

NOTES:

- 1. The netname "VCC_1P8V" represents connection to the +1.8V digital power plane.
- 2. The netname "VCC_2P5V" represents connection to the +2.5V digital power plane.
- 3. The netname "VCC_3P3V" represents connection to the +3.3V digital power plane.
- 4. The netname "GND" represents connection to the ground plane.
- 5. A "#" suffix on a signal plane indicates an active low signal.
- 6. All components with designators "U", "Q", and "D" are electrostatic discharge sensitive.
- 7. All resistor values are in ohms unless otherwise specified.
- 8. All capacitor values in microfarads unless otherwise specified.
- 9. Bluewire cicuit modifications are noted by dashed outlines.

HIGHEST REFERENCE DESIGNATORS USED						
BT	C287	D15	FB11	H1	J17	L10
R264	RN4	RP10	SW4	TP32	U23	Y5

Default Jumper Settings
J10 1-2
J5 2-3
J3 2-3,5-6,8-9,11-12,14-15

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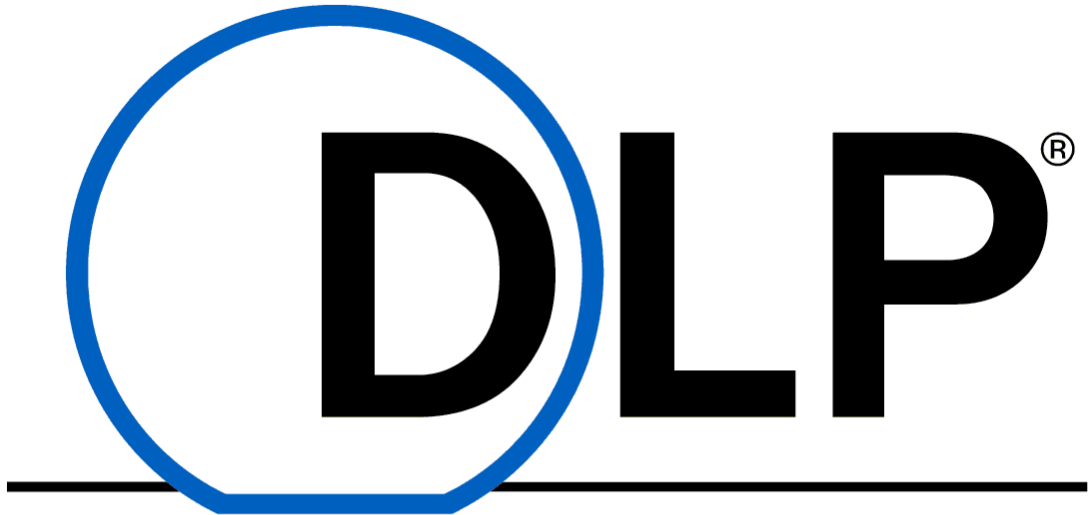
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REV	DESCRIPTION	DATE	APPROVED
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B	ECO 2100898 -Update sheet 2, 8, 10, and 15	08/17/09	W. Allen

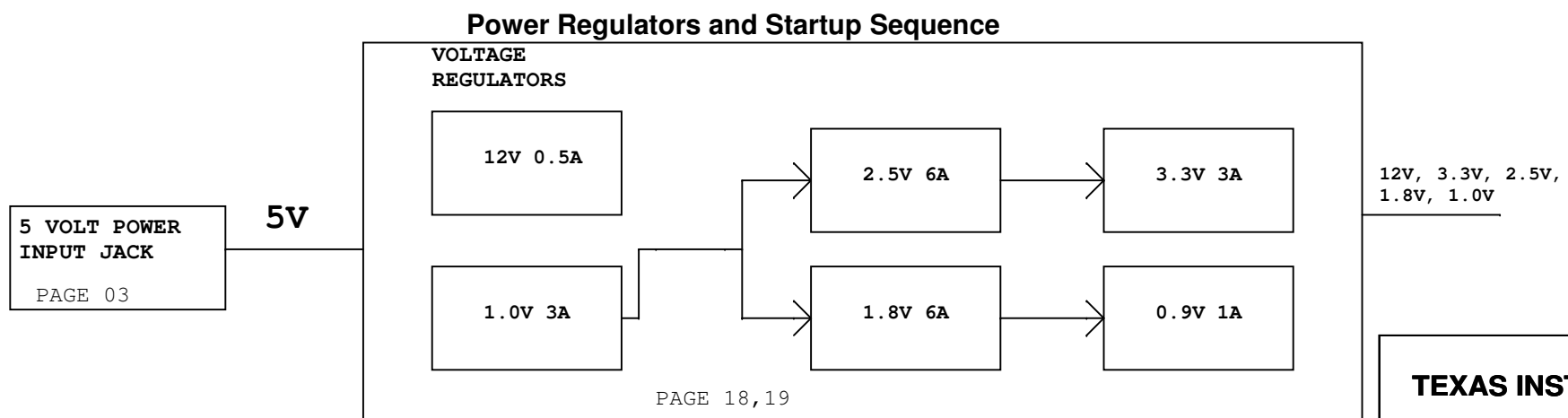
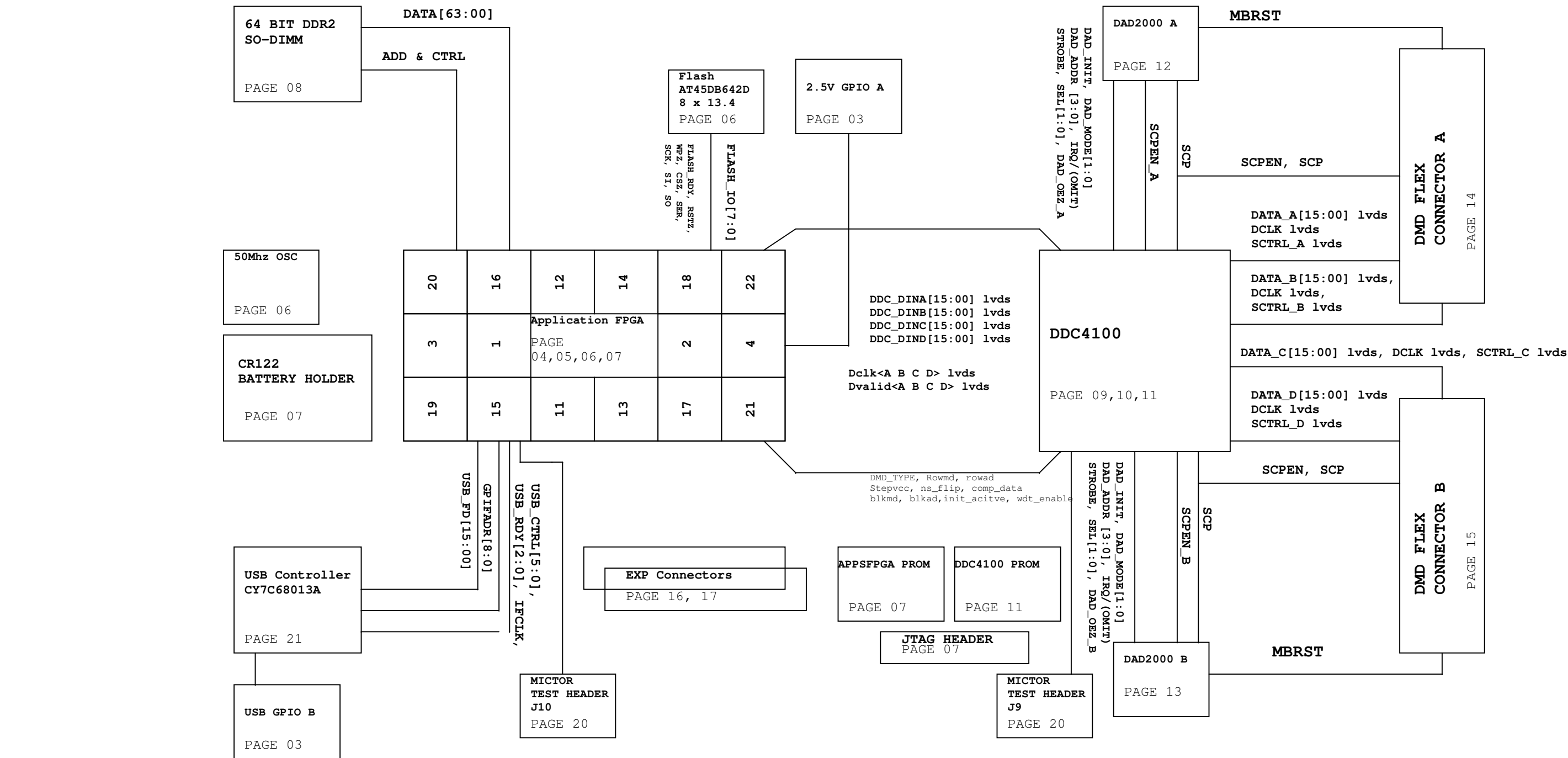
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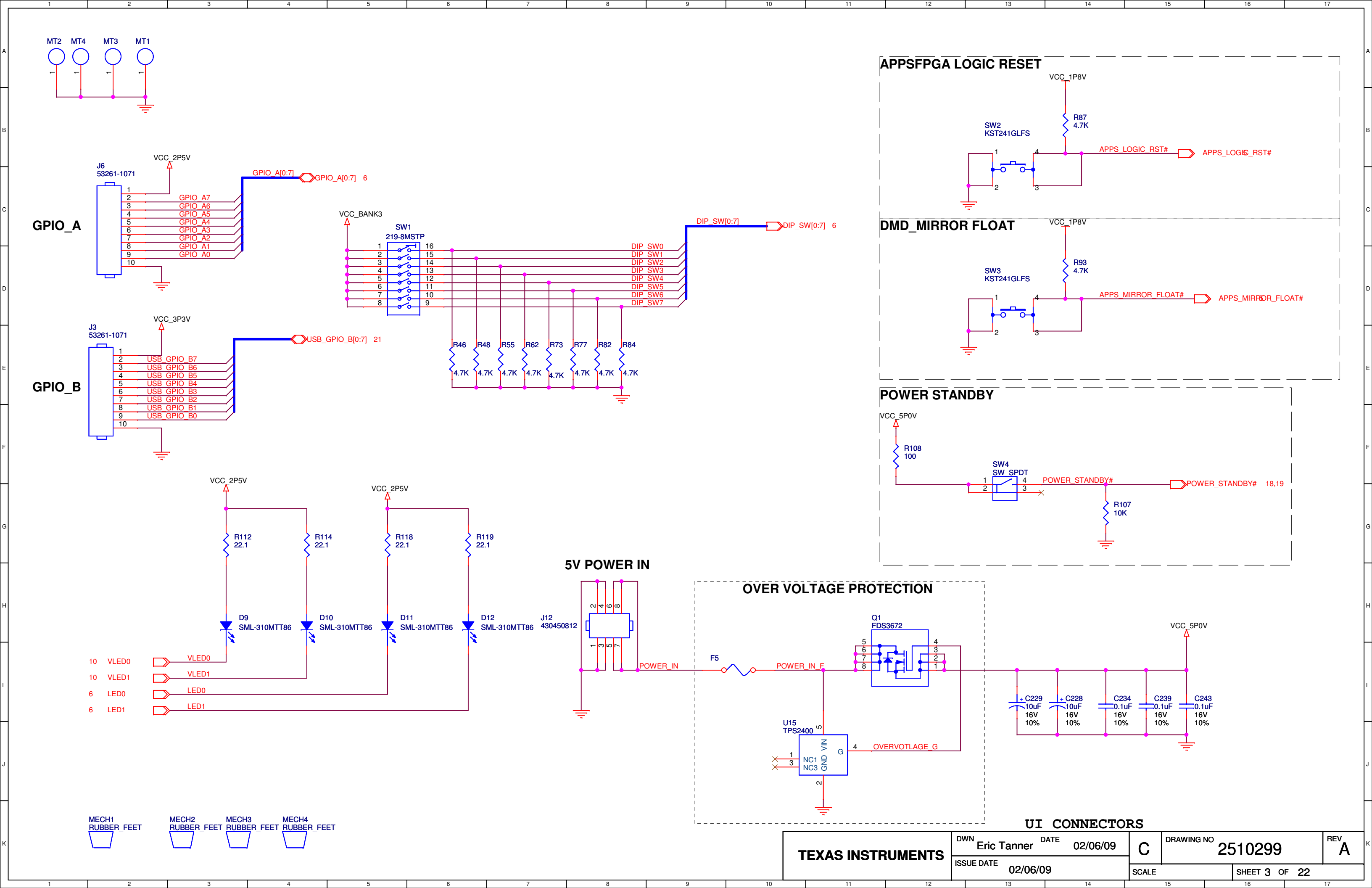


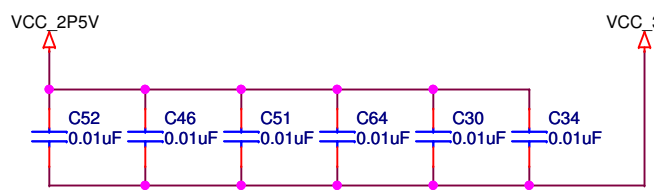
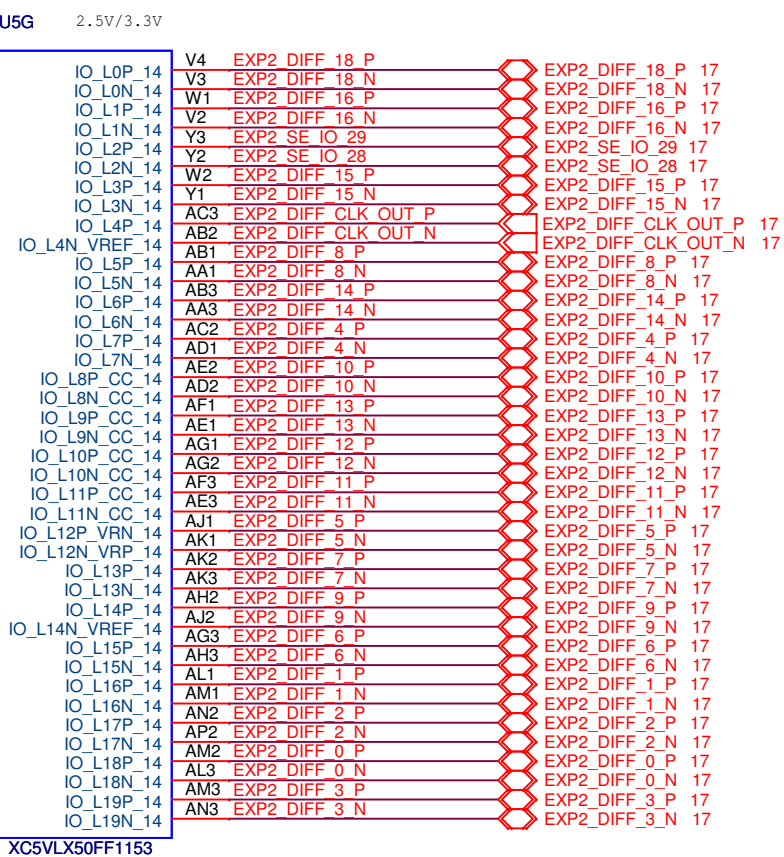
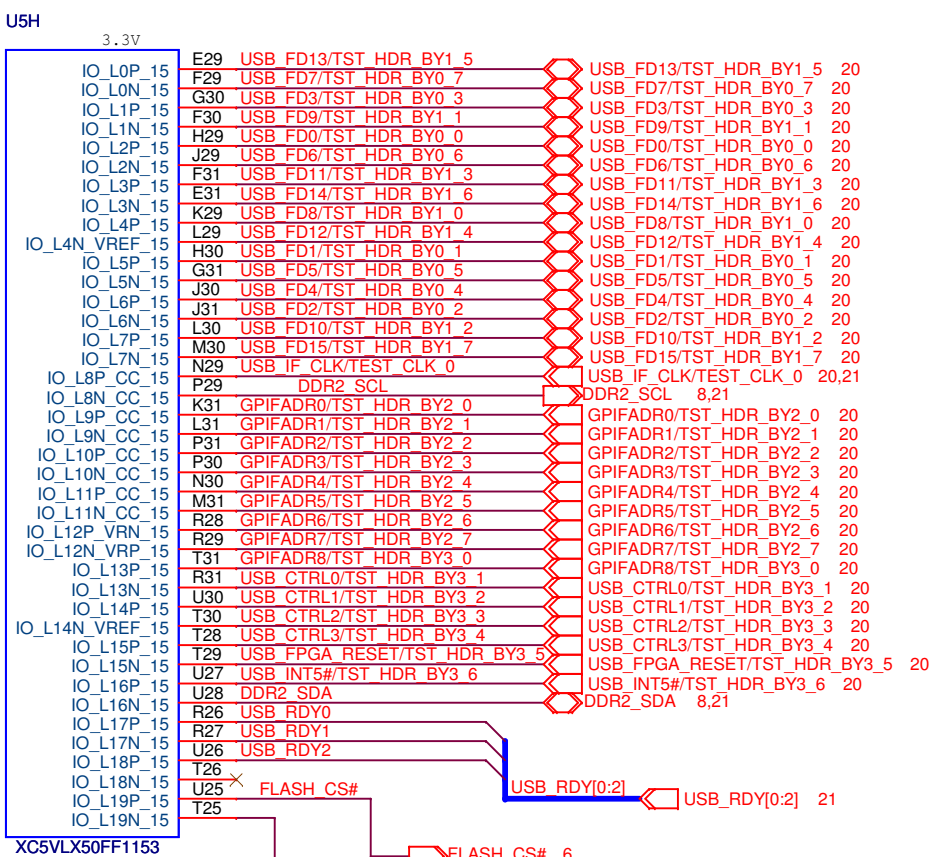
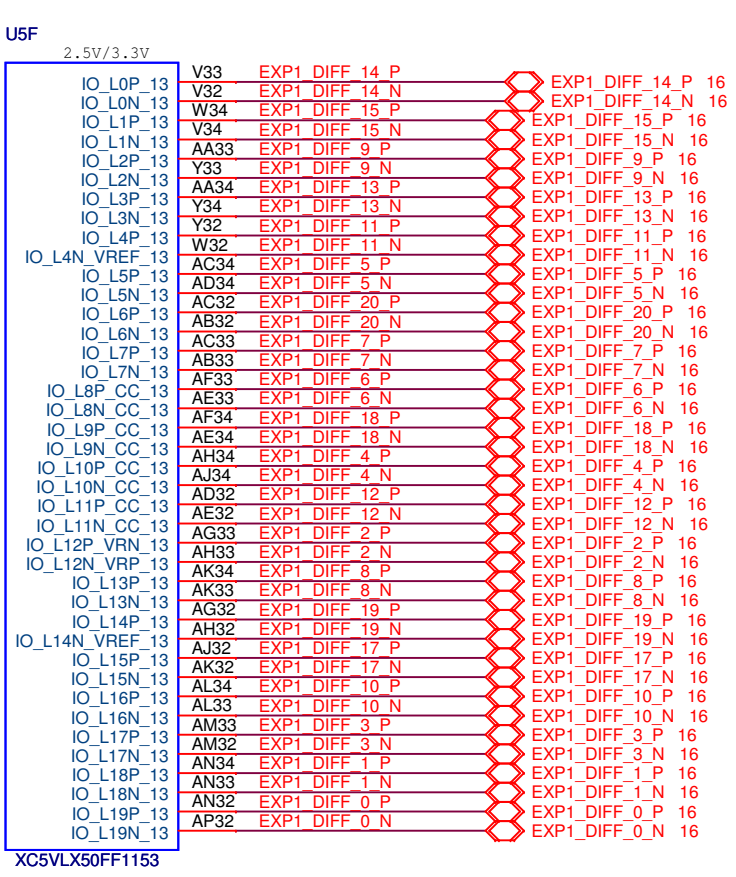
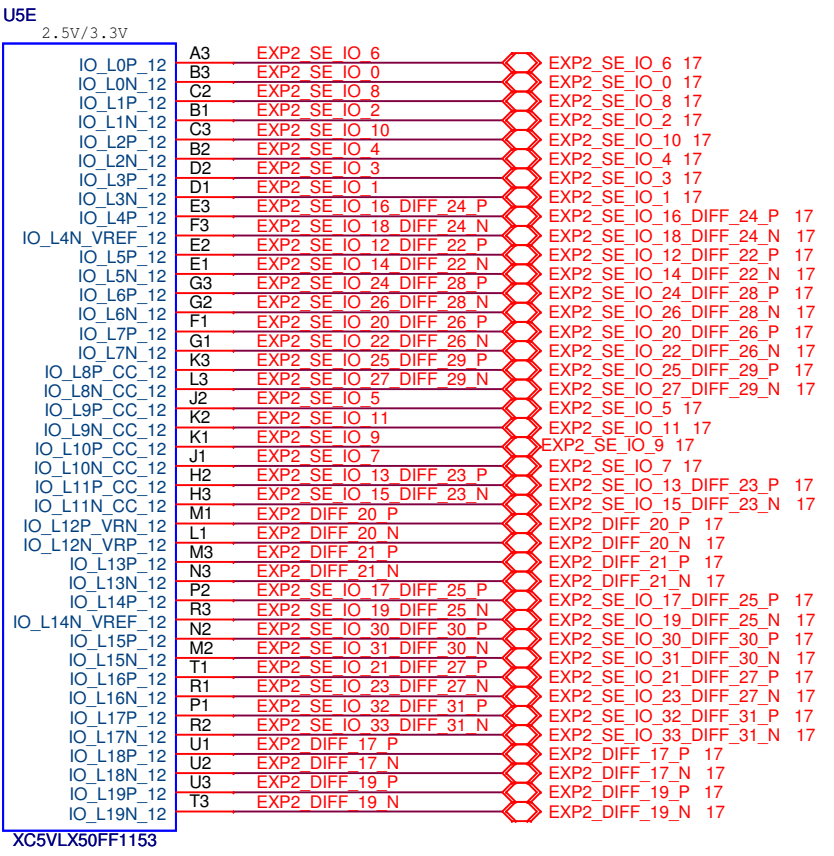
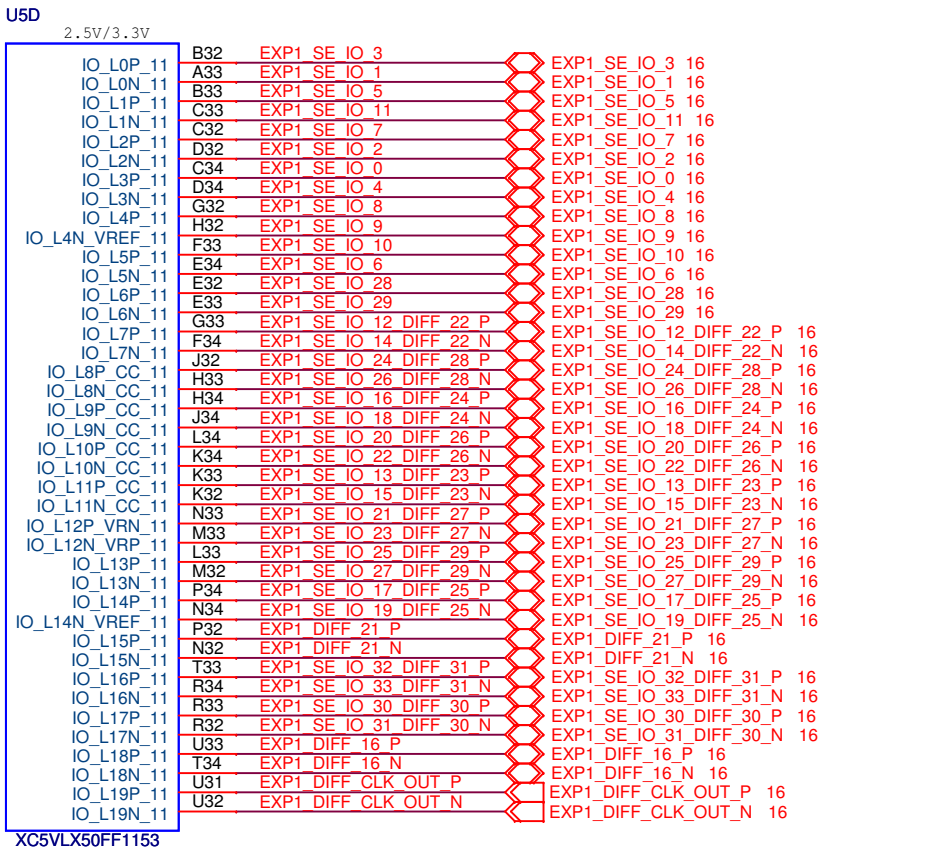
TEXAS INSTRUMENTS

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		ENGR Jason Thompson			
		APVD Jason Thompson		TITLE DLP Discovery 4100 Main Board Schematics	
		MFG Larry Taylor			
2509486	0314CP	QA Faisal Khan			
NEXT ASSY	USED ON			D	REV A
APPLICATION		SW	Cadence Ver 16.2	SCALE	SHEET 1 of 22

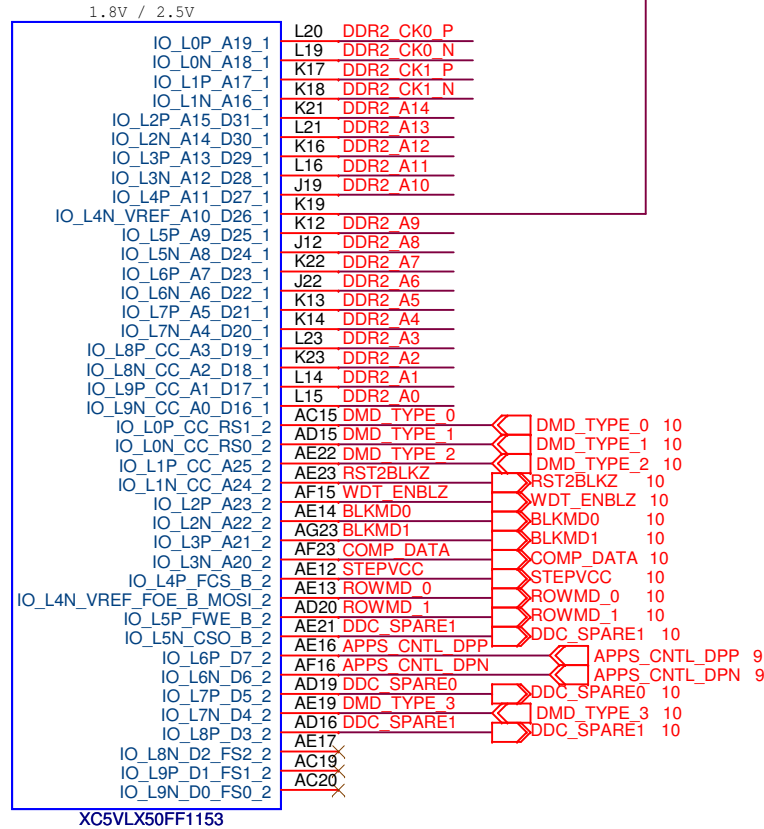




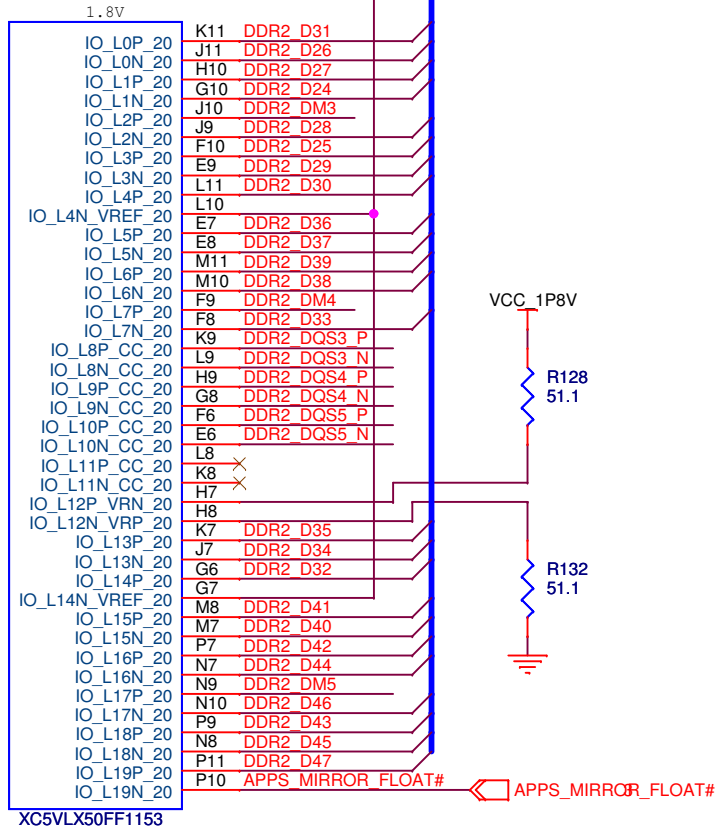


VIRTEX5 - 1

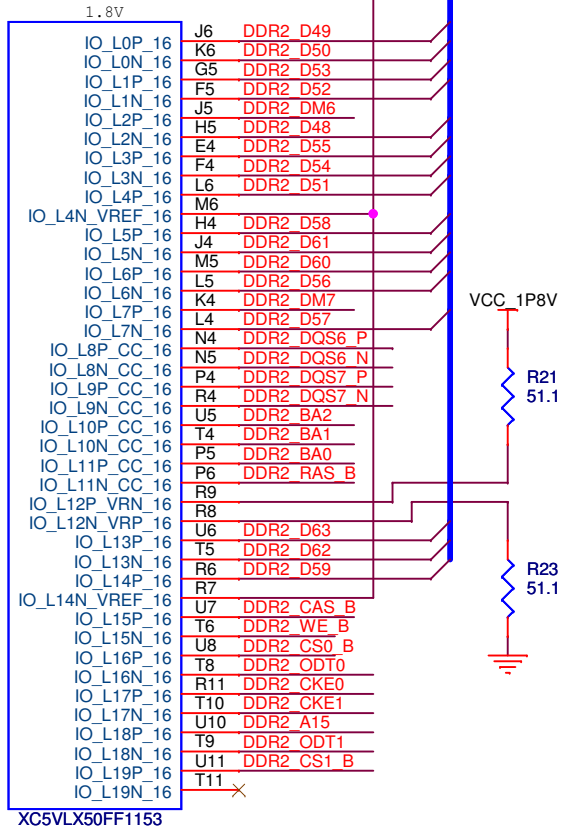
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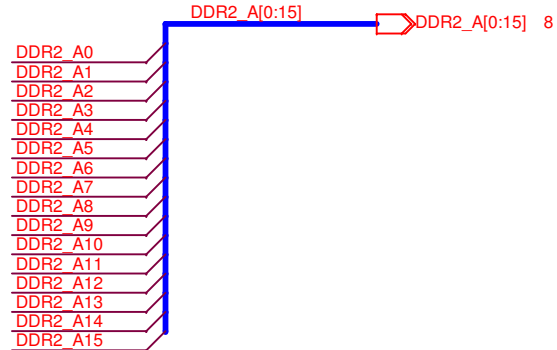
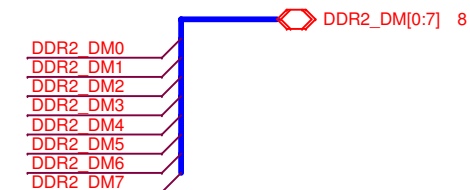
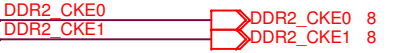
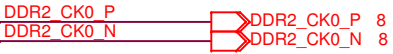
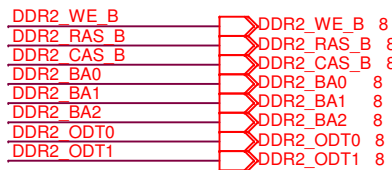
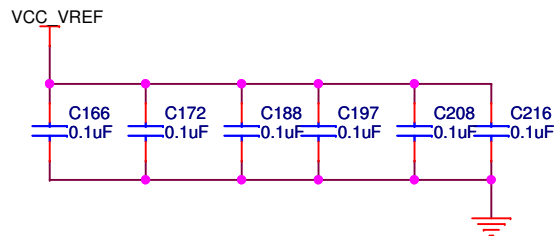
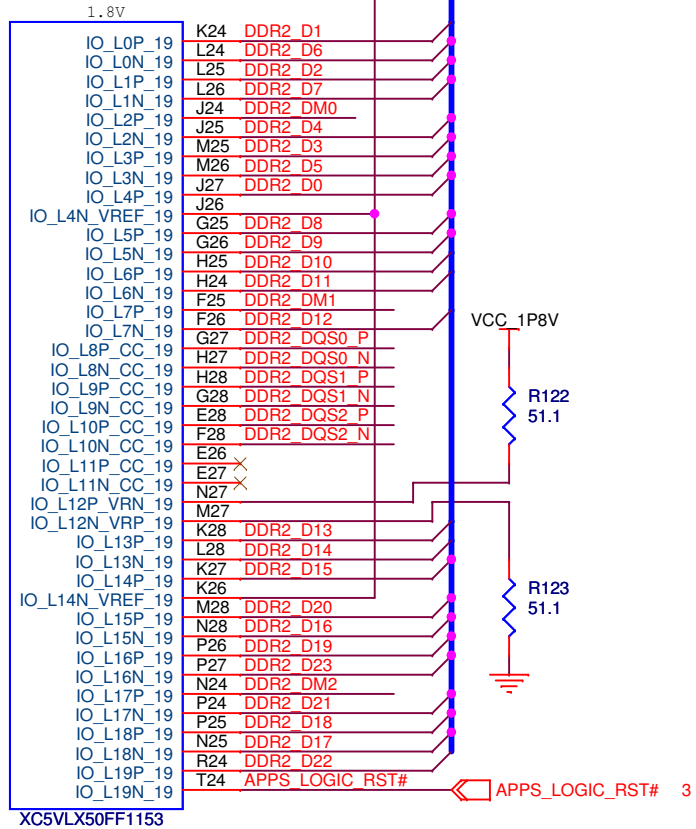
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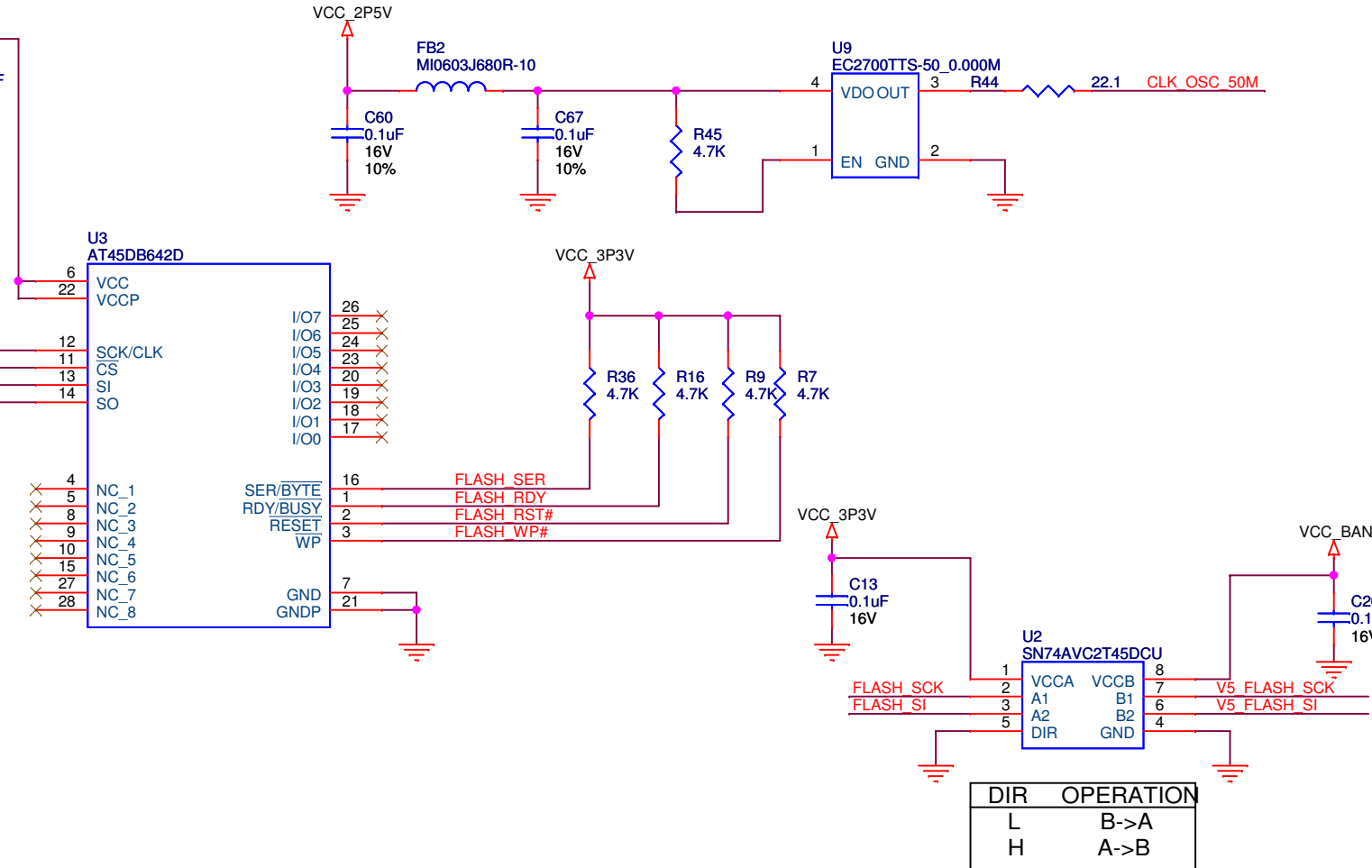
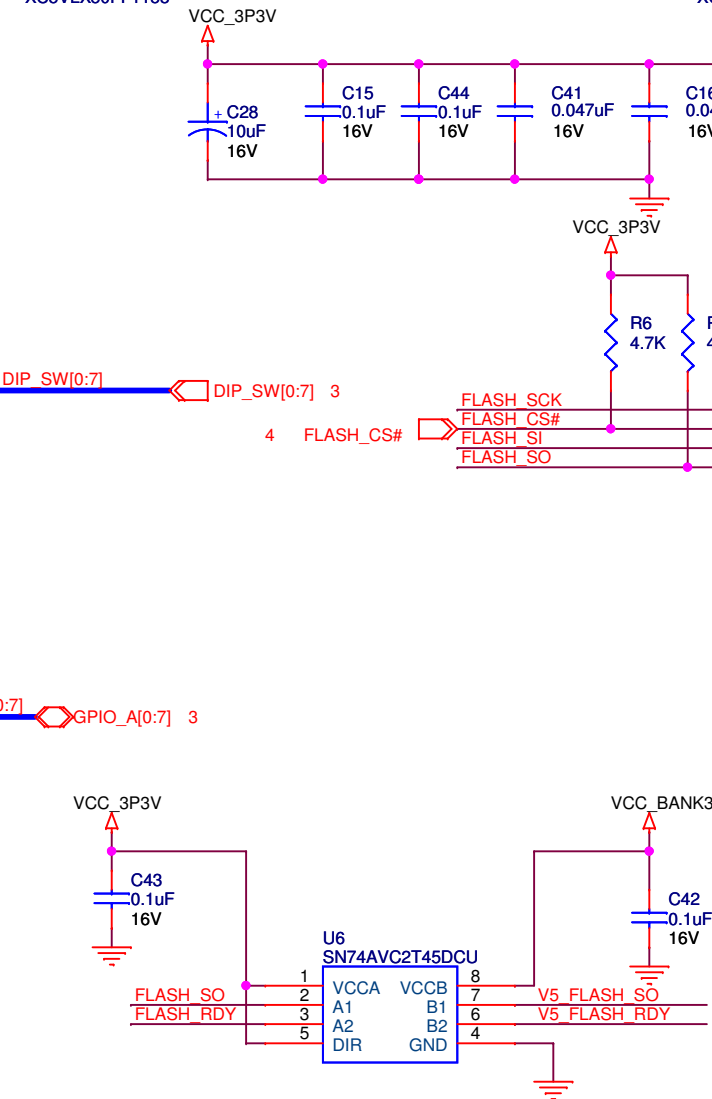
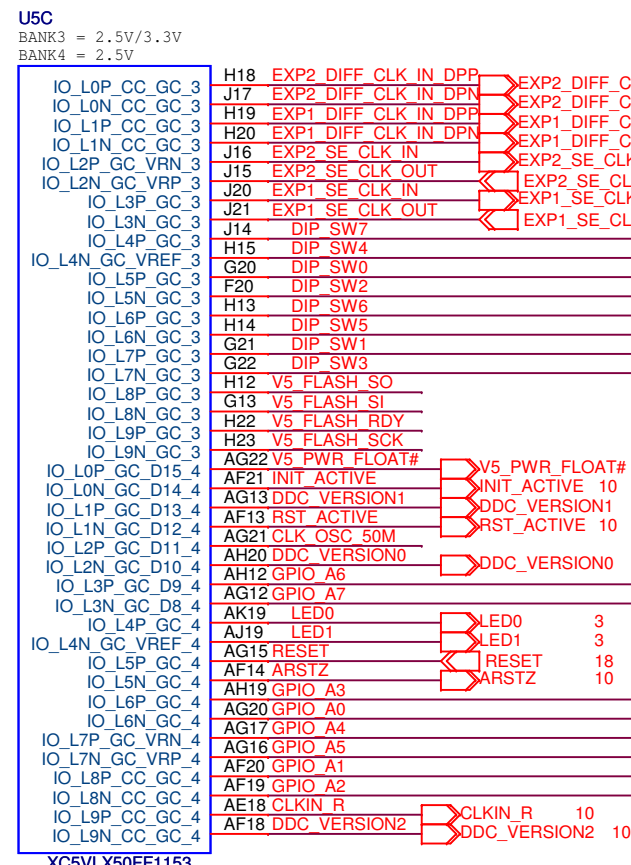
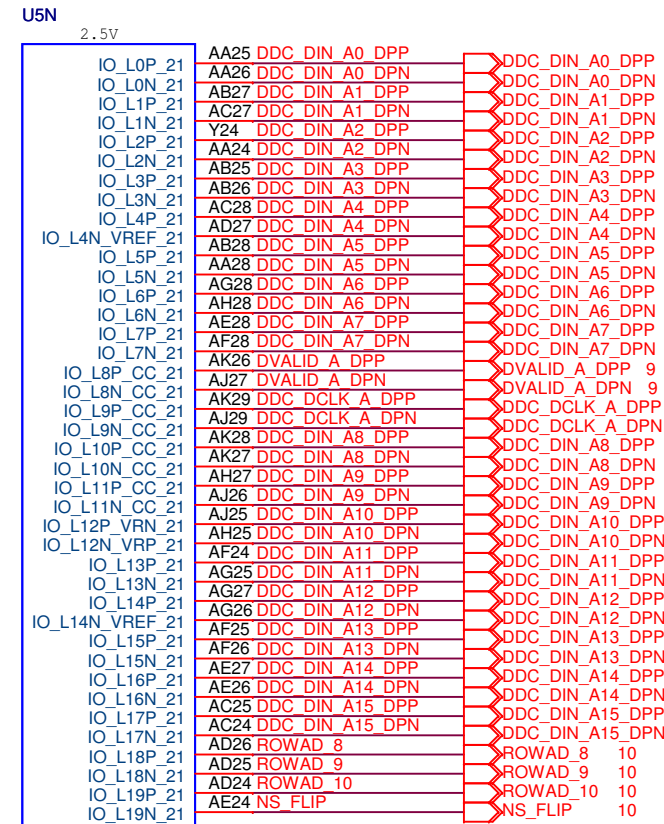
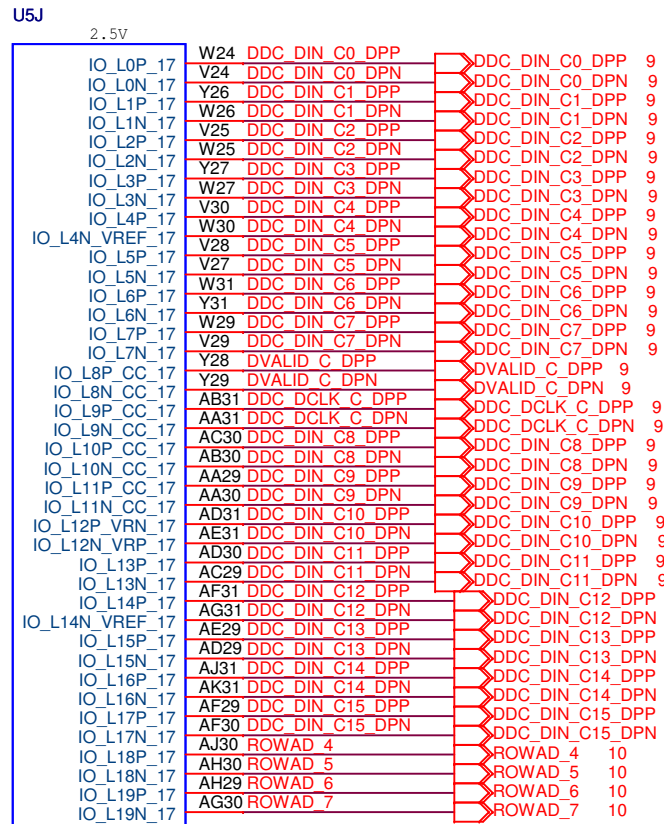
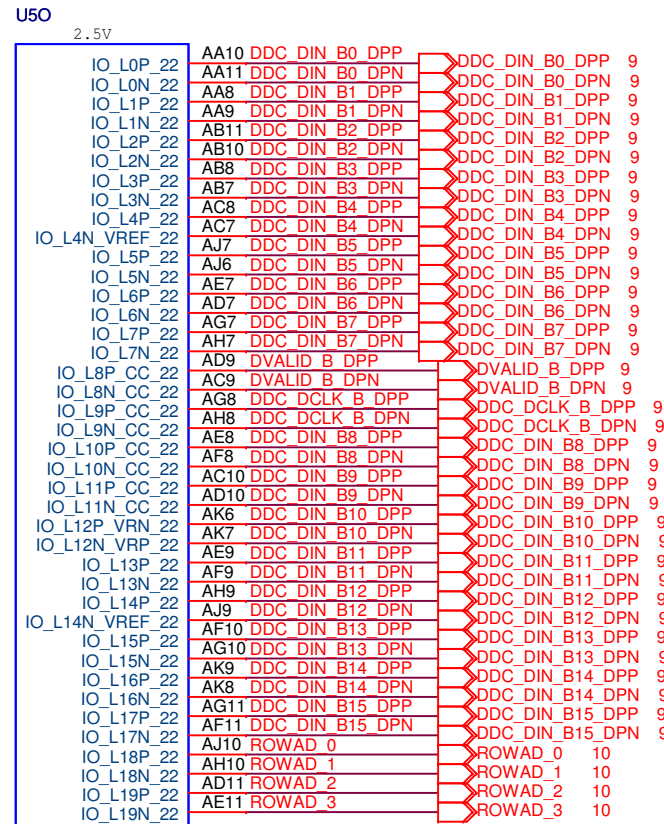
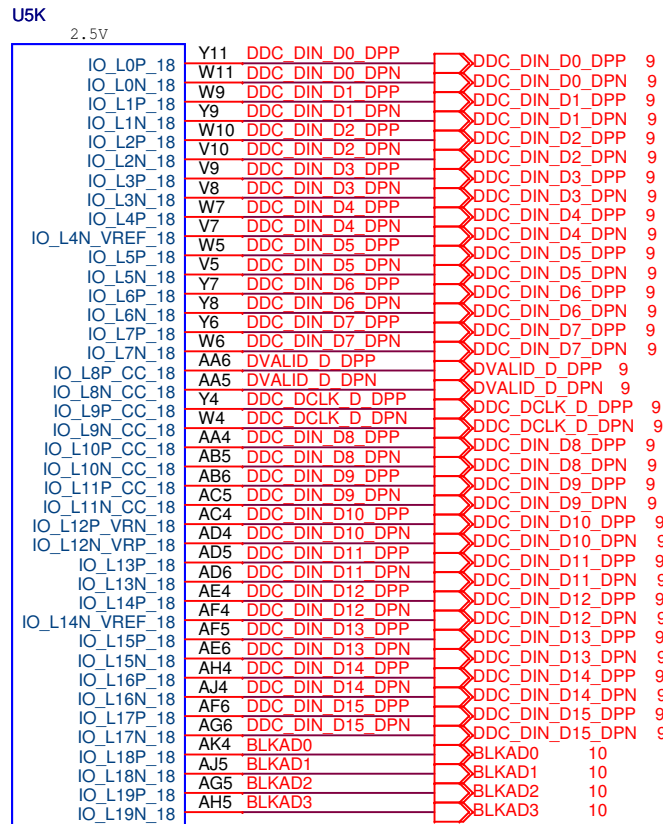
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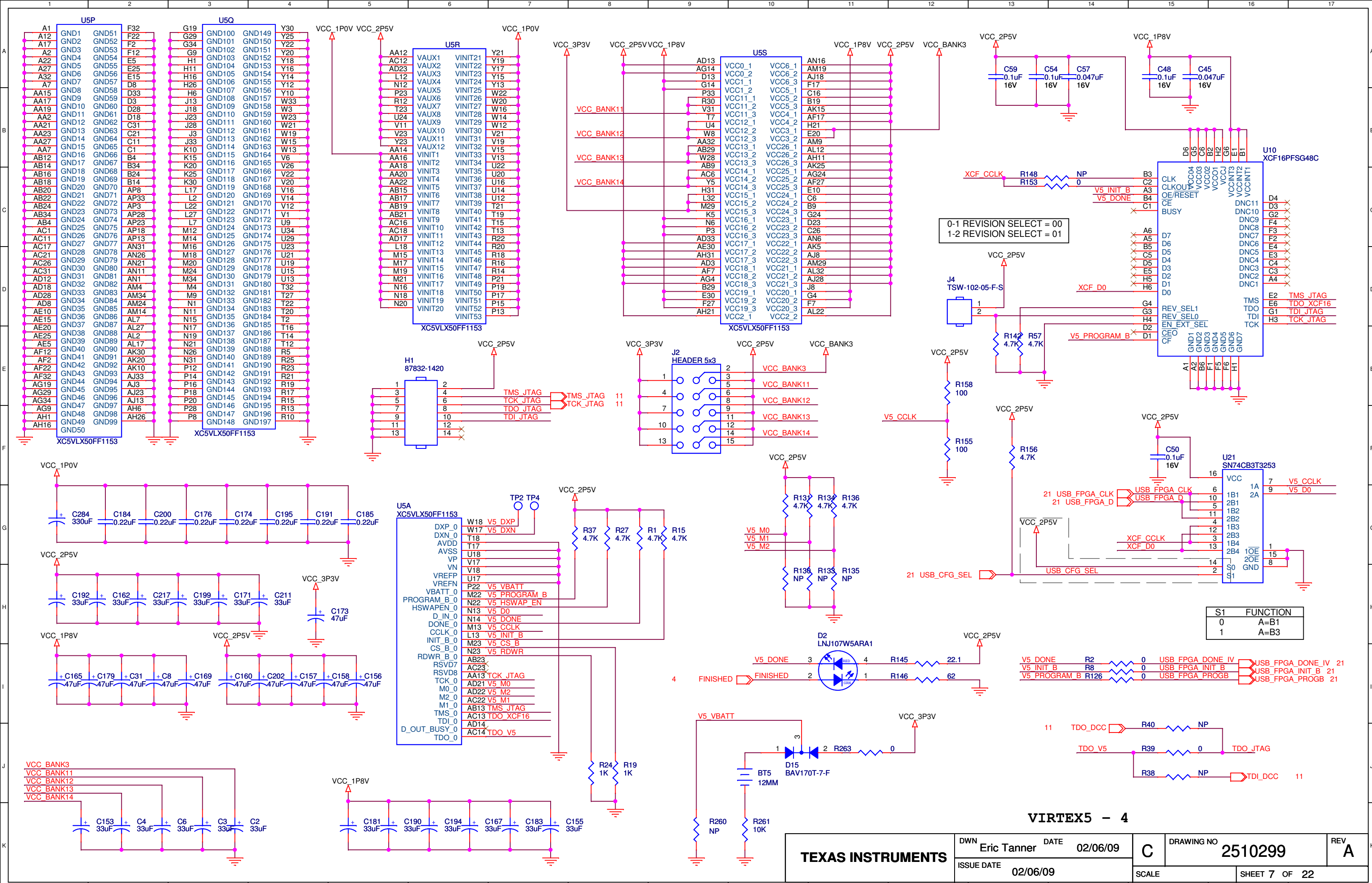
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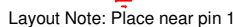


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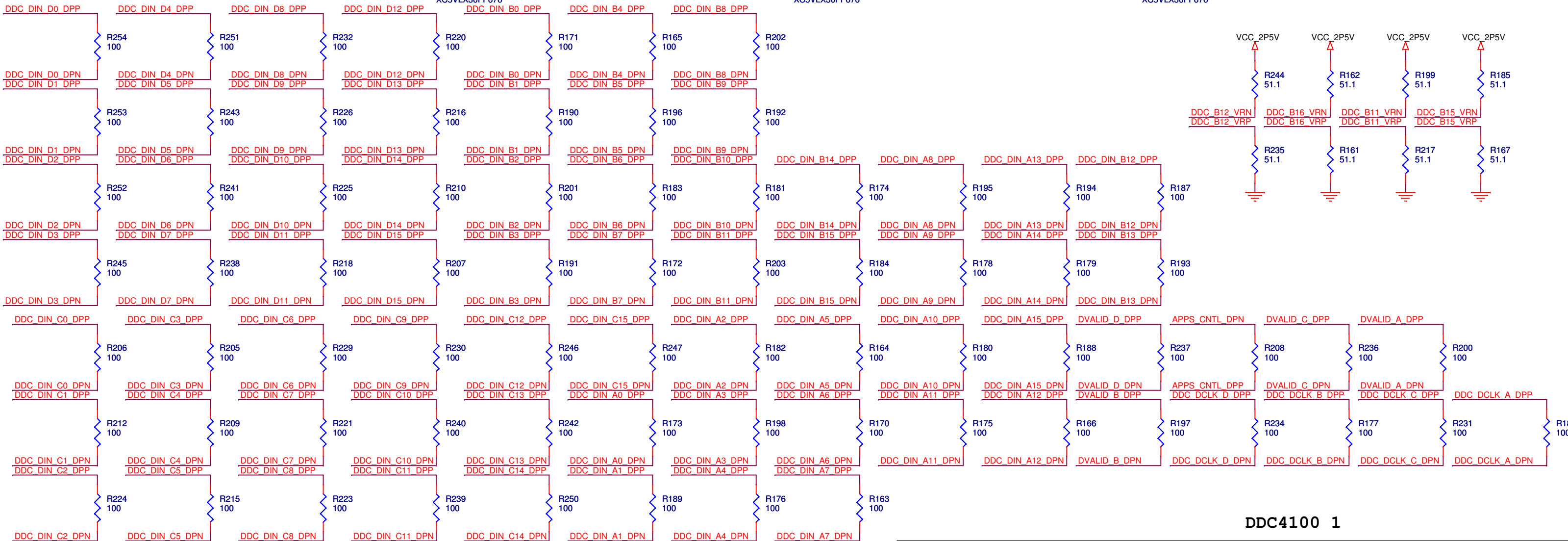
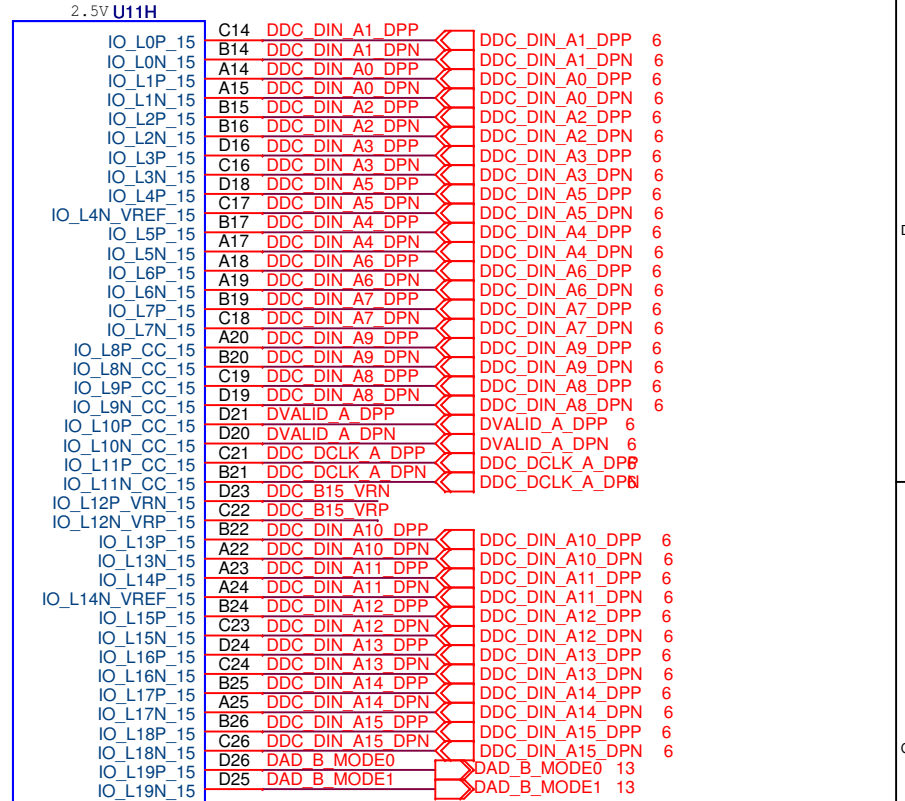
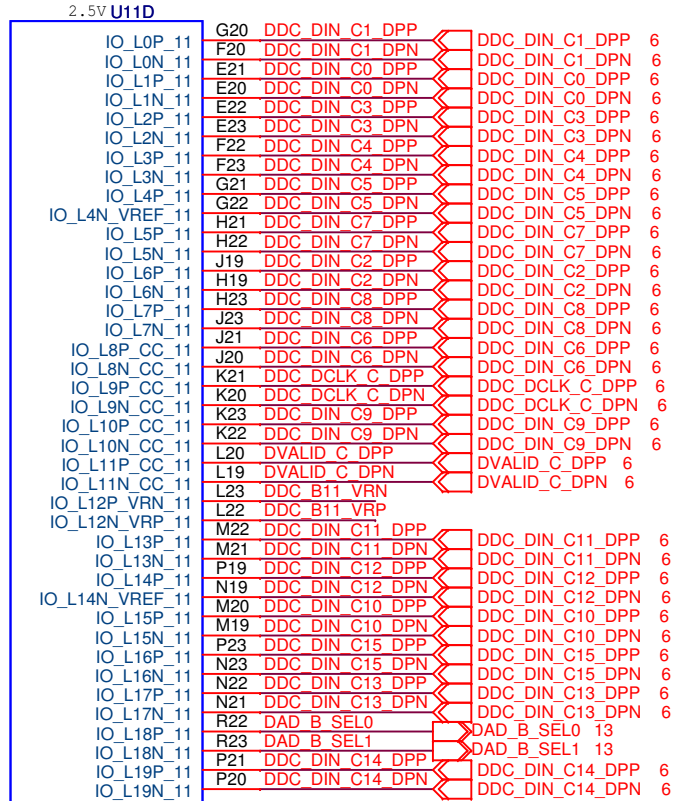
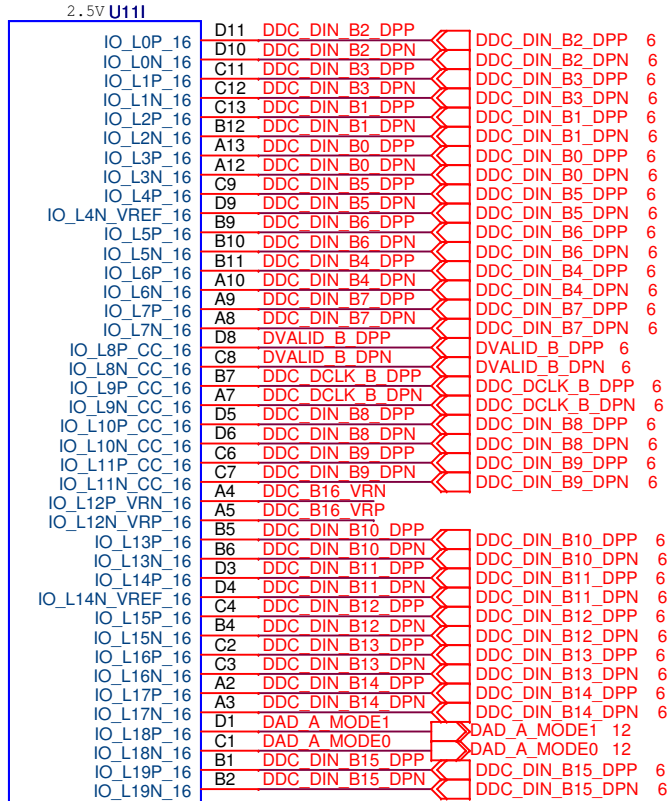
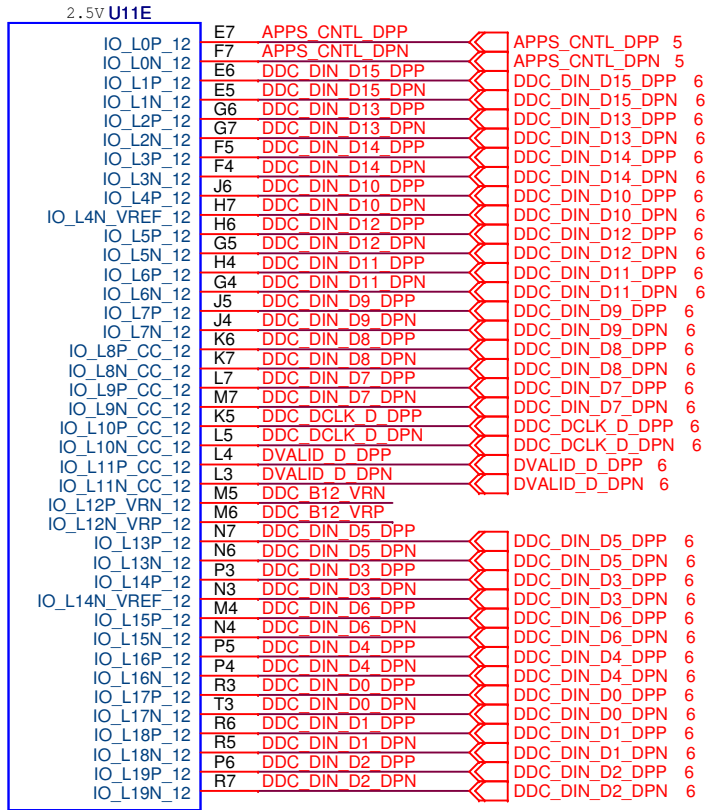


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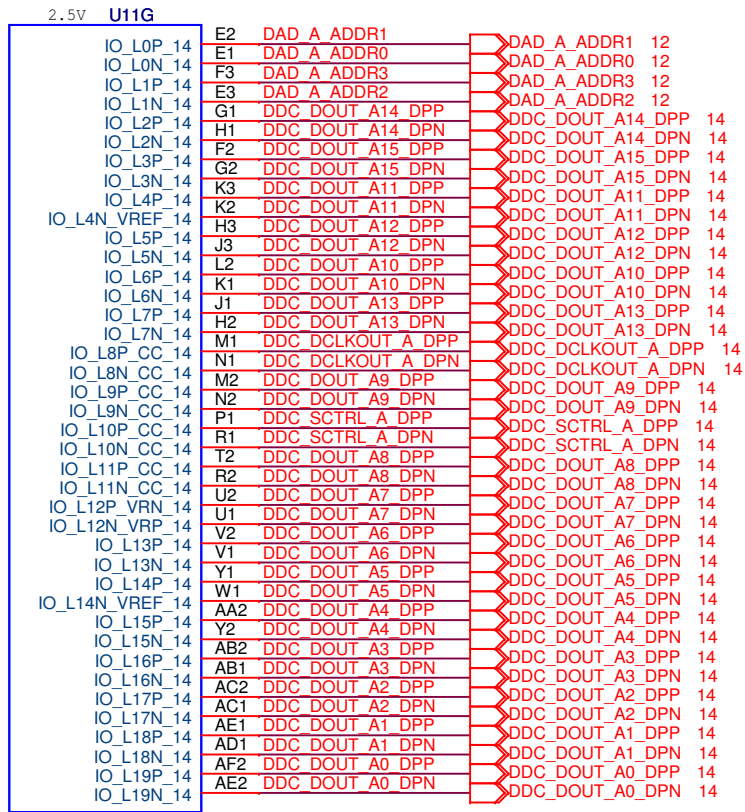




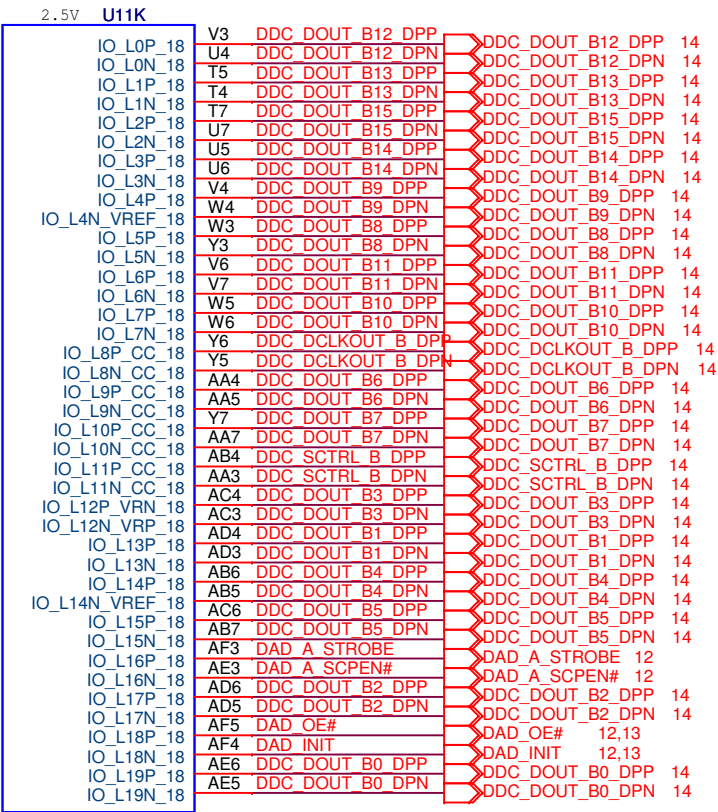
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	ISSUE DATE 02/06/09	SCALE	SHEET 8 OF 22	



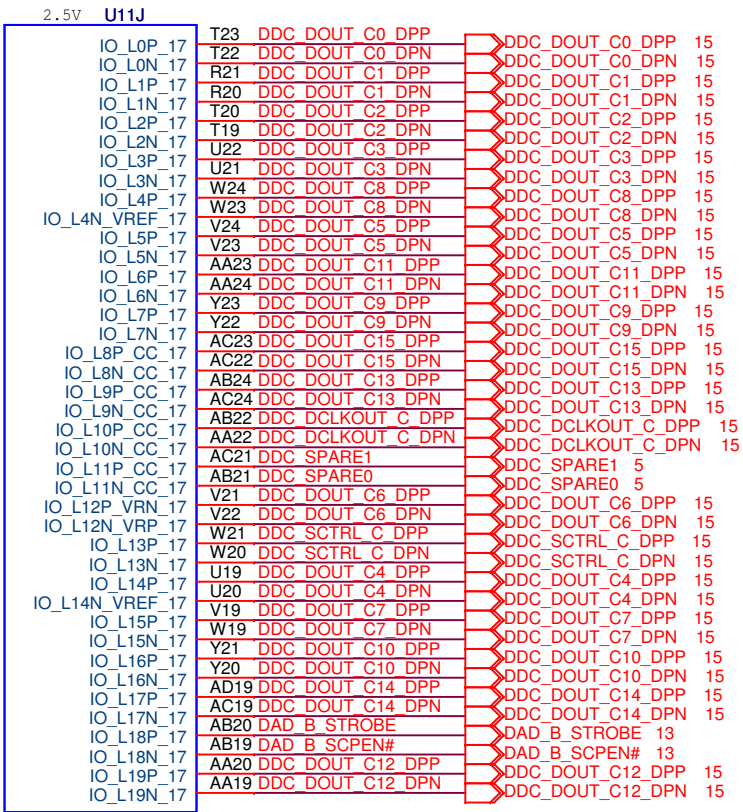
DDC4100 1



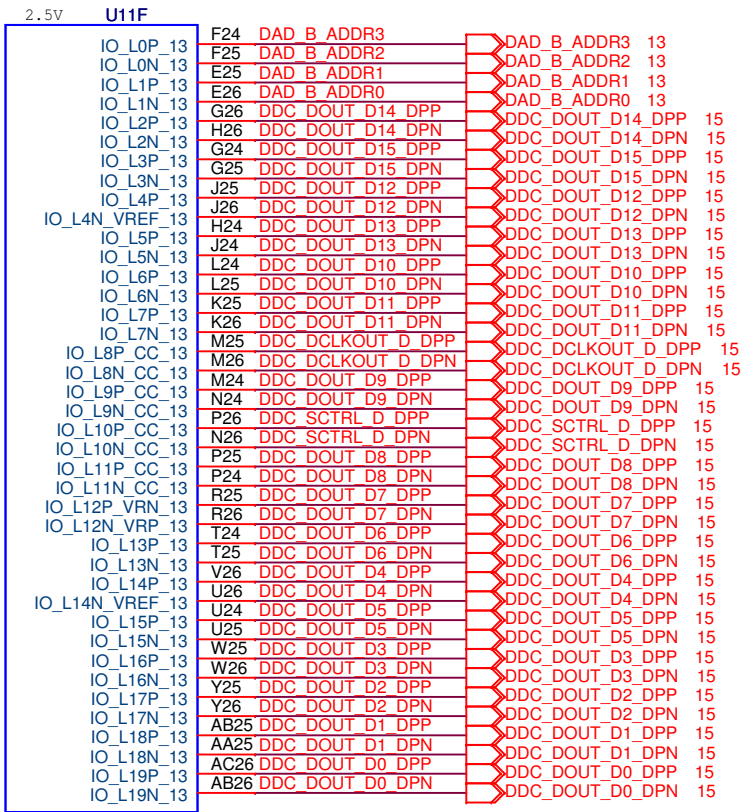
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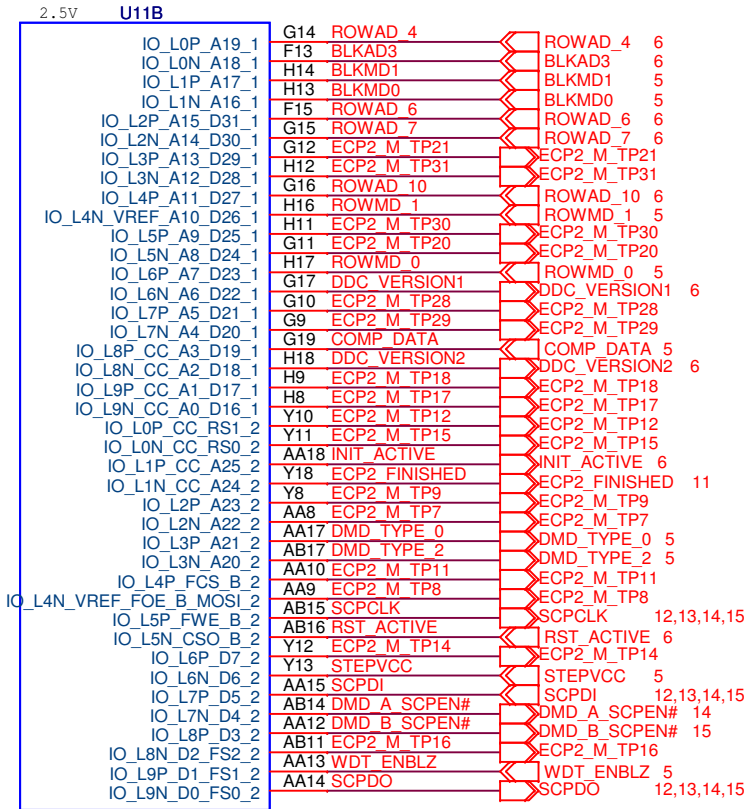
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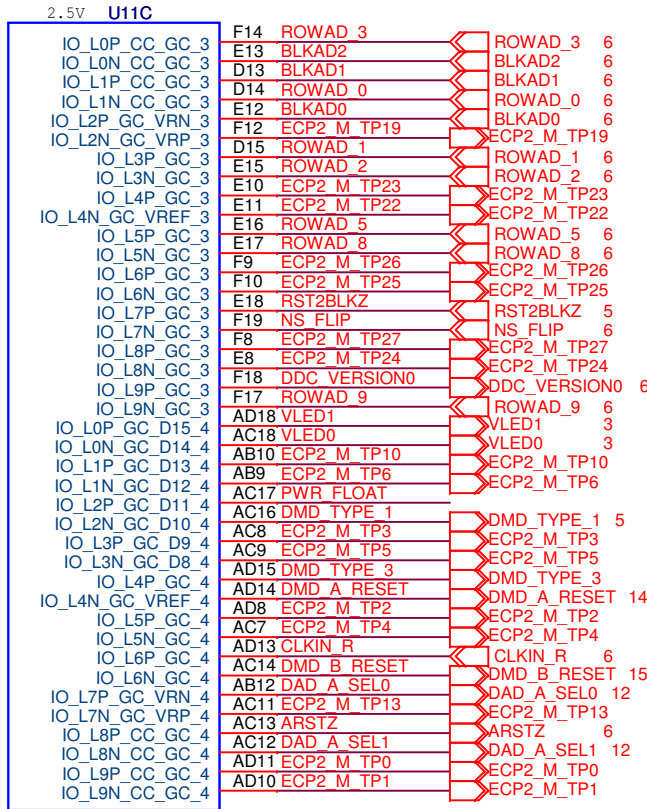
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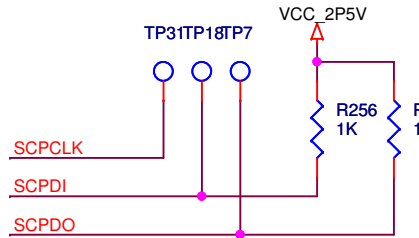
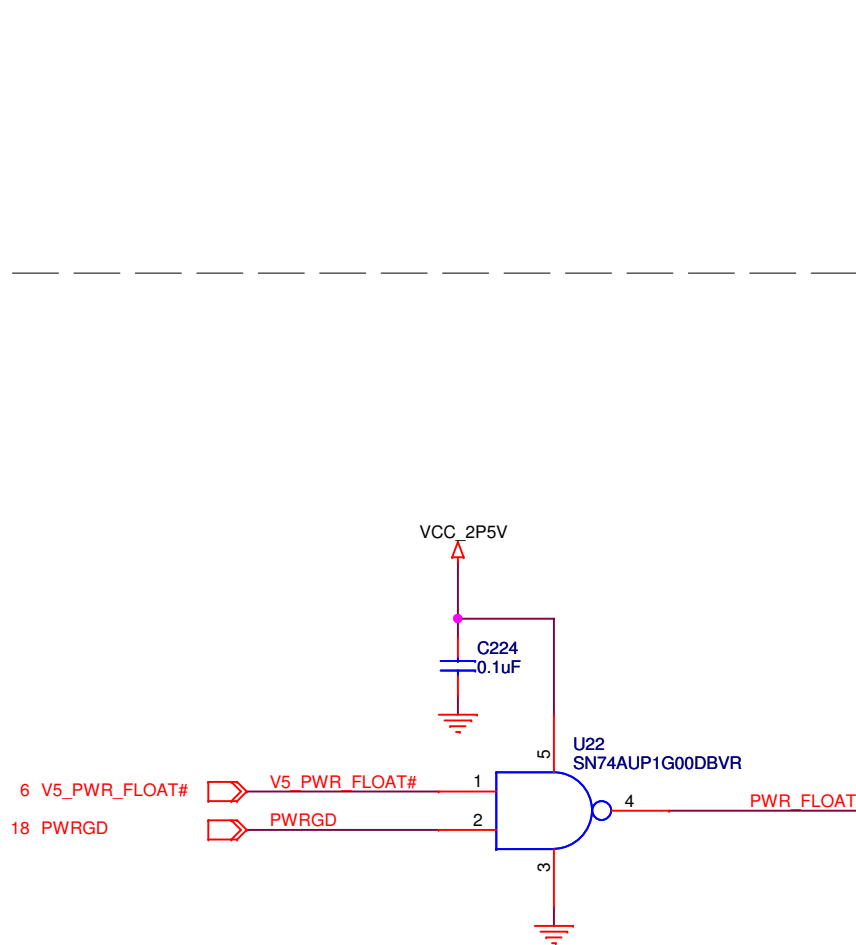
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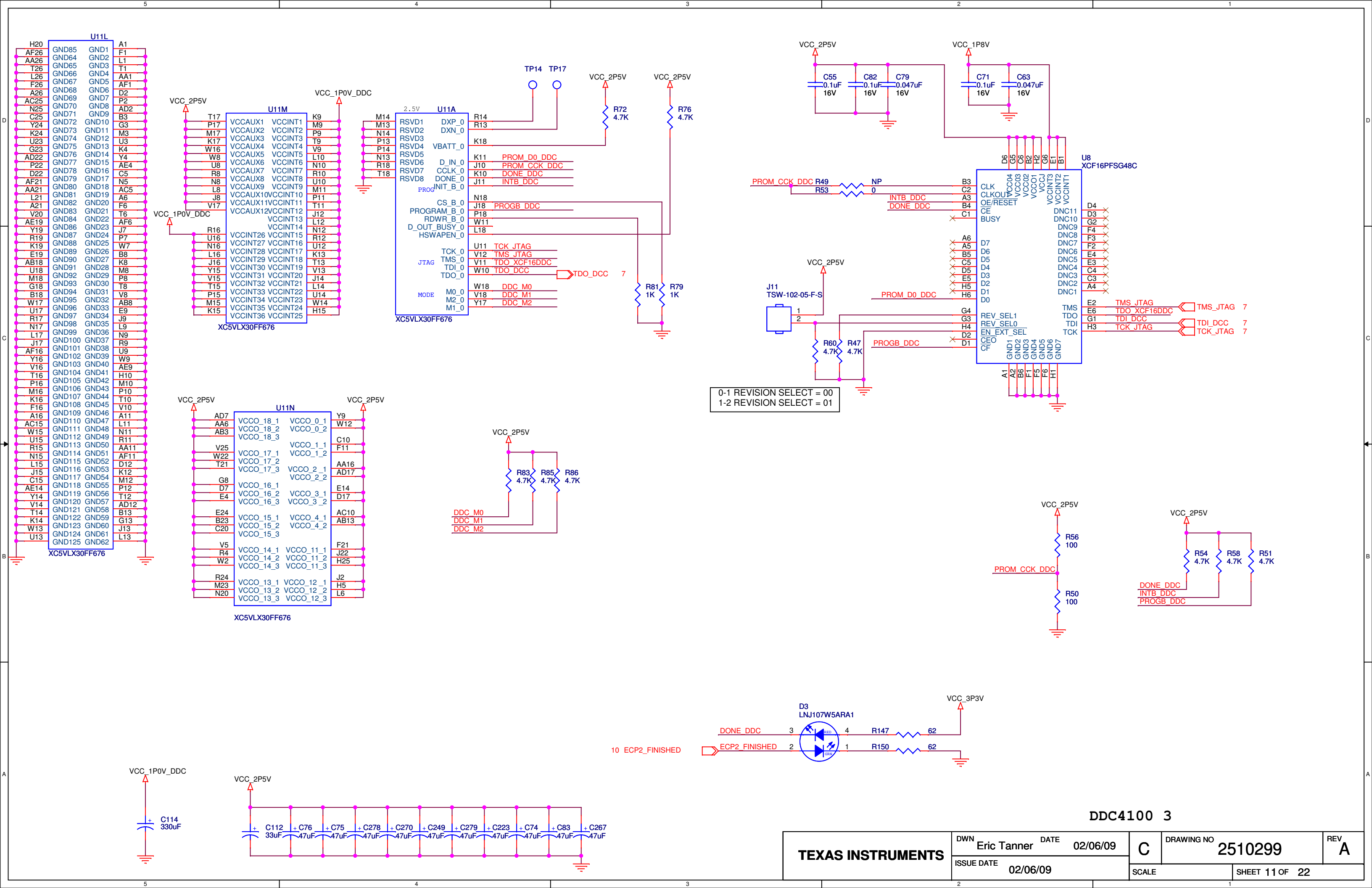
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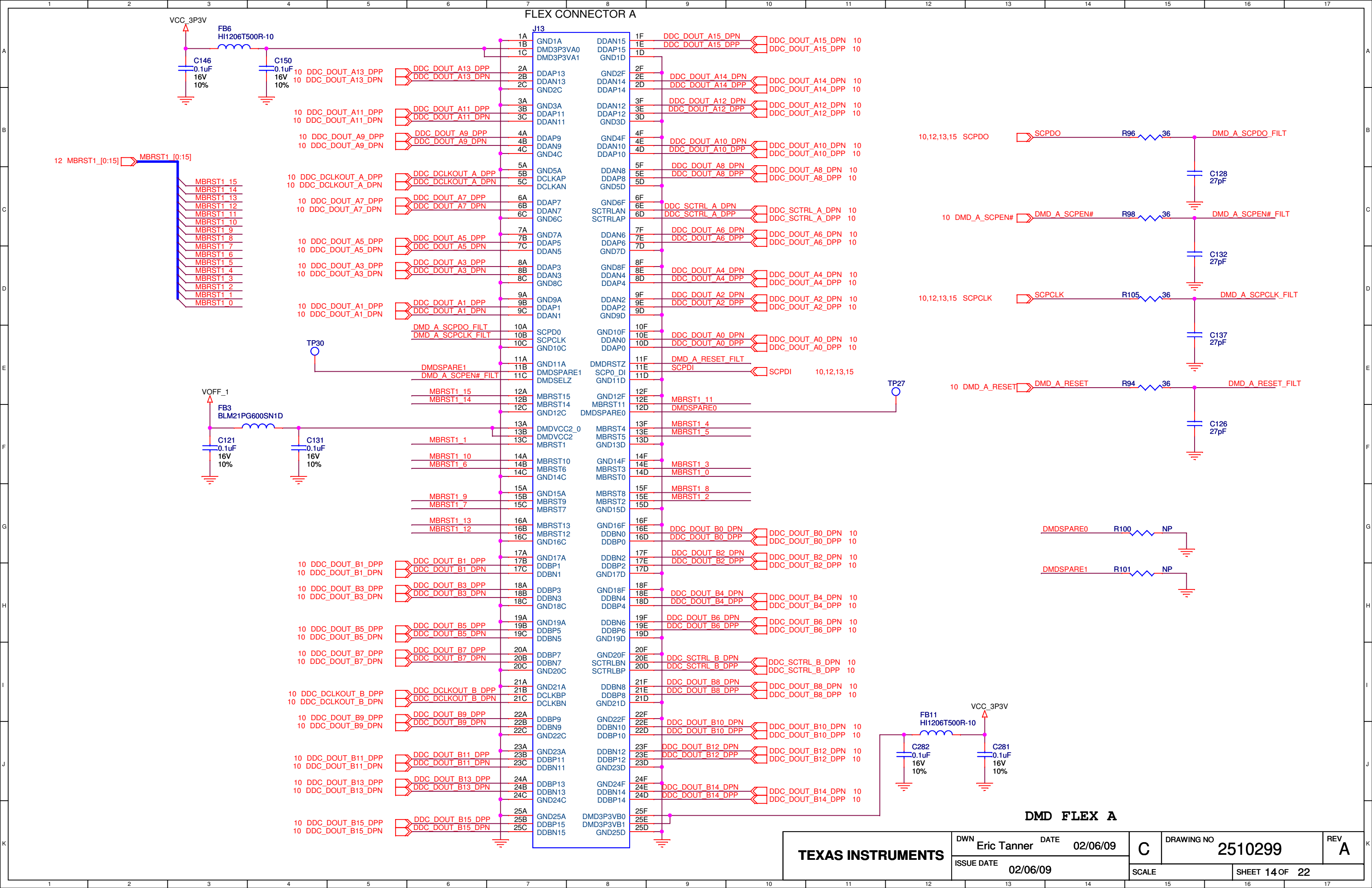
When PWR_FLOAT goes high, the DMD mirrors will float. The board must be power cycled to unfloat.

V5_PWR_FLOAT#	PWRGD	PWR_FLOAT
0	0	1
0	1	1
1	0	1
1	1	0

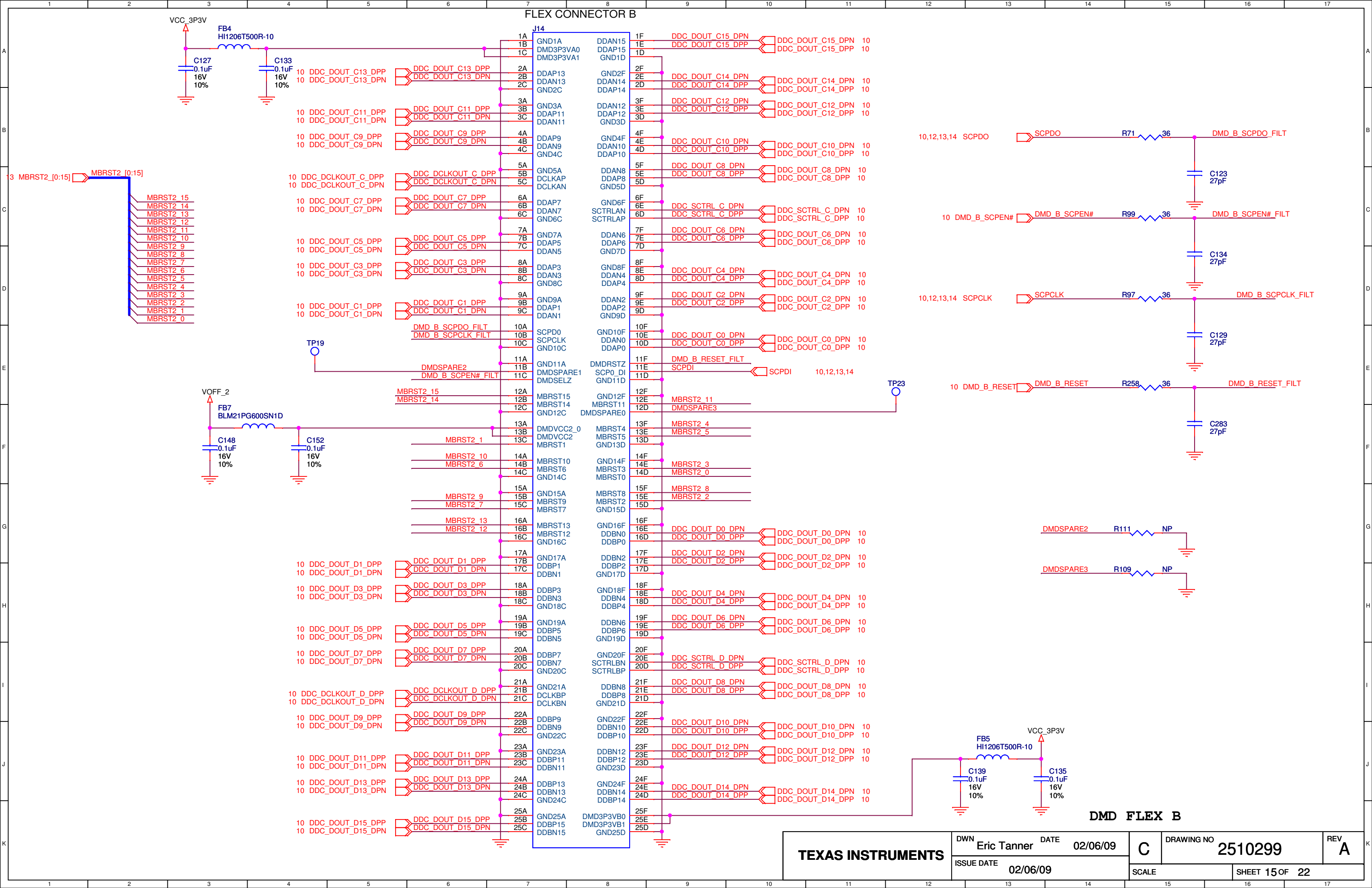
DDC4100 2

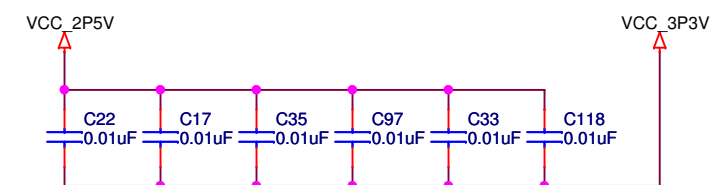


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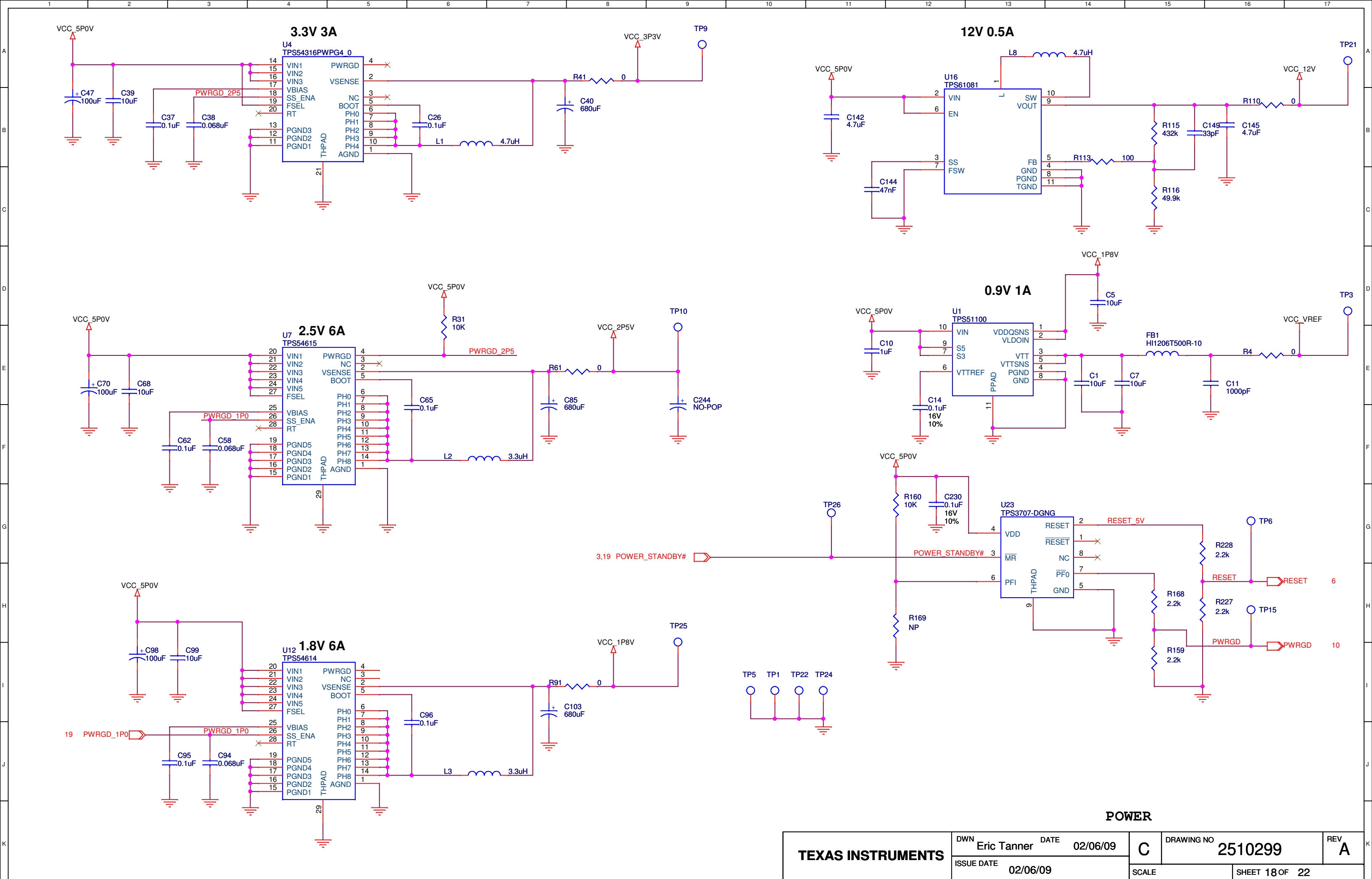


FLEX CONNECTOR B



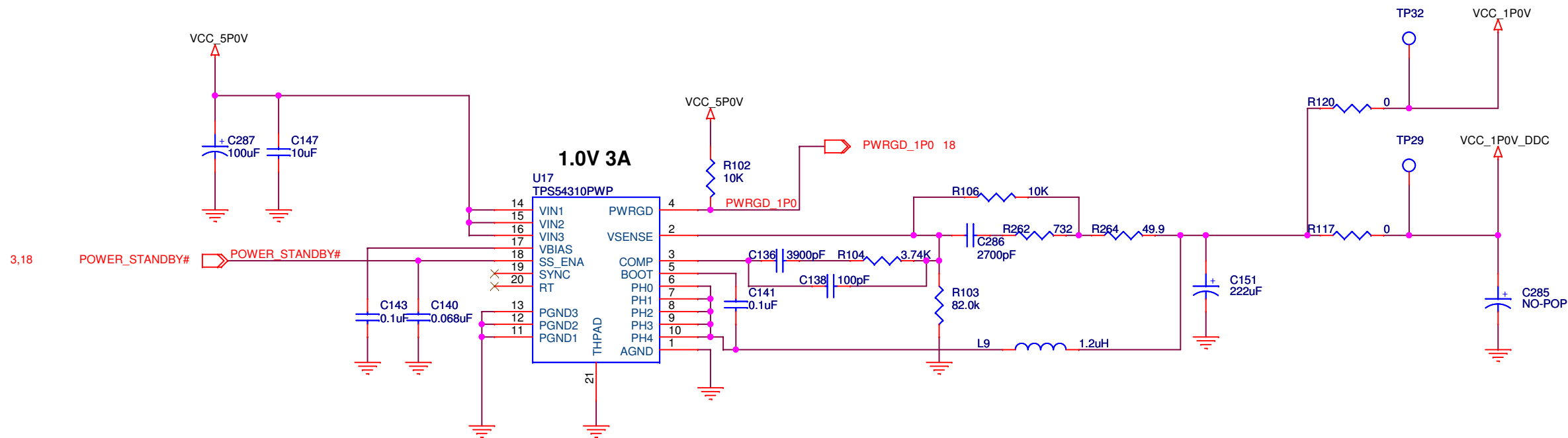


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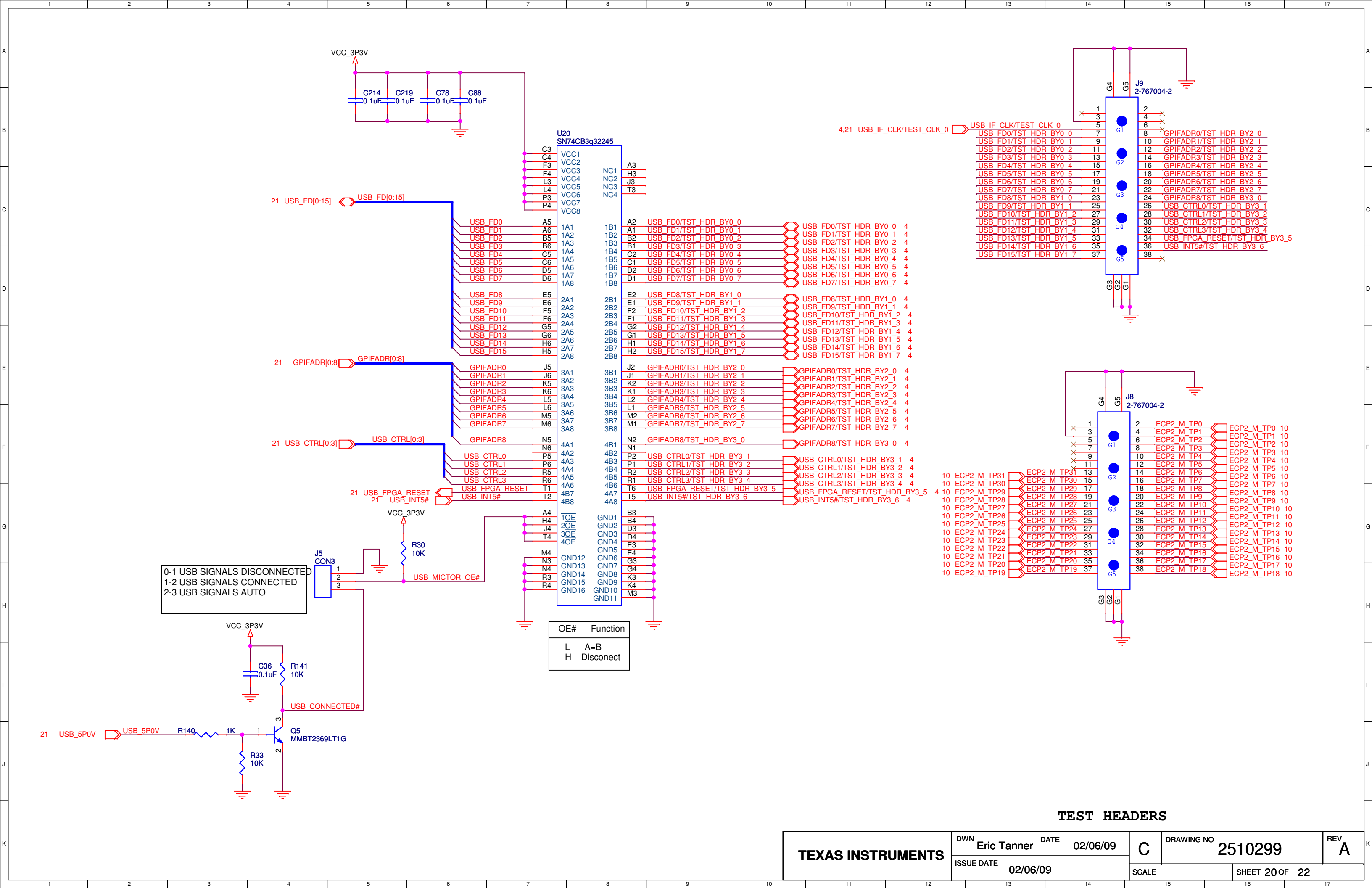
POWER

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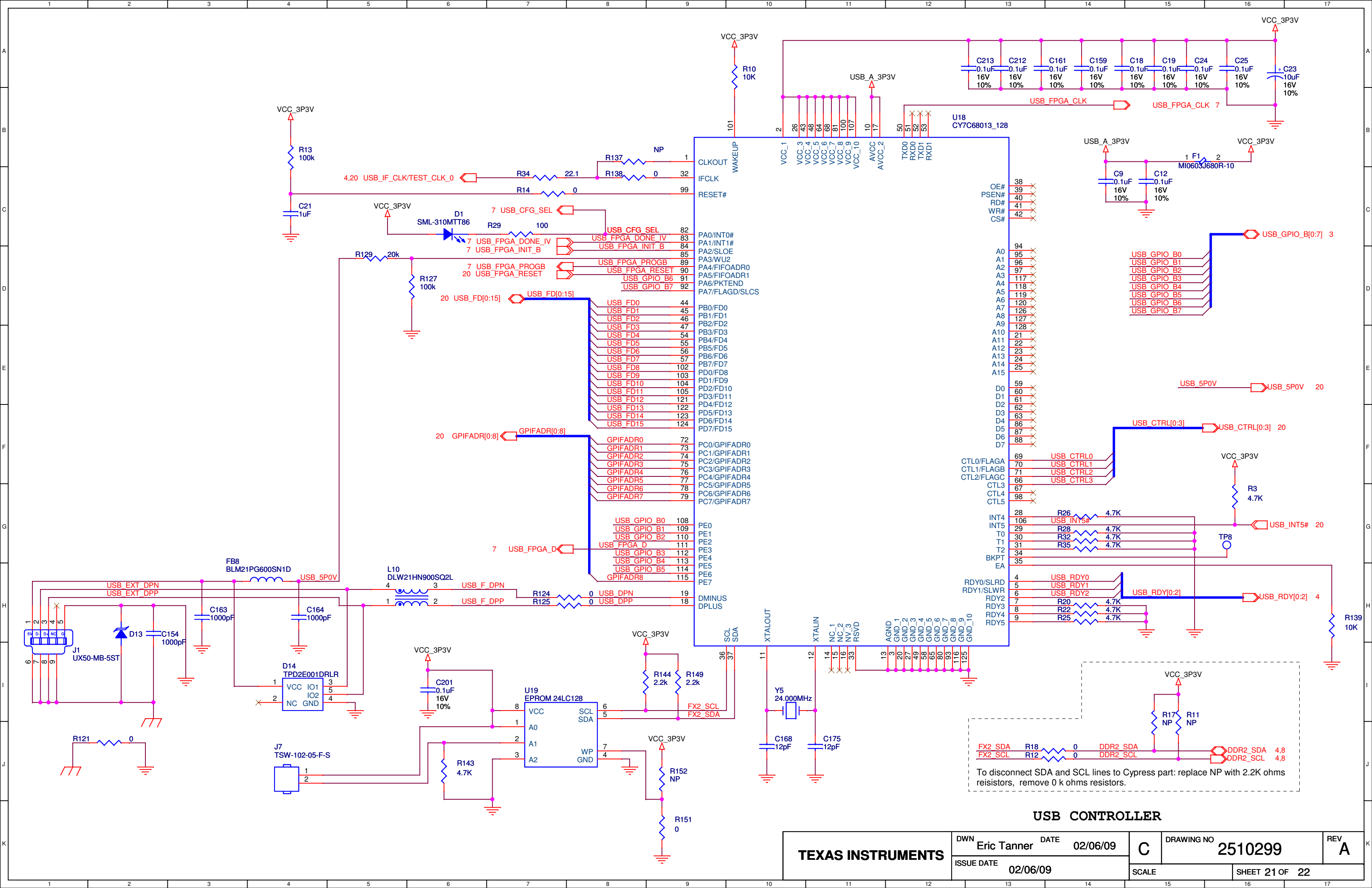


POWER 2

TEXAS INSTRUMENTS	DWN Eric Tanner	DATE 02/06/09	C	DRAWING NO 2510299	REV A
	ISSUE DATE 02/06/09			SCALE	
				SHEET 19 OF 22	



TEST HEADERS



USB CONTROLLER

Unused Virtex-5 Pins

U5T			
XC5VLX50FF1153			
A4	NC1	NC61	C23
A5	NC2	NC62	C24
A6	NC3	NC63	C25
A8	NC4	NC64	C27
A9	NC5	NC65	C28
A10	NC6	NC66	C29
A11	NC7	NC67	C30
A13	NC8	NC68	D4
A14	NC9	NC69	D5
A15	NC10	NC70	D6
A16	NC11	NC71	D7
A18	NC12	NC72	D9
A19	NC13	NC73	D10
A20	NC14	NC74	D11
A21	NC15	NC75	D12
A23	NC16	NC76	D14
A24	NC17	NC77	D15
A25	NC18	NC78	D16
A26	NC19	NC79	D17
A28	NC20	NC80	D19
A29	NC21	NC81	D20
A30	NC22	NC82	D21
A31	NC23	NC83	D22
B5	NC24	NC84	D24
B6	NC25	NC85	D25
B7	NC26	NC86	D26
B8	NC27	NC87	D27
B10	NC28	NC88	D29
B11	NC29	NC89	D30
B12	NC30	NC90	D31
B13	NC31	NC91	E11
B15	NC32	NC92	E12
B16	NC33	NC93	E13
B17	NC34	NC94	E14
B18	NC35	NC95	E16
B20	NC36	NC96	E17
B21	NC37	NC97	E18
B22	NC38	NC98	E19
B23	NC39	NC99	E21
B25	NC40	NC100	E22
B26	NC41	NC101	E23
B27	NC42	NC102	E24
B28	NC43	NC103	F11
B30	NC44	NC104	F13
B31	NC45	NC105	F14
C4	NC46	NC106	F15
C5	NC47	NC107	F16
C7	NC48	NC108	F18
C8	NC49	NC109	F19
C9	NC50	NC110	F21
C10	NC51	NC111	F23
C12	NC52	NC112	F24
C13	NC53	NC113	G11
C14	NC54	NC114	G12
C15	NC55	NC115	G15
C17	NC56	NC116	G16
C18	NC57	NC117	G17
C19	NC58	NC118	G18
C20	NC59	NC119	G23
C22	NC60	NC120	H17

U5U			
XC5VLX50FF1153			
AG18	NC121	NC181	AM13
AH13	NC122	NC182	AM15
AH14	NC123	NC183	AM16
AH15	NC124	NC184	AM17
AH17	NC125	NC185	AM18
AH18	NC126	NC186	AM20
AH22	NC127	NC187	AM21
AH23	NC128	NC188	AM22
AH24	NC129	NC189	AM23
AJ11	NC130	NC190	AM25
AJ12	NC131	NC191	AM26
AJ14	NC132	NC192	AM27
AJ15	NC133	NC193	AM28
AJ16	NC134	NC194	AM30
AJ17	NC135	NC195	AM31
AJ20	NC136	NC196	AN4
AJ21	NC137	NC197	AN5
AJ22	NC138	NC198	AN7
AJ24	NC139	NC199	AN8
AK11	NC140	NC200	AN9
AK12	NC141	NC201	AN10
AK13	NC142	NC202	AN12
AK14	NC143	NC203	AN13
AK16	NC144	NC204	AN14
AK17	NC145	NC205	AN15
AK18	NC146	NC206	AN17
AK21	NC147	NC207	AN18
AK22	NC148	NC208	AN19
AK23	NC149	NC209	AN20
AK24	NC150	NC210	AN22
AL4	NC151	NC211	AN23
AL5	NC152	NC212	AN24
AL6	NC153	NC213	AN25
AL8	NC154	NC214	AN27
AL9	NC155	NC215	AN28
AL10	NC156	NC216	AN29
AL11	NC157	NC217	AN30
AL13	NC158	NC218	AP4
AL14	NC159	NC219	AP5
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AL16	NC161	NC221	AP7
AL18	NC162	NC222	AP9
AL19	NC163	NC223	AP10
AL20	NC164	NC224	AP11
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AL23	NC166	NC226	AP14
AL24	NC167	NC227	AP15
AL25	NC168	NC228	AP16
AL26	NC169	NC229	AP17
AL28	NC170	NC230	AP19
AL29	NC171	NC231	AP20
AL30	NC172	NC232	AP21
AL31	NC173	NC233	AP22
AM5	NC174	NC234	AP24
AM6	NC175	NC235	AP25
AM7	NC176	NC236	AP26
AM8	NC177	NC237	AP27
AM10	NC178	NC238	AP29
AM11	NC179	NC239	AP30
AM12	NC180	NC240	AP31

Unused DDC4100 Pins

U110			
AC20	NC40	NC0	AD24
AB23	NC41	NC2	AD23
AE24	NC42	NC3	AE26
		NC4	AD26
		NC5	AF24
		NC6	AF25
		NC7	AE25
		NC8	AD25
		NC9	AF23
		NC10	AE23
		NC11	AD20
		NC12	AD21
		NC13	AE20
		NC14	AE21
		NC15	AF22
		NC16	AE22
		NC17	AF18
		NC18	AE18
		NC19	AF19
		NC20	AF20
		NC21	AF17
		NC22	AE17
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		NC31	AE12
		NC32	AE11
		NC33	AF10
		NC34	AE10
		NC35	AF9
		NC36	AF8
		NC37	AF7
		NC38	AE7
		NC39	AE8
			AD9

UNUSED PINS