

BOM for FW-TH

Designator	Description	Value	Package	Part Number	Supplier	Quantity
C1 C2 C6 C7 C8 C13	Capacitor X7R	0.1uF 25V	RAD-0.1	K104K15X7RF5TL2	Vishay/BC	6
C3A C3B	Capacitor Aluminum	470uF 25V		UVZ1E471MPD	Nichicon	2
C4 C12	Capacitor Polyester	0.022uF 250V	RAD-0.3	QXK2E103KTP	Nichicon	2
C5	Capacitor Aluminum	4.7uF 250V		UVR2E4R7MPD	Nichicon	1
C9 C11	Capacitor COG	18pF 50V	RAD-0.1	K180J15C0GF5TL2	Vishay/BC	2
C10	Supercap	0.33F 5.5V		EEC-SOHD334V	Panasonic	1
D1	Rectifier			1N4003	Diodes Inc	1
D2	High speed diode			UF4004	Micro Commercial	1
D3	Diode			1N914	Fairchild	1
J1	Power Jack 2.1mm			PJ-102A	CUI	1
J2	Header 3x1			PIR	not installed	
J3	Header 3x2			ISP	not installed	
JP1	Header 2			BAT	Generic	1
	Shunt			2-382811-1	Tyco	1
L1	Inductor	220uH		MSD1278-224	Coilcraft	1
L2	Inductor	10uH		1025R-44K	API Devlan	1
PCB				FLW-TH	Advanced Circuits	1
Q1 Q2 Q3 Q4	Transistor PNP		TO-92A	MPSA92	Fairchild	4
Q5	MOSFET		TO-220	IRL1640G	International Rectifier	1
Q6 Q7 Q8 Q9	Transistor NPN		TO-92A	MPSA42	Fairchild	4
R1 R2 R3 R4	Resistor 1/4W 5%	10k	AXIAL-0.4		Generic	4
R5	Resistor 1/4W 5%	1M	AXIAL-0.4		Generic	1
R6	Resistor 1/4W 5%	4.7k	AXIAL-0.4		Generic	1
R7 R27 R28 R29 R30	Resistor 1/4W 5%	100k	AXIAL-0.4		Generic	5
R8 R9	Resistor 1/4W 5%	47k	AXIAL-0.4		Generic	2
R10	Resistor 1/4W 5%	10R	AXIAL-0.4		Generic	1
R11	Resistor 1/4W 5%	2.2k	AXIAL-0.4		Generic	1
R12 R15 R26	Resistor 1/4W 5%	18k	AXIAL-0.4		Generic	3
R13 R14 R16 R17 R19 R23	Resistor 1/4W 5%	22k	AXIAL-0.4		Generic	6
R18 R20 R22 R24	Resistor 1/4W 5%	20k	AXIAL-0.4		Generic	4
R21 R25	Resistor 1/4W 5%	27k	AXIAL-0.4		Generic	2
S1	Switch DIP 8		DIP-16	195-8MST	CTS	1
S2 S3 S4	Switch PB			EG1837-ND	E-Switch	3
U1	Regulator		TO-92A	LM78L05ACZ	Fairchild	1
U2	HV driver		PLCC 28	HV5812	Supertex	1
U3	Processor		DIP 28	ATmega328P	Atmel	1
U4	Supervisor		TO-92A	MCP130-475DI	Microchip	1
SKU2	PLCC socket 28 pin			940-44-028-24-000000	Mill-Max	1
SKU3	DIP socket 28 pin			4828-3004-CP	3M	1
V1 V2 V3 V4	socket pins			0316-0-15-01-34-27-10-0	Mill-Max	68
Y1	Crystal	32.768kHz		AB38T-32.768KHZ	Abracon	1