

# OPERATIONAL DESCRIPTION

The device is a wireless sensor.

The EM357 is the industry's leading ARM<sup>®</sup> Cortex<sup>®</sup>-M3 based family of ZigBee SoCs delivering unmatched performance, power consumption and code density in a compact package. The EM35x and EM358x families combine a 2.4 GHz IEEE 802.15.4 radio transceiver with a 32-bit microprocessor, Flash memory and RAM with powerful hardware supported network-level debugging features. Combined with the powerful ecosystem of ARM tools, these devices and tools enable OEMs to simplify development and accelerate time to market.

The device designated with the following general information and technical specification as following:

## The General Information of the Device

|                     |                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------|
| Operation Frequency | 2405.00-2480.00MHz, (Channel Number: 16, Channel Frequency=2405+5(K-1), K=1, 2, 3 .....16) |
| Main Chipset        | EM357                                                                                      |
| OSC                 | 24MHz                                                                                      |
| RF Output Power     | 13.27dBm(Max)                                                                              |
| Channel Spacing     | 5MHz                                                                                       |
| Modulation          | OQPSK                                                                                      |
| Number of channels  | 16                                                                                         |
| Hardware Version    | 1.00                                                                                       |
| Software Version    | 1.00                                                                                       |
| Antenna Designation | Integrated Antenna                                                                         |
| Antenna Gain        | 0dBi(Max.)                                                                                 |
| Power Supply        | DC3V by button cell                                                                        |