



DEFCON China 1.0 Circuit Board Badge

Bill-of-Materials

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Notes:

1) Do Not Populate: P1

Item	Quantity	Reference	Manufacturer	Manuf. Part #	Distributor	Distrib. Part #	Description
1	1	BT1	MPD	BU2032SM-JJ-GTR	N/A	N/A	Battery Holder, CR2032, SMD
1b	1	N/A	Panasonic	CR2032	Digi-Key	P189-ND	Battery, Coin Cell, Lithium, 3V, 225mAh
2	9	C1, C2, C6, C7, C8, C9, C10, C12, C13	Kemet	C0603C104K4RACTU	Digi-Key	399-1096-2-ND	Capacitor, 0.1uF, 16V, Ceramic, 10%, X7R, 0603
3	1	C3	Samsung	CL10B103KB8NCNC	Digi-Key	1276-1921-2-ND	Capacitor, 0.01uF, 50V, Ceramic, 10%, X7R, 0603
4	2	C4, C5	AVX	06035A470JAT2A	Digi-Key	478-1171-2-ND	Capacitor, 47pF, 50V, Ceramic, 5%, C0G/NP0, 0603
5	1	C11	Kemet	T491A106M016AT	Digi-Key	399-3687-2-ND	Capacitor, 10uF, 16V, Tantalum, 20%, Size A
6	2	C14, C15	Taiyo Yuden	TMK212B7225KG-TR	Digi-Key	587-2991-2-ND	Capacitor, 2.2uF, 25V, Ceramic, 10%, X7R, 0805
7	4	D1, D9, D17, D25	Kingbright	AA3528SYCKT09	N/A	N/A	LED, Yellow, 250mcd, 2.0Vf, 590nm, Reverse Mount, PLCC-2
8	4	D2, D10, D18, D26	Kingbright	AA3528SECKT09	N/A	N/A	LED, Orange, 350mcd, 2.1Vf, 605nm, Reverse Mount, PLCC-2
9	8	D3, D4, D11, D12, D19, D20, D27, D28	Kingbright	AA3528SURCKT09	N/A	N/A	LED, Red, 350mcd, 1.95Vf, 630nm, Reverse Mount, PLCC-2
10	16	D5, D6, D7, D8, D13, D14, D15, D16, D21, D22, D23, D24, D29, D30, D31, D32	Kingbright	AA3528CGCKT09	N/A	N/A	LED, Green, 100mcd, 2.1Vf, 570nm, Reverse Mount, PLCC-2
11	1	D33	Kingbright	APT1608LQWF/D	N/A	N/A	LED, White, 35mcd, 2.65Vf, 0603
12	1	L1	TDK	MPZ2012S221AT000	Digi-Key	445-1568-2-ND	Inductor, Ferrite Bead, 220R @ 100MHz, 3A, 0805
13	1	L2	Taiyo Yuden	LBMF1608T100K	Digi-Key	587-1714-2-ND	Inductor, Wirewound, 10uH, 10%, 360mR, 80mA, 0603
14	1	P2	TE Connectivity	2173157-2	Verical	N/A	Connector, Micro-USB Type B, R/A, 5 position, SMD
15	2	Q1, Q3	Infineon	IRLML6402TRPBF	Digi-Key	IRLML6402PBFTR-ND	Transistor, MOSFET, P-Channel, 20V, 65mR @ 3.7A, SOT23
16	1	Q2	Infineon	IRLML2502TRPBF	Digi-Key	IRLML2502TRPBFTR-ND	Transistor, MOSFET, N-Channel, 20V, 45mR @ 4.2A, SOT23
17	8	R1, R3, R5, R6, R8, R9, R10, R15	Panasonic	ERJ-3GEYJ103V	Digi-Key	P10KGTR-ND	Resistor, 10k, 5%, 1/10W, 0603
18	2	R2, R4	Panasonic	ERJ-3GEYJ270V	Digi-Key	P27GTR-ND	Resistor, 27 ohm, 5%, 1/10W, 0603
19	1	R7	Panasonic	ERJ-3GEYJ332V	Digi-Key	P3.3KGTR-ND	Resistor, 3.3k, 5%, 1/10W, 0603
20	4	R11, R12, R13, R14	Panasonic	ERJ-3GEYJ470V	Digi-Key	P47GTR-ND	Resistor, 47 ohm, 5%, 1/10W, 0603
21	1	SW1	Panasonic	EVP-AA202K	Digi-Key	P13348SDKR-ND	Switch, SPST, Tactile Momentary, 160gf, 3.5 x 2.9mm, J-Lead
22	1	U1	FTDI	FT231XS-R	Digi-Key	768-1129-2-ND	IC, USB-to-UART Bridge, SSOP20
23	1	U2	Microchip	ATMEGA328P-AU	N/A	N/A	IC, Microcontroller, 32KB Flash, TQFP32
23b	1	N/A	Microchip	N/A	N/A	N/A	IC, Microcontroller, Programming
24	1	U3	STMicroelectronics	LIS3DHTR	Digi-Key	497-10613-6-ND	IC, Accelerometer, 3-Axis, 2-16g, LGA16
25	1	U4	Nexperia	74HC595PW,118	Digi-Key	1727-3068-2-ND	IC, Shift Register, 8-bit, TSSOP16
26	1	U5	Microchip	MCP1700T-3002E/MB	Digi-Key	MCP1700T-3002E/MBCT-ND	Voltage Regulator, LDO, 3.0V, 250mA, SOT89-3
27	1	Y1	Kyocera	PBRC8.00MR50X000	Mouser	581-PBRC8.00MR50X	Resonator, 8MHz, 0.5%, Internal 15pF Capacitor, SMD
28	1	PCB	Electronic Interconnect	DCN1.0	N/A	N/A	PCB Fabrication, Assembly, Test