

Bill Of Materials

Item	Quantity	Reference	Part	Comments	MFR	MFR Part#	Diag-Key Part#	PCB Footprint
1	1	C1	5pF_open	CAP 5.0PF 50V CERAMIC 0603 SMD. DO NOT PURCHASE. DO NOT MOUNT.	Panasonic	ECJ-1VC1H050C_open	PC0050CVCT-ND	CAP_HDC_0603
2	1	C2	5pF_open	CAP 5.0PF 50V CERAMIC 0603 SMD. DO NOT PURCHASE. DO NOT MOUNT.	Panasonic	ECJ-1VC1H050C_open	PC0050CVTR-ND	CAP_HDC_0603
3	5	C3,C4,C5,C28,C29	0.1uF	CAP CERAMIC 1UF 50V X7R 0603	Panasonic	ECJ-0E1X1C104K	PC2389CT-ND	CAP_HDC_0603
4	2	C6,C30	10uF	CAP CER 10UF 6.3V X5R 20% 0603	TDK	C1608XSRJ106M	445-4112-1-ND	CAP_HDC_0603
5	3	C7,C35,C52	1uF	CAP CER 1.0UF 16V X7R 10% 0603	TDK	C1608X7R1C105K	445-1604-1-ND	CAP_HDC_0603
6	9	C8,C16,C18,C57,C59,C70,C72,C73,C75	10uF	CAP CER 10UF 16V X7R 10% 1206	TDK	C3216X7R1C106K	445-4042-1-ND	CAP_HDC_1206
7	1	C9	10uF	CAP CER 10UF 16V X7R 10% 1206	Murata	C3216X7R1C106K	445-4042-1-ND	CAP_HDC_1206
8	14	C10,C11,C13,C19,C20,C22,C24,C31,C32,C36,C38,C43,C47,C60	0.01uF	CAP CER .01UF 25V X7R 0603	Johanson Dielectrics Inc	250R14W103KV4T	709-1154-1-ND	CAP_HDC_0603
9	25	C12,C14,C15,C17,C21,C23,C25,C33,C37,C39,C44,C45,C46,C48,C51,C53,C55,C56,C58,C61,C63,C64,C69,C71,C74	0.1uF	CAP .1UF 16V CERAMIC X7R 0603	Panasonic	ECJ-1V81C104K	PCC1762CT-ND	CAP_HDC_0603
10	2	C26,C27	100uF	CAP CERAMIC 100PF 60V 0603 SMD	Panasonic	ECJ-1VC1H101J	PC1014CVCT-ND	CAP_HDC_0603
11	1	C34	22uF	CAP CER 22UF 6.3V X5R 20% 0805	Panasonic	C2012XSRJ226M	445-1422-1-ND	805
12	1	C40	22uF	CAP ELECT 22UF 63V FK SMD	Panasonic	EEE-FK1J220XP	PCE3821CT-ND	Radial_Surface_Mount
13	1	C41	0.1uF	CAP CER 0.1UF 50V X7R 0603	Kemet	C0603C104M5RACCTU	C0603C104M5RACCTU-ND	CAP_0603
14	1	C42	1uF	CAP CER 1UF 50V X7R 0805	Murata	GRM21BR71H109K412L	490-4736-1-ND	CAP_HDC_0805
15	1	C49	100uF	CAP TANTALUM 100UF 6.3V 20% SMD	Rohm Semiconductor	TCTALD10J7M8R	511-1498-2-ND	3216_12_EIA_1206
16	1	C50	0.01uF	CAP CER .01UF 25V X7R 0603	Johanson Dielectrics Inc	250R07W103KV4T	709-1154-1-ND	CAP_HDC_0603
17	2	C54,C62	10uF	CAP CER 10UF 6.3V X7R 10% 0805	Taiyo Yuden	JMK212B7108KG-T	587-2396-1-ND	CAP_HDC_0805
18	4	C65,C66,C67,C68	4.7uF	CAP CER 4.7UF 16V X7R 0805	Murata	GRM21BR71C478X473L	490-4522-1-ND	CAP_HDC_0805
19	1	D1	Green_LED,0603	LED GREEN CLEAR THIN 0603 SMD	Liteon	LT-ST-C191KGKT	160-1446-1-ND	603
20	1	D2	DIODE SCHOTTKY	SCHOTTKY RECT 60V 1A SOD323F	NXP	PMEG6010CEJ.115	566-4138-1-ND	SC_90_SOD_323F
21	2	D3,D4	DIODE SCHOTTKY	DIODE SCHOTTKY 30V 1A SMD	Liteon	RSX101VA-30TR	MA215349LCT-ND	CON2
22	1	D5	Orange_LED,0603	LED RED ORAN CLEAR THIN 0603 SMD	Liteon	LT-ST-C191KFKT	160-1445-1-ND	603
23	1	J1	HEADER 16X2	CONN FEMALE 32POS DL .1" R/A GOLD	Sullins Connector Solutions	PPTC162LJBN-RC	SS569-ND	Through_Hole_Right_Angle
24	2	J2,J6	DC1X3	CONN HEADER -100 SINGL STR 3POS	Sullins Connector Solutions	PBC035AAN	S1011E-03-ND	Header_1X3P
25	1	J3	24Pin Header	CONN HEADER -100 DUAL STR 6POS	Sullins Connector Solutions	PBC033FAN	S2211E-03-ND	Header_24XP
26	2	J4,J7	RJ45	CONN MOD JACK 8POS R/A G-Y PCB	Tyco	4-06549-1	A97715-ND	RJ45_LED
27	1	J5	HEADER 16X2	CONN HEADER -100 DUAL R/A 32POS	Sullins Connector Solutions	PBC16DBBN	S2121E-16-ND	hdr_100mil_16X2
28	3	J8,J9,J11	CONN	CONN HEADER -100 SINGL STR 2POS	Sullins Connector Solutions	PBC025AAN	S1011E-02-ND	CON2
29	1	J10	CONN JACK PWR	CONN POWERJACK MINI R/A PCMT	Switchcraft Inc.	RAPCT12X	SC237-ND	3_terminal_thru_hole_power_jack
30	1	L1	39uH	INDUCTOR POWER 39UH 1.11A SMD	Würth	7447779139	32-1196-1-ND	Surface_Mount_100uH
31	1	L2	100uH	INDUCTOR 100UH 50MA 10% 0805	Taiyo Yuden	LBR2012T101K	587-2048-1-ND	100uH
32	11	L3,L4,L5,L6,L7,L8,L9,L10,L11,L12,L13	FB 1000 Ohm,0402	FERRITE CHIP 1000 OHM 0402	Murata	BLM15A1X102SN1D	490-5442-1-ND	RES_HDC-0402
33	1	P1	HSD_2X2_open	Automotive HSD Connector - Right Angle Plug for PCB. DO NOT PURCHASE. DO NOT LOAD.	Rosenberger	D4S20B-40ML5-Y_open		CON_HSD-4P_1
34	1	P2	HSD_2X2_open	Automotive HSD Connector - Right Angle Plug for PCB. DO NOT PURCHASE. DO NOT LOAD.	Rosenberger	D4S20B-40ML5-Y_open		CON_HSD-4P
35	2	Q1,Q2	MINI182N	TRANS GP SS NPN 40V SOT1416	OnSemi	MMBT3904TT1G	MMBT3904TT1GOSCT-ND	SC7_75
36	1	Q3	PMOSFET	MOSFET P-CH 20V 1.6A SSO73	Fairchild Semiconductor	FDN338P	FDN338PCT-ND	PMOSFET
37	9	R1,R10,R12,R15,R32,R33,R35,R37,R46	10K	RES 10K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ103V	P10KGCT-ND	RES_0603
38	4	R2,R3,R19,R29	4.7K	RES 4.7K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ472V	P47KGCT-ND	RES_0603
39	6	R4,R18,R20,R28,R31,R41	220 ohm	RES 220 OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ221V	P220GCT-ND	RES_0603
40	9	R5,R7,R8,R9,R23,R24,R25,R26,R27	33 ohm	RES 33 OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ330V	P33GCT-ND	RES_0603
41	1	R6	33 ohm	RES 33 OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ330V	P33GCT-ND	RES_0603
42	5	R11,R13,R34,R36,R38	1.0K	RES 1.0K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ102V	P10KGCT-ND	RES_0603
43	1	R14	1K	RES 1.0K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ102V	P10KGCT-ND	RES_0603
44	2	R16,R17	33 ohm_open	RES 33 OHM 1/10W 5% 0603 SMD. DO NOT PURCHASE. DO NOT MOUNT.	Panasonic	ERJ-3GEYJ330V	P33GCT-ND	RES_0603
45	2	R21,R22	1.8K	RES 1.8K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ182V	P18KGCT-ND	RES_0603
46	2	R30,R54	75 ohm,0603	RES 75 OHM 5%, 1/16W, 0603	Panasonic	ERJ-3GEYJ750V	P75GCT-ND	RES_0603
47	1	R39	0 Ohm	RES ZERO OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYR00V	P00GCT-ND	RES_HDC_0603
48	1	R40	1.0K_open	RES 1.0K OHM 1/10W 5% 0603 SMD. DO NOT PURCHASE. DO NOT MOUNT.	Panasonic	ERJ-3GEYJ102V_open	P10KGCT-ND	RES_0603
49	1	R42	0ohm	RES 0.0 OHM 1/10W 0603 SMD	Panasonic	ERJ-3GEYR00V	P00GCT-ND	RES_HDC_0603
50	1	R43	975_open	RES 910 OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ911V_open	P910GCT-ND	RES_HDC_0603
51	1	R44	10K	RES 10K OHM 1/10W 5% 0603 SMD. DO NOT PURCHASE. DO NOT MOUNT.	Panasonic	ERJ-3GEYJ103V	P10KGCT-ND	RES_HDC_0402
52	1	R45	470K	RES 470K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ474V	P470KGCT-ND	RES_HDC_060
53	2	R47,R51	9.31K	RES 9.31K OHM 1/10W 1% 0603 SMD	Vishay/Dale	CRCW06039K31FKEA	541-9-31KHCT-ND	RES_HDC_0603
54	2	R48,R52	5.62K	RES 5.62K OHM 1/10W 1% 0603 SMD	Vishay	CRCW0603562FKEA	541-5-629HCT-ND	RES_HDC_0603
55	2	R49,R53	51K	RES 51K OHM 1/10W 5% 0603 SMD	Panasonic	ERJ-3GEYJ513V	P51KGCT-ND	RES_HDC_0603
56	1	R50	0ohm_open	RES 0.0 OHM 1/10W 0603 SMD. DO NOT PURCHASE. DO NOT MOUNT.	Panasonic	ERJ-3GEYR00V_open	P00GCT-ND	RES_HDC_0603
57	2	R58,R59	0 ohm_open	RES 0.0 OHM 1/10W 0402 SMD. DO NOT PURCHASE. DO NOT MOUNT.	Panasonic	ERJ-2GE0R00X_open	P00JCT-ND	RES_0402
58	1	S1	SW DIP-2	SWITCH DIP HALF PITCH SMD	CTS	218-2LPST	CT218LPST-ND	Surface_Mount
59	2	S2,S4	SW PUSHBUTTON	LT SWITCH 2.1MM HT 240GF SMD	Panasonic	EVQ-P420M2	P11080SCT-ND	SPST_NO
60	1	S3	SW DIP-4	SWITCH DIP HALF PITCH APOS	CTS	218-4LPST	CT218LPST-ND	CT2184LPST
61	1	U1	DS90UB901Q	IC SERIALIZER	TI	DS90UB901	DS90UB901QSGE/NOPBCT-ND	324i_LLP
62	1	U2	ATMEL25	MCU AVR 2K ISP FLASH 1.8V 8-SOIC	Atmel	ATTINY25V-10SU	ATTINY25V-10SSU-ND	8_SOIC
63	2	U3,U7	MINI382N, 3.4-3.7V	IC VOLT DETECT 3.4V CMOS SMD	Panasonic	MINI382NP	MINI382NPCT-ND	Mini_3P
64	1	U4	LP2982AIM5-3.3	IC CONV DCDC STEP-DOWN SOT23-5	NSC	LP2982AIM5-3.3	LP2982AIM5-3.3CT-ND	SOT_23_5
65	2	U5,U11	LP2982AIM5-1.8	IC REG LDO MICRWR 250MA SOT23-5	NSC	LP2982AIM5-1.8	LP2982AIM5-1.8CT-ND	SOT_23_5
66	1	U6	DS90UB902Q	IC DESERIALIZER	TI	DS90UB902	DS90UB902QSGE/NOPBCT-ND	40id_LLP
67	1	U8	LM22671MRE-5.0	IC REG SWITCH BUCK .5A 5V 8PSOP	TI	LM22671MRE-5.0NOPB	LM22671MRE-5.0CT-ND	8_PSOP
68	1	U9	NC7SZ14/SOT23	IC INVERTER UNS SCHMITT 5V SOT23-5	Fairchild	NC7SZ14PSX	NC7SZ14PSXCT-ND	SC70_5
69	1	U10	NC7SZ74	IC FLIP FLOP D-TYPESINGLE USB	Fairchild	NC7SZ74K8X	NC7SZ74K8XCT-ND	USB_8_VSSOP
70	2	U12,U13	LP38693MP-ADJ	IC REG LDO 500MA ADJ SOT23-4	NSC	LP38693MP-ADJNOPB	LP38693MP-ADJCT-ND	SOT23-4
71	1	Y1	OSC4/SM	OSCILLATOR 27.000MHZ 3.3V SMD	Abracon	ASFL1-27.000MHZ-EKT	535-9263-1-ND	4_PIN_SMT

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