



| Comment         | Description                             | Designator                         | Footprint                    | LibRef           | Quantity | Variant      |
|-----------------|---|------------------------------------|------------------------------|------------------|----------|--------------|
|                 |   | C1, C2, C8, C17,                   |                              |                  |          |              |
| 106             | Cap SMD                                 | C18, C19, C20, C21                 | SM-0805                      | СМ               | 8        |              |
| 0.1uF           | Cap SMD<br>WR-PHD 2.54 mm               | C3                                 | SM-0805                      | СМ               | 1        |              |
|                 | Angled Socket                           |                                    |                              |                  |          |              |
| JP4             | Header                                  | C4<br>CE C4                        | HDR2.54 4DV                  | JP4              | 2        |              |
| 1nF             | Cap SMD<br>WR-PHD 2.54 mm               | C5, C6                             | SM-0805                      | СМ               | 2        |              |
| JP3             | Angled Socket<br>Header                 | C7                                 | HDR2.54 3DV                  | JP3              | 1        |              |
| JF3             | WR-PHD 2.54 mm                          | C7                                 | HDR2.54 3DV                  | JF3              |          |              |
| JP5             | Angled Socket<br>Header                 | C9                                 | JP5-C1T                      | JP5              | 1        |              |
| 3. 0            | WR-PHD 2.54 mm                          | ,                                  | 3.0011                       | 3. 0             |          |              |
| JP5             | Angled Socket<br>Header                 | C10                                | HDR2.54 5DV                  | JP5              | 1        |              |
|                 | WR-PHD 2.54 mm                          |                                    |                              |                  |          |              |
| JP5x2           | Dual Socket<br>Header                   | C11                                | JP5-D2T                      | JP5x2            | 1        |              |
|                 | WR-PHD 2.54 mm                          |                                    |                              |                  |          |              |
| JP4x2           | Dual Socket<br>Header                   | C12                                | JP4-D2T                      | JP4x2            | 1        |              |
| 1000uF/25V      | Cap 1000uF/16V -<br>220uF/50V           | C13, C14, C15, C16                 | CD1 5/3 /                    | CP4              | 4        |              |
| 1000ur/23V      | WR-PHD 2.54 mm                          | C13, C14, C13, C10                 | CF1.5/3.4                    | CF4              | 4        |              |
| JP8x2           | Dual Socket<br>Header                   | C22                                | 61201621621                  | JP8x2            | 1        |              |
| JI UAZ          | ricadei                                 | C23, C24, C25,                     | 01201021021                  | JI OAZ           |          |              |
|                 |   | C26, C27, C28,<br>C29, C31, C33,   |                              |                  |          |              |
| 104             | Cap SMD                                 | C34, C35, C36                      | SM-0805                      | СМ               | 12       |              |
| 22P             | Cap SMD                                 | C30, C32                           | SM-0805                      | СМ               | 2        | $oxed{oxed}$ |
| Diode           |   | D1, D2, D4                         | DIO-SMD-106                  | Diode            | 3        |              |
| 3V6             | Diode Zener                             | D3                                 | SOD123                       | Diode Zener      | 1        | <u> </u>     |
| Fuse            | RS232 - RS485                           | F1, F2, F3                         | RES-SMD-1812                 | FUSE             | 3        |              |
| MAX485          | (Same sn75176)                          | IC1                                | SO8                          | MAX485           | 1        |              |
| KF4             | Magnatia Cara                           | J1                                 | KF4-5.08<br>INDUCTOR 3A      | KF4              | 1        |              |
| 220mH           | Magnetic-Core<br>Inductor               | L1                                 | VERTICAL                     | Inductor Iron    | 1        |              |
| LCD 16x2A       | LCD dipslay 16                          | LCD1                               | LCD16X2                      | LCD16x2A         | 1        |              |
| ECD TOXZA       | char, 2 line                            | LCDT                               | SM-LED-0805-                 | ECD TOXZA        | - '      |              |
| LED             |   | LED1                               | Green                        | LED              | 1        |              |
| LED             |   | LED2<br>LED3, LED4, LED5,          | SM-LED-0805-Blue             | LED              | 1        |              |
|                 |   | LED6, LED7, LED8,                  |                              |                  |          |              |
| LED<br>2N3904   | NPN 600mW, ECB                          | LED9, LED10<br>Q1                  | SOT23-231                    | LED<br>2N3904    | 1        |              |
| 2113704         | INFIN GOGITIV, ECB                      | Q1                                 | 30123-231                    | 2143704          | - '      |              |
|                 |   | R1, R3, R5, R12,<br>R13, R14, R15, |                              |                  |          |              |
| 1k              | Resistor R1/4W                          | R16, R17, R18, R19                 | RES-SMD-0805                 | R                | 11       |              |
| 330R            | Resistor R1/4W                          | R2, R10, R11, R25                  | RES-SMD-0805                 | R                | 4        |              |
| 120R            | Resistor R1/4W                          | R4                                 | RES-SMD-0805                 | R                | 1        |              |
|                 |   | R6, R7, R8, R9,                    |                              |                  |          |              |
|                 |   | R21, R28, R31,<br>R32, R33, R34,   |                              |                  |          |              |
| 10K             | Resistor R1/4W                          | R35, R36, R39, R40                 | RES-SMD-0805                 | R                | 14       |              |
| 2k4             | Resistor R1/4W                          | R20, R26                           | RES-SMD-0805                 | R                | 2        |              |
| 27k             | Resistor R1/4W                          | R22, R29                           | RES-SMD-0805                 | R                | 2        |              |
| 68k             | Resistor R1/4W                          | R23, R30                           | RES-SMD-0805                 | R                | 2        |              |
| 4k7<br>22R      | Resistor R1/4W<br>Resistor R1/4W        | R24, R27<br>R37, R38               | RES-SMD-0805<br>RES-SMD-0805 | R<br>R           | 2        |              |
| 221             | WS-DITV 2.54 mm                         | K37, K36                           | KE3-3IVID-0803               | K                | 2        |              |
|                 | small compact THT<br>flat actuator with |                                    |                              |                  |          |              |
| =partNo         | top tape                                | S1                                 | SW-DIP8                      | SWDIP8           | 1        |              |
| SW              | Switch-Button                           | S2                                 | BUTTON-SMD<br>2PIN           | SW-Button        | 1        |              |
| SB              | zc.i zatton                             | SB1, SB2, SB3                      | SB                           | SB               | 3        |              |
| Speaker         | Speaker Chip                            | SP1                                | SPK                          | SPK              | 1        |              |
| Tact Switch     |   | SW1, SW2, SW3,                     | SW4_12X12_LAGER              | SW4              | 5        |              |
| Tact Switch     |   | SW4, SW5<br>TVS1, TVS2, TVS3,      | SVV 4_1ZA IZ_LAGER           |                  | 5        |              |
| PSD12C          |   | TVS4                               | DIO-SMD-B                    | Diode TVS        | 4        |              |
| 74HC14          |   | U1                                 | SO14                         | 74HC14           | 1        |              |
| 78XX<br>AMS1117 |   | U2<br>U3                           | TO252-123<br>SOT223          | LM78XX<br>AMS117 | 1        |              |
| mivio i i I /   | ARM Cortex-M3 32-                       | 0.3                                | 501223                       | PINIS LT/        | 1        |              |
|                 | bit MCU, 64 KB                          |                                    |                              |                  |          |              |
|                 | Flash, 20 KB<br>Internal RAM, 37        |                                    |                              |                  |          |              |
|                 | I/Os, 48-pin LQFP, -<br>40 to 85 degC,  |                                    |                              |                  |          |              |
| STM32F103C8T6TR | Tape and Reel                           | U4                                 | STM-LQFP48_N                 | STM32F103C8T6TR  | 1        |              |
| 10k             |   | VR1                                | VR-S2                        | Resistor Var     | 1        |              |
|                 | Crystal, 32.768<br>KHz, -40 to 85       |                                    |                              |                  |          |              |
| 08.46           | degC, 3.2 x 1.5 x                       | V1                                 | VII                          | VT2              |          |              |
| 8Mhz            | 0.9 mm SMD                              | X1                                 | XT2                          | XT2              | 1        |              |