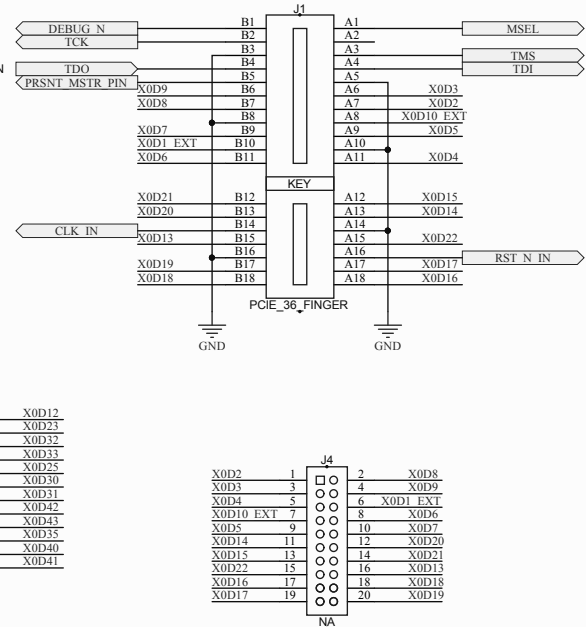
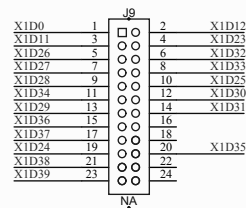
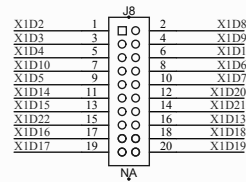
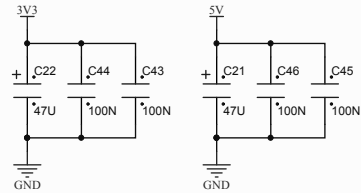
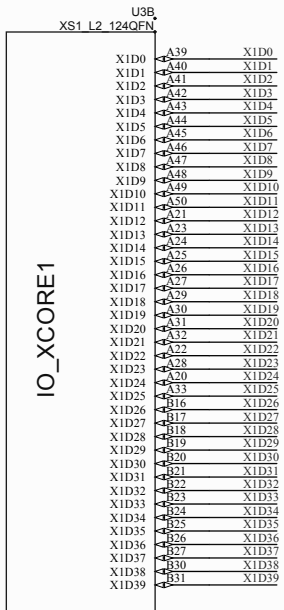
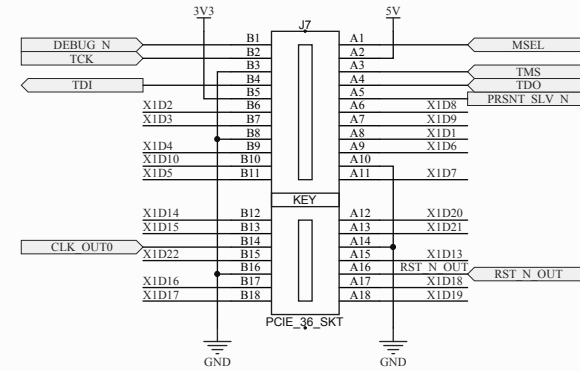


PLUG CHAIN CONNECTOR

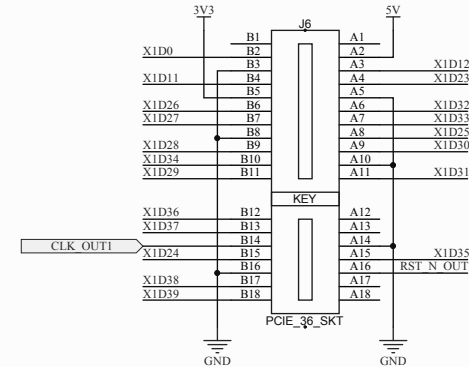




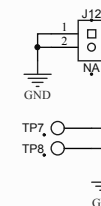
SOCKET SQUARE SLOT



SOCKET CIRCLE SLOT



MECH5
NPTH_2MM8
MECH6
NPTH_2MM6

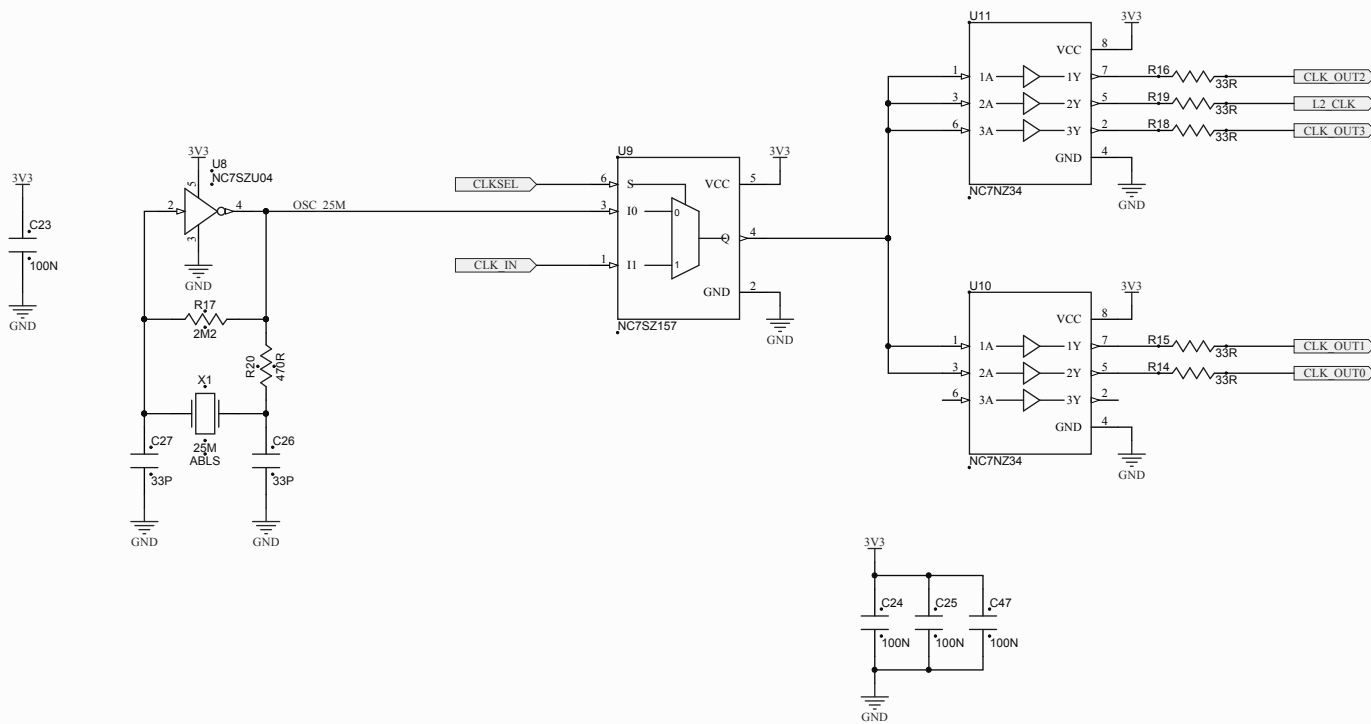


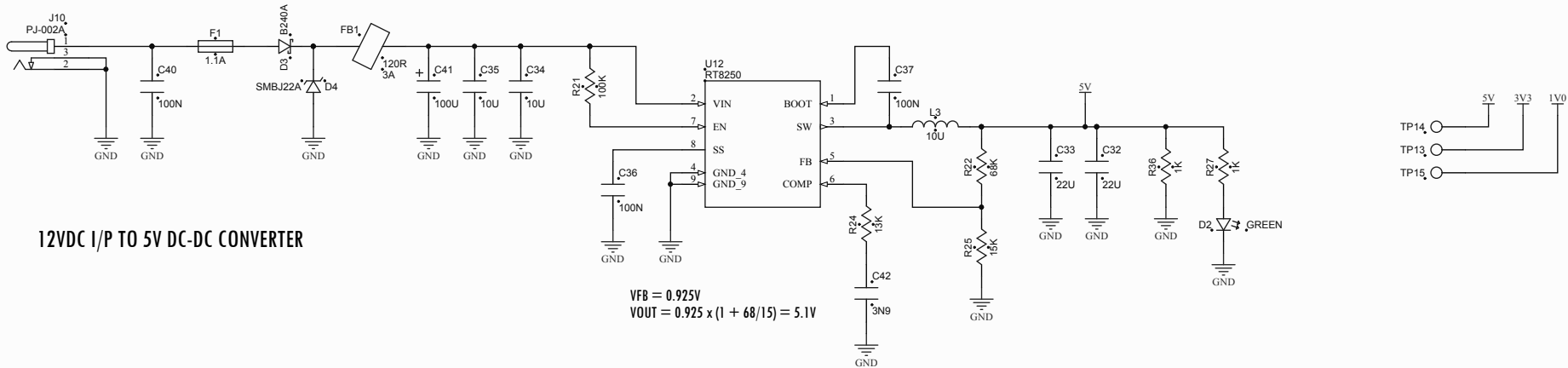
XMOS

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Project Name
XPCB-054 L2Core.PrjPCB

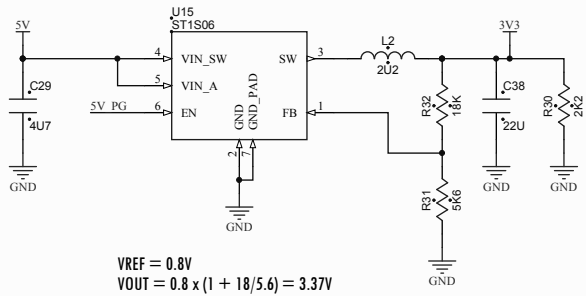
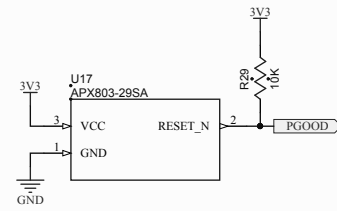
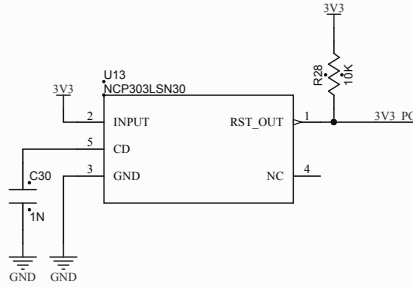
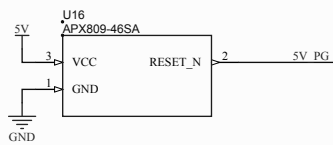
Size: A3	Sheet Name TILE 1	Rev 1V1
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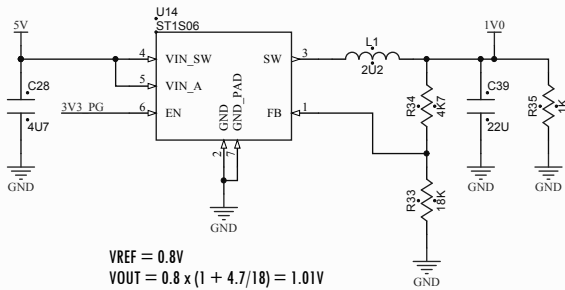


12VDC I/P TO 5V DC-DC CONVERTER

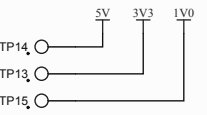
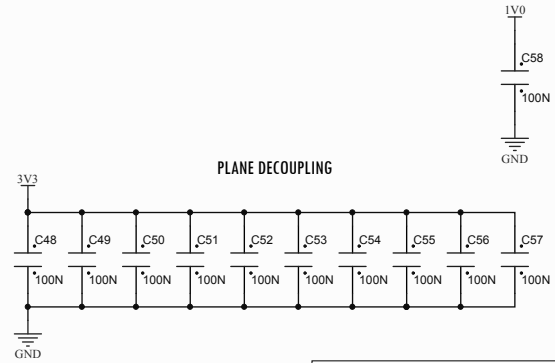
$V_{FB} = 0.925V$
 $V_{OUT} = 0.925 \times (1 + 68/15) = 5.1V$



$V_{REF} = 0.8V$
 $V_{OUT} = 0.8 \times (1 + 18/5.6) = 3.37V$



$V_{REF} = 0.8V$
 $V_{OUT} = 0.8 \times (1 + 4.7/1.8) = 1.01V$



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Project Name XPCB-054 L2Core.PrjPCB		
Size: A3	Sheet Name POWER	Rev 1V1
Date: 23/10/2012		Sheet 5 of 5

BOM

SliceKit L2 Core Board

Source Data From:

XPCB-054 L2Core.PrjPCB

Project:

XPCB-054 L2Core.PrjPCB

Variant:

None



Report Date: 23/10/2012 12:09:06
 Print Date: 23-Oct-12 12:09:15 PM

#	LibRef	Designator	Description	Quantity
1	E-01-0001	R1, R27, R35, R36	RES 1k 0603 1%	4
2	E-01-0002	R2, R3, R4, R6, R8, R11, R12, R13, R28, R29	RES 10k 0603 1%	10
3	E-01-0008	R9, R10, R14, R15, R16, R18, R19, R23	RES 33R 0603 1%	8
4	E-01-0012	R39	RES 0R 0603 1%	1
5	E-01-0013	R37, R40	RES 0603 No Fit	2
6	E-01-0017	R31	RES 5.6k 0603 1%	1
7	E-01-0021	R34	RES 4.7k 0603 1%	1
8	E-01-0022	R20	RES 470R 0603 1%	1
9	E-01-0027	R26, R30	RES 2.2k 0603 1%	2
10	E-01-0032	R21	RES 100k 0603 1%	1
11	E-01-0034	R22	RES 68k 0603 1%	1
12	E-01-0036	R17	RES 2.2M 0603 5%	1
13	E-01-0050	R7, R32, R33	RES 18k 0603 1%	3
14	E-01-0115	R24	RES 13k 0603 1%	1
15	E-01-0116	R25	RES 15k 0603 1%	1
16	E-01-0158	R5	RES 2.2R 0402 5%	1
17	E-01-0220	R38	RES 100k 0402 1%	1
18	E-02-0001	C1	MLCC 1uF 0402 X5R 6.3V	1
19	E-02-0002	C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C14, C15, C17, C18, C19, C20, C23, C24, C25, C31, C36, C37, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58	MLCC 100nF 0402 X7R 16V	39
20	E-02-0003	C59	MLCC 10nF 0402 X7R 50V	1
21	E-02-0004	C38, C39	MLCC 22uF 0805 X5R 6.3V	2
22	E-02-0008	C26, C27	MLCC 33pF 0402 COG 50V	2
23	E-02-0015	C41	AI Elec 100uF 16V CaseD SMD	1
24	E-02-0021	C28, C29	MLCC 4.7uF 0805 X5R 10V	2
25	E-02-0031	C13, C16, C21, C22	AI Elec 47uF 16V CaseC SMD	4
26	E-02-0037	C32, C33	MLCC 22uF 1206 X5R 16V	2
27	E-02-0039	C34, C35	MLCC 10uF 1206 X5R 25V	2
28	E-02-0043	C40	MLCC 100nF 0603 X7R 50V	1
29	E-02-0056	C42	MLCC 3.9nF 0402 X7R 50V	1
30	E-02-0061	C30	MLCC 1nF 0402 X7R 50V	1
31	E-03-0021	U7	Memory, Flash, SR, 16Mb (8Kx256), SOIC-8W	1
32	E-04-0050	J10	DC Power Jack, 5.5mm x 2.1mm, 2.5A, Through Hole	1
33	E-04-0058	J1	PCIe Edge Connector Plug, x1, 36 Pin, DNF	1
34	E-04-0067	J2, J3, J6, J7	PCIe End Fire Socket, x1, 36 Pin, SMD	4
35	E-05-0019	U12	DC-DC Buck Converter, Adjustable, 3A, SOIC8	1
36	E-05-0028	U14, U15	DC-DC Buck Converter, 1.5A, 1.5MHz, DFN6	2
37	E-07-0019	X1	Crystal, 25MHz, HC19US SMD, Fundamental, 18pF, Tol. ±30ppm, Stab. ±50ppm	1
38	E-08-0006	FB1	Ferrite Bead, 120R AT 100MHz, 0805, 3A	1
39	E-09-0005	L1, L2	Power Inductor, 2.2uH, 2.7A, 44mR DCR	2
40	E-09-0013	L3	Power Inductor, 10uH, 3.1A, 44mR DCR	1
41	E-10-0021	D3	Schottky Diode, 40V, 2A, SMA	1
42	E-10-0022	D4	Unidirectional Transient Protection Diode, 22V Stand-Off, 600W, SMB	1
43	E-10-0028	Q1, Q2	MOSFET, ESD Protected, N-Channel, Logic Level, 60V, 300mA, SOT23	2
44	E-11-0009	U3	XMOS XS1-L2 Processor, 124QFN, 500MHz	1
45	E-12-0001	D2	LED, GREEN, 0603	1
46	E-13-0009	U4, U9	2-Input Multiplexer, UHS Series, SC70	2
47	E-13-0014	U10, U11	Triple Logic Buffer, UHS Series, US8	2
48	E-13-0021	U8	Unbuffered Inverter, UHS Series, SOT-23-5	1
49	E-13-0025	U13	Voltage Detector, 3.0V, Programmable Delay, SOT23-5	1
50	E-13-0026	U1, U2	Dual Logic Buffer, Open Drain Output, UHS Series, SC70	2
51	E-13-0099	U6	Quad 1-of-2 Multiplexer/Demultiplexer, Bus Switch, CBTLV Series, TSSOP16	1
52	E-13-0103	U5	Triple Logic Buffer, Schmitt Trigger, UHS Series, US8	1
53	E-13-0104	U16	Microprocessor Reset Circuit, 4.6V, Active Low, Push Pull, SOT23	1
54	E-13-0106	U17	Microprocessor Reset Circuit, 2.9V, Active Low, Open Drain, SOT23	1
55	E-13-0108	U18	Dual D-type flip-flop with set and reset, p.e. trig, TSSOP14	1
56	E-14-0002	MTH1, MTH2, MTH3, MTH4	Mounting Hole, Plated, for M3 Screw, .6mm Dia	4
57	E-14-0013	MECH1	Layer Registration Check Decal, 4 Layer Board	1
58	E-14-0014	MECH2, MECH3, MECH4, MECH5, MECH6	Mounting Hole, Non Plated, 2.8mm Dia	5
59	E-15-0002	J11, J12	Single Row Male Pin Header, 2 Pin, 0.1" Pitch, THT	2
60	E-15-0004	FM1, FM2, FM3	Fiducial, 1.5mm dot, 3mm keepout	3
61	E-15-0032	TP13, TP14, TP15	Through Hole Testpoint, Compact, 1.8mm Loop, Red	3
62	E-15-0033	TP1, TP2, TP7, TP8	Through Hole Testpoint, Compact, 1.8mm Loop, Black	4
63	E-15-0042	J4, J8	Dual Row Male Pin Header, 20 Pin, 0.1" Pitch, THT	2
64	E-15-0043	J5, J9	Dual Row Male Pin Header, 24 Pin, 0.1" Pitch, THT	2
65	E-17-0024	F1	Polyswitch Resettable Fuse, 1812, 1.1A, 16V	1
66	P-01-0011	PROD1, PROD2, PROD3, PROD4	Feet, Nylon, M3, 6mm Standoff	4

Approved

Notes

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