

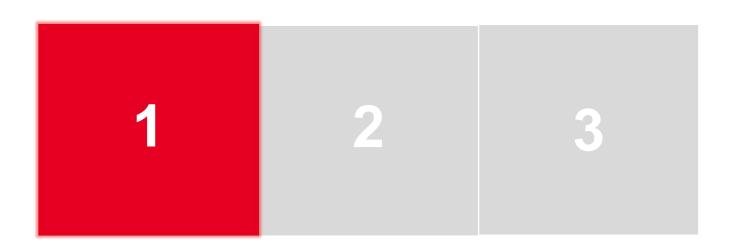
SIMCom Company Profile

Oct, 2024





SIMCom Overview



Why choose SIMCom?



20⁺years

Leading the wireless module industry

180⁺countries

Worldwide sales network

10,000⁺

Collaborate customers all over the world

500⁺million

Cumulative shipments

No.1

Global shipment in 4 consecutive years

500⁺million

Investment in 5G R&D and automatic equipment

 5000^{+}m^{2}

R&D laboratory

500⁺

Global patents and certifications



Company History & Milestone



2021-2024

Ranked No.1 global shipment during 2015~2018

Developed more product lines
Launched automotive module product line
Establishment of Chongqing 5G R&D Center
Launched LPWA module SIM7000 and SIM70X0 series



2015-2018



Keeping Top 3 in Global Shipment

Launched 4G Cat.1 & Cat.3 modules SIM7100, SIM7600 series Qualified in AT&T recommended module list



2006-2009

Shipment ranked No.2 in the world

Entered high-end North American market Received certifications from overseas operators Launched 1st 3G module SIM5320 and SIM5360 series



Start up in Shanghai in 2002

Launched 1st self-designed GSM M2M module Entered overseas market including India and Eastern Europe Shipments jumped to No.1 in Asia

Moved into new HQ office in Shanghai

Launched 11 new 5G modules SIMCom's 20th anniversary in 2022 Completion of Expansion of Chongqing R&D Center Cumulative Shipments Exceed 500 Million



5G

2019-2020

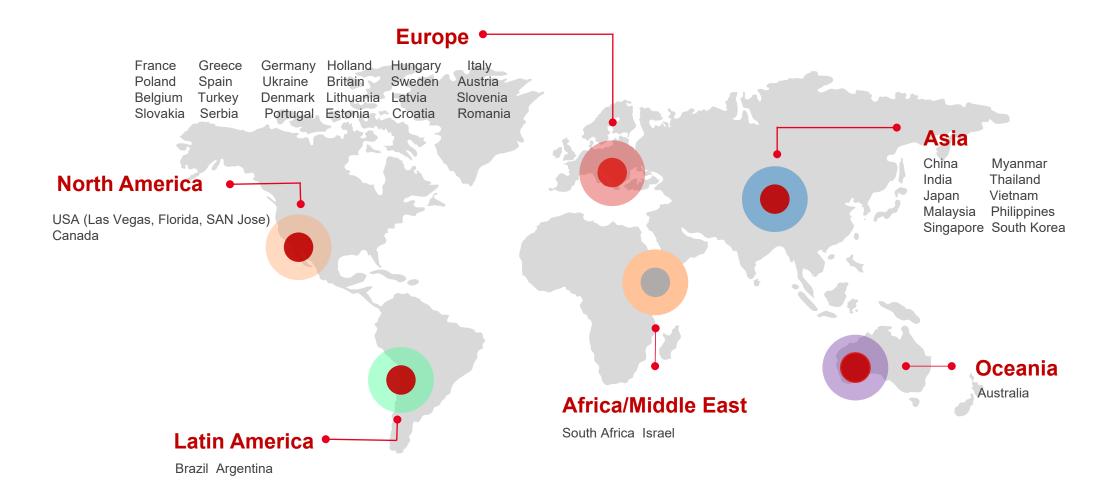
Launched 1st 5G module SIM8200EA-M2 in the world

Launched world's smallest size 5G module SIM8202 series Cumulative shipments exceeded 300 million pcs Launched C-V2X and LTE-A modules SIM8100, SIM7906, SIM7912, SIM7912 series

Global Sales Network



Serve 180⁺ countries and regions in five continents.



Key Partners and Ecosystem



Helping customers to develop global markets.

Rich certifications save customer large amount of time and investment.











Top Level Labs Ensure R&D Quality



5,000+m² advanced labs equiped with world's leading instruments























5G mmWave

GNSS Performance Test

Quality Control Management



Production quality control

Supplier quality control

- ✓ Utilize APQA, SWOT, DOE, FMEA, PPAP and other tools to select qualified suppliers
- ✓ Establish Supplier assessment and management mechanism

✓ Utilize CP, FMEA, MSA and SPC tools to control the production test process ✓ 7S management and ESD control management ✓ Complete material/product traceability system ✓ QC improvement team

Test quality control

- ✓ Strict product test standards
- ✓ Professional hardware and software test team
- ✓ Professional Test Lab

Design quality control

- ✓ Utilize FMEA/SWOT/PPAP-based management process to ensure design output assessment system
- ✓ JIRA system-based project platform for tracking management
- ✓ Professional PQM and NPI to follow complete design and production process



Continuous improvement

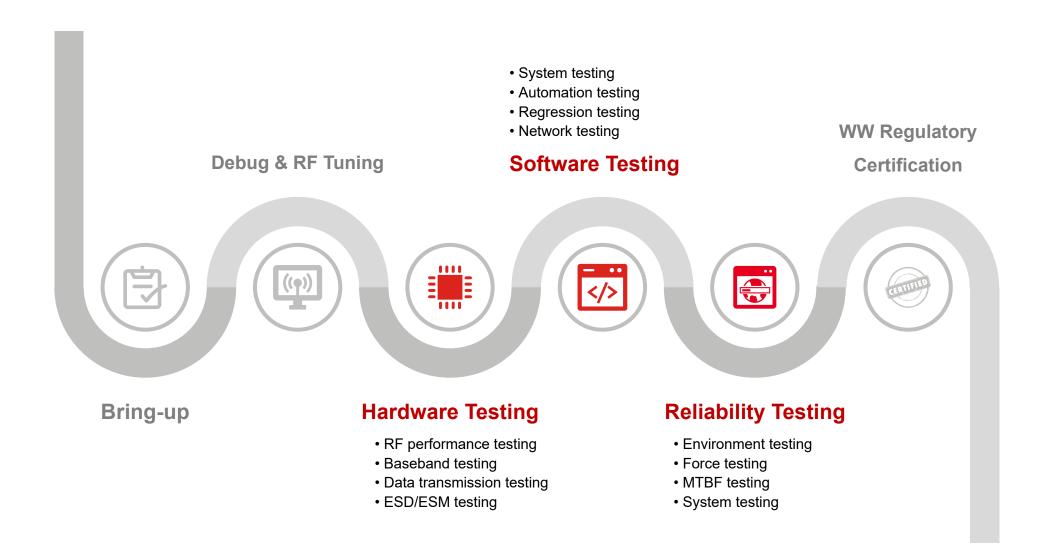
 $\checkmark \ \ \text{Continuous improvement with PDCA management tools}$

Aftersales service

- ✓ 24-hour services
- ✓ Professional RMA team
- ✓ 8D report

R&D Quality Control





Supply Chain Management



HEG TECH

CTT

BIRD

Multiple qualified factories and automatic production lines

- Qualified factories includes BYD@Shenzhen, BYD@ Xi' an, BIRD@Suizhou, CTT@Huizhou, HEG TECH@Huizhou, MTN@Huizhou, BYD@ Vietnam, BYD@ India, GBR@Brazil
- Innovative Auto lines dramatically shrink back-end cycle times

Business Continuity Management process

- Monitor potential losses ,develop risk-mitigation process
- Continuous review of internal/external partners & suppliers

First-class quality

Strict quality control system for high-quality products

Multiple manufacturing partners assure delivery and lead-time

Production Capacity

- Advanced SMT Machine
- Daily production capacity >200K pcs
- Standard leadtime: 8-12 weeks

Qualified Production System

- ISO9001 - IATF 16949 : 2016

- ISO14001 - QC0800000

- ISO27001 - TL9000

- ISO45001 - ESD2020

- OHSAS18001

GBR

SIMCom manufacturing strategy assures on-time delivery



All-round customer technical support



03.Test & Debug

- Board Bring-up
- Performance optimization
- Antenna Guidance
- · Applications Support

02.System Design

 Support system design issues such as schematic and layout

01.Promotion/Engagement

- Product promotion
- · Technology discussion



04. Certification

· Global certifications

05.Production

 Provide guidance on production testing and manufacturing

SIMCom is pretigious for its services which are incorporated throughout product life-cycle

Core Competitiveness





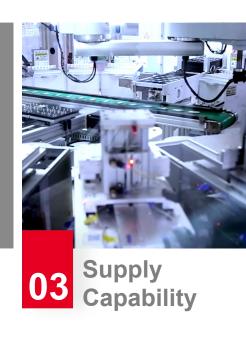
industry



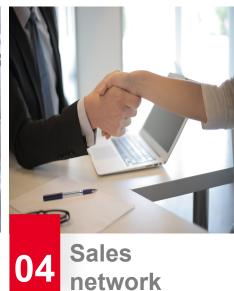
GNSS & TE

LPWA S NB-IOT

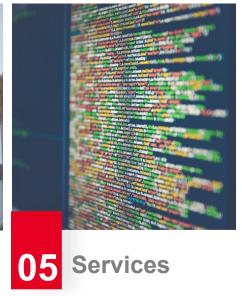
C-V2X E



Stable cooperation with five reliable manufacturers who adopts automatic production lines.



A worlwide sales network with 30+ sales offices covering 180+countries and regions



Provide software and certification support based on a customeroriented service system.



Product Portfolio



SIMCom Product Portfolios in the 5G Era





Positioning

- Single Frequency & Multi-mode
- Multi-Frequency
- RTK



Low &Middle Data Rate

- 2G/3G
- **LPWA**
- LTE-M
- NB-loT
- Cat.1/Cat.1 bis



MBB

- LTE Cat.4
- LTE-A Cat.6
- LTE-A Pro Cat.12

| 5G



Automotive

- Automotive Grade
- Cat.4
- V2X
- 5G/5G+V2X



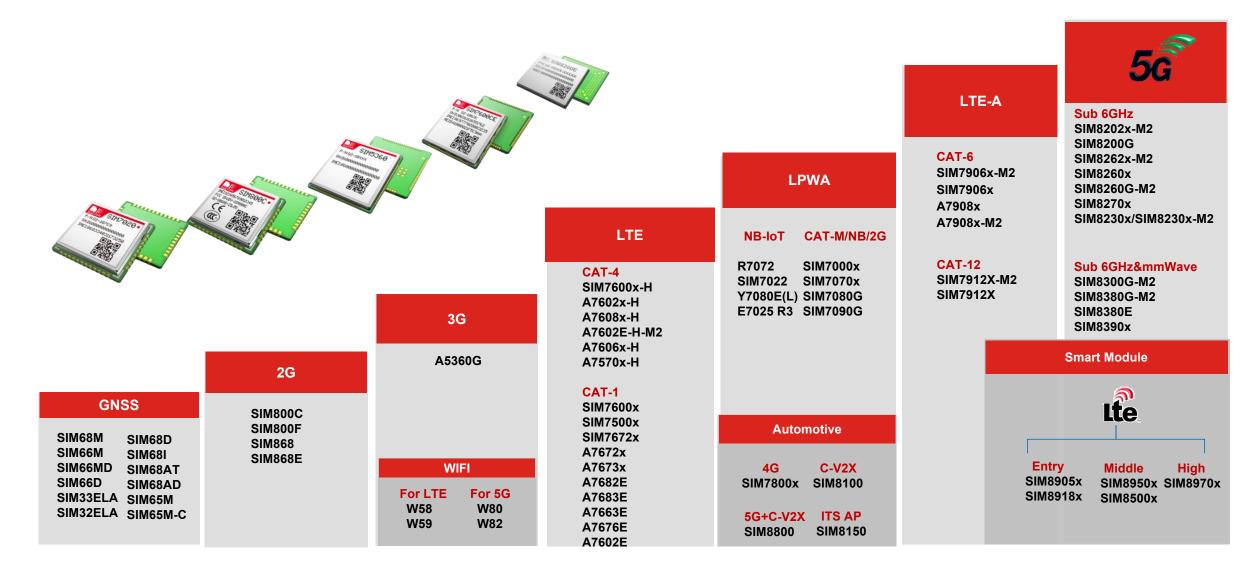
Edge Computing

- Smart Module
 - Entry
- Mid
- High

Complete Range of Cellular & GNSS Product Lines

SIMCom Product Portfolio





5G Module Roadmap





SDX55 SDX62 SDX65 SDX72/75 SDX35 SIM8380G-M2 SIM8300G-M2 • M.2 SIM8390x Sub 6GHz+mmW • 30*52*2.3mm • 30*52*3.65mm Global • 46*53 mm • Rel-15 • 4+2 Antenna SIM8260x SIM8380E SIM8270x SIM8230x SIM8200G • LGA Sub 6GHz • LGA • LCC+LGA • LGA • 41*43.6mm • 46*53 mm • 41*43.6mm • 30*30 mm (41.0*43.6mm, LGA) • 41*43.6 mm • Rel.16 RedCap • Rel-16 • Rel-15 • -A/-C/-E Sub SIM8260G-M2 SIM8260C-M2 Sub 6GHz SIM8200EA-M2 SIM8230x-PCIE • M.2 6GHz • M.2 • M.2 • mini-PCle (30.0*52.0mm, M.2) • Rel-16 Rel.16 • 31*5.8 mm • Rel-15 • China RedCap SIM8262x-M2 SIM8202x-M2 Sub 6GHz SIM8230x-M2 • M.2 • M.2 (30.0*42.0mm, M.2) • Rel.16 • 30*42 mm • -E/-G RedCap • -A/-E • Rel-15

2022

LTE-A Module Roadmap







2021~2023

Cat.12

Cat.6

ASR1828

A7908x

- LTE Cat 6
- 300M DL/50M UL
- LGA Form Factor
- -E/-SA



A7908x-M2

- LTE Cat 6
- 300M DL/ 50M UL
- M.2 Interface
- -E/-SA

SIM7912x



- LTE Cat 12 • 600M DL/150M UL
- LGA Form Factor • -E/-A



SIM7912x-M2

- LTE Cat 12
- 600M DL/150M UL
- M.2 Interface
- -E/-A/-G

SDX12

SIM7906x



- LTE Cat 6
- 300M DL/50M UL
- LGA Form Factor
- -E/-A



SIM7906x-M2

- LTE Cat 6
- 300M DL/50M UL
- M.2 Interface
- -E/-A/-G

Note: Special variants for CBRS/LAA/4x4 MIMO

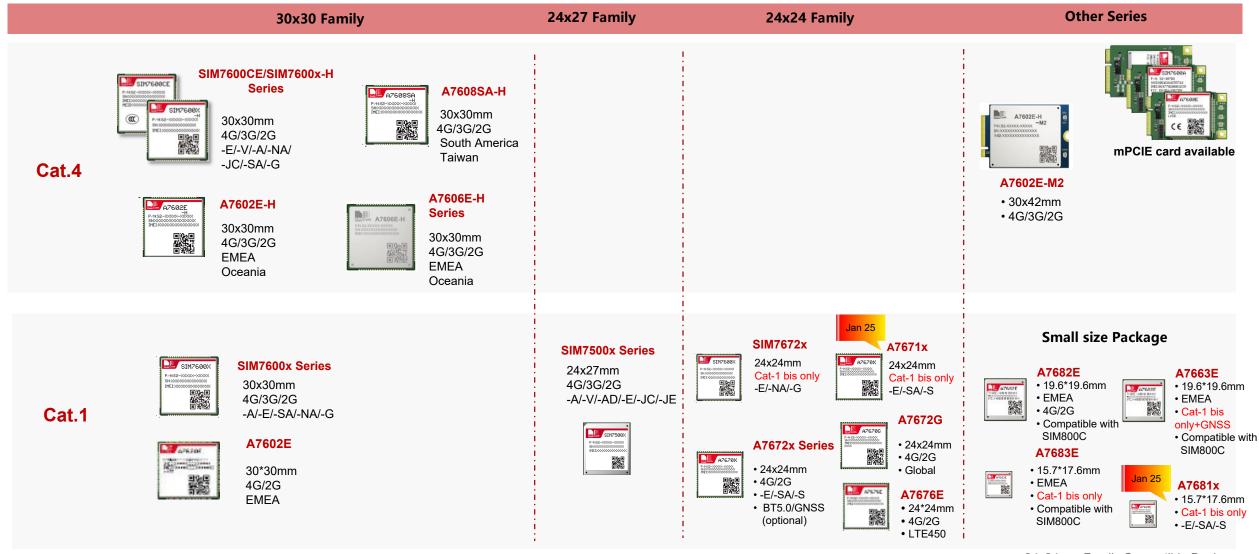
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LTE Module Roadmap









24x24mm Family Compatible Design 30x30mm Family Compatible Design

LPWA Module Roadmap







CAT-M /NB-IoT/2G &GNSS



SIM7000X

- LCC
- 24*24*2.6mm
- CAT-M/NB-IoT/2G
- -A/-E/-JC/-G



SIM7070X

- LCC
- 24*24*2.3mm
- CAT-M/NB-IoT/2G
- -G/-E(LTE450)



SIM7080G

- LCC+LGA
- 17.6*15.7*2.4mm
- CAT-M/NB-IoT

SIM7090G

- LGA
- 14.8*12.8*2.0mm
- CAT-M/NB-IoT



NB-IoT



SIM7022

- LCC
- 17.6*15.7*2.3mm
- NB-IoT



Y7028

- 17.6* 15.7* 2.3mm
- NB-loT



Y7080E(-L)

- 17.6* 15.7* 2.3mm
- NB-IoT Only

NB-IoT &GNSS



/7080F

- 17.6* 15.7* 2.3mm
- NB-IoT+GNSS

NB-IoT &2G



R7072

- 24.0x24.0mm
- NB-IoT +2G

NB-IoT &BLE



E7025 R3

- 17.6*15.7mm
- NB-IoT only
- BLE 5.1

Mass Production In development

LTE450 Module Roadmap







LTE CAT-1/CAT-1 bis/2G



A7676E

- LCC+LGA
- 24*24*2.4mm
- CAT-1/2G
- B1/B3/B8/B20/B28*/B31/B72

CAT-M /NB-IoT(option)/2G* (option) &GNSS



SIM7070E

- LCC
- 24*24*2.3mm
- CAT-M/NB-IoT/2G*/GNSS

Mass Production

Automotive Module Roadmap

Qualcomm MDM 9628









Mass Production

Smart Module Roadmap - With Cellular







High



SIM8970X

- 44.1*45.6*2.8mm
- · LCC+LGA Package
- LTE Cat.6,300M DL/50M UL
- CPU QCM6125, Octa ARM V-8 cores up to 2.0GHz
- 2520*1080 Dual display
- · Camera 25MP
- Wi-Fi/BT/GNSS integrated
- Android 10/11 /13
- EU/SA/NA

Medium







SIM8950X

- 44.1x45.6x2.8mm
- LCC+LGA Package
- LTE Cat.4.150M DL/50M UL
- CPU SDM450 Octa-Core A53 1.8GHz 64bit
- Display 4K@30fps
- Dual Display support
- Camera 24MP 13MP+13MP
- · Wi-Fi/BT/GNSS integrated
- Android 8/9/10
- EC/AC





SIM8918X

- 40.5x40.5x2.8mm
- · LCC+LGA Package
- LTE Cat.4,150M DL/50M UL
- CPU QCM2290 4xA53 2.0GHz
- 1680*720 HD+ Display
- · Camera 13MP
- Wi-Fi/BT/GNSS integrated
- Android 11/12/13/Linux
- CE/EA/SA/NA/JP





SIM8965G

40.5*40.5*3.0mm LCC+LGA Package LTE Cat.4,150M DL/50M UL

SM6115

Octa-Core 2.0GHz One Display **Dual Cameras** WIFI/BT/GNSS PIN compatible with SIM8918

Entry



SIM8905X

- 40.5x40.5x2.8mm
- LCC+LGA Package
- LTE Cat.4,150M DL/50M UL
- CPU MDM8909 4xA7 1.1GHz
- 720P HD Display
- Camera 8MP
- Wi-Fi/BT/GNSS integrated
- Linux 3.18 and 4.9
- E/A R2



SIM8500X

- 40.5*40.5*2.8mm
- LTE Cat.4,150M DL/50M UL

- LCC+LGA Package
- CPU **\$L8541** Quad-Core A53@1.4GHz
- 1440*720@60fps Display
- Camera 13MP
- WIFI/BT4 2/GNSS
- Android 10
- · CE/EA

Mass Production In development

Smart Module Roadmap - Without Cellular





High



SIM8070

- 44.1*45.6*2.8mm
- LCC+LGA Package
- CPU QCM6125 ,Octa
- ARM V-8 cores up to 2.0GHz
- · 2520*1080 Dual display
- Camera 25MP
- WIFI/BT



SIM9650L-W

- LGA
- 42,5*56.5*3.0mm
- QCS6490
- AI 14 TOPS
- Octa-Core 2.7GHz(1×A78 2.7GHz +3×A78 2.4GHz+ 4×A55 1.9GHz)
- WIFI 6E/BLE/GNSS
- Android 14



Med



SIM8050LH

- LCC+LGA 44.1*45.6*2.8mm
- SDM450
- Octa-Core 1.GHz
- Dual Display, Dual Cameras
- WIFI/BT



SIM8918W

- LCC+LGA 40.5*40.5*2.8mm
- QCM2290
- Quad-Core 2.0GHz
- 1 Display 3 Cameras
- WIFI/BT

Entry



SIM8905E-W

- LCC+LGA 40.5*40.5*2.8mm
- MSM8909
- Quad-Core 1.1GHz
- 1 Display、Dual Cameras
- WIFI/BT

Mass Production

In development

GNSS Module Roadmap







Multi Frequency



SIM68D

- 16*12.20*2.4mm
- LNA/SAW Inside
- · Beidou/GPS/GLONASS/ Galileo/QZSS
- L1+L5



- 16*12.20*2.4mm
- LNA/SAW Inside
- · Beidou/GPS/GLONASS/ Galileo/QZSS
- L1+L5: DR



SIM66D

- 16*12.20*2.4mm
- · LNA/SAW Inside
- Beidou/GPS/GLONASS/ Galileo/QZSS
- L1+L5: RTK*



SIM66MD

- 10.1*9.7*2.5mm
- LNA/SAW Inside
- Beidou/GPS/GLONASS/ Galileo/QZSS
- L1+L5: RTK*

Multi Mode Single Band



SIM68M

- LNA/SAW Inside
- Beidou/GLONASS



SIM65M

- 10.1* 9.7* 2.5mm
- LNA/SAW Inside
- Beidou/GPS/GLONASS/ Galileo/QZSS



SIM65M-C

- 10.1* 9.7* 2.5mm
- LNA/SAW Inside
- · Beidou/GPS/GLONASS/ Galileo/QZSS



SIM33 Series

(Embedded Antenna) SIM33ELA/SIM33EAU



SIM32ELA

(Embedded antenna)

- 14* 9.6* 2.15mm
- LNA/SAW Inside
- · Beidou/GPS/GLONASS/ Galileo/QZSS

Mass Production

WIFI Module Roadmap





For LTE



W58

- 16.6x13mm
- Base on QCA-9377-3
- Wi-Fi with SIM7600X-H
- IEEE 802.11b/g/n



W74

- 16.6x13mm
- Base on QCA6174A
- Wi-Fi with SIM7612X
- IEEE 802.11a/b/g/n/ac

W59 • S2-9000X SH00000000000

W59

- 16x18.3mm
- Base on QCA-6574A-3
- Auto Grade Wi-Fi with SIM7800
- IEEE 802.11a/b/g/n/ac

For 5G



W80

- 17x24mm
- Base on QCA-6391
- WIFI 6 with SIM8200 series
- IEEE 802.11a/b/g/n/ac/ax
- Support 2x2+2x2 MU-MIMO



W82

- 17x24mm
- Base on WCN6856
- WIFI 6 with SIM8260 series
- IEEE 802.11a/b/g/n/ac/ax
- Support 2x2+2x2 MU-MIMO



W86

- 26x21mm
- Base on WCN-7851
- WIFI 7 with SIM8270 series
- IEEE 802.11a/b/g/n/ac/ax/be
- Support 2x2 MU-MIMO

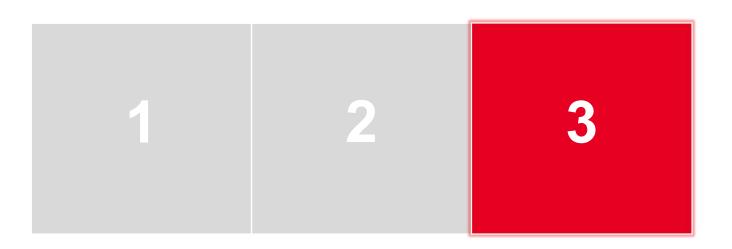
W87

- 32.5x29.5mm
- Base on QFW71X4
- WIFI 7 with SIM8270 series
- IEEE 802.11a/b/g/n/ac/ax/be
- Support 4x4 MU-MIMO

Mass Production In development



IoT Applications



Typical Applications









Industry

- Industrial PDAs/ Scanners
- Industrial PCs
- Rugged Tablet PCs
- Pipeline Monitors

- Robots
- Flowmeters
- UAVs
- · Industrial Refrigerators
- Indoor Air Monitozzzrs
- Water Valves/ Pump Controls

Recreational Machines

Life & Healthcare

- Personal Trackers
- Pet Trackers
- Wearables
- Home Automation
- Elderly Monitoring
- Remote Medical Equipment Patient Monitoring Laptops
- Glucometers
- Blood Pressure Monitors

Agriculture & Environment

- Trail Cameras
- Food Traceability
- Farmland Monitoring
- Farm Machinery Management

- Meteorological Stations
- Wildlife Tracking
- Irrigation
- · Environmental Monitoring

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Typical Applications









Telematics & Transport

- Automotive OEMs
- Vehicle Tracking
- Asset Tracking
- Ship Tracking
- Special Purpose Vehicles
- Fleet Management

- OBD
- Vehicle DVRs
- Usage-Based Insurance

Energy

- Electricity Meters
- Gas Meters
- Water Meters
- Heat Meters

- Smart Grid
- Wind Turbines
- Solar Panels
- Charging Piles

- OBD
- Vehicle DVRs
- Usage-Based Insurance

Payment

- Wireless POS
- Cash Registers
- ATMs

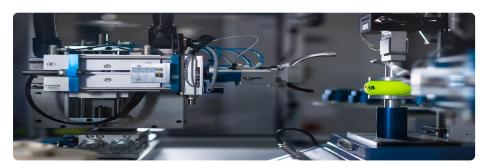
- Vending Machines
- Top-up Machines

Typical Applications









Safety

- Alarms
- Intrusion Detection
- Smoke Detectors
- Gas Detectors
- Motion Sensors
- Asset Protection

Smart Cities

- Street Lighting
- Traffic Lights
- Sharing Economy
- Smart Elevators
- Smart Parking
- Parking Meters
- Toll Collection Systems
- Digital Signage

- Advertisement Displays
- Smart Bins
- Outdoor LED Lighting

Gateways

- DTUs
- Consumer Routers
- Industrial Routers
- VOIP
- Servers
- Wi-Fi Hotspots



Typical Application Smart meters

SIMCom and Partners have created a series of smart metering devices in an effort to make sure that Water/gas/electricity is better distributed and protected.

These Smart metering applications were equipped with SIMCom's LPWA modules, used to realize remote data transmission and control. It supports accurate measurement, remote data transmission and real-time monitoring. More than that, it has certain warning functions, and helps the control platform to enable smart management, improve the management efficiency, and save human and time cost to a very large extent.





Typical Application Smart Payment

Alipay Box Dragonfly F1 is a device terminal that combines Alipay Cloud's face recognition function and IoT technology. SIMCom smart modules have been used in this device for data transmission. Alipay Box Dragonfly F1 combines voice broadcast, password keypad, and advertising electronic poster, face recognition payment, scan code payment and other functions.

Compared with traditional payment methods, with the addition of biometrics and facial recognition, smart payment has enabled convenient self-service shopping, giving consumers a hands-free experience.

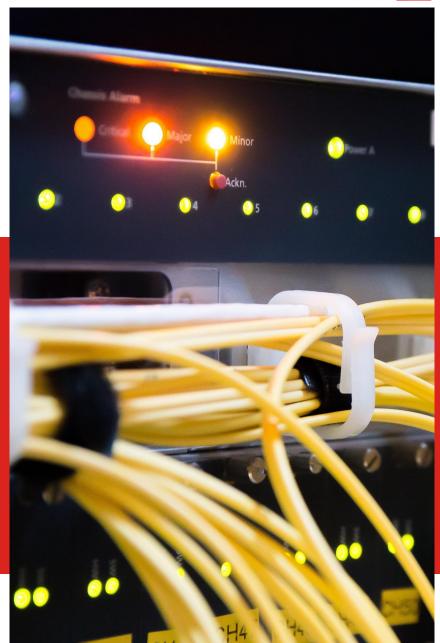




Typical Application Industry Router

Industry router is a fundamental device in the wireless communication. SIMCom 5G modules have been used in the 5G industry router, it can use public 4G/5G networks to provide users with long-range wireless big data transmission.

The 5G industrial router adopts high-performance industrial communication processors and industrial wireless modules and an embedded real-time OS is operating as its software support platform.





Typical Application Fleet management

SIMCom LTE Cat.1 modules can provide proper transmission rates for data uploading and downloading, remote controlling, video surveillance, and voice calling. The capability of automatic fall-back to 2G/3G ensures the fleet continuous wireless connection on road. Moreover, the optimized RF design brings much more stability to the networking when the vehicles are running at high speed.

The GNSS positioning modules of SIMCom consist of the modules that support standard precision positioning working on a single frequency and dual frequency and the high-precision modules with capabilities such as RTK (Real Time Kinematics), and DR (Dead Reckoning).





Typical Application T-Box

With increasing demands from car owners, the majority of new vehicles are equipped with networking capabilities. The penetration rate of vehicle interconnectivity will increase year by year. With complicated and harsh in-vehicle environment, this requires high standards on equipment and components, and core components need to meet automotive grade requirements. SIMCom's automotive modules can provide OEMs and tier-1s vendors with a more stable and reliable solution.

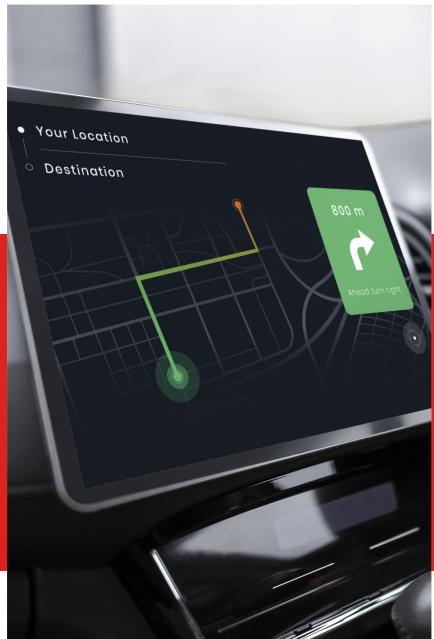




Typical Application In-Vehicle Infotainment(IVI)

With the prosperous development of the automotive industry and the transport industry, in-vehicle infotainment system is expected to become a highlight of future vehicles, providing the most useful traffic information and entertainment service anywhere anytime, including navigation, video and audio streaming, and network connectivity.

SIMCom has collaborated with its partners to develop highly integrated and cost-effective in-vehicle infotainment, with support for WiFi hotspots, Bluetooth, navigation, music streaming and other features.



Thanks!







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