



Build BOM:

EVB-USB82514QFN36 Evaluation Board with Basic Feature Set

Revision B-4Lct (Bobby)

Revised: April 7, 2008

SKU: USB82514 -- 4-port Version

Item	Qty	Qty Pop'd	Ref. Des.	Description	Manufacturer	Part Number	Notes
1	5	5	BR1,BR2,BR3,BR4,BR5	Diode, Bridge, Switching, 50V, 140mA, SOT-143	Infineon Tech	BGX50A	Optional for ESD
2	4	4	C3,C16,C18,C22	Capacitor, 1.0uF, 16VDC, 10%, X5R, 0603	Panasonic	ECJ-1VB1C105K	Industrial temp range
3	16	16	C5,C6,C7,C8,C10,C11,C12,C13,C15,C17,C27,C28,C29,C30,C31,C50	Capacitor, 0.1uF, 6.3V, 10%, X5R, 0402	Panasonic	ECJ-0EB1A104K	Industrial temp range
4	2	2	C9,C14	Capacitor, 33pF, 25V, 10%, NPO, 0402	Panasonic ECG	ECJ-0EC1H330J	Automotive temp range
5	2	2	C19,C20	Capacitor, 4.7uF, 6.3VDC, 20%, X5R, 0603	Panasonic	ECJ-1VB0J475M	Industrial temp range
6	9	8	C44,C45,C46,C47,C48,C49,C51,C147	Capacitor, 1000pF, 50V, 10%, X7R, 0402	SMEC	MCCJ102K0NRTF	Automotive temp range
7	4	4	C23,C24,C25,C26	Capacitor, Low ESR, 100uF, 6.3VDC, 20%, Aluminum, Radial-SMT, 5mm x 5.8mm	United Chemi-Con	EMZA6R3ADA101ME61G	Automotive temp range
8	10	0	C32,C33,C34,C35,C36,C37,C38,C39,C41,C146	Capacitor, Do Not Populate, 0402			DNP - Optional for EMI
9	1	0	C40	Capacitor, 1.0uF, 16VDC, 10%, X5R, 0603	Panasonic	ECJ-1VB1C105K	DNP
10	1	0	C42	Capacitor, 33pF, 25V, 10%, NPO, 0402	Panasonic ECG	ECJ-0EC1H330J	DNP
11	12	12	FB1,FB2,FB3,FB4,FB5,FB6,FB7,FB8,FB9,FB10,FB11,FB12	Ferrite Bead, 220 Ohm, 2A, 0.05DCR, 0603	TDK	MPZ1608S221A	EMI - Not always needed
12	4	4	J1,J2,J3,J4	Receptacle, USB, Style A, Right Angle, Through-hole	AMP	787616-1	Industrial temp range
13	1	1	J5	Receptacle, USB, Style B, Right Angle, Through-hole	AMP	292304-1	Industrial temp range
14	1	1	J6	Connector, Power Jack, 2.0mm, 12V, 4A, Right Angle, TH	Cui Stack	PJ-002AH	
15	4	4	LED1,LED2,LED3,LED4	LED, Green, 3mm, Diffused, Right Angle	Lumex	SSF-LXH103GD	
16	1	0	LED5	LED, Orange, 5mm, TH, Right Angle	Dialight	550-2505	DNP - Optional power backlight
17	1	1	LED6	LED, Red, 0603	Stanley Electric	BR1111C-TR	
18	5	5	L1,L2,L3,L4,L5	Inductor, Common Mode Choke, DLP11SN900SL2, 0504	Murata	DLP11SN900SL2	Optional for ESD/EMI
19	5	5	R1,R2,R3,R4,R12	Resistor, 330, 5%, 1/16W, 0603	Yageo America	9C06031A3300JLHFT	Automotive temp range
20	7	7	R5,R6,R7,R9,R11,R13,R14	Resistor, 100K, 5%, 1/16W, 0603	Yageo America	9C06031A1003JLHFT	Automotive temp range
21	1	1	R8	Resistor, 12.0K, 1%, 1/16W, 0603	Yageo America	9C06031A1202FKHFT	Automotive temp range
22	1	1	R10	Resistor, 1Meg, 5%, 1/16W, 0603	Yageo America	9C06031A1004JLHFT	Automotive temp range
23	9	0	R27,R28,R29,R30,R31,R32,R33,R34,R36	Resistor, 10K, 5%, 1/16W, 0603	Yageo America	9C06031A1002JLHFT	DNP - Optional port disable
24	1	1	R35	Resistor, 1K, 5%, 1/16W, 0603	Yageo America	9C06031A1001JLHFT	
25	1	0	R37	Resistor, 1K, 5%, 1/16W, 0603	Yageo America	9C06031A1001JLHFT	DNP - Optional power backlight
26	1	1	U1	IC, USB82514, 4 Port USB 2.0 Hub, QFN36	SMSC	USB82514-AEZG	Automotive temp range
27	2	2	U2,U3	IC, MIC2026-1BM, Power Distribution Switch, SO-8	Micrel	MIC2026-1BM	Industrial temp range
28	1	0	U4	IC, PQ1L333M2SP, Voltage Regulator, 3.3V, 300mA, Low Dropout, 900mW, SOT-89-5	Sharp	PQ1L333M2SP	DNP - Optional for commercial temp range
29	1	1	U5	IC, LT1129IQ-3.3, Voltage Regulator, +3.3V, 700mA, DD 5-Lead	Linear Technology	LT1129IQ-3.3	Automotive temp range
30	1	1	Y1	Crystal, 24.000MHz, 50ppm, 18pF, HC-49SMT	Citizen America	HCM49-24.000MABJ-UT	Commercial range - Automotive temp range substitutes available
31	4	4		Rubber Feet		Placed per sample	
32	1	1		Labels			
33	1	1	PCB Fab	PCB, EVB-USB2514QFN36, Rev. B-4Lct	DDi	EVB-USB2514QFN36_B-4Lct	
34	1	1	Assembly	Assembly, EVB-USB2514QFN36, Rev. B-4Lct	KoDIK	EVB-USB2514QFN36_B-4Lct	