LaPi Development Board

CIRCUIT SCHEMATIC *Revision: 1.9*
Last Updated *April 10th, 2013 - 17:30*

#	Reference	Value	Footprint	Manufacturer	Manufacturer's Part #	Digi-Key Part#
1	J2	Voltage Selector				
2	J5	Target Micro Selector - TST				
3	J6	Target Micro Selector - RST				
4	J7	nanoEase PWR Opt Selector	*Through-hole - 1x3*	Samtec	HTSW-103-07-G-S	**HTSW-103-07-G-S-ND**
5	J12	MCU Com Selector - RX				
6	J13	MCU Com Selector - TX				
7	J14	nanoEase RST Opt Selector				
8	J8	Debugger	*Through-hole - 2x7*			
9	J9	Universal Socket #1	*Through-hole - 2x13*	Samtec	TSW-150-07-L-D	**SAM1030-50-ND**
10	J10	Universal Socket #2	*Through-hole - 2x13*			
11	J11	SMD - micro USB	*Surface Mount - microUSB*	Hirose	ZX62R-B-5P	**H11574CT-ND**
12	J1	External Power	*xxx*	*xxx*	*xxx*	*xxx*
13	J3	15 I/O Pins Q111	*xxx*	*xxx*	*xxx*	*xxx*
14	J4	25 I/O pins Q112	*xxx*	*xxx*	*xxx*	*xxx*
15	U1 - New	**3.3v LDO Reg (USB 5V to 3.3v, etc.)**	*Surface Mount - HRP5 (5-pins plus tab)*	ROHM	**BA33D18HFP**	**BA33D18HFPDKR-ND**
16	U2	Q111 - 5V, 8-Bit, 20-pin LAPIS Micro	*Surface Mount - TSSOP-20 (20-pin)*	ROHM	ML610Q111	**LAPIS-SAMPLES**
17	U3	Q112 - 5V, 8-Bit, 20-pin LAPIS Micro	*Surface Mount - LQFP-32 (32-pin)*	ROHM	ML610Q112	**LAPIS-SAMPLES**
18	U4	Voltage Level Shifter (2-bit)	*Surface Mount - DCT (8-pin)*	Texas Instruments	TXS0102DCTR	**296-21978-1-ND**
19	U5	USB-to-UART Translator	*Surface Mount - SSOP (16-pin)*	FTDI	FT230XS-R	**768-1135-1-ND**
20	S1 - New	**Micro's Reset Button (Normally Open)**	*Surface Mount (2-pad)*	E-Switch	TL3302AF180QG	**EG2528DKR-ND**
21	LED1	RED - 5V PWR				
22	LED2	RED - 3.3V PWR	SMD 0805 (2012 Metric)	ROHM	SML-210VTT86	**511-1289-1-ND**
23	LED3	GREEN - RX Indicator	SMD 0805 (2012 Metric)	ROHM	SML-210MTT86	**511-1287-1-ND**
24	LED4	YELLOW - TX Indicator	SMD 0805 (2012 Metric)	ROHM	SML-210YTT86	**511-1290-1-ND**
25	D1	Schottky Diode Input Protection - 20V 3A	*Surface Mount - 123SOD (2-pads)*	ROHM	RB051M-2YTR	**RB051M-2YCT-ND**
26	FB1	Ferrite Bead (600R/0.5A)	SMD 0805 (2012 Metric)	Laird	MI0805K601R-10	**240-2390-1-ND**
27	R1					
28	R2					
29	R3					
30	R4					
31	R14	0R	SMD 0805 (2012 Metric)	ROHM	MCR10EZPJ000	**RHM0.0ARCT-ND**
32	R15					
33	R16					
34	R17					
35	R23	27R	SMD 0805 (2012 Metric)	ROHM	MCR10EZPF2702	**RHM27.0KCRCT-ND**
36	R24					
37	R6					
38	R7					
39	R13	270R	SMD 0805 (2012 Metric)	ROHM	MCR10EZHJ271	**RHM270ACT-ND**
40	R21					
41	R22					
42	R9					
43	R10					
44	R11					
45	R12	10k	SMD 0805 (2012 Metric)	ROHM	MCR10EZPF1002	**RHM10.0KCRCT-ND**
46	R20					
47	R18					
48	R25	15K	SMD 0805 (2012 Metric)	ROHM	MCR10EZPF1502	**RHM15.0KCRCT-ND**
49	C16	Cer - 47pF	SMD 0805 (2012 Metric)	Kemet	C0805C470J1GACTU	**399-8079-1-ND**
50	C17					
51	C1					
52	C6	Cer - 0.01 µF	SMD 0805 (2012 Metric)	TDK Corporation	C2012X7R2E103K	**445-2280-1-ND**
53	C15					
54	C18					
55	C5					
56	C10					
57	C11					
58	C13	Cer - 0.1 µF	SMD 0805 (2012 Metric)	TDK Corporation	C2012X7R2A104K	**445-1418-1-ND**
59	C14					
60	C19					
61	C3 - New	**Polarized - 3.3 µF, 50V**	*SMD Alum Cap (660x773)*	Panasonic	EEE-1HA3R3NP	**PCE4303DKR-ND**
62	C12	Polarized - 4.7 µF	*SMD Alum Cap (430x540)*	Panasonic	ECE-V1EA4R7SR	**PCE3066CT-ND**
63	C2	Cer - 4.7 µF	SMD 0805 (2012 Metric)	TDK Corporation	C2012Y5V1A475Z/1.25	**445-1370-1-ND**
64	C7					
65	C4 - New	**Cer - 10 µF**	SMD 0805 (2012 Metric)	TDK Corporation	C2012X5R1C106K085AC	**445-7644-6-ND**
66	Rubber Feet	5 per board	*Stick-on Rubber Feet*	3M	SJ-5003 (white)	**SJ5003-9-ND**
67	Chiclets	7 per board	*Chicle Jumpers with Tab*	Sullins Connector Solutions	NPC02SXON-RC	**S9341-ND**