

EVB-USB2504 - USB2504 Evaluation Platform Revised: Wednesday, November 9, 2004

EVB-USB2504 Revision: A2



Bill of Materials November 9, 2004

Item	Quantity	Part Reference	Description	Manufacturer	Part Number	Notes
1	1	C1	Capacitor, Do Not Populate, 0805			
2	3	C2, C3, C18	Capacitor, 1.0uF, 16VDC, 10%, X5R, 0805	Panasonic	ECJ-GVB1C105K	
3	9	C4, C6, C7, C8, C13, C15, C16, C19, C23	Capacitor, 0.1uF, 16V, 10%, X7R, 0603	Panasonic	ECJ-1VB1C104K	
4	2	C5, C14	Capacitor, 33pF, 50V, 5%, NPO, 0603	Yageo America	0603CG330J9B200	Determined by choice of crystal
5	5	C9, C10, C12, C17, C20	Capacitor, 10uF, 6.3VDC, 20%, X5R, 0805	Panasonic	ECJ-2FB0J106M	Need to be low ESR ceramic capacitors
6	1	C11	Capacitor, Do Not Populate, 0603			
7	2	C21, C22	Capacitor, 0.01uF, 16V, 10%, X7R, 0603	Panasonic	ECJ-1VB1C103K	
8	4	C24, C25, C26, C27	Capacitor, Low ESR, 150uF, 10VDC, 20%, Aluminum, Radial-SMT, 6.3mm x 5.8mm	Panasonic	EEV-FK1A151P	Critical for USB-IF droop/drop tests
9	10	D1, D3, D4, D6, D7, D9, D10, D12, D13, D15	Varistor, V5.5MLA0603H, 0603	Littelfuse	V5.5MLA0603H	Optional for high ESD tolerance
10	5	D2, D5, D8, D11, D14	Surge Suppressor, PGB002ST23, SOT-23	Littelfuse	PGB002ST23WR	Optional for high ESD tolerance
11	10	FB1, FB2, FB4, FB5, FB6, FB7, FB8, FB9, FB10, FB11	Ferrite Bead, 2000mA, DCR=0.05, 0805	Murata	BLM21PG221SN1D	Optional for EMI reduction
12	1	FB3	Ferrite Bead, 120 Ohm, 0.5A, 0.1DCR, 0603	Panasonic	EXC-3BP121H	
13	1	J1	Connector, Power Jack, 2.0mm, 12V, 4A, Right Angle	Cui Stack	PJ-002AH-SMT-1	
14	1	J2	Receptacle, USB, Style B, Right Angle, Through-hole	AMP	787780-1	
15	4	J3, J4, J5, J6	Receptacle, USB, Style A, Right Angle, Through-hole	AMP	787616-1	
16	4	LED1, LED4, LED5, LED8	LED, Green, 0603	Stanley Electric	BG1111C-TR	
17	4	LED2, LED3, LED6, LED7	LED, Yellow, 0603	Stanley Electric	AY1111C-TR	
18	5	L1, L2, L3, L4, L5	Inductor, Common Mode Choke, 0805	Murata	DLW21SN900SQ2L	Optional for EMI reduction
19	1	OSC1	Oscillator, Do Not Populate, SMT			Not needed for production
20	1	R1	Resistor, Do Not Populate, 0805			Not needed for production
21	1	R2	Resistor, 100K, 5%, 1/16W, 0603	Yageo America	9C06031A10003JLHFT	
22	1	R3	Resistor, ZERO, 0.1W, 0603	Yageo America	9C06031A0R00JLHFT	
23	2	R4, R10	Resistor, Do Not Populate, 0603			Not needed for production
24	4	R5, R6, R8, R11	Resistor, 10K, 5%, 1/16W, 0603	Yageo America	9C06031A1002JLHFT	
25	1	R7	Resistor, 330K, 5%, 1/16W, 0603	Yageo America	9C06031A3303JLHFT	
26	1	R9	Resistor, 1Meg, 5%, 1/16W, 0603	Yageo America	9C06031A1004JLHFT	
27	1	R12	Resistor, 12.0K, 1%, 1/16W, 0603	Yageo America	9C06031A1202FKHFT	Critical needs to be 1% 12.0K
28	8	R13, R14, R15, R16, R17, R18, R19, R20	Resistor, 220, 5%, 1/16W, 0603	Yageo America	9C06031A2200JLHFT	Non-critical - current limit for LEDs
29	1	SKT1	Socket, IC, 8 Pin DIP, Leaf Contacts, Through Hole	Amp	2-641260-1	Not needed for production
30	1	U1	IC, USB2504, 4 Port USB 2.0 Hub, TQFP-64	Standard Microsystems Corp	USB20H04	
31	1	U2	IC, AT24C02A, 2 Wire Serial EPROM, 2Kb, 2.7V, DIP-8	Atmel	AT24C02AN-10PI-2.7	Alternate: STMicro M24C02
32	1	U3	IC, PQ1L331M2ZP, Voltage Regulator, 3.3V, 300mA, Low Dropout, 900mW, SOT-89-5	Sharp	PQ1L331M2ZP	Alternate: Linear Technology LTC3025
33	2	U4,U5	IC, MIC2026-1BM, Power Distribution Switch, SO-8	Micrel	MIC2026-1BM	Non-critical other choices acceptable
34	1	Y1	Crystal, 24.000MHz, 50ppm, 18pF, HC-49SMT	Citizen America	CS10-24.000MABJTR	