

BOM

RF-ARS-Student

| Layer | Material | Description | Unit | Qty | Mass(g) | Color | Ver. | RoHS | Remarks |
|-------|--------------------------|--|------|---------|---------|-------|------|------|---------------------|
| 1 | PVC Key for student | PVC,BHS-01 | PCS | 1.0000 | | | | Y | Manufactured,B1-B19 |
| 2 | ABS Case for student | ABS,BHS-01 | PCS | 1.0000 | | | | Y | Manufactured |
| 3 | Battery case for Student | ABS,BHS-01 | PCS | 1.0000 | | | | Y | Manufactured |
| 4 | BHS-01-S PCBA Assembly | BHS-01-S PCBA assembly | PCS | 1.00000 | | | | Y | Manufactured |
| 5 | LCD socket | Socket,BHS-01, (ST7565) | PCS | 1.00000 | | | V02 | Y | JP3 |
| 6 | Battery contact | BTH-01-S | PCS | 1.0000 | | | | Y | JP1 |
| 7 | Resistor SMT | 22K Ω \pm 1% 0402 | PCS | 1.00000 | | | | Y | R2 |
| 8 | Resistor SMT | 100K Ω 0.125W \pm 5% 0603 | PCS | 1.00000 | | | | Y | R50 |
| 9 | Resistor SMT | 1M 0.125W \pm 5% 0402 | PCS | 1.00000 | | | | Y | R1 |
| 10 | Resistor SMT | 0 Ω 0.125W \pm 5% 0805 | PCS | 1.00000 | | | | Y | R5 |
| 11 | Resistor SMT | 51K Ω \pm 5% 0603 | PCS | 2.00000 | | | | Y | R10,R11 |
| 12 | Capacitor SMT | CAP-CHIP 1nF K(\pm 10%) 25V C0402 | PCS | 1.00000 | | | V02 | Y | C8 |
| 13 | Capacitor SMT | GRM155R71E103K 10nF, \pm 10%,X7R, 0402 | PCS | 1.00000 | | | | Y | C9 |
| 14 | Capacitor SMT | 22pF \pm 2%,16V,0402 NPO | PCS | 2.00000 | | | | Y | C1,C2 |
| 15 | Capacitor SMT | 33nF \pm 10%,50V,0603 N7R | PCS | 1.00000 | | | | Y | C7 |
| 16 | Capacitor SMT | 0.1uF \pm 10%,25V 0603 | PCS | 4.00000 | | | V02 | Y | C51,C53,C54,C63 |
| 17 | Capacitor | 0.1uF \pm 10% 50V 0805 | PCS | 1.00000 | | | V02 | Y | C75 |
| 18 | Capacitor SMT | 2.2nF \pm 10% 16V 0402,N7R | PCS | 1.00000 | | | | Y | C3 |
| 19 | Capacitor | 1uF \pm 10% 0603 SMD | PCS | 9.00000 | | | | Y | CD1~CD9 |
| 20 | Capacitor | 100nF 0603,10V | PCS | 1.00000 | | | | Y | C20 |
| 21 | Capacitor | 100uF,6.3V,7227 | PCS | 3.00000 | | | V02 | Y | C57,C62,C74 |
| 22 | Capacitor | 10uF +80%-20% 16V 3216 | PCS | 1.00000 | | | V02 | Y | C19 |
| 23 | Capacitor SMT | 4.7pF \pm 0.25pF,50V,0402 NPO | PCS | 1.00000 | | | | Y | C4 |
| 24 | Capacitor SMT | 1.5pF \pm 0.1pF,50V,0402 NPO | PCS | 1.00000 | | | V02 | Y | C5 |
| 25 | Capacitor SMT | 1.0pF \pm 0.1pF,50V,0402 NPO | PCS | 1.00000 | | | | Y | C6 |
| 26 | Capacitor SMT | 10n | PCS | 1.00000 | | | | Y | C21 |
| 27 | IC | CAT809,SOT-23 | PCS | 1.00000 | | | | Y | U13 |
| 28 | IC | P89LPC936,TSSOP-28,Philips | PCS | 1.00000 | | | | Y | U8 |
| 29 | IC | 74HC595,SO-16,Philips | PCS | 2.00000 | | | | Y | U11,U12 |
| 30 | IC | NRF24L01,QFN20,NORDIC | PCS | 1.00000 | | | | Y | U1 |
| 31 | IC | AT24C64,SO-8,ATMEL | PCS | 1.00000 | | | | Y | U10 |
| 32 | Inductor SMT | LQG15HS8N2J02,8.2nH,0402,Murata | PCS | 1.00000 | | | | Y | L1 |

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|-------|--------------------|---|------|---------|---------|-------|------|------|----------|
| 33 | Inductor | Chip inductor 3.9nH ±5% 0402 LQG18HN3N9J00D | PCS | 1.00000 | | | | Y | L3 |
| 34 | Inductor | Chip inductor 2.7nH ±5% 0402 LQG18HN2N7J | PCS | 1.00000 | | | | Y | L2 |
| 35 | Inductor | 100uH 1206 | PCS | 3.00000 | | | | Y | L6,L7,L9 |
| 36 | Crystal Oscillator | 16MHz ,±60ppm,Cl=12pF,XTAL3 | PCS | 1.00000 | | | | Y | X1 |
| 37 | LCD | TG12832-COG1, liquid crystal display | PCS | 1.00000 | | | | Y | Sourced |
| 38 | PCB | FR4 double-layer, gold-coated, T=1.0mm for BHS-01-S | PCS | 1.00000 | | | | Y | Sourced |
| 39 | Antenna | 2.4GHZ antenna,50Ω,Chip ANT,SMT | PCS | 1.0000 | | | | Y | Sourced |