## **Bill Of Materials for R&D**

R&D

Design Title Author Aykut KELEŞ

**Document Number** 

Revision 1.0

**Design Created** 28 Haziran 2021 Pazartesi Design Last Modified 2 Ağustos 2021 Pazartesi

Total Parts In Design 31

| O Maded                         | loc              |                     |                                     |                                     |                                 |                                      |                    |
|---------------------------------|------------------|---------------------|-------------------------------------|-------------------------------------|---------------------------------|--------------------------------------|--------------------|
| 0 Modul                         | References       | Value               | Stock Code                          | Unit                                | PCB Package                     | Description                          | Name               |
|                                 |                  | <u>value</u>        | Stock Code                          | <u>Cost</u><br><b>₹</b> 0,00        | PCB Package                     | <u>Description</u>                   | <u>Name</u>        |
| Sub-totals: \$0,00 9 Capacitors |                  |                     |                                     |                                     |                                 |                                      |                    |
| •                               | References       | <u>Value</u>        | Stock Code                          | <u>Unit</u>                         | PCB Package                     | Description                          | <u>Name</u>        |
| 2                               | C1,C6            | 10uF                | 399-<br>C0603C106M7PAC7411CT-<br>ND | Cost<br>\$0,25                      | 0603_CAP                        | CAP CER 10UF 4V X5R<br>0603          | C0603C106M7PAC7411 |
| 3                               | C2-C3,C7         | 0.1uF               | 399-1096-1-ND                       | <b>₺</b> 0,11                       | 0603_CAP                        | CAP CER 0.1UF 16V X7R 0603           | C0603C104K4RACTU   |
| 3                               | C4-C5,C9         | 1nF                 | 399-<br>C0603C102J5RAC7411CT-<br>ND | <b>ŧ</b> 0,10                       | 0603_CAP                        | CAP CER 1000PF 50V<br>X7R 0603       | C0603C102J5RAC7411 |
| 1                               | C8               | 10uF                | 399-3684-1-ND                       | ₺0,37                               | 1206 CAP POLARIZE               | CAP TANT 10UF 10%<br>10V 1206        | T491A106K010AT     |
| Sub-totals                      |                  |                     |                                     | <b>₺</b> 1,50                       |                                 |                                      |                    |
| 10 Resistors                    |                  |                     |                                     |                                     |                                 |                                      |                    |
| Quantity                        | References       | <u>Value</u>        | Stock Code                          | <u>Unit</u><br><u>Cost</u>          | PCB Package                     | Description                          | Name               |
| 2                               | R1,R3            | 10k                 | 311-10.0KHRCT-ND                    | <b>₺</b> 0,10                       | 0603_RES                        | RES SMD 10K OHM 1% 1/10W 0603        | RC0603FR-0710KL    |
| 4                               | R2,R5,R7,<br>R9  | 100R                | 311-100HRCT-ND                      | <b>₺</b> 0,10                       | 0603_RES                        | RES SMD 100 OHM 1%<br>1/10W 0603     | RC0603FR-07100RL   |
| 4                               | R4,R6,R8,<br>R10 | 255R                | 311-255HRCT-ND                      | ₺0,10                               | 0603_RES                        | RES SMD 255 OHM 1% 1/10W 0603        | RC0603FR-07255RL   |
| Sub-totals                      |                  |                     |                                     | <b>1</b> ,00                        |                                 |                                      |                    |
| •                               | ated Circuit     |                     |                                     |                                     |                                 |                                      |                    |
| <u>Quantity</u>                 | References       | <u>Value</u>        | Stock Code                          | <u>Unit</u><br><u>Cost</u>          | PCB Package                     | <u>Description</u>                   | <u>Name</u>        |
| 1                               | U1               | ESP32-<br>WROOM-32D | 1965-ESP32-<br>WROOM-32D(4MB)CT-ND  | <b>₹3,80</b>                        | ESP32-<br>WROOM-32D-<br>UPDATED | RX TXRX MOD WIFI<br>TRACE ANT SMD    | ESP32-WROOM-32D    |
| 1                               | U2               | MCP4921-E/MS        | MCP4921-E/MS-ND                     | <b>₺</b> 2,19                       | SOP65P490X110-8N                | IC DAC 12BIT V-OUT<br>8MSOP          | MCP4921-E/MS       |
| Sub-totals                      | :                |                     |                                     | <b>₺</b> 5,99                       |                                 |                                      |                    |
| 0 Transi                        | stors            |                     |                                     |                                     |                                 |                                      |                    |
| Quantity Sub-totals             | References       | Value               | Stock Code                          | <u>Unit</u><br><u>Cost</u><br>‡0,00 | PCB Package                     | <u>Description</u>                   | <u>Name</u>        |
| 0 Diodes                        |                  |                     |                                     |                                     |                                 |                                      |                    |
|                                 | References       | <u>Value</u>        | Stock Code                          | <u>Unit</u><br><u>Cost</u>          | PCB Package                     | <u>Description</u>                   | Name               |
| Sub-totals: \$0,00              |                  |                     |                                     |                                     |                                 |                                      |                    |
|                                 | ellaneous        | Val.                | Otrack Orde                         | 11.2                                | DOD De d                        | Describera                           | Maria              |
| Quantity                        | References       | <u>Value</u>        | Stock Code                          | <u>Unit</u><br><u>Cost</u>          | PCB Package                     | <u>Description</u>                   | Name               |
| 3                               | GND,RXD,<br>TXD  | PIN 4015            |                                     |                                     | PIN 4015                        |                                      | PIN 4015           |
| 1                               | J1               | SIL-100-03          |                                     |                                     | SIL-100-03                      | 0.1in pitch header block             | SIL-100-03         |
| 1                               | <b>J</b> 4       | 690367280476        | 732-1964-1-ND                       | ₺0,59                               | 690367280476                    | CONN RCPT 4POS 0.1<br>TIN SMD        | 690367280476       |
| 4                               | LD1-LD4          | 155124M173200       | 732-11414-1-ND                      | <b>₺</b> 0,50                       | 155124M173200                   | LED RGB CLEAR 1204<br>SMD R/A        | 155124M173200      |
| 1                               | S3               | 434153017835        | 732-10143-1-ND                      | <b>₺</b> 0,56                       | 434153017835                    | SWITCH TACTILE SPST-<br>NO 0.05A 12V | 434153017835       |
| Sub-totals                      | :                |                     |                                     | <b>‡</b> 3,15                       |                                 |                                      |                    |
| Totals:                         |                  |                     |                                     | <b>11,64</b>                        |                                 |                                      |                    |