

# Bill of Materials

AL104

Footprint	Comment	Designator	Description	Quantity
DIP-4_S	PC817	U7	4-Pin Phototransistor Optocoupl	1
C1206_S	.1uF 1206	C7, C8, C10, C14, C23, C24, C25, C26	Capacitor	8
C1206_S	33nF 1206	C22	Capacitor	1
C1206_S	4.7nF 1206	C20	Capacitor	1
DO-41A_S	1N4007	D19	Default Diode	1
DO201	MUR420	D17	Default Diode	1
DO-15	P6KE200A	D18	Default Diode	1
SOT23_M_S	ESDA5V3L	D24, D25, D26, D27, D28, D29, D30	DUAL TRANSIL ARRAY FOR E	7
FIDUCIAL ROUND T	Fiducial - Round	FD1, FD2, FD3	Fiducial - Round 1.5mm Top-Bo	3
SOIC-SO28_M	PIC16F886-I/SO	U4	Flash-Based, 8-Bit CMOS Micro	1
XY7501_7.62_2PIN	CON 7501 2PIN	P4, P5, P6, P15	Header, 2-Pin	4
Conn_2Pin	Header 2	P19	Header, 2-Pin	1
Conn_2Pin	Header 2 + Buzzer	P8	Header, 2-Pin	1
XY9521 2 Pin	XY9521 2PIN	P1, P2, P3, P18	Header, 2-Pin	4
XY128_5.08_3PIN	XY128 3PIN	P9, P10, P11, P12, P13, P14, P16, P17	Header, 3-Pin	8
CONNDEBUG	Header 4	H1, H2	Header, 4-Pin	2
CON_ICSP	Header, 6-Pin	P7	Header, 6-Pin	1
INDUCTOR 5x8	Inductor 10uH Drum Core	L1	Inductor	1
SOT23_M	MMBT3906	Q1, Q2, Q3, Q4, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18	NPN General-purpose Transisto	17
DIP-8_S	VIPER53E	U6	OFF-line primary switch	1
SOT23_M	BC857	Q5	PNP General-purpose Transisto	1
Cap_1_2	100uF/25V	C13, C18	Polarized Capacitor (Radial)	2
Cap_1	10uF/40V	C19	Polarized Capacitor (Radial)	1
Cap_2	22uF/80V	C15	Polarized Capacitor (Radial)	1
Cap_1	4.7uF/40V	C21	Polarized Capacitor (Radial)	1
Cap_2-2	470uF/25V	C16	Polarized Capacitor (Radial)	1
C1206_S	1uF 1206	C1, C2, C3, C4, C5, C6, C9, C11, C12	Polarized Capacitor (Radial), Po	9
TO252AA	µA78M05CKTPR	U5	Positive-Voltage Regulator	1
Conn_3PIN	LM35DZ	U3	Precision Centigrade Temperatu	1
SOIC14_M	LM324AD	U1, U2	Quadruple Operational Amplifier	2
R1206_S	2.2K 1206	R107, R110	Resistor	2
AXIAL-0.5	100K .5W Metal Glaze Resistor	R70, R74	Semiconductor Resistor	2
R1206_S	100K 1206	R66, R71, R75, R77	Semiconductor Resistor	4
R1206_S	10E 1206	R106	Semiconductor Resistor	1
R1206_S	10K 1206	R58, R65, R69, R76	Semiconductor Resistor	4
R1206_S	1K 1206	R45, R46, R47, R50, R60, R61, R72, R73, R116	Semiconductor Resistor	9
R1206_S	1M 1206	R1, R9, R12, R20, R25, R31, R36, R44, R48, R53, R54, R56	Semiconductor Resistor	12
R1206_S	220E 1206	R79, R109	Semiconductor Resistor	2
R1206_S	220K 1206	R4, R8, R15, R19, R27, R30, R38, R41	Semiconductor Resistor	8
R1206_S	4.7K 1206	R5, R7, R16, R18, R26, R29, R37, R40, R51, R59, R62, R63, R67, R68, R78, R82, R83, R84, R89, R90, R95, R96, R98, R100, R103, R104, R112, R114, R115	Semiconductor Resistor	29
R1206_S	470E 1206	R80, R81, R85, R86, R87, R88, R91, R92, R93, R94, R97, R99, R101, R102, R105	Semiconductor Resistor	15
R1206_S	470K 1206	R6, R17, R28, R39, R111, R113	Semiconductor Resistor	6
R1206_S	47K 1206	R49, R57	Semiconductor Resistor	2
AXIAL-0.6_1W	680E 1W	R64	Semiconductor Resistor	1
AXIAL-0.5	MFR 1M .5W	R2, R3, R10, R11, R13, R14, R21, R22, R23, R24, R32, R33, R34, R35, R42, R43, R52, R55	Semiconductor Resistor	18
4148SMDW	LL4148	D2, D4, D5, D7, D9, D11, D14, D15, D20	Small Signal Fast Switching Dio	9
RELAY	Relay	K1, K2, K3, K4, K5, K6, K7, K8	SPDT Relay	8
Bourns_3352E_3306	PRESET 5K BOURNS 3306	BTS BATT, DG BATT, MAINS UV, TEMPERATURE	Tapped Resistor	4
EE25_HORIZTL	EE25 10PIN HORIZONTAL	T1	Three-winding Transformer (Sw	1
LED_1206_GREEN	LED 1206 GREEN	D22	Typical RED GaAs LED	1
LED_1206_YELLOW	LED 1206 YELLOW	D1	Typical RED GaAs LED	1
LED5MMRED	LED R/R 5MM	D3, D6, D8, D10, D12, D13, D16, D23	Typical RED GaAs LED	8
DO-35_S	Zenor 12V .5W	D21	Zener Diode 1N4741A	1
				233
Approved	Suraj K A			