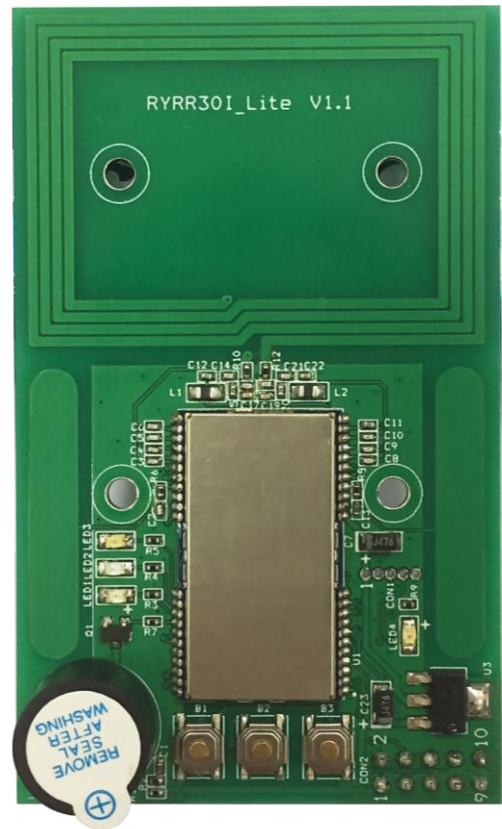


RYRR30I_Lite

**Multiprotocol Fully
Integrated 13.56MHz
RFID & NFC Antenna Module**

Datasheet



PRODUCT DESCRIPTION

The RYRR30I_Lite Antenna module is a 13.56-MHz RFID and Near Field Communication (NFC) system. Built-in programming options make the device suitable for a wide range of applications for proximity and vicinity identification systems.

FEATURES

- Supports Near Field Communication (NFC) Standards NFCIP-1 (ISO/IEC 18092) Active P2P.
- Completely Integrated Protocol Handling for ISO15693, ISO14443A, ISO14443B and FeliCa.
- Capacitive sensing - Wake-up
- ST ST25R3911B NFC/RFID Engine.
- Firmware upgrade via UART Interface.
- Operation Temperature range: -40 to +85°C.

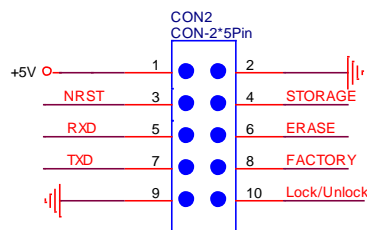
APPLICATIONS

- RFID cards Reader
- Mobile Devices Near Field Communication

SPECIFICATION

| Item | Min. | Typical | Max. | Unit | Condition |
|-----------------------|---------|---------|---------|------|-------------------------------|
| Operation Voltage | 4.8 | 5 | 5.2 | V | +5V |
| V _{OH} | 0.9*VDD | VDD | VDD | V | TXD High-level output voltage |
| V _{OL} | 0 | 0 | 0.1*VDD | V | TXD Low-level output voltage |
| V _{IH} | 0.7*VDD | 3.3 | VDD | V | RXD High-level input voltage |
| V _{IL} | 0 | 0 | 0.3*VDD | V | RXD Low-level input voltage |
| RF Output Power | | | 30 | dBm | |
| RF transmit current | | 550 | | mA | |
| Communication Range | | 5 | | cm | Standard card |
| Reset Time | | 100 | | ms | |
| Baud Rate | | 115200 | | bps | 8,N,1 |
| RF Frequency Range | 13.553 | 13.56 | 13.567 | MHz | |
| Operating Temperature | -40 | 25 | +85 | °C | |
| Antenna | | | | | Internal PCB Antenna |
| Weight | | 10 | | g | |

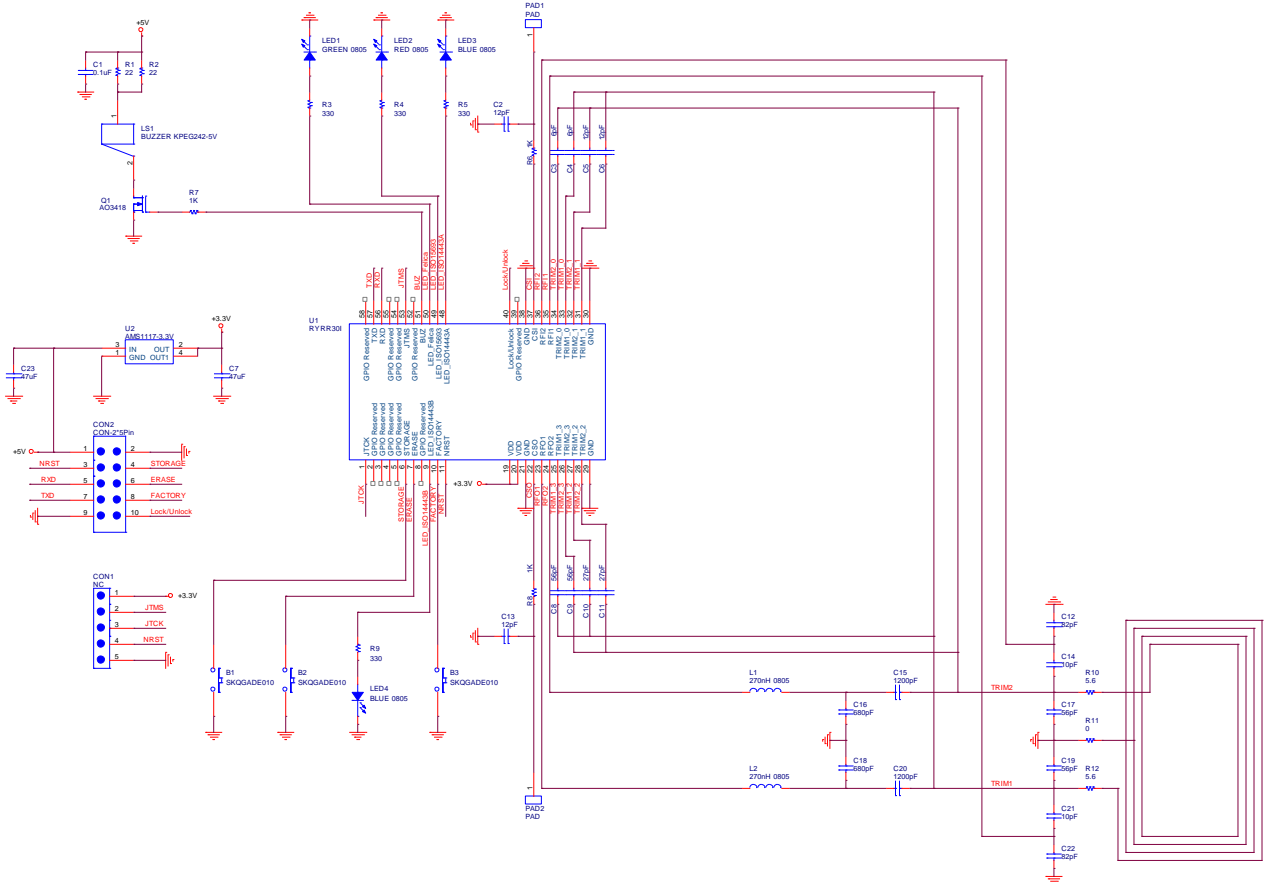
CON2 PIN DESCRIPTION



| Pin | Name | I/O | Condition |
|-----|---------|-----|--|
| 1 | +5V | I | Power Supply |
| 2 | GND | - | GROUND |
| 3 | NRST | I | Low reset If this pin is unused, keep open. |
| 4 | STORAGE | I | STORAGE UUID. |
| 5 | RXD | I | UART Data Input |
| 6 | ERASE | I | ERASE UUID. |
| 7 | TXD | O | UART Data Output |

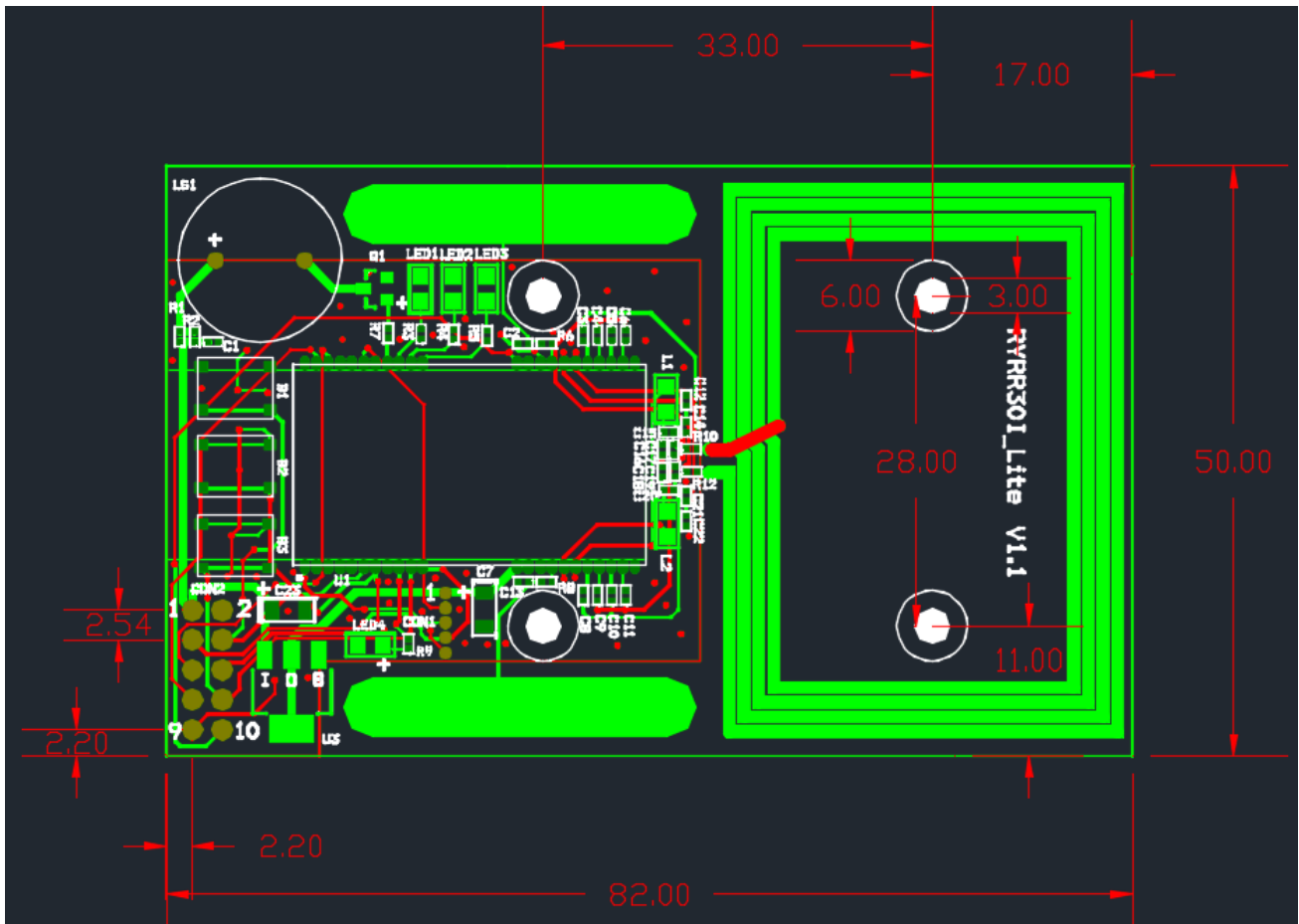
| | | | |
|----|-------------|---|----------------------------|
| 8 | FACTORY | I | FACTORY RESET. |
| 9 | GND | - | GROUND |
| 10 | Lock/Unlock | O | Lock/Unlock Signals Output |

SCHEMATIC



| | | |
|--------------------|----------------------------|--------------|
| REYAX RYRR301_Lite | | |
| Doc | Document Number | Rev |
| Cust | Customer | 1.1 |
| Date | Thursday, October 17, 2019 | Sheet 1 of 1 |

DIMENSIONS



unit : mm PCB Thickness 1.6mm

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