

| ESP32 Breakout BOM | | | | | | | | |
|--------------------|------------------------------------|-----|-------------------|--------------------|--|-------------------|-----------|---|
| Item # | Reference Designator | Qty | Manufacturer | Mfg Part # | Description / Value | Package/Footprint | Type | Instructions / Notes |
| 1 | C1 C4 | 2 | Vishay | K101J15C0GF5TL2 | CAP CER 100PF 50V C0G/NP0 RADIAL | 2.5mm Radial | THRU-HOLE | |
| 2 | C9 C10 C11 | 3 | KEMET | C320C104K5R5TA7317 | 0.1 µF ±10% 50V Ceramic Capacitor X7R Radial | 2.5mm Radial | THRU-HOLE | |
| 3 | C2 C5 | 2 | Panasonic | ECA-1CM100I | 10 µF 16 V Aluminum Electrolytic Capacitor Radial | 2.5mm Pitch | THRU-HOLE | |
| 4 | C7 C8 | 2 | Panasonic | ECA-1CM470I | CAP ALUM 47UF 20% 16V RADIAL | 2.5mm Pitch | THRU-HOLE | |
| 5 | D1 D2 D3 D4 D5 | 5 | Kingbright | WP7113ID | LED RED DIFFUSED T-1 3/4 T/H | T-1 3/4 | THRU-HOLE | |
| 6 | J3 J4 J5 J10 | 4 | Sullins | PREC002SAAN-RC | Connector Header Through Hole 2 position 0.100" | 2POS | THRU-HOLE | |
| 7 | J11 J12 J13 J14 J15 | 5 | Sullins | PREC004SAAN-RC | CONN HEADER VERT 4POS 2.54MM | 4POS | THRU-HOLE | |
| 8 | J1 J2 | 2 | Sullins | PREC015SAAN-RC | CONN HEADER VERT 15POS 2.54MM | 15POS | THRU-HOLE | |
| 9 | J6 J7 J8 J9 | 4 | Sullins | PREC003SAAN-RC | Connector Header Through Hole 3 position 0.100" | 3POS | THRU-HOLE | |
| 10 | P1 P2 P3 P4 | 0 | | | | | | No component just pcb copper |
| 11 | Q1 Q2 Q3 Q4 | 4 | Onsemi | BSS138 | N-CH MOSFET 50V 0.34A SOT-23-3L | SOT-23 | SMD | |
| 12 | R15 R18 R21 R22 | 4 | YAGEO | CFR-25JR-52-200R | RES 200 OHM 5% 1/4W AXIAL | Axial | THRU-HOLE | |
| 13 | R1 | 1 | YAGEO | CFR-25JR-52-300R | RES 300 OHM 5% 1/4W AXIAL | Axial | THRU-HOLE | |
| 14 | R2 R5 R6 R9 | 4 | YAGEO | CFR-25JR-52-1K | RES 1K OHM 5% 1/4W AXIAL | Axial | THRU-HOLE | |
| 15 | R12 R13 R16 R17 R19 R20 R23 R24 | 8 | Panasonic | ERJ-6GEYJ103V | RES SMD 10K OHM 5% 1/8W 0805 | 0805 | SMD | |
| 16 | R4 R8 | 2 | YAGEO | CFR-25JR-52-10K | RES 10K OHM 5% 1/4W AXIAL | Axial | THRU-HOLE | |
| 17 | R10 R14 | 2 | YAGEO | CFR-25JR-52-47K | RES 47K OHM 5% 1/4W AXIAL | Axial | THRU-HOLE | |
| 18 | R3 R7 R11 | 3 | Vishay | T73YP104KT20 | TRIMMER 100K OHM 0.5W PC PIN TOP | 2.5mm Pitch | THRU-HOLE | |
| 19 | S1 S2 S3 S4 S5 | 5 | TE Connectivity | 1825910-6 | 50mA Straight SPST 160gf 24V Plugin Tactile Switch | Plugin | THRU-HOLE | |
| 20 | U2 | 2 | Sullins | PPTC151LFBN-RC | CONN HDR 15POS 0.1 TIN PCB | 15POS | THRU-HOLE | Two 15 pin female headers are installed so the user can plug in ESP32_DevKit_V1_DOIT module. For best alignment plug an ESP32 module into the headers and then solder to PCB. |
| 21 | U1 | 1 | Texas Instruments | LM358P | IC OPAMP GP 2 CIRCUIT 8DIP | DIP-8 | THRU-HOLE | |