

| Componenti necessari per l'assemblaggio della BDS                                                |                                                                                                |        |                                                                                                                                                                                                                             |
|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prefisso                                                                                         | descrizione                                                                                    | quant. | link (solo per indicazione)                                                                                                                                                                                                 |
| VIN                                                                                              | Led blu da 3,3v                                                                                | 1      | <a href="https://it.aliexpress.com/item/1005003323707856.html?spm=a2g0o.order_list.order_list_main.621.7af93696">https://it.aliexpress.com/item/1005003323707856.html?spm=a2g0o.order_list.order_list_main.621.7af93696</a> |
| 5V                                                                                               | Led rosso da 3,3v                                                                              | 1      | <a href="https://it.aliexpress.com/item/1005003323707856.html?spm=a2g0o.order_list.order_list_main.621.7af93696">https://it.aliexpress.com/item/1005003323707856.html?spm=a2g0o.order_list.order_list_main.621.7af93696</a> |
| 3,3v                                                                                             | Led verde da 3,3v                                                                              | 1      | <a href="https://it.aliexpress.com/item/1005003323707856.html?spm=a2g0o.order_list.order_list_main.621.7af93696">https://it.aliexpress.com/item/1005003323707856.html?spm=a2g0o.order_list.order_list_main.621.7af93696</a> |
| C1/C4/C5                                                                                         | Elettrol. 100 µF 25 VI                                                                         | 3      | <a href="https://it.aliexpress.com/item/1005003189675117.html?spm=a2g0o.order_list.order_list_main.626.7af93696">https://it.aliexpress.com/item/1005003189675117.html?spm=a2g0o.order_list.order_list_main.626.7af93696</a> |
| C2/C3                                                                                            | Elettrol. 10 µF 25 VI                                                                          | 2      | <a href="https://it.aliexpress.com/item/1005003189675117.html?spm=a2g0o.order_list.order_list_main.626.7af93696">https://it.aliexpress.com/item/1005003189675117.html?spm=a2g0o.order_list.order_list_main.626.7af93696</a> |
| C3                                                                                               | Condensatore 10 nF                                                                             | 1      | <a href="https://it.aliexpress.com/item/1005003189675117.html?spm=a2g0o.order_list.order_list_main.626.7af93696">https://it.aliexpress.com/item/1005003189675117.html?spm=a2g0o.order_list.order_list_main.626.7af93696</a> |
| D1/D2/D3/D4                                                                                      | Diodo 1N4007                                                                                   | 4      | <a href="https://it.aliexpress.com/item/1005002772647658.html?spm=a2g0o.order_list.order_list_main.717.7af93696">https://it.aliexpress.com/item/1005002772647658.html?spm=a2g0o.order_list.order_list_main.717.7af93696</a> |
| R1                                                                                               | Resistenza 220Ω 1/8W                                                                           | 1      | <a href="https://it.aliexpress.com/item/33025939683.html?spm=a2g0o.order_list.order_list_main.609.7af93696">https://it.aliexpress.com/item/33025939683.html?spm=a2g0o.order_list.order_list_main.609.7af93696</a>           |
| R2/.R9                                                                                           | Resistenza 10 KΩ 1/8W                                                                          | 8      | <a href="https://it.aliexpress.com/item/33025939683.html?spm=a2g0o.order_list.order_list_main.609.7af93696">https://it.aliexpress.com/item/33025939683.html?spm=a2g0o.order_list.order_list_main.609.7af93696</a>           |
| R10                                                                                              | Resistenza 560 Ω 1/8W                                                                          | 1      | <a href="https://it.aliexpress.com/item/33025939683.html?spm=a2g0o.order_list.order_list_main.609.7af93696">https://it.aliexpress.com/item/33025939683.html?spm=a2g0o.order_list.order_list_main.609.7af93696</a>           |
| R11                                                                                              | Resistenza 1 KΩ 1/8W                                                                           | 1      | <a href="https://it.aliexpress.com/item/33025939683.html?spm=a2g0o.order_list.order_list_main.609.7af93696">https://it.aliexpress.com/item/33025939683.html?spm=a2g0o.order_list.order_list_main.609.7af93696</a>           |
| MF1                                                                                              | Mos-fet IRF520                                                                                 | 1      | <a href="https://it.aliexpress.com/item/1005007084867411.html?spm=a2g0o.productlist.main.3.34b345c3aofuZ">https://it.aliexpress.com/item/1005007084867411.html?spm=a2g0o.productlist.main.3.34b345c3aofuZ</a>               |
| MF1                                                                                              | Mos-fet IRF3708                                                                                | 1      | <a href="https://it.aliexpress.com/item/1005012269321973.html?spm=a2g0o.productlist.main.2.4fcdudBqudBqa">https://it.aliexpress.com/item/1005012269321973.html?spm=a2g0o.productlist.main.2.4fcdudBqudBqa</a>               |
| L7808                                                                                            | regolatore di tensione L7808 (8 v)                                                             | 1      | <a href="https://it.aliexpress.com/item/32870556485.html?spm=a2g0o.order_list.order_list_main.53.7af93696p">https://it.aliexpress.com/item/32870556485.html?spm=a2g0o.order_list.order_list_main.53.7af93696p</a>           |
| L7805                                                                                            | regolatore di tensione L7805 (5 v)                                                             | 1      | <a href="https://it.aliexpress.com/item/1005008093159699.html?spm=a2g0o.productlist.main.1.71b8cMIHcMIH">https://it.aliexpress.com/item/1005008093159699.html?spm=a2g0o.productlist.main.1.71b8cMIHcMIH</a>                 |
| 3v_reg.                                                                                          | regolatore di tensione 3,3v                                                                    | 1      | <a href="https://www.amazon.it/Fasizi-Regolatore-Tensione-Alimentazione-4-75V-12V/dp/B09Z28LTRD/ref=sr_">https://www.amazon.it/Fasizi-Regolatore-Tensione-Alimentazione-4-75V-12V/dp/B09Z28LTRD/ref=sr_</a>                 |
| TRM1                                                                                             | Potenziometro 10 KΩ                                                                            | 1      | <a href="https://it.aliexpress.com/item/1005001958275450.html?spm=a2g0o.order_list.order_list_main.595.7af93696">https://it.aliexpress.com/item/1005001958275450.html?spm=a2g0o.order_list.order_list_main.595.7af93696</a> |
| U1                                                                                               | Zoccolo 38 pin per ESP32S                                                                      | 1      |                                                                                                                                                                                                                             |
| U2                                                                                               | Zoccolo 30 pin per ESP32                                                                       | 1      |                                                                                                                                                                                                                             |
| MT1/BZ1/DA1/<br>AD1A/AD1B/<br>GPS1/<br>GPS2RFID1/<br>I2C1/I2C2/I2C3/<br>DA2/DA3/DA4/<br>DA5/DATA | File di connettori femmina da 40 pin<br>HDR-F-2.54_1x40 Bianchi                                | 4      | <a href="https://it.aliexpress.com/item/1005005038036493.html?spm=a2g0o.order_list.order_list_main.29.489c">https://it.aliexpress.com/item/1005005038036493.html?spm=a2g0o.order_list.order_list_main.29.489c</a>           |
| RELAY/SWITCH/<br>I2C4                                                                            | File di connettori femmina da 40 pin<br>HDR-F-2.54_1x40 Rossi da 40 pin<br>HDR-F-2.54_1x40 BLU | 2      | <a href="https://it.aliexpress.com/item/1005005038036493.html?spm=a2g0o.order_list.order_list_main.41.7af93696">https://it.aliexpress.com/item/1005005038036493.html?spm=a2g0o.order_list.order_list_main.41.7af93696</a>   |
| GND                                                                                              | File di connettori femmine da 40 pin<br>HDR-F-2.54_1x40 Neri                                   | 1      | <a href="https://it.aliexpress.com/item/1005005038036493.html?spm=a2g0o.order_list.order_list_main.41.7af93696">https://it.aliexpress.com/item/1005005038036493.html?spm=a2g0o.order_list.order_list_main.41.7af93696</a>   |
| +3.3v/+5v                                                                                        | File di connettori femmina da 40 pin<br>HDR-F-2.54_1x40 Rossi                                  | 1      | <a href="https://it.aliexpress.com/item/1005005038036493.html?spm=a2g0o.order_list.order_list_main.41.7af93696">https://it.aliexpress.com/item/1005005038036493.html?spm=a2g0o.order_list.order_list_main.41.7af93696</a>   |
| SV1/J5/J6/J7/<br>SDA/J3                                                                          | File di connettori maschio da 40 pin<br>HDR-M-2.54_1x40 Neri                                   | 1      | <a href="https://it.aliexpress.com/item/1005002577212594.html?spm=a2g0o.order_list.order_list_main.23.7af93696">https://it.aliexpress.com/item/1005002577212594.html?spm=a2g0o.order_list.order_list_main.23.7af93696</a>   |
| J10/J2/3v_sel/<br>vin_sel/J4/J8/J9                                                               | File di connettori maschio da 40 pin<br>HDR-M-2.54_1x40 Rossi                                  | 2      | <a href="https://it.aliexpress.com/item/1005002577212594.html?spm=a2g0o.order_list.order_list_main.23.7af93696">https://it.aliexpress.com/item/1005002577212594.html?spm=a2g0o.order_list.order_list_main.23.7af93696</a>   |
| Jumper                                                                                           | jumper rossi                                                                                   | 7      | <a href="https://it.aliexpress.com/item/1005002448285187.html?spm=a2g0o.order_list.order_list_main.47.7af93696">https://it.aliexpress.com/item/1005002448285187.html?spm=a2g0o.order_list.order_list_main.47.7af93696</a>   |
| Jumper                                                                                           | jumper verdi                                                                                   | 5      | <a href="https://it.aliexpress.com/item/1005002448285187.html?spm=a2g0o.order_list.order_list_main.47.7af93696">https://it.aliexpress.com/item/1005002448285187.html?spm=a2g0o.order_list.order_list_main.47.7af93696</a>   |
| Jack audio                                                                                       | jack audio 3.5                                                                                 | 1      | <a href="https://it.aliexpress.com/item/32900115725.html?spm=a2g0o.order_list.order_list_main.732.7af93696">https://it.aliexpress.com/item/32900115725.html?spm=a2g0o.order_list.order_list_main.732.7af93696</a>           |
| Connettore alimentazione                                                                         | Connettore alimentazione 3 pin 5.5 x 2.1 mm                                                    |        | <a href="https://it.aliexpress.com/item/4001206395694.html?spm=a2g0o.productlist.main.19.1db91a7blucvii&amp;a">https://it.aliexpress.com/item/4001206395694.html?spm=a2g0o.productlist.main.19.1db91a7blucvii&amp;a</a>     |

## Componenti per la BDS

| Componenti accessori  |                                                            |        |                                                                                                                                                                                                                     |
|-----------------------|------------------------------------------------------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prefisso              | descrizione                                                | quant. | link (solo per indicazione)                                                                                                                                                                                         |
| Tastiera              | tastiera 2x4 pulsanti                                      | 1      | <a href="https://it.aliexpress.com/item/1005006381605495.html?spm=a2g0o.order_list.order_list_main.99.7af9">https://it.aliexpress.com/item/1005006381605495.html?spm=a2g0o.order_list.order_list_main.99.7af9</a>   |
| ESP32                 | Microcontroller ESP32 (30pin)<br>CH340C                    | 1      | <a href="https://it.aliexpress.com/item/1005005704190069.html?spm=a2g0o.order_list.order_list_main.364.7af9">https://it.aliexpress.com/item/1005005704190069.html?spm=a2g0o.order_list.order_list_main.364.7af9</a> |
| ESP32S                | Microcontroller ESP32S (38pin)<br>connettore Type C CP2102 | 1      | <a href="https://it.aliexpress.com/item/1005005972312714.html?spm=a2g0o.order_list.order_list_main.163.7af9">https://it.aliexpress.com/item/1005005972312714.html?spm=a2g0o.order_list.order_list_main.163.7af9</a> |
| ESP32 LGVL            | Microcontroller ESP32 con display<br>touch LVGL 2,4"       | 1      | <a href="https://it.aliexpress.com/item/1005006604267846.html?spm=a2g0o.order_list.order_list_main.119.7af9">https://it.aliexpress.com/item/1005006604267846.html?spm=a2g0o.order_list.order_list_main.119.7af9</a> |
| Modulo 8 led          | Modulo 8 led rossi o blu anodo<br>comune/catodo comune     | 1      | <a href="https://it.aliexpress.com/item/1005006407862412.html?spm=a2g0o.order_list.order_list_main.419.7af9">https://it.aliexpress.com/item/1005006407862412.html?spm=a2g0o.order_list.order_list_main.419.7af9</a> |
| Display Touch<br>2.8" | Display Touch 2.8" LVGL                                    | 1      | <a href="https://it.aliexpress.com/item/1005003936535877.html?spm=a2g0o.order_list.order_list_main.101.226">https://it.aliexpress.com/item/1005003936535877.html?spm=a2g0o.order_list.order_list_main.101.226</a>   |