Design: P42 Watt-A-Live
Rev: 1
Date: 21. April 2019

Item	Qty	Reference(s)	Value	Description	Mfr	Mfr PN	Footprint
1	4	C1, C2, C3, C4	100n	CAP CER 100nF 10% 25V X7R 0603			Capacitor_SMD:C_0603_1608Metric_Pad1.05x0.95mm_HandSolder
2	1	D1	LED	LED GREEN CLEAR 0603 SMD	Wurth	150060GS75000	LED_SMD:LED_0603_1608Metric_Pad1.05x0.95mm_HandSolder
3	1	J1J6	Supply	CONN SCREW TERMINAL 5MM 2PIN	Wurth	691137710004	TerminalBlock_RND:TerminalBlock_RND_205-00045_1x04_P5.00mm_Horizontal
5	1	J3	Select	CONN HEADER VERT 3POS 2.54MM	Wurth	61300311121	Connector_PinHeader_2.54mm:PinHeader_1x03_P2.54mm_Vertical
6	1	J4	Bypass	CONN HEADER VERT 2POS 2.54MM	Harwin	M20-9990246	Connector_PinHeader_2.54mm:PinHeader_1x02_P2.54mm_Vertical
9	1	Q1	2N7002	MOSFET N-CH 60V 0.115A SOT-23	ON Semiconductor	2N7002ET1G	Package_TO_SOT_SMD:SOT-23
11	4	R7, R8, R17, R25	0R	RES 0R 1A 0603			Resistor_SMD:R_0603_1608Metric_Pad1.05x0.95mm_HandSolder
12	2	R9, R10	1K0	RES 1K0 1% 1/10W 0603			Resistor_SMD:R_0603_1608Metric_Pad1.05x0.95mm_HandSolder
13	2	R11, R12	4K7	RES 4K7 1% 1/10W 0603			Resistor_SMD:R_0603_1608Metric_Pad1.05x0.95mm_HandSolder
14	6	R18, R19, R20, R21, R22, R23	47K	RES 47K 1% 1/10W 0603			Resistor_SMD:R_0603_1608Metric_Pad1.05x0.95mm_HandSolder
15	1	R13	0.05R	RES SHUNT 0.05R 1% 2W 2010	Ohmite	LVK20R050FER	P42:R_Shunt_2010
16	2	R14, R15	10R	RES 10R 1% 1/10W 0603			Resistor_SMD:R_0603_1608Metric_Pad1.05x0.95mm_HandSolder
17	1	R16	499R	RES 499R 0.1% 1/2W 1210	Vishay Dale	TNPW1210499RBEEA	Resistor_SMD:R_1210_3225Metric_Pad1.42x2.65mm_HandSolder
20	1	U1	INA209	IC CURRENT MONITOR 1% 16TSSOP	Texas Instruments	INA209AIPWR	Package_SO:TSSOP-16_4.4x5mm_P0.65mm

Do not populate							
4	1	J2, J5	DNP				Connector:Banana_Jack_1Pin
10	9	R1, R2, R3, R4, R5, R6, R24, R26, R27	DNP	RES 0R 1A 0603			Resistor_SMD:R_0603_1608Metric_Pad1.05x0.95mm_HandSolder
18	1	SH1	Adafruit_FeatherWing				P42:FeatherWing
19	1	SH2	ARDUINO_as_UNO				SHIELD_ARDUINO:ARDUINO_as_UNO_R3_CONTOUR
8	1	J6	Load	CONN SCREW TERMINAL 5MM 2PIN			TerminalBlock_RND:TerminalBlock_RND_205-00045_1x02_P5.00mm_Horizontal