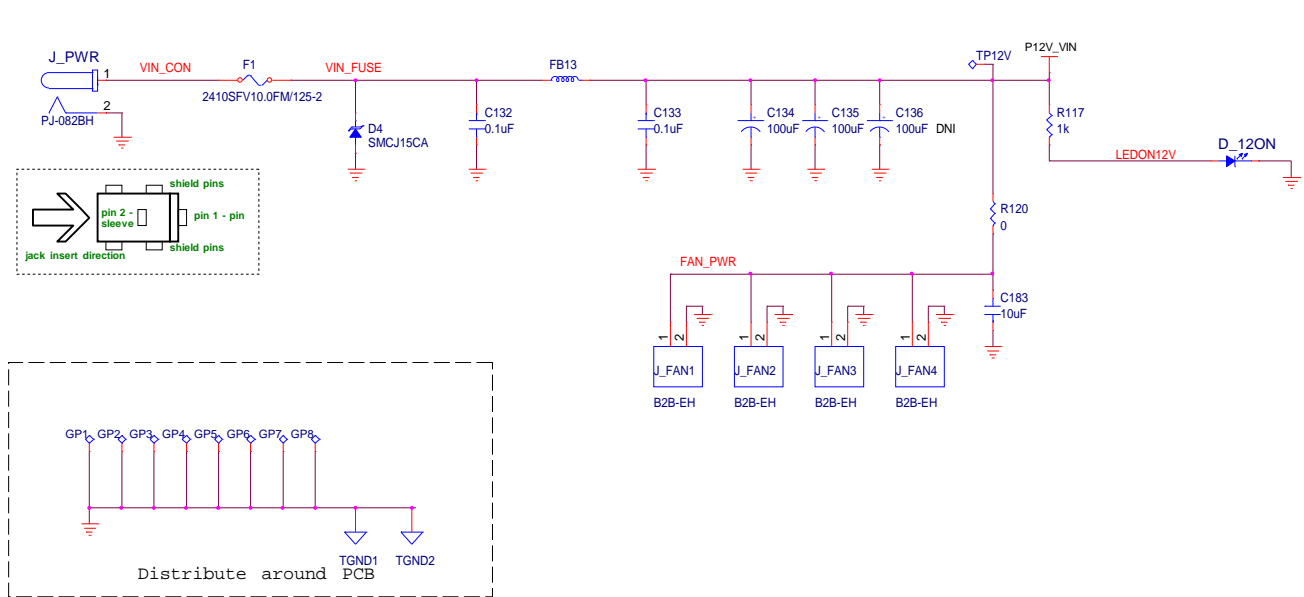




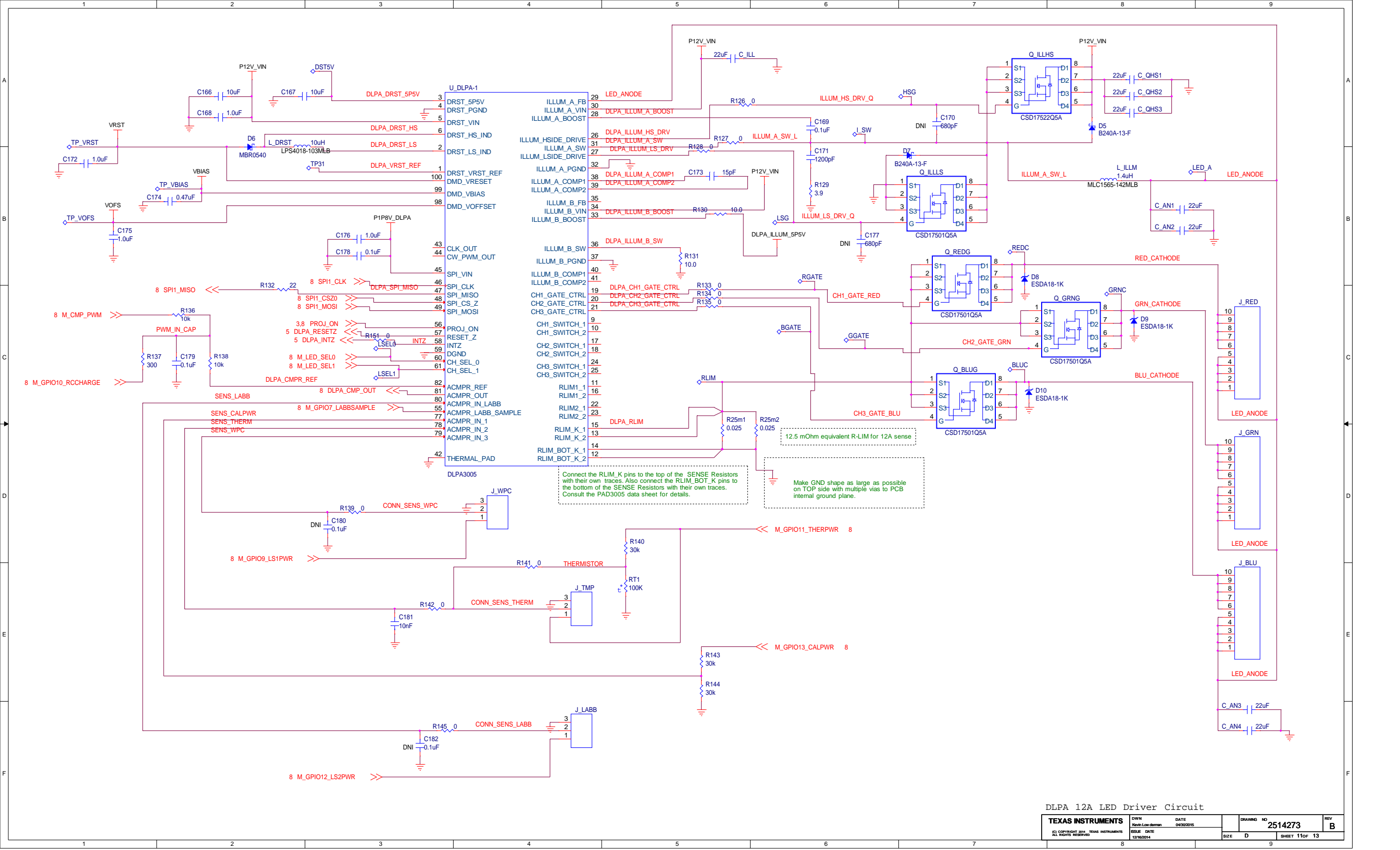
DLC3439 Power/Ground

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	Issue Low Emission	04/20/2015	B
<small>ISSUE DATE</small> 12/16/2014	<small>DRAWING NO</small> <b>2514273</b>	<small>SHEET 9 OF 13</small>	
<small>SIZE</small> D	<small>REV</small>		

"Standby" power for frontend electronics and SPI Flash



12V Supply In, 3.3V Standby, DLPA 5V 3.3V 1.8V 1.1V, LDO 1.2V



Connect the RLIM\_K pins to the top of the SENSE Resistors with their own traces. Also connect the RLIM\_BOT\_K pins to the bottom of the SENSE Resistors with their own traces. Consult the PAD3005 data sheet for details.

12.5 mOhm equivalent R-LIM for 12A sense

Make GND shape as large as possible on TOP side with multiple vias to PCB internal ground plane.

# Revisions

Rev. A : Initial Release

Rev. B : Initial Release

Page 3 : R32 changed to DNI. Added "MSP\_ENABLE\_I2CPOLL" for test & debug purpose

Page 5 : install JRST for test & debug purpose

Page 10 : add connection for DLPA3005 pin 87,88

Page 11 : add zero ohm resistor for DLPA\_INTZ for test & debug purpose

## REVISION NOTES

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	ISSUE 12/16/2014	DATE	SIZE D	SHEET 12 OF 13

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