

# Bill of Materials: hestia-B+ top.fzz

## Assembly List

Label	Part Type	Properties
18B20	NPN-Transistor	package TO92 [THT]; type NPN (ECB); DS18B20
C1	Capacitor	variant 0805; package 0805 [SMD]; part # 100nF
H	LEDs	variant 1206; package led-1206; RED
LCD	LCD screen	pins 1602; type 16x2 Character LCD
Q1	NPN-Transistor	package SOT-23 [SMD]; type NPN; BC847
R1-1	10k $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 10k $\Omega$
R1-2	10k $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 10k $\Omega$
R1-3	10k $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 10k $\Omega$
R1-4	10k $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 10k $\Omega$
R2-1	1k $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 1k $\Omega$
R2-2	1k $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 1k $\Omega$
R2-3	1k $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 1k $\Omega$
R2-4	1k $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 1k $\Omega$
R3	4.7k $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 4.7k $\Omega$
R4	27k $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 27k $\Omega$
R5	Trimmer Potentiometer	size Trimmer - 6mm; track Linear; maximum resistance 10k $\Omega$ ; package THT; type Trimmer Potentiometer
R6	130 $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 130 $\Omega$
R7	130 $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 130 $\Omega$
RESET	Pushbutton	package [THT]
RESET	Generic female header - 2 pins	pins 2; form ♀ (female); hole size 1.0mm,0.508mm; row single; pin spacing 0.1in (2.54mm); package THT
S1 (H)	Pushbutton	package [THT]
S2 (-)	Pushbutton	package [THT]

S3 (+)	Pushbutton	package [THT]
S4 (W)	Pushbutton	package [THT]
W	LEDs	variant 1206; package led-1206

## Shopping List

Amount	Part Type	Properties
1	NPN-Transistor	package TO92 [THT]; type NPN (ECB); DS18B20
1	Capacitor	variant 0805; package 0805 [SMD]; part # 100nF
2	LEDs	variant 1206; package led-1206
1	LCD screen	pins 1602; type 16x2 Character LCD
1	NPN-Transistor	package SOT-23 [SMD]; type NPN; BC847
4	10k $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 10k $\Omega$
4	1k $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 1k $\Omega$
1	4.7k $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 4.7k $\Omega$
1	27k $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 27k $\Omega$
1	Trimmer Potentiometer	size Trimmer - 6mm; track Linear; maximum resistance 10k $\Omega$ ; package THT; type Trimmer Potentiometer
2	130 $\Omega$ Resistor	tolerance $\pm 5\%$ ; package 1206 [SMD]; resistance 130 $\Omega$
5	Pushbutton	package [THT]
1	Generic female header - 2 pins	pins 2; form ♀ (female); hole size 1.0mm,0.508mm; row single; pin spacing 0.1in (2.54mm); package THT
1	Generic female header - 4 pins	pins 4; form ♀ (female); hole size 1.0mm,0.508mm; row single; pin spacing 0.1in (2.54mm); package THT
1	Generic female header - 26 pins	pins 26; form ♀ (female); hole size 1.0mm,0.508mm; row double; pin spacing 0.1in (2.54mm); package THT