

| Designator | Comment | Footprint | Quantity |
|------------|----------|-----------|----------|
| C1 | 100uF | RVT | 1 |
| C2 | 0.1uF | C0603 | 1 |
| C3 | 0.1uF | C0603 | 1 |
| C4 | 22uF | RVT4X5.5 | 1 |
| C5 | 100uF | RVT | 1 |
| C6 | 0.1uF | C0603 | 1 |
| C7 | 10uF | RVT4X6 | 1 |
| C8 | 2.2uF | C0603 | 1 |
| C9 | 150pF | C0603 | 1 |
| C10 | 0.1uF | C0603 | 1 |
| C11 | 0.1uF | C0603 | 1 |
| C12 | 0.1uF | C0603 | 1 |
| C13 | 0.1uF | C0603 | 1 |
| C14 | 22pF | C0603 | 1 |
| C15 | 0.1uF | C0603 | 1 |
| C16 | 10pF | C0603 | 1 |
| C17 | 22pF | C0603 | 1 |
| C18 | 10pF | C0603 | 1 |
| C19 | 0.1uF | C0603 | 1 |
| C20 | 0.1uF | C0603 | 1 |
| C21 | 0.1uF/NL | C0603 | 1 |
| C22 | 22pF | C0603 | 1 |
| C23 | 22pF | C0603 | 1 |
| C24 | 0.1uF | C0603 | 1 |
| C25 | 1uF | C0603 | 1 |
| C27 | 0.1uF | C0603 | 1 |
| C28 | 0.1uF | C0603 | 1 |
| C29 | 0.1uF | C0603 | 1 |
| C30 | 0.1uF | C0603 | 1 |
| C31 | 10uF | RVT4X6 | 1 |
| C32 | 10uF | RVT4X6 | 1 |
| C33 | 0.1uF | C0603 | 1 |
| C34 | 1uF | C0603 | 1 |
| C35 | 1uF | C0603 | 1 |
| C36 | 1uF | C0603 | 1 |
| C37 | 1uF | C0603 | 1 |
| C38 | 1uF | C0603 | 1 |
| C39 | 1uF | C0603 | 1 |
| C40 | 0.1uF | C0603 | 1 |
| C41 | 0.1uF | C0603 | 1 |
| C42 | 0.1uF | C0603 | 1 |
| Cm1_M1 | 100uF | RVT | 1 |
| Cm1_M2 | 100uF | RVT | 1 |
| Cm1_M3 | 100uF | RVT | 1 |
| Cm1_M4 | 100uF | RVT | 1 |
| Cm2_M1 | 0.1uF | R0603 | 1 |

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| Cm2_M2 | 0.1uF | R0603 | 1 |
| Cm2_M3 | 0.1uF | R0603 | 1 |
| Cm2_M4 | 0.1uF | R0603 | 1 |
| Cm4_M1 | 0.1uF | R0603 | 1 |
| Cm4_M2 | 0.1uF | R0603 | 1 |
| Cm4_M3 | 0.1uF | R0603 | 1 |
| Cm4_M4 | 0.1uF | R0603 | 1 |
| Cm5_M1 | 0.1uF | R0603 | 1 |
| Cm5_M2 | 0.1uF | R0603 | 1 |
| Cm5_M3 | 0.1uF | R0603 | 1 |
| Cm5_M4 | 0.1uF | R0603 | 1 |
| Cm6_M1 | 0.1uF | R0603 | 1 |
| Cm6_M2 | 0.1uF | R0603 | 1 |
| Cm6_M3 | 0.1uF | R0603 | 1 |
| Cm6_M4 | 0.1uF | R0603 | 1 |
| Cm7_M1 | 0.22uF | R0603 | 1 |
| Cm7_M2 | 0.22uF | R0603 | 1 |
| Cm7_M3 | 0.22uF | R0603 | 1 |
| Cm7_M4 | 0.22uF | R0603 | 1 |
| D1 | SMA-S1G-1A | D-SMA | 1 |
| D2 | S1A-13-F | D-SMA | 1 |
| D3 | LED | LED0603 | 1 |
| D4 | B340A-13-F | D-SMA | 1 |
| D5 | SS12 | D-SMA | 1 |
| D8 | LED | LED0603 | 1 |
| D9 | LED | LED0603 | 1 |
| D10 | LED | LED0603 | 1 |
| EXP1 | Header 5X2 | DC14P | 1 |
| F1 | 30A | F1206 | 1 |
| F2 | 15A | F1206 | 1 |
| F3 | RCL-1.5A | MF-MSMF050 | 1 |
| F4 | 500mA | MF-MSMF050 | 1 |
| FAN2 | Header 2 | XH-2A | 1 |
| Fid1 | Fiducial | Fiducial-A | 1 |
| Fid2 | Fiducial | Fiducial-A | 1 |
| Fid3 | Fiducial | Fiducial-A | 1 |
| J1 | JTAG | HDR2X3 | 1 |
| J2 | USB | USBB | 1 |
| J3 | Header 9 | XH-9A | 1 |
| J4 | Header 2 | 129-5.08 | 1 |
| J5 | DG302-2P | DG302-5.0-2P | 1 |
| J6 | Header 2 | XH-2A | 1 |
| J7 | X | XH-3A | 1 |
| J8 | Y | XH-3A | 1 |
| J9 | Z- | XH-3A | 1 |
| J10 | Z+ | XH-3A | 1 |
| Jm1_M1 | XH-4A | XH-4A | 1 |

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|--------|-----------------|-----------|---|
| Jm1_M2 | XH-4A | XH-4A | 1 |
| Jm1_M3 | XH-4A | XH-4A | 1 |
| Jm1_M4 | XH-4A | XH-4A | 1 |
| Jm2_M4 | XH-4A | XH-4A | 1 |
| L1 | DO3316P 15uH-3A | DO3316 | 1 |
| M1 | ESP-12S | ESP-12S-A | 1 |
| MT_DET | Header 3 | XH-3A | 1 |
| POWER | DG302-5.0 | 129-5.08 | 1 |
| POWER0 | DC-005 | DC-005 | 1 |
| Q1 | HY3403 | TO-252AA | 1 |
| Q2 | HY1403 | TO-252AA | 1 |
| Q3 | HY1403 | TO-252AA | 1 |
| R1 | 1.8K | R0603 | 1 |
| R2 | 100K | R0603 | 1 |
| R3 | 210K | R0603 | 1 |
| R4 | 40.2k | R0603 | 1 |
| R5 | 24.9k | R0603 | 1 |
| R6 | 100K | R0603 | 1 |
| R7 | 100K | R0603 | 1 |
| R8 | 10K | R0603 | 1 |
| R9 | 10K | R0603 | 1 |
| R10 | 100K | R0603 | 1 |
| R11 | 4.7K | R0603 | 1 |
| R12 | 4.7K | R0603 | 1 |
| R13 | 10K | R0603 | 1 |
| R16 | 1K | R0603 | 1 |
| R17 | 1K | R0603 | 1 |
| R18 | 22 | R0603 | 1 |
| R19 | 22 | R0603 | 1 |
| R20 | 10K | R0603 | 1 |
| R21 | 10K | R0603 | 1 |
| R22 | 10K | R0603 | 1 |
| R23 | 10K | R0603 | 1 |
| R25 | 10K | R0603 | 1 |
| R26 | 1K | R0603 | 1 |
| R27 | 10K | R0603 | 1 |
| R28 | 10K | R0603 | 1 |
| R29 | 10K | R0603 | 1 |
| R33 | 10K | R0603 | 1 |
| R34 | 10K | R0603 | 1 |
| R35 | 10K | R0603 | 1 |
| R36 | 10K | R0603 | 1 |
| R37 | 10K | R0603 | 1 |
| R38 | 10K | R0603 | 1 |
| R39 | 10K | R0603 | 1 |
| R40 | 10K | R0603 | 1 |
| R41 | 4.7K | R0603 | 1 |

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| R42 | 4.7K | R0603 | 1 |
| R43 | 1K | R0603 | 1 |
| R44 | 1K | R0603 | 1 |
| R45 | 1K | R0603 | 1 |
| R46 | 1K | R0603 | 1 |
| R47 | 1K | R0603 | 1 |
| R48 | 1K | R0603 | 1 |
| R49 | 10K | R0603 | 1 |
| R50 | 10K | R0603 | 1 |
| R51 | 1.8K | R0603 | 1 |
| R52 | 1.8K | R0603 | 1 |
| R53 | 1.8K | R0603 | 1 |
| R54 | 100 | R0603 | 1 |
| R55 | 100 | R0603 | 1 |
| Rm1_M1 | 0.2 | R0805 | 1 |
| Rm1_M2 | 0.2 | R0805 | 1 |
| Rm1_M3 | 0.2 | R0805 | 1 |
| Rm1_M4 | 0.2 | R0805 | 1 |
| Rm2_M1 | 0.2 | R0805 | 1 |
| Rm2_M2 | 0.2 | R0805 | 1 |
| Rm2_M3 | 0.2 | R0805 | 1 |
| Rm2_M4 | 0.2 | R0805 | 1 |
| Rm3_M1 | 10K | R0603 | 1 |
| Rm3_M2 | 10K | R0603 | 1 |
| Rm3_M3 | 10K | R0603 | 1 |
| Rm3_M4 | 10K | R0603 | 1 |
| Rm6_M1 | 0 | R0603 | 1 |
| Rm6_M2 | 0 | R0603 | 1 |
| Rm6_M3 | 0 | R0603 | 1 |
| Rm6_M4 | 0 | R0603 | 1 |
| RPK1 | 100 | RPACK4 | 1 |
| RPK2 | 100 | RPACK4 | 1 |
| RPK3 | 100 | RPACK4 | 1 |
| RPK4 | 100 | RPACK4 | 1 |
| RPK5 | 10 | RPACK4 | 1 |
| RPK6 | 100K | RPACK4 | 1 |
| Ry1 | 1M | R0603 | 1 |
| Ry2 | 1M | R0603 | 1 |
| SD1 | microSD | microSD-2 | 1 |
| TB | Header 2 | XH-2A | 1 |
| TH | Header 2 | XH-2A | 1 |
| U1 | MP1584EN | SOIC8E | 1 |
| U2 | LM1117-3.3V | SOT223-4N | 1 |
| U3 | STM32F103RCT6 | LQFP64 | 1 |
| U4 | AT24C16N-10SI-2.7 | SO8 | 1 |
| U5 | CH340G | SO16 | 1 |
| U6 | SN74LVC1T45DCKT | DCK6 | 1 |

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|-------|-----------------|--------|---|
| U7 | SN74LVC1T45DCKT | DCK6 | 1 |
| U8 | SN74LVC1T45DCKT | DCK6 | 1 |
| U9 | SN74LVC1T45DCKT | DCK6 | 1 |
| U10 | SN74LVC1T45DCKT | DCK6 | 1 |
| Um_M1 | HR4988 | QFN28 | 1 |
| Um_M2 | HR4988 | QFN28 | 1 |
| Um_M3 | HR4988 | QFN28 | 1 |
| Um_M4 | HR4988 | QFN28 | 1 |
| Y1 | 8M | Y | 1 |
| Y2 | 32.768K | FC-135 | 1 |
| Y3 | 12M | Y | 1 |
| Z1 | CG0603MLC-05E | R0603 | 1 |
| Z2 | CG0603MLC-05E | R0603 | 1 |
| Z3 | CG0603MLC-05E | R0603 | 1 |