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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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## Wio LTE JP Version v1.3- 4G, Cat.1, Espruino Compatible

SKU 102991024

### Description

While most of smart phones are using LTE network now, how about giving LTE capability to your IoT project with the latest released Wio LTE board. The Wio LTE is an Arduino and Grove compatible development board with also the ability of accessing LTE network. The LTE network provides a wide bandwidth which allows much faster interaction between user and device. The Arduino and Grove compatibility allows for quicker development through numerous libraries and a supportive community. In addition to C/C++, the Wio LTE also support programming in Espruino, a simplified JavaScript language that lower the entrance difficulty in play with the board.

We have some improvements of v1.3, but all functions is still compatible with old version.

Optimized circuit:

1. Using new PMIC MP2617
2. Improve the charging circuit of LTE module

Battery LED indicator:

1. If charging, LED on.
2. If charging complete, LED off.
3. If blinking, BAT Error which means battery error or unplug the battery.

Note

- When the signal is not good, there will be noise while calling.
- We have developed 4 different versions of Wio LTE for different regions. This is the Wio LTE JP version, except this version, the others also support GNSS, below table shows the difference between each version. For more detail information, please refer to the manual.

| Versions | LTE Bands                     | 3G Bands           | GSM               | GNSS                                     |
|----------|-------------------------------|--------------------|-------------------|------------------------------------------|
| US       | FDD: B2/B4/B12                | WCDMA: B2/B4/B5    | /                 | GPS/GLONASS/Beidou/Compass /Galileo/GZSS |
| EU       | FDD: B1/B3/B5/B7/B8/B20       | WCDMA: B1/B5/B8    | 900/1800          | GPS/GLONASS/Beidou/Compass /Galileo/GZSS |
| AU       | FDD: B1/B2/B3/B4/B5/B7/B8/B28 | WCDMA: B1/B2/B5/B8 | 850/900/1800/1900 | GPS/GLONASS/Beidou/Compass /Galileo/GZSS |
| JP       | FDD: B1/B3/B8/B18/B19/B26     | /                  | /                 | /                                        |

### Technical Details

|            |                 |
|------------|-----------------|
| Dimensions | 0mm x 0mm x 0mm |
| Weight     | G.W 70g         |
| Battery    | Exclude         |

Part List

|                         |   |
|-------------------------|---|
| Wio LTE JP Version v1.3 | 1 |
| Antenna                 | 2 |
| USB Cable               | 1 |

| Sub-System      | Function               | Detail                                                                                                                                                                                            |
|-----------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Microcontroller | Processor              | STM32F405RG, ARM Cortex-M4, CPU running up to 168MHZ                                                                                                                                              |
|                 | Flash                  | 1MB                                                                                                                                                                                               |
|                 | RAM                    | 192+4KB                                                                                                                                                                                           |
|                 | Operating Voltage      | 3.3V                                                                                                                                                                                              |
|                 | Low Power              | Sleep, Stop, Standby modes                                                                                                                                                                        |
|                 | DC Current per I/O Pin | 7 mA                                                                                                                                                                                              |
| LTE             | LTE Cat.1              | FDD: B1/B3/B8/B18/B19/B26<br>AT Command: 3GPP TS27.007 and enhanced AT Commands                                                                                                                   |
|                 | Data                   | LTE-FDD Max 10Mbps(DL) Max 5Mbps (UL)<br>Protocol: TCP/UDP/PPP/FTP/HTTP/SSL                                                                                                                       |
|                 | SMS                    | Peer to Peer Message, SMS broadcast, Text and PDU mode                                                                                                                                            |
|                 | Audio                  | Echo cancellation; Noise elimination                                                                                                                                                              |
|                 | Grove                  | 2 x Grove Digital Port<br>2 x Analog Port<br>1 x UART<br>1 x I2C                                                                                                                                  |
| Peripheral      | Antenna                | 2 x LTE Antenna                                                                                                                                                                                   |
|                 | Others                 | USB: Power supply and upload program<br>JST 1.0 connector for battery<br>3.5mm Audio Jack<br>MCU Reset Button, EC21 Power Button<br>1 x User RGB LED SK6812<br>Nano SIM and TF card 2 in 1 socket |

ECCN/HTS

|        |            |
|--------|------------|
| ECCN   | 3A991.a    |
| HSCODE | 8543709990 |

