

piSmasher SBC Revised: 10/05/2015
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Bill Of Materials October 5,2015 12:37:16

Item	Qty	Reference	Description	Manufacturer	Part Number
1	5	C1,C8,C9,C10,C12	Capacitor, Ceramic, 10uF 25V 10% X7R, SMD 1210	Samsung	CL32B106KAULNNE
2	48	C2,C11,C13,C15,C16,C17,C18,C19,C20,C21,C22,C24,C25,C26,C28,C29,C31,C35,C37,C38,C40,C44,C45,C46,C48,C49,C50,C52,C53,C54,C55,C58,C60,C62,C63,C66,C67,C68,C71,C74,C77,C83,C85,C89,C95,C97,C106,C113	Capacitor, Ceramic, 0.1uF 25V 10% X7R, SMD 0603	Samsung	CL10B104KA8NNNC
3	4	C3,C4,C5,C6	Capacitor, Ceramic, 22uF 6.3V 10% X5R, SMD 1206	Samsung	CL31A226KQHNNNE
4	2	C7,C14	Capacitor, Ceramic, 3300pF 25V 10% X7R, SMD 0603	Murata	C0402C332K3RACTU
5	11	C23,C27,C30,C32,C61,C84,C90,C93,C96,C107,C114	Capacitor, Ceramic, 10uF 6.3V 10% X5R, SMD 0805	Samsung	CL21A106KQQNNNE
6	2	C33,C34	Capacitor, Ceramic, 33pF 50V 5% NPO, SMD 0603	Samsung	CL10C330JB8NNNC
7	3	C36,C39,C42	Capacitor, Ceramic, 33uF 6.3V 20% X5R, SMD 1210	TDK	C3225X5R0J336M250AA
8	18	C41,C43,C80,C81,C82,C87,C88,C94,C98,C100,C101,C102,C103,C104,C105,C110,C111,C112	Capacitor, Ceramic, 0.01uF 25V 10% X7R, SMD 0603	Samsung	CL10B103KA8NNNC
9	3	C47,C51,C56	Capacitor, Ceramic, 1.0uF 25V 10% X5R, SMD 0603	Samsung	CL10A105KA8NNNC
10	2	C57,C65	Capacitor, Ceramic, 4.7uF 6.3V 10% X5R, SMD 0805	Samsung	CL21A475KQFNNE
11	1	C59	Capacitor, Ceramic, 150uF 6.3V 20% X5R, SMD 1210	Samsung	CL32A157MQVNNNE
12	1	C64	Capacitor, Ceramic, 2.2uF 10V 10% X5R, SMD 0603	Samsung	CL10A225KP8NNNC
13	4	C69,C72,C75,C78	Capacitor, Ceramic, 0.01uF 25V 5% NPO, SMD 0603	Samsung	CL10C103JA8NNNC
14	4	C70,C73,C76,C79	Capacitor, Ceramic, 1000pF 50V 5% NPO, SMD 0603	Samsung	CL10C102JB8NNNC
15	5	C86,C91,C92,C108,C115	Capacitor, Ceramic, 47uF 10V 10% X5R, SMD 1210	Samsung	CL32A476KPNNE
16	2	C99,C109	Capacitor, Ceramic, 27pF 50V 5% NPO, SMD 0603	Samsung	CL10C270JB8NNNC
17	1	D1	Diode, Schottky, Dual Common Cathode, 35V 25A, D2PAK	ON Semiconductor	MBRE2535CTLG
18	3	D2,D3,D4	LED, Green 0603	Lumex	SML-LX0603SUGW-TR
19	1	D5	Diode, Schottky, 30V 30mA, SOD323	ON Semiconductor	RB751V40T1G
20	1	D6	Diode, Signal, 75V 150mA, SOD123	Vishay	1N4148WFL-G3-08
21	1	FB1	Ferrite Bead, 220 ohms 25% @ 100MHz, 0.6A max, SMD 0603	Laird	HZ0603A222R-10
22	5	FB2,FB3,FB4,FB5,FB6	Ferrite Bead, 120 ohms 25% @ 100MHz, 2A max, SMD 0603	Vishay Dale	ILHB0603ER121V
23	7	PC1,PB1,PA1,JC1,PB2,PA2,P3	Conn, Header, 40-pin, 20-posx2-row, 0.05" Vert Shrouded, TH	Samtec	TFM-120-01-F-D-A
24	1	J1	Conn, Jack, 2-pos, 5.5mm OD x 2.5mm ID DC Power, 8A T/H RA	CUI Inc	PJ-063BH
25	1	J4	Conn, Header, 14-pos, 2MM VERT Gold SHRD	Molex Inc.	87831-1420
26	2	J5,J6	Conn, Recept, HDMI 19-pos, TH, RA Horizontal	CNC Tech	2000-1-1-20-00-BK
27	1	J7	Connector, Receptacle, USB Type A 2.0, 4 Position Through Hole, Right Angle, Horizontal	Amphenol	UE27AC5410H
28	2	J9,J10	Header, 25 pos x 2 rows, 50 Pins, 0.1 Centers	Samtec	TSW-125-07-F-D
29	1	J11	Conn, Header, 5-pos, 0.1" Vert, Gold Flash	Samtec	TSW-105-07-L-S
30	2	L1,L2	Inductor 2.2uH 20% 21milliohm 3.7A SMD 4mmx4mmx2mm	Coilcraft	XFL4020-222MEB
31	9	L3,L4,L5,L6,L7,L8,L9,L10,L11	Inductor, 10uH 20% 700mohm 470mA, Shielded, SMD 2mmx2mmx1.2mm	Abracon	ASPI-2012-100M-T
32	1	P2	Conn, Header, 30-pin, 15-posx2-row, 0.05" Vert Shrouded, TH	Samtec	TFM-115-01-F-D-A
33	1	P8	Conn, Magjack, 1-port 1000 Base-T	Abracon	ARJE-0027
34	1	Q1	MOSFET, P-CH, 20V 5.5A, SOT-223	Fairchild Semiconductor	FDT434P
35	1	RP1	Resistor Pack, 2.0K ohm 5% x4 Individual, 1/16W per resistor, Convex, SMD 1206	Yageo	YC164-JR-072KL
36	8	RP2,RP3,RP4,RP5,RP6,RP7,RP8,RP9	Resistor Pack, 75 ohm 1% x4 Individual, 1/16W per resistor, Convex, SMD 1206	Vishay	CRA06508375R0FTA
37	1	RP10	Resistor Pack, 10K ohm 5% x4 Individual, 1/16W per resistor, Convex, SMD 1206	Yageo	YC164-JR-0710KL
38	1	R1	Resistor, 1.13K ohm 1% 1/10W, SMD 0603	Samsung	RC1608F1131CS
39	7	R2,R3,R17,R27,R30,R34,R35	Resistor, 330 ohm 1% 1/10W, SMD 0603	Samsung	RC1608F331CS
40	4	R4,R5,R6,R31	Resistor, 100K ohm 1% 1/10W, SMD 0603	Samsung	RC1608F104CS
41	2	R7,R11	Resistor, 24.9K ohm 0.1% 1/8W, SMD 0805	Yageo	RT0805BRD0729K4L
42	3	R8,R10,R12	Resistor, 10.0K ohm 0.1% 25ppm 1/10W, SMD 0603	Yageo	AT0603BRD0710KL
43	1	R9	Resistor, 100K ohm 0.1% 1/8W, SMD 0805	Yageo	RT0805BRD07100KL
44	1	R13	Resistor, 49.9 ohm 1% 1/10W, SMD 0603	Samsung	RC1608F49R9CS
45	1	R14	Resistor, 27.0K ohm 1% 1/10W, SMD 0603	Samsung	RC1608F273CS
46	2	R15,R16	Resistor, 2.00K ohm 1% 1/10W, SMD 0603	Samsung	RC1608F202CS
47	2	R18,R21	Resistor, 100 ohm 1% 1/10W, SMD 0603	Samsung	RC1608F101CS
48	1	R19	Resistor, 4.70K ohm 1% 1/10W, SMD 0603	Samsung	RC1608F472CS
49	1	R20	Resistor, 887 ohm 1% 1/10W, SMD 0603	Samsung	RC1608F8870CS
50	3	R22,R37,R39	Resistor, 10.0K ohm 1% 1/10W, SMD 0603	Samsung	RC1608F103CS
51	7	R23,R32,R33,R36,R38,R40,R41	Resistor, 1.00K ohm 1% 1/10W, SMD 0603	Samsung	RC1608F102CS

52	2	R24,R25	Resistor, 47.0K ohm 1% 1/10W, SMD 0603	Samsung	RC1608F473CS
53	1	R26	Resistor, 390K ohm 1% 1/10W, SMD 0603	Samsung	RC1608F394CS
54	1	R28	Resistor, 0ohms 1/10W, SMD 0603	Samsung	RC1608J000CS
55	1	R29	Resistor, 8.06K ohm 1% 1/10W, SMD 0603	Samsung	RC1608F8061CS
56	1	R42	Resistor, 12.1K ohm 1% 1/10W, SMD 0603	Samsung	RC1608F1212CS
57	1	TVS1	TVS DIODE 3.3VWM SOD523	NXP Semiconductors	PESD3V3U1UB,115
58	1	TVS2	Diode Array, Quint 3.3V ESD Prot., SOT363	NXP Semiconductor	PESD3V3L5UY,115
59	1	U1	IC, Buck Regulator, Synchronous, 5.0V 1A, 16QFN 3x3mm	Texas Instruments	TPS62153RGTT
60	1	U2	IC, Buck Regulator, Synchronous, 1.8V 1A, 16QFN 3x3mm	Texas Instruments	TPS62151RGTT
61	1	U3	IC, Quad Voltage Supervisor with Manual Reset Input, VSSOP-8	Texas Instruments	TPS386596L33DGKR
62	1	U4	IC, EEPROM, 256x8bit, I2C 400KHz, TSOT23-5	ON Semiconductor	CAT24AA02TDI-GT3
63	2	U5,U7	TVS Diode Array, 13 Channel HDMI, 5.5VWM 15VC 1pF Cio 0.05pF diff Cio, 5V Load Switch, 16TSSOP	Texas Instruments	TPD13S523PWR
64	1	U6	IC, Transmitter, HDMI 165MHz, 64-LQFP	Analog Devices	ADV7513BSW2
65	1	U8	IC, Receiver, HDMI 165MHz LP, 64LQFP	Analog Devices	ADV7611BSW2-P
66	1	U9	IC, USB PHY, Host/Dev/OTG, ULPI I/F, 24-QFN	Microchip Technology	USB3315C-CF-TR
67	1	U10	IC, USB TVS and Current Limit Switch, SOT-23-6	Texas Instruments	TPD3S014DBVR
68	1	U11	IC, Gigabit Ethernet Transceiver with RGMII support, QFN-48	Micrel	KSZ9031RNXCA
69	1	U12	IC, Dual Non-Inverting Buffer/Driver, Open Drain Output, SOT23-6	Diodes Incorporated	74LVC2G07W6-7
70	1	X1	Crystal, 28.63636MHz, 20ppm, 18pF, 50 Ohm, -40C - 85C, 3.2mm x 2.5mm DFN4 SMD	Abracon	ABM8G-28.63636MHz-18-D2Y-T
71	1	X2	Crystal, 25.0000MHz, 20ppm, 18pF, 50 Ohm, -40C - 85C, 3.2mm x 2.5mm DFN4 SMD	AVX Corp/Kyocera Corp	CX3225GB2500P0HPQCC
72	1	Y1	IC, Crystal Oscillator, 12.0MHz +/-25ppm, 3.2mm x 2.5mm SMD	Abracon	ASE-12.000MHz-LR-T
73	1	Y2	Oscillator, MEMS, 24.000MHz +/-50ppm, 1.8V-3.3V, SMD 3.2mmx2.5mm	Abracon LLC	ASEMB-24.000MHz-LC-T