TEXAS INSTRUMENTS

# Bill of Materials

**TI DESIGNS**

TIDM-TEMPCOMPENSATED-RTC

| Description | Value | Designator | Pcs/Unit | Footprint | Manufacturer |
|---|---|---|---|---|---|
| SMD,Capacitor,±20% | 0.1uF | C6 C7 C50 C51 C52  C131 C151 C152 | 17 | 0603 | Yageo |
| SMD,Capacitor,±20% | 0.47uF | C53 | 1 | 0603 | Yageo |
| SMD,Capacitor,±20% | 2.2nF | C48 | 1 | 0603 | Yageo |
| SMD,Capacitor,±20% | 4.7uF | C54 | 1 | 0603 | Yageo |
| SMD,Capacitor,±20% | 10uF | C55 C56 C57 | 3 | 0805 | Yageo |
| SMD,Capacitor,±20% | 1000pF | C153 C154 C211 C232 | 4 | 0603 | Yageo |
| SMD,Capacitor,±10% | 180pF | C132 C133 | 2 | 0603 | Yageo |
| SMD,Capacitor,±10% | 15nF | C78 C81 C84 | 3 | 0603 | Yageo |
| SMD,Capacitor,±10% | 15pF | C47 C49 | 2 | 0603 | Yageo |
| SMD,Capacitor,±10% | 22pF | C322 | 1 | 0603 | Yageo |
| SMD,Capacitor,±10% | 47pF | C76 C77 C79 C80 C82 C83 | 6 | 0603 | Yageo |
| SMD,Capacitor,±10% | 68pF | C281-C314 | 34 | 0603 | Yageo |
| SMD,Resistor,±5% | O ohm | R283 | 1 | 0603 | Yageo |
| SMD,Resistor,±5% | 10k ohm | R15 R34 R35 R37  R39 R41 R74 R298 | 8 | 0603 | Yageo |
| SMD,Resistor,±1% | 1k ohm | R94 R96 R98 R99 R101 R102 | 6 | 0603 | Yageo |
| SMD,Resistor,±5% | 1k ohm | R14 R171 R174 R206 R207 R213 R215 R216 R218 R343 R346 R347 R412 | 13 | 0603 | Yageo |
| SMD,Resistor,±5% | 2k ohm | R16 R29 R31 | 3 | 0603 | Yageo |
| SMD,Resistor,±5% | 20k ohm | R241 | 1 | 0603 | Yageo |
| SMD,Resistor,±5% | 3k ohm | R13 R30 R32 | 3 | 0603 | Yageo |
| SMD,Resistor,±5% | 33k ohm | R17 R18 | 2 | 0603 | Yageo |
| SMD,Resistor,±5% | 300 ohm | R341 R345 | 2 | 0603 | Yageo |
| SMD,Resistor,±5% | 100k ohm | R201 R202 | 2 | 0603 | Yageo |
| SMD,Resistor,±1% | 100 ohm | R95 | 1 | 0603 | Yageo |
| SMD,Resistor,±5% | 100 ohm | R24 R413 | 2 | 0603 | Yageo |
| SMD,Resistor,±1% | 470 ohm | R11 | 1 | 0603 | Yageo |
| SMD,Resistor,±5% | 4.7k ohm | R12 R25 R26 R33 R36 R38 R40 R177 R342 | 11 | 0603 | Yageo |
| SMD,Resistor,±5% | 47k ohm | R72 | 1 | 0603 | Yageo |
| SMD,Resistor,±5% | 5.1k ohm | R211 R212 R214 R217 R219 R220 R300 | 7 | 0603 | Yageo |
| SMD,Resistor,±1% | 10 ohm | R100 | 1 | 0603 | Yageo |
| SMD,Resistor,±5% | 10 ohm | R73 | 1 | 0603 | Yageo |
| SMD,Resistor,±5% | 7.5k ohm | R151 R152 | 2 | 0603 | Yageo |

| Description | Value | Designator | Pcs/Unit | Footprint | Manufacturer |
|---|---|---|---|---|---|
| SMD,Resistor,±5% | 1M ohm | R203 R265 R281 R282 | 4 | 0603 | Yageo |
| SMD,Resistor,±5% | 300k ohm | R261 R262 R263 R264 | 4 | 0805 | Yageo |
| SMD,Resistor,±1% | 150k ohm | R92 R93 | 2 | 1206 | Yageo |
| SMD,Resistor,±1% | 240k ohm | R91 | 1 | 1206 | Yageo |
| SMD,Diode | IN4148 | D92 D94 D95 D96 | 4 | IN4148-SMT | |
| SMD,MCU | MSP430F6736 | U26 | 1 | TQFP100-0.26 | Texas Instruments |
| SMD,RS485 | SN65HVD3082E | U5 | 1 | SOIC8 | Texas Instruments |
| SMD,EEPROM | 24LC256B-I/SN | U41 | 1 | SOIC8 | |
| SMD,Transistors,NPN | 3904 | Q3 Q4 Q5 Q6 Q7 Q8 Q36 Q51 Q53 Q55 | 12 | 3904_3906 | |
| SMD,Transistors,PNP | 3906 | Q9 Q10 Q37 Q52 Q54 Q126 | 6 | 3904_3906 | |
| SMD,LDO | 78L05 | U88 | 1 | SOT-89 | Texas Instruments |
| SMD,LDO | HT7550 | U89 | 1 | SOT-89 | HT |
| SMD,Rectifier Diode | M7 | D81 D91 | 2 | IN5817-SMT | |
| SMD,Rectifier Bridge | MB6S | V2 | 1 | MBS-1 | |
| SMD,NTC | 10k ohm | R242 | 1 | 0805 | Exsense |
| SMD,Bead | STBL-120 | Z6 Z7 Z8 Z9 | 4 | 0805 | |
| | | | | | |
| Through-hole，LED | RED LED-Φ5 | D113 D114 D115 | 3 | LED | |
| Through-hole，Crystal,12.5p-5ppm | 32.768kHz VT200 | G1 | 1 | G-32.768 | SEIKO |
| Through-hole，LCD | LCD-JY09484 | LCD1 | 1 | LCD-JY09484A | HEBEI JIYA |
| Through-hole，Voltage Transformer | JS28D20-18A | T1 | 1 | TRANS-TD28-18-3 | QINGZHOU JINSHUN |
| Through-hole，Back Light Panel | C01W-7131-6 | D111 | 1 | BG-ST-7131 | SHENZHEN SAITE |
| Through-hole，lithium battery | ER14250AH | BAT3 | 1 | B-CR1/2AA | YIWEI |
| Through-hole，Button | 6*6*4.3 | K1 K2 | 2 | RESET | |
| Through-hole，Micro-Switch | KF-508 | K3 | 1 | KFT-5.8 | |
| Through-hole，ESAM | ESAM2605 | U131 | 1 | DIP-8 | CSG |
| Through-hole，Electrolytic Capacitor | 100uF/35V | C221 | 1 | D*D*F 6.3*0.5*2.50 | |
| Through-hole，Electrolytic Capacitor | 220uF/16V | C224 | 1 | D*D*F 6.3*0.5*2.5 | |
| Through-hole，Electrolytic Capacitor | 470uF/16V | C229 | 1 | D*D*F 8*0.6*3.5 | |
| Through-hole，Electrolytic Capacitor | 1000uF/35V | C225 | 1 | D*D*F 12.5*0.6*5.0 | |
| Through-hole，Zener diode | 1N4744A | ZD23 | 1 | DO41-UP | |
| Through-hole，Piezoresistor | 20K681 | RV31 | 1 | RV20K681 | |
| Through-hole，Optocoupler | PC817C | U2 U3 U51 U52 U79 | 5 | DIP-4 | |
| Through-hole，Bead | B62 | Z24 Z25 | 2 | B62A | |
| Through-hole，Thermistor | MZ4-250 | PT7 | 1 | PTC-120/120-35MA | |
| Through-hole，Thermistor | MZ6-51R | RT3 | 1 | PTC-120/120-35MA | |
| Through-hole，TVS | P6KE6.8CA | TV1 | 1 | TVSUP | |
| Through-hole，TVS | P6KE22CA | TV33 | 1 | TVSUP | |
| Through-hole，Infrared Reader | HM238 | U6 | 1 | TSOP1838 | |
| Through-hole，Infrared Sender | AT205B | D5 | 1 | LED-5 | |
| Emeter Case | | 201Type 10（60）A | 1 | | QUANSHENG |
| Relay | | GRT508FA 250uΩ | 1 | | GELEITE |
| Current transformer | | 10（60）/5MA | 1 | | |
| PCB Board | | | 1 | | |

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