A1B — 113990105

D0, D1, D2, D3, D4
3V3, 3V3
D5, D6, D7, D8, D9, D10
GND, GND

3V, 3V
D5, D6, D7, D8, D9, D10
GND, GND

A1A — 113990105

VIN, 3V3
EN, RST
A0, CLK, CMD
RSV1, RSV2
SD0, SD1, SD2, SD3
GND, GND

VIN, 3V
EN, RST
A0, CLK, CMD
RSV1, VUSB
SD0, SD1, SD2, SD3
GND, GND

J17 — 110990030
D5, D10, V3V/5V, GND
1, 2, 3, 4

microbuck
1 IN+    IN- 2
3 OUT+  OUT- 4
12V, GND, VIN, GND

LEDs:
D2 — LED2 — 3V / 3V1 — R1 Res3 1K
D3 — LED2 — VIN / VIN1 — R2 Res3 1K
D4 — LED2 — VUSB / VUSB1 — R3 Res3 1K
D5 — LED2 — VUSB/VIN / VUSB/VIN1 — R4 Res3 1K
D6 — LED2 — 12V / 12V1 — R5 Res3 1K

P2 — Header 15
15 A0
14 RSV1
13 VUSB
12 SD3
11 SD2
10 SD1
9 CMD
8 SD0
7 CLK
6 GND
5 3V
4 EN
3 RST
2 GND
1 VIN

S1 EG1218 — VUSB1, VIN1, VUSB/VIN
S2 EG1218 — VUSB/VIN1, 3V1, V3V/5V

P1 — Header 15X2
D0  1  2  D0
D1  3  4  D1
D2  5  6  D2
D3  7  8  D3
D4  9  10 D4
3V  11 12 3V
GND 13 14 GND
D5  15 16 D5
D6  17 18 D6
D7  19 20 D7
D8  21 22 D8
D9  23 24 D9
D10 25 26 D10
GND 27 28 GND
3V  29 30 3V

P4 — Header 15
15 D0
14 D1
13 D2
12 D3
11 D4
10 3V
9 GND
8 D5
7 D6
6 D7
5 D8
4 D9
3 D10
2 GND
1 3V

J4 — PJ-102A
1 12V
3 GND
2 GND
GND

P7 — Header 15
15 A0
14 RSV1
13 VUSB
12 SD3
11 SD2
10 SD1
9 CMD
8 SD0
7 CLK
6 GND
5 3V
4 EN
3 RST
2 GND
1 VIN

P5 — Header 4X2
3V  1  2  GND
3V  3  4  GND
3V  5  6  GND
3V  7  8  GND

P8 — Header 4X2
12V1 1  2  GND
12V1 3  4  GND
12V1 5  6  GND
12V1 7  8  GND

P6 — Header 4X2
VUSB/VIN 1  2  GND
VUSB/VIN 3  4  GND
VUSB/VIN 5  6  GND
VUSB/VIN 7  8  GND

J11 — 110990030: D6, D8, V3V/5V, GND — 1,2,3,4
J12 — 110990030: D3, D4, V3V/5V, GND — 1,2,3,4
J13 — 110990030: D2, D5, V3V/5V, GND — 1,2,3,4
J1 — 110990030: A0, NC, V3V/5V, GND — 1,2,3,4
J2 — 110990030: D1, D2, V3V/5V, GND — 1,2,3,4
J3 — 110990030: D1, D2, V3V/5V, GND — 1,2,3,4
J5 — 110990030: D3, D5, V3V/5V, GND — 1,2,3,4
J6 — 110990030: D5, D6, V3V/5V, GND — 1,2,3,4
J7 — 110990030: D6, D7, V3V/5V, GND — 1,2,3,4
J8 — 110990030: D9, D10, V3V/5V, GND — 1,2,3,4
J9 — 110990030: D8, D4, V3V/5V, GND — 1,2,3,4
J10 — 110990030: D7, D8, V3V/5V, GND — 1,2,3,4
J14 — 110990030: D1, D2, V3V/5V, GND — 1,2,3,4
J15 — 110990030: D1, D2, V3V/5V, GND — 1,2,3,4
J16 — 110990030: D1, D2, V3V/5V, GND — 1,2,3,4

| Line # | Name | Description | Designator | Quantity | Manufacturer 1 | Manufacturer Part Number 1 | Manufacturer Lifecycle 1 | Supplier 1 | Supplier Part Number 1 | Supplier Unit Price 1 | Supplier Subtotal 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | microbuck | | | 1 | | | | | | | |
| | 113990105 | - ESP8266 Transceiver; 802.11 b/g (Wi-Fi, WiFi, WLAN) 2.4GHz Evaluation Board | A1 | 1 | Gravitech | 15Fx1-254mm | Volume Production | Mouser | 992-15FX1-254MM | 1.05 | 1.05 |
| | LED2 | Typical RED, GREEN, YELLOW, AMBER GaAs LED | D2, D3, D4, D5, D6 | 5 | Wurth Electronics | 150120GS75000 | Volume Production | Mouser | 710-150120GS75000 | 0.23 | 1.15 |
| | 110990030 | GROVE 2MM 4PIN VERT CONN 10PCS | J1, J2, J3, J5, J6, J7, J8, J9, J10, J11, J12, J13, J14, J15, J16, J17 | 16 | Seeed Studio | 110990030 | | Mouser | 713-110990030 | 1.7 | 27.2 |
| | PJ-102A | 2.0 x 6.5 mm, 2.5 A, Horizontal, Through Hole, Tapered Pins, Dc Power Jack Connector | J4 | 1 | CUI | PJ-102A | Volume Production | Digi-Key | CP-102A-ND | 0.77 | 0.77 |
| | Header 15X2 | Header, 15-Pin, Dual row | P1 | 1 | | | | | | | |
| | Header 15 | Header, 15-Pin | P2, P4, P7 | 3 | Wurth Electronics | 61301511121 | Volume Production | Digi-Key | 732-5326-ND | 0.88 | 2.64 |
| | Header 4X2 | Header, 4-Pin, Dual row | P5, P6, P8 | 3 | | | | | | | |
| | Res3 | Resistor | R1, R2, R3, R4, R5 | 5 | Vishay | MCT0603MD1500BP100 | Not Recommended for New Design | Mouser | 594-MCT0603MD1500BP1 | 0.75 | 3.75 |
| | EG1218 | Slide Switch SPDT Through Hole | S1, S2 | 2 | E-Switch | EG1218 | Volume Production | Future Electronics | 9403163 | 0.48 | 0.96 |