

Bill of Material

Item	RefDes	Value	Name	Pattern	Remark	QTY
1	C1	0.1uf	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
2	C2	47uF50V	20% 105C ELEC 6D11RAD	CAPPR-2.5/6.3h11		1
3	C3	0.1uf	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
4	C4	0.1uf	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
5	C5	47uF50V	20% 105C ELEC 6D11RAD	CAPPR-2.5/6.3h11		1
6	C6	47uF50V	20% 105C ELEC 6D11RAD	CAPPR-2.5/6.3h11		1
7	C7	47uF50V	20% 105C ELEC 6D11RAD	CAPPR-2.5/6.3h11		1
8	C8	0.1UF	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
9	C9	0.1UF	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
10	C10	0.1UF	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
11	C11	1UF	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
12	C12	1UF	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
13	C13	1UF	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
14	C14	xxx	50V 10% 105C X7R MLC	CAP-5.08/9.15x3	not used	0
15	C15	0.1UF	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
16	C16	0.1UF	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
17	C17	0.1UF	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
18	C18	100uF35V	20% 105C ELEC 6D11RAD	CAPPR-2.5/6.3h11		1
19	C19	100uF35V	20% 105C ELEC 6D11RAD	CAPPR-2.5/6.3h11		1
20	C20	0.1UF	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
21	C21	0.1UF	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
22	C22	100uF35V	20% 105C ELEC 6D11RAD	CAPPR-2.5/6.3h11		1
23	C23	100uF35V	20% 105C ELEC 6D11RAD	CAPPR-2.5/6.3h11		1
24	C24	0.1UF	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
25	C25	0.1UF	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
26	C26	100uF35V	20% 105C ELEC 6D11RAD	CAPPR-2.5/6.3h11		1
27	C27	47uF50V	20% 105C ELEC 6D11RAD	CAPPR-2.5/6.3h11		1
28	C28	0.1uf	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
29	C29	0.1uf	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
30	C30	0.1uf	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
31	C31	100uF35V	20% 105C ELEC 6D11RAD	CAPPR-2.5/6.3h11		1
32	C32	0.1uf	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
33	C33	100uF35V	20% 105C ELEC 6D11RAD	CAPPR-2.5/6.3h11		1
34	C34	0.1uf	50V 10% 105C X7R MLC	CAP-5.08/9.15x3		1
35	C35	100uF35V	20% 105C ELEC 6D11RAD	CAPPR-2.5/6.3h11		1
36	D1	4148	DIODE_1N4148	DO-35S		1
37	D2	1N4006	DIODE_1N4006	DO-41		1
38	D3	4148	DIODE_1N4148	DO-35S		1
39	D4	SR1100	DIODE_SR1100	DO-41		1
40	D5	xxx	DIODE_SR1100	DO-41	not used	0
41	D6	SR1100	DIODE_SR1100	DO-41		1
42	D7	SR1100	DIODE_SR1100	DO-41		1
43	D8	xxx	DIODE_SR1100	DO-41	not used	0
44	D9	SR1100	DIODE_SR1100	DO-41		1
45	D10	SR1100	DIODE_SR1100	DO-41		1
46	D11	xxx	DIODE_SR1100	DO-41	not used	0

Item	RefDes	Value	Name	Pattern	Remark	QTY
47	D12	4148	DIODE_1N4148	DO-35S		1
48	D13	4148	DIODE_1N4148	DO-35S		1
49	D14	4148	DIODE_1N4148	DO-35S		1
50	D15	4148	DIODE_1N4148	DO-35S		1
51	D16	4148	DIODE_1N4148	DO-35S		1
52	D17	4148	DIODE_1N4148	DO-35S		1
53	D18	4148	DIODE_1N4148	DO-35S		1
54	GX1	HD1X9	HD1X9	HD-1x9/2.54		1
55	JP1	HD1X3L	HD1X3L	HDL-1x3T/2.54/KK		1
56	JP2	HDR1X6ST	HDR1x6 Stackable	HDR-1x6/2.54 Pin Length=11mm	Programing Socket Install on bottom	1
57	JP3	HD1X3L	HD1X3L	HDL-1x3T/2.54/KK		1
58	JP4	HD1X3L	HD1X3L	HDL-1x3T/2.54/KK		1
59	JP5	HD1X3L	HD1X3L	HDL-1x3T/2.54/KK		1
60	JP6	HD1X3L	HD1X3L	HDL-1x3T/2.54/KK		1
61	JP7	HD1X4L	HD1X4L	HDL-1x4T/2.54/KK		1
62	JP8	HD1X3L	HD1X3L	HDL-1x3T/2.54/KK		1
63	JP9	HD1X3L	HD1X3L	HDL-1x3T/2.54/KK		1
64	JP10	HD1X8	HD1X8	HD-1x8/2.54		1
65	JP11	HD1X8	HD1X8	HD-1x8/2.54		1
66	JP12	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
67	JP13	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
68	JP14	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
69	JP15	HD1X4L	HD1X4L	HDL-1x4T/2.54/KK		1
70	JP16	HD1X3L	HD1X3L	HDL-1x3T/2.54/KK		1
71	JP17	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
72	JP18	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
73	JP19	HD1X4L	HD1X4L	HDL-1x4T/2.54/KK		1
74	JP20	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
75	JP21	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
76	JP22	HD1X3L	HD1X3L	HDL-1x3T/2.54/KK		1
77	JP23	HD1X4L	HD1X4L	HDL-1x4T/2.54/KK		1
78	JP24	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
79	JP25	HD1X4L	HD1X4L	HDL-1x4T/2.54/KK		1
80	JP26	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
81	JP27	HDR1X6ST	HDR1x6 Stackable	HDR-1x6/2.54 Pin Length=11mm	Programing Socket Install on bottom	1
82	JP28	HD1X3L	HD1X3L	HDL-1x3T/2.54/KK		1
83	JP29	HD1X3L	HD1X3L	HDL-1x3T/2.54/KK		1
84	JP30	HD1X3L	HD1X3L	HDL-1x3T/2.54/KK		1
85	JP31	HD1X3L	HD1X3L	HDL-1x3T/2.54/KK		1
86	JP32	HD1X4L	HD1X4L	HDL-1x4T/2.54/KK		1
87	JP33	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
88	JP34	HD1X4L	HD1X4L	HDL-1x4T/2.54/KK		1
89	JP35	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
90	JP36	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1

Item	RefDes	Value	Name	Pattern	Remark	QTY
91	JP37	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
92	JP38	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
93	JP39	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
94	JP40	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
95	JP41	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
96	JP42	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
97	JP43	HD1X2L	HD1X2L	HDL-1x2T/2.54/KK		1
98	LED1		LED-BI-COLOR CA	LED_3MM-RG	Common Anode Install on bottom	1
99	LED2		LED-BI-COLOR CA	LED_3MM-RG	Common Anode Install on bottom	1
100	LED3		LED-BI-COLOR CA	LED_3MM-RG	Common Anode Install on bottom	1
101	LED4		LED-BI-COLOR CA	LED_3MM-RG	Common Anode Install on bottom	1
102	LED5		LED-BI-COLOR CA	LED_3MM-RG	Common Anode Install on bottom	1
103	LED6		LED-BI-COLOR CA	LED_3MM-RG	Common Anode Install on bottom	1
104	LED7		LED-BI-COLOR CA	LED_3MM-RG	Common Anode Install on bottom	1
105	M1	SPS_3A	MODULE_SPS_3A-VER	SPS_3A_VER	Optional ON-BOARD OUT 15V to JP35	1
106	M2	xxx	MODULE_SPS_3A-VER	SPS_3A_VER	not used	0
107	M3	SPS_3A	MODULE_SPS_3A-VER	SPS_3A_VER	Optional ON-BOARD OUT 15V to JP14	1
108	M4	SPS_3A	MODULE_SPS_3A-VER	SPS_3A_VER	Optional ON-BOARD OUT 15V to JP39	1
109	MINI1	ProMini	PRO-MINI3	PROMINI3		1
110	MINI2	ProMini	PRO-MINI3	PROMINI3		1
111	Q1	BS250	PMOS_BS250	TO-92-100	VISHAY	1
112	Q2	2N7000	NMOS_2N7000	TO-92-100	Philips-NXP	1
113	Q3	2N7000	NMOS_2N7000	TO-92-100	Philips-NXP	1
114	Q4	2N7000	NMOS_2N7000	TO-92-100	Philips-NXP	1
115	Q5	2N7000	NMOS_2N7000	TO-92-100	Philips-NXP	1
116	R1	4.7K	RES400	RES-1/4W-MF		1
117	R2	3.9K	RES400	RES-1/4W-MF		1
118	R3	2K	RES400	RES-1/4W-MF		1
119	R4	10K	RES400	RES-1/4W-MF		1
120	R5	10K	RES400	RES-1/4W-MF		1
121	R6	10K	RES400	RES-1/4W-MF		1
122	R7	10K	RES400	RES-1/4W-MF		1
123	R8	xxx	RES400	RES-1/4W-MF		1
124	R9	82K1%	RES400	RES-1/4W-MF		1
125	R10	10K 1%	RES400	RES-1/4W-MF		1
126	R11	1K	RES400	RES-1/4W-MF		1

Item	RefDes	Value	Name	Pattern	Remark	QTY
127	R12	10K	RES400	RES-1/4W-MF		1
128	R13	220K1%	RES400	RES-1/4W-MF		1
129	R14	5.6K1%	RES400	RES-1/4W-MF		1
130	R15	220K1%	RES400	RES-1/4W-MF		1
131	R16	5.6K1%	RES400	RES-1/4W-MF		1
132	R17	xxx	RES400	RES-1/4W-MF	not used	0
133	R18	xxx	RES400	RES-1/4W-MF	not used	0
134	R19	xxx	RES400	RES-1/4W-MF	not used	0
135	R20	xxx	RES400	RES-1/4W-MF	not used	0
136	R21	xxx	RES400	RES-1/4W-MF	not used	0
137	R22	10	RES400	RES-1/4W-MF		1
138	R23	4.7K	RES400	RES-1/4W-MF		1
139	R24	10	RES400	RES-1/4W-MF		1
140	R25	10	RES400	RES-1/4W-MF		1
141	R26	10	RES400	RES-1/4W-MF		1
142	R27	10	RES400	RES-1/4W-MF		1
143	R28	10K	RES400	RES-1/4W-MF		1
144	R29	10K	RES400	RES-1/4W-MF		1
145	R30	10K	RES400	RES-1/4W-MF		1
146	R31	10K	RES400	RES-1/4W-MF		1
147	R32	10K	RES400	RES-1/4W-MF		1
148	R33	10K	RES400	RES-1/4W-MF		1
149	R34	10K	RES400	RES-1/4W-MF		1
150	R35	10K	RES400	RES-1/4W-MF		1
151	RN1	RN9-8R-4.7K	RN9-8R	SIP-9/23.46x2.5x2.54	CTS	1
152	RN2	RN9-8R-4.7K	RN9-8R	SIP-9/23.46x2.5x2.54	CTS	1
153	U1	HC08	IC_74HC08N	DIP-14	Texas Instruments	1
154	U2	7812CT	IC_7812CT	TO-220V/HS	National Semiconductor	1
155	U3	7805CT	IC_7805CT	TO-220V/HS	National Semiconductor	1
156	U4	LM393	IC_LM393N	DIP-8	Motorola	1
157	U5	LM358	IC_LM358N	DIP-8	Motorola	1
158	U6	IR2110	IC_IR2110	DIP-14	IR	1
159	U7	IR2110	IC_IR2110	DIP-14	IR	1
160	U8	IR2110	IC_IR2110	DIP-14	IR	1
161	U2 ,U3	TO220-HS	TO220-HS	HEATSINK-TO220	21x15x10mm M3 Thread	2
162	U4.U5	IC-DIP8	IC_SOCKET	DIP-8		2
163	U1,6,7,8	IC-DIP14	IC_SOCKET	DIP-14		4
164	MINI1,2	HDR1X13	HDR1X13	HDR-1X13/2.54		4
165	MINI1,2	HDR1X6	HDR1x6	HDR-1X6/2.54		2
166	MINI1,2	HDR1X5	HDR1X5	HDR-1X5/2.54		2
167	M1,2,4	HD1X1RT	HD1X1RT	HD-1X1-RT	Right Angle Pin for VIN	6

Page 5 of 5

Page 5 of 5