

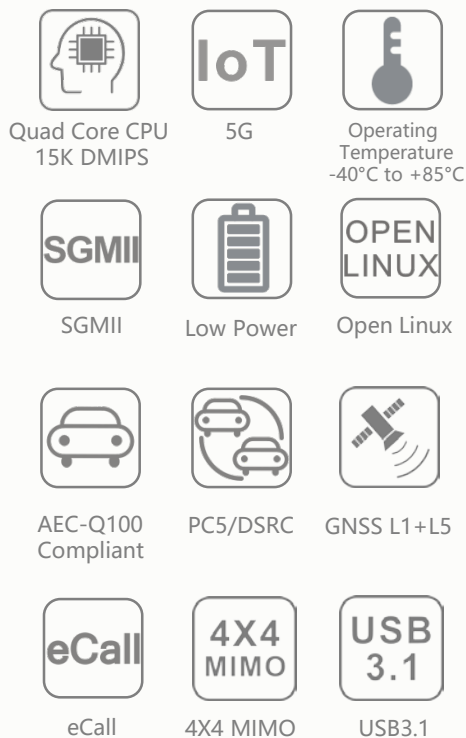
## T800

### 5G automotive grade module

T800 is an automotive grade 5G module based on MediaTek MT2735 platform which supports Multi-Band 5G NR/FDD-LTE/TDD-LTE/WCDMA/GSM. It has strong extension capability with abundant interfaces including USB3.1, PCIe, SGMII, SPI, GPIO etc. It provides more drivers and APIs for customers to develop applications. The module will be commonly found in automotive devices.

T800 is designed for automotive applications with IATF 16949 requirement and provides the unique combination of performance, security and flexibility for automotive applications. Its excellent performance in ESD and EMI protection ensures great robustness in harsh environments.

T800 supports multiple input multiple output (MIMO) technology. Using multiple antennas at the transmitting and receiving ends at the same time and on the same frequency band that greatly reduces errors and optimizes data speed. The integrated multi-frequency (L1 + L5) GNSS receiver simplify product design greatly and provide quicker, more accurate and more dependable positioning capability.



## General Features

- T800P:  
CPU: Quad-core ARM® Cortex A55 1.5GHz  
Flash: Nand 8Gb+LPDDR4 8Gb
- T800M:  
CPU: Dual-core ARM® Cortex A55 1.5GHz  
Flash: Nand 4Gb+LPDDR4 4Gb
- ARM® TrustZone® HSM Security
- Frequency Bands:  
5G NR: n1/n3/n28/n41/n78/n79  
TDD-LTE: B34/B38/B39/B40/B41  
FDD-LTE: B1/B3/B5/B8  
UMTS/HSDPA/HSPA+: B1/B8  
GSM/GPRS/EDGE: GSM850/EGSM900/  
DCS1800/PCS1900
- Transmission power:  
LTE/5G: Class2(26dBm+2/-3dB)  
Class3(23dBm±2dB)  
WCDMA: Class3(24dBm+1/-3dB)  
GSM850/EGSM900: Class4(33dBm±2dB)  
DCS1800/PCS1900: Class1(30dBm±2dB)  
GSM850 8-PSK: Class E2(27dBm±3dB)  
EGSM900 8-PSK: Class E2(27dBm±3dB)  
DCS1800 8-PSK: Class E2(26dBm±3dB)  
PCS1900 8-PSK: Class E2(26dBm±3dB)
- GNSS L1+L5  
GPS/GLONASS/BeiDou/Galileo/QZSS
- External WIFI 6 module
- External V2X module
- Operating temperature: -40°C ~ +85°C
- Operating Voltage: 3.3V ~ 4.4V  
(3.8V is recommended)
- Package: LGA
- Weight: 18g
- eCall

## Data Transmission

- 5G:  
SA:  
4.67Gbps(DL)/2.5Gbps(UL)  
NSA:  
NR: 2.34Gbps(DL)/1.25Gbps(UL)  
LTE: 1.4Gbps(DL)/211Mbps(UL)  
LTE+NR: 3.74Gbps(DL)/1.46Gbps(UL)
- LTE:  
LTE FDD: 150Mbps(DL)/50Mbps(UL)  
LTE TDD: 130Mbps(DL)/30Mbps(UL)
- UMTS:  
DC-HSDPA: 42Mbps(DL)  
HSUPA: 5.76Mbps(UL)  
WCDMA: 384Kbps(DL/UL)
- GSM:  
EDGE: 296Kbps(DL)/236.8Kbps(UL)  
GPRS: 107Kbps(DL)/85.6Kbps(UL)

## GNSS

- Integrated GNSS :  
Multi-Frequency: L1+L5  
GPS/ GLONASS/BeiDou/  
Galileo/QZSS
- TTFF:  
Cold Start: 35s  
Warm Start: 20s  
Hot Start: 1s
- Sensitivity:  
Acquisition: -147dBm  
Reacquisition: -158dBm  
Tracking: -163dBm

## Certifications

- CCC\*/SRRC\*

## Interfaces

- UART
- SIM (3.0V/1.8V)
- IIC
- ADC
- USB2.0(Host/Slave mode)
- USB3.1(Host/Slave mode)
- PCM
- TDM
- IIS
- GPIO
- SDIO
- SPI
- Ethernet (SGMII)
- PCIE
- Power Key
- Reset Key
- RTC
- Network LED interface
- PWM
- Wakeup interface
- 4X4 MIMO Antennas
- GPS Antenna

## Software features

- USB Serial Driver:  
Windows XP/7/8/8.1/10  
Linux 4.19
- RNDIS Driver
- ECM/NCM Driver
- Protocol stack  
TCP/UDP/PPP/PING/FTP(S)/  
HTTP(S)/SSL/TLS/NTP/FILE
- Firmware update via USB
- FOTA