



L660X-2 Series

IoT module

The L660X-2 series is an NB-IoT communication module developed by LYNQ for the IoT industry. It features high integration, low power consumption and high reliability. The L660X-2 adopts LCC+LGA package with a size of $17.7 \times 15.8 \times 2.3\text{mm}$ and it is compatible with the L660 series module products.

The L660X-2 series supports both domestic and European frequency bands. The module has low power mode and wide voltage mode. It also supports FOTA, AT command, Bluetooth (optional) and other functions.

The L660X-2 series enables customers to reduce product size and optimize product costs. And with low power consumption, small size, high sensitivity can be widely used in smoke alarm, smart gas meter, smart water meter, smart city and other scenes.



FOTA



BT5.2



Temperature
-40°C to +85°C



AT Command



Low Power
Consumption



Tiny Size

Main Features

- Module Configuration:
L660XC-2: 272KB SRAM+2MB flash
L660XC-2E: 272KB SRAM+2MB flash
L660XE-2: 272KB SRAM+2MB flash
L660XE-2E: 272KB SRAM+2MB flash
E: Represents a Bluetooth version
- Frequency Bands:
L660XC-2、L660XC-2E: B3/B5/B8
L660XE-2、L660XE-2E: B1/B3/B5/B8/B20/B28
- Output Power:
LTE: $23\text{dBm} \pm 2\text{dB}$
- CPU Core: ARM Cortex-M3, 204MHz
- Support 3GPP R14 NB-IoT standard
- Support AT command
- Operation Temperature Range: $-40^\circ\text{C} \sim +85^\circ\text{C}$
- Supply Voltage Range: 2.1 ~ 4.5V (typ.3.8V)
- Dimensions: 17.7*15.8*2.3mm
- Package: 58-pin LCC+LGA
- Weight: 1.2g

Other features

- Firmware Update: Firmware updated via UART
- Support PSM and eDRX
- Support TCP/UDP/HTTP/MQTT/SSL/FOTA etc.

Interfaces

- UART $\times 4^*$
- (U)SIM (3.0V/1.8V) $\times 2^*$
- I₂C $\times 1$
- SPI $\times 1$
- ADC $\times 2^*$
- GPIO $\times 1^*$
- PWM $\times 1$
- Reset $\times 1$
- Netlight $\times 1$
- Wakeup_IN $\times 1$
- Antenna $\times 1$

Note: * For specific applications, please contact FAE

Power consumption

- PSM: 1.0uA@3.3V/25 °C
- DRX: 227uA@3.3V/2.56S/25 °C
- Current consumption:
169mA, 23dBm, B3
139mA, 23dBm, B5
145mA, 23dBm, B8
23mA, 0dBm, B3
14mA, 0dBm, B5
19mA, 0dBm, B8

Data transmission

- Support Cat NB1/NB2:
NB1: DL 24Kbps, UL 55Kbps;
NB2: DL 150Kbps, UL 200Kbps;