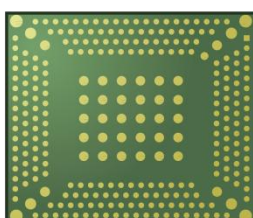


# SIM7800E

LTE Module for Automotive



Multi-Band

LTE  
Cat. 4

LGA

Security

eCall

FOTA

Embedded  
Abundant  
Protocols

GNSS

Jamming  
Detection

## Product Description

The SIM7800E is a Multi-Band LTE-TDD/LTE-FDD/HSPA+ and Dual-Band GSM/GPRS/EDGE automotive grade module which supports LTE CAT4 up to 150Mbps for downlink and 50Mbps for uplink data transfer.

SIM7800E is designed and manufactured according to IATF 16949:2016 quality management system, it is targeted at the IoV (Internet of Vehicles) applications.

It has strong extension capability with abundant interfaces including UART, SDIO, I2C, SPI, GPIO etc. The module provides much flexibility and ease of integration for customer's application, and its excellent performance in ESD and EMI protection ensures great robustness in harsh environments.

## Key Benefits

- Compliant with automotive quality management system IATF 16949:2016.
- Wide operation temperature range (-40° C to +85° C) for automotive application.
- Excellent EMC protection ensures great robustness even in harsh environments.
- Compact SMT form factor with LGA pads ideal for integration in automotive devices.
- With abundant interfaces and abundant application capability, provides much flexibility and ease of integration for customer's application.

Smart machine Smart decision

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## General Features

TDD-LTE B38/B40/B41  
FDD-LTE B1/B3/B5/B7/B8/B20  
UMTS/HSPA+ B1/B5/B8  
GSM/GPRS/EDGE 900/1800 MHz  
Control Via AT Commands  
Supply voltage range: 3.3V~ 4.3V  
Operation temperature: -40°Cto +85°C  
Dimension: 34\*40\*3.1 mm  
Weight:8.7g±0.2g  
GNSS:  
gpsOneGen8C;standalone;GPS/GLONASS/Beidou2/Galileo;  
AGPS(SUPL2.0);XTRA;LBS

## Data

### LTE CAT4

- Uplink up to 50Mbps,
- Downlink up to 150Mbps

### HSPA+

- Uplink up to 5.76Mbps,
- Downlink up to 42 Mbps

### UMTS

- Uplink/Downlink up to 384Kbps

### EDGE Class

- Uplink/Downlink up to 236.8Kbps

### GPRS

- Uplink/Downlink up to 85.6Kbps

## Other Features

USB Driver for Microsoft Windows  
2000/XP/Vista/Win7/Win8/Win10  
USB Driver for Linux /Android  
RIL supporting for Android  
Firmware update via USB  
TCP/IP/IPV4/IPV6 Multi-PDP/FTPS/HTTPS/DNS/COAP/MQTT  
DTMF/TTS/eCall  
S-FOTA: OTA downlaod solution/Local security upgrade/S-Delta  
solution  
Security:Trustzone/Secure boot  
S-FS: Optimize Linux UBI filesystem/Backup and restore  
mechanism  
Open development: Windows SDK/Open Linux  
WIFI: support 2.4G/5G mode; AP+STA; Max of Connection  
number: 30 (with W59 module)  
BT:BT 3.0 SPP/BLE 4.2 (with W59 module)  
Multimedia : Play/record multimedia files  
Virtual Ethernet: RNDIS/NDIS  
Antenna diagnostics

## Interfaces

USB 2.0 Interface with OTG Function  
UART \*3  
I2C  
I2S  
SPI  
HSIC  
SDIO  
SD Card  
ADC \*3  
SGMII Interface  
GPIO \*5  
1.8V/3.0V USIM Interface

## Certifications(plan)

CE  
RoHS / REACH

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