ME3612 wireless communication module is based on the standard of NB-IoT/eMTC/EGPRS narrowband communication, and it support the global main-stream operator’s NB-IoT network. In NB-IoT mode, the module can provide maximum 66 Kbps uplink rate and 34Kbps downlink rate. The module is pin-to-pin with LCC 30*30 serial modules such as ME3630/ME3620/ME3610/MC8635/MW3650.

This module is designed for low rate, low power consumption, long distance, large amounts of connecting the Internet of things. It supports multiple network protocols (PPP, CoAP, TCP/UDP, OMA LWM2M, MQTT) and low power consumption (PSM, eDRX). These protocols and features can be applied to many applications in the Internet of things.
ME3612 NB-IoT Module

Data Features
- NB-IoT
  - Max Uplink 66 kbps / Downlink 34 kbps
- eMTC
  - Max Uplink 375 kbps / Downlink 300 kbps
- EGPRS
  - Max Uplink 236 kbps / Downlink 296 kbps

Interfaces
- USB 2.0 High speed
- UART1 (support 2-wires)
- UART2 (For debug, 2-wires)
- SIM interface (1.8/3.0V)
- eSIM (optional)
- RF PAD for Primary Antenna
- Reset & Power-on
- ADC × 2
- GPIO × 8

Applications
- Embedded TCP /UDP /CoAP* /MQTT*
- PAP and CHAP used for PPP connection
- OMA LWM2M *
- AT Commands according to 3GPP TS27.005, 27.007 and ZTEWelink extended AT commands
- WeFota *

Environmental
- Operation temperature: -30° C to +75° C
  - Extreme Operating temperature: -40° C to +85° C
- Storage temperature: -40° C to +85° C
- Humidity: 5%~ 95%

Driver & Tools
- Drivers
  - Windows XP, 7
  - Linux
- Diag-log Tool
- Firmware Update Tool

General Features
- LCC Form Factor (80 pins)
- Pin-to-Pin with LCC 30 × 30
- GNSS (optional)
- Dimensions: 30mm × 30mm × 2.3mm
- Weight: About 4.0g

Electrical & Sensitivity
- Transmit Power:
  - NB-IoT/eMTC: 23 ± 2.7dBm (Power Class 3)
  - EGPRS B5, B8: 30 ± 2dBm (Power Class 1)
  - EGPRS B2, B3: 33 ± 2dBm (Power Class 4)
- Power Supply:
  - 3.3V -- 4.2V (3.8V is recommended)

ME3612 Band

<table>
<thead>
<tr>
<th>PID</th>
<th>Band</th>
<th>GNSS</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1A</td>
<td>Cat.M/NB-IoT: B3, B8, B20, B28 EGPRS: B2, B5, B3, B8</td>
<td>GPS+GLONASS</td>
</tr>
<tr>
<td>E1B</td>
<td>Cat.M/NB-IoT: B3, B8, B20, B28 EGPRS: B2, B5, B3, B8</td>
<td>None</td>
</tr>
<tr>
<td>E1C</td>
<td>NB-IoT: B3, B8, B20, B28</td>
<td>None</td>
</tr>
<tr>
<td>U1A</td>
<td>Cat.M/NB-IoT: B2, B4, B12, B13</td>
<td>GPS+GLONASS</td>
</tr>
<tr>
<td>U1B</td>
<td>Cat.M/NB-IoT: B2, B4, B12, B13</td>
<td>None</td>
</tr>
</tbody>
</table>

Note:
*In developing