

Handheld I²C Bus Analyzer Bill of Materials - April 10, 2011

Reference	Value	Package	Description	Manufacturer	Manufacturer Part #	Supplier	Supplier Part #	Qty	Unit Cost	Total Cost
B1			18.5Wh Li-Poly Battery w/ Protection	AA Portable Power	PL896474-WR	Batteryspace.com	4071	1	\$22.95	\$22.95
C1, C2, C6, C9	10μF	0805	6.3V X5R Ceramic	Taiyo Yuden	JMK212BJ106MG-T	Digi-Key	587-1943-1-ND	4	\$0.48	\$1.92
C3	1μF	0402	6.3V X5R Ceramic	Taiyo Yuden	JMK105BJ105KV-F	Digi-Key	587-1231-1-ND	1	\$0.16	\$0.16
C4	330pF	0402	50V C0G Ceramic	Taiyo Yuden	UMK105CG331JV-F	Digi-Key	587-1217-1-ND	1	\$0.14	\$0.14
C5	22μF	1206	6.3V X5R Ceramic	Taiyo Yuden	JMK316BJ226KL-T	Digi-Key	587-1467-1-ND	1	\$0.56	\$0.56
C7	33pF	0402	50V C0G Ceramic	Taiyo Yuden	UMK105CG330JV-F	Digi-Key	587-1205-1-ND	1	\$0.12	\$0.12
C8, C10-C20	0.1μF	0402	10V X5R Ceramic	Taiyo Yuden	LMK105BJ104KV-F	Digi-Key	587-1227-1-ND	12	\$0.068	\$0.82
CONN1			22 Position SMT FFC Connector	Molex	522712279	Digi-Key	WM3380CT-ND	1	\$2.00	\$2.00
CONN2			USB Mini B SMT Connector	Hirose Electric	UX60SC-MB-5ST(80)	Digi-Key	H11671CT-ND	1	\$0.76	\$0.76
CONN3			3x2 Header	FCI	69168-106HLF	Digi-Key	609-2423-ND	1	\$1.36	\$1.36
CONN4, CONN5			BNC Connector	TE Connectivity	5226990-6	Digi-Key	A32255-ND	2	\$2.63	\$5.26
D1			Blue LED	Cree	C4SMF-BJS-CR0U0452	Digi-Key	C4SMF-BJS-CR0U0452CT-ND	1	\$0.27	\$0.27
D2-D5		SOD123	Schottky	Diodes	1N5711W-7-F	Digi-Key	1N5711W-FDICT-ND	4	\$0.48	\$1.92
L1	3.3μH		SMT Power	TDK	VLCF5020T-3R3N1R6	Digi-Key	445-3195-1-ND	1	\$0.81	\$0.81
L2	10μH		SMT Power	TDK	VLCF4020T-100MR85	Digi-Key	445-3186-1-ND	1	\$0.77	\$0.77
R1	100Ω	0603	1/10W 5%	Stackpole Electronics	RMCF0603JT100R	Digi-Key	RMCF0603JT100RCT-ND	1	\$0.02	\$0.02
R2, R5	105kΩ	0603	1/10W 1%	Stackpole Electronics	RMCF0603FT105K	Digi-Key	RMCF0603FT105KCT-ND	2	\$0.04	\$0.08
R3	15kΩ	0603	1/10W 5%	Stackpole Electronics	RMCF0603JT15K0	Digi-Key	RMCF0603JT15K0CT-ND	1	\$0.02	\$0.02
R4	499kΩ	0603	1/10W 1%	Stackpole Electronics	RMCF0603FT499K	Digi-Key	RMCF0603FT499KCT-ND	1	\$0.04	\$0.04
R6	200kΩ	0603	1/10W 1%	Stackpole Electronics	RMCF0603FT200K	Digi-Key	RMCF0603FT200KCT-ND	1	\$0.04	\$0.04
R7, R18, R19, R28, R29	10kΩ	0603	1/10W 5%	Stackpole Electronics	RMCF0603JT10K0	Digi-Key	RMCF0603JT10K0CT-ND	5	\$0.02	\$0.10
R8	1Ω	0603	1/10W 5%	Stackpole Electronics	RMCF0603JT1R00	Digi-Key	RMCF0603JT1R00CT-ND	1	\$0.02	\$0.02
R9	10kΩ		Trim Potentiometer	Bourns	TC33X-2-103E	Digi-Key	TC33X-103ECT-ND	1	\$0.25	\$0.25
R13, R14	4.7kΩ	0603	1/10W 5%	Stackpole Electronics	RMCF0603JT4K70	Digi-Key	RMCF0603JT4K70CT-ND	2	\$0.02	\$0.04
R16, R17	1kΩ	0603	1/10W 5%	Stackpole Electronics	RMCF0603JT1K00	Digi-Key	RMCF0603JT1K00CT-ND	2	\$0.02	\$0.04
R20	100kΩ	SC70-6	I ² C Potentiometer	Microchip Technology	MCP4018T-104E/LT	Digi-Key	MCP4018T-104E/LTCT-ND	1	\$0.63	\$0.63
R21, R23	1kΩ	0603	1/10W 1%	Stackpole Electronics	RMCF0603FT1K00	Digi-Key	RMCF0603FT1K00CT-ND	2	\$0.04	\$0.08
R24	200kΩ	0603	1/10W 5%	Stackpole Electronics	RMCF0603JT200K	Digi-Key	RMCF0603JT200KCT-ND	1	\$0.02	\$0.02
R22, R26	110Ω	0603	1/10W 1%	Stackpole Electronics	RMCF0603FT110R	Digi-Key	RMCF0603FT110RCT-ND	2	\$0.04	\$0.08
R25, R27	1MΩ	0603	1/10W 1%	Stackpole Electronics	RMCF0603FT1M00	Digi-Key	RMCF0603FT1M00CT-ND	2	\$0.04	\$0.08
R30, R31	100Ω	1206	1/4W 5%	Stackpole Electronics	RMCF1206JT100R	Digi-Key	RMCF1206JT100RCT-ND	2	\$0.05	\$0.10
S1			SPDT Slide Switch	E-Switch	EG1224	Digi-Key	EG2585-ND	1	\$1.11	\$1.11
S2-S5			SPST Push Button	C&K Components	D6R90 F1 LFS	Digi-Key	401-1978-ND	4	\$1.30	\$5.20
U1		DFN8	Buck-Boost DC/DC Converter	Linear Technology	LTC3538EDCB#TRMPBF	Digi-Key	LTC3538EDCB#TRMPBFCT-ND	1	\$5.82	\$5.82
U2		SC70-6	5V Step-Up DC/DC Converter	Linear Technology	LTC3525ESC6-5#TRMPBF	Digi-Key	LTC3525ESC6-5#TRMPBFCT-ND	1	\$4.14	\$4.14
U3		QFN16	USB Power Controller and Li-Ion Charger	Linear Technology	LTC4055EUF#PBF	Digi-Key	LTC4055EUF#PBF-ND	1	\$4.38	\$4.38
U4		TQFP64	Microcontroller	Atmel	ATXMEGA128A3-AU	Digi-Key	ATXMEGA128A3-AU-ND	1	\$10.43	\$10.43
U5, U6		SO8	High-Speed Comparator	Linear Technology	LT1016CS8#PBF	Digi-Key	LT1016CS8#PBF-ND	2	\$6.13	\$12.26
U7		SO8	Dual Rail-to-Rail Opamp	Linear Technology	LT1801CS8#PBF	Digi-Key	LT1801CS8#PBF-ND	1	\$3.88	\$3.88
U8		TSSOP8	I ² C Level Translator	NXP Semiconductors	PCA9306DP,118	Digi-Key	568-4214-1-ND	1	\$0.93	\$0.93
			2 Inch 22 Position FFC	Molex	21039-0379	Digi-Key	WM10008-ND	1	\$3.76	\$3.76
			320x240 LCD w/ Backlight and Controller	Newhaven Display	NHD-320240WX-CoTFH-V#I041	Newhaven Display	NHD-320240WX-CoTFH-V#I041	1	\$59.95	\$59.95
									Total	\$153.32