



JTAGulator
 Bill-of-Materials
 HW B, Document 1.0, April 19, 2013

Build Quantity 1

Item	Quantity	Reference	Manufacturer	Manuf. Part #	Distributor	Distrib. Part #	Description	Unit Price	Per Build	Extended
1	2	C1, C2	Kemet	C1206C103K5RACTU	Digi-Key	399-1234-1-ND	Capacitor, 0.01uF ceramic, 10%, 50V, X7R, 1206	\$0.160	2	\$0.32
2	14	C3, C6, C9, C11, C12, C13, C14, C15, C17, C18, C19, C20, C21, C22	Kemet	C1206C104K5RACTU	Digi-Key	399-1249-1-ND	Capacitor, 0.1uF ceramic, 10%, 50V, X7R, 1206	\$0.100	14	\$1.40
3	1	C4	Yageo	CC1206KRX7R9BB102	Digi-Key	311-1170-1-ND	Capacitor, 1000pF ceramic, 10%, 50V, X7R, 1206	\$0.130	1	\$0.13
4	1	C5	Yageo	CC1206KRX7R9BB471	Digi-Key	311-1167-1-ND	Capacitor, 470pF ceramic, 10%, 50V, X7R, 1206	\$0.130	1	\$0.13
5	1	C7	Kemet	T491A106M016AS	Digi-Key	399-3687-1-ND	Capacitor, 10uF tantalum, 20%, 16V, size A	\$0.410	1	\$0.41
6	2	C8, C10	Kemet	T491A475K016AT	Digi-Key	399-3697-1-ND	Capacitor, 4.7uF tantalum, 10%, 16V, size A	\$0.350	2	\$0.70
7	1	D1	Kingbright	WP59EGW	Digi-Key	754-1232-ND	LED, Red/Green Bi-Color, T-1 3/4 (5mm)	\$0.330	1	\$0.33
8	1	L1	TDK	MPZ2012S221A	Digi-Key	445-1568-1-ND	Inductor, Ferrite Bead, 220R@100MHz, 3A, 0805	\$0.120	1	\$0.12
9	1	P1	Hirose Electric	UX60-MB-5S8	Digi-Key	H2960CT-ND	Connector, Mini-USB, 5-pin, SMT w/ PCB mount	\$1.380	1	\$1.38
10	5	P2, P3, P4, P5, P6	TE Connectivity	282834-5	Digi-Key	A98336-ND	Connector, Terminal Block, 5-pin, side entry, 0.1" P	\$1.730	5	\$8.65
11	3	P7, P8, P9	3M	961210-6404-AR	Digi-Key	3M9460-ND	Header, Dual row, Vertical header, 2x5-pin, 0.1" P	\$0.700	3	\$2.10
12	1	Q1	Fairchild	MMBT3904	Digi-Key	MMBT3904FSCT-ND	Transistor, NPN, 40V, 200mA, SOT23-3	\$0.150	1	\$0.15
13	5	R1, R2, R3, R4, R10	Any	Any	Digi-Key	P10KECT-ND	Resistor, 10k, 5%, 1/4W, 1206	\$0.100	5	\$0.50
14	1	R5	Any	Any	Digi-Key	P470ECT-ND	Resistor, 470 ohm, 5%, 1/4W, 1206	\$0.100	1	\$0.10
15	1	R6	Any	Any	Digi-Key	P270ECT-ND	Resistor, 270 ohm, 5%, 1/4W, 1206	\$0.100	1	\$0.10
16	1	R7	Any	Any	Digi-Key	P18.0KFCT-ND	Resistor, 18k, 1%, 1/4W, 1206	\$0.100	1	\$0.10
17	1	R8	Any	Any	Digi-Key	P8.20KFCT-ND	Resistor, 8.2k, 1%, 1/4W, 1206	\$0.100	1	\$0.10
18	1	R9	Any	Any	Digi-Key	P100KECT-ND	Resistor, 100k, 5%, 1/4W, 1206	\$0.100	1	\$0.10
19	3	R11, R12, R13	Bourns	4816P-1-102LF	Digi-Key	4816P-1-102LFCT-ND	Resistor, Array, 8 isolated, 1k, 2%, 1/6W, SOIC16	\$0.640	3	\$1.92
20	1	SW1	C&K	KSC201JLFS	Digi-Key	401-1756-1-ND	Switch, SPST, Momentary, 120gf, 6.2 x 6.2mm, J-Lead	\$0.510	1	\$0.51
21	1	U1	FTDI	FT232RL-REEL	Digi-Key	768-1007-1-ND	IC, USB-to-UART Bridge, SSOP28	\$4.500	1	\$4.50
22	1	U2	Parallax	P8X32A-Q44	Digi-Key	P8X32A-Q44-ND	IC, Microcontroller, Propeller, LQFP44	\$7.990	1	\$7.99
23	1	U3	Micrel	MIC2025-2YM	Digi-Key	576-1058-ND	IC, Power Distribution Switch, Single-channel, SOIC8	\$1.290	1	\$1.29
24	1	U4	Microchip	24LC512-I/SN	Digi-Key	24LC512-I/SN-ND	IC, Memory, Serial EEPROM, 64KB, SOIC8	\$1.940	1	\$1.94
25	1	U5	Analog Devices	AD8655ARZ	Digi-Key	AD8655ARZ-ND	IC, Op. Amp., CMOS, Rail-to-rail, 220mA Iout, SOIC8	\$2.150	1	\$2.15
26	1	U6	ST Microelectronics	LD1117S33CTR	Digi-Key	497-1241-1-ND	IC, Voltage Regulator, LDO, 3.3V@800mA, SOT223	\$0.540	1	\$0.54
27	6	U7, U8, U10, U11, U13, U14	ON Semiconductor	NUP4302MR6T1G	Digi-Key	NUP4302MR6T1GOSCT-ND	IC, Schottky Diode Array, 4 channel, TSOP6	\$0.900	6	\$5.40
28	3	U9, U12, U15	Texas Instruments	TXS0108EPWR	Digi-Key	296-23011-1-ND	IC, Level Translator, Bi-directional, TSSOP20	\$2.300	3	\$6.90
29	1	Y1	ECS	ECS-50-18-4XEN	Digi-Key	XC1738-ND	Crystal, 5.0MHz, 18pF, HC49/US	\$0.770	1	\$0.77
30	1	PCB	Any	JTAG B	N/A	N/A	PCB, Fabrication	N/A	1	\$0.00

Total \$50.73
 Approximate Per Unit Cost \$50.73