

SIMCom Company Profile

March, 2024

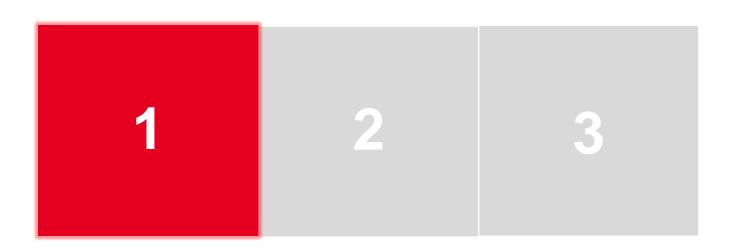
SIMCom Wireless Solutions Limited John Faucher

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SIMCom Overview



Why choose SIMCom?



21⁺years

Leading the wireless module industry

180⁺ countries

Worldwide sales network

10,000⁺

Collaborate customers all over the world

500⁺million

Cumulative shipments

500⁺million

Investment in 5G R&D and automatic equipment

 $5000^{\dagger} \text{m}^{2}$

R&D laboratory

500⁺

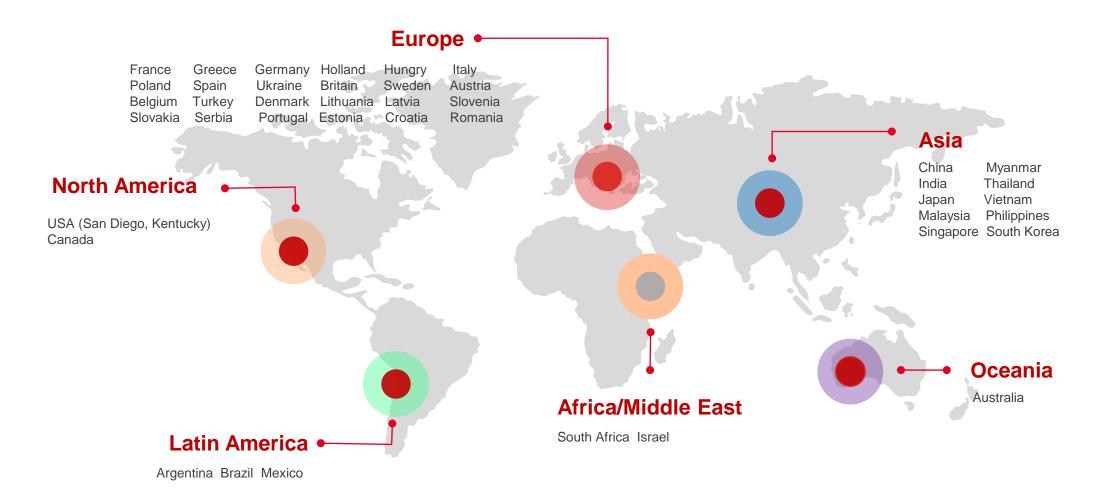
Global patents and certifications



Global Sales/Support Network



30⁺ sales offices 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.











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
- Standard leadtime: 8-12weks

Qualified Production System

- ISO9001 - I

- IATF 16949 : 2016

- ISO14001

GBR

- QC0800000

- ISO27001

- TL9000

- ISO45001

- ESD2020

- OHSAS18001

SIMCom manufacturing strategy assures on-time delivery

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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-IoT
- 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



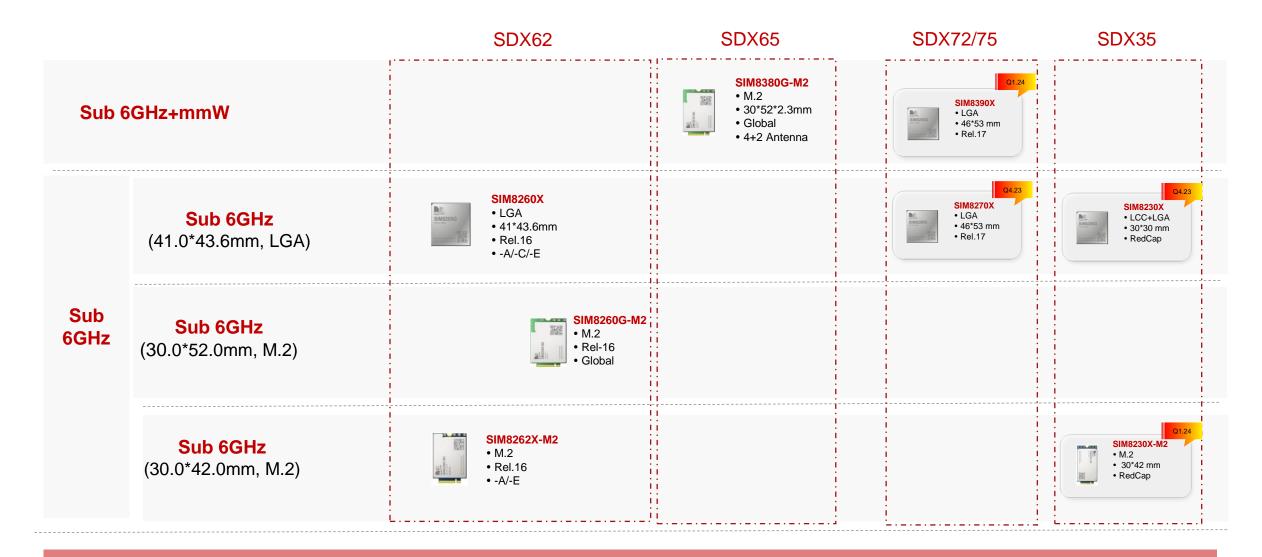
Edge Computing

- Smart Module
- Low
- Mid
- High

Complete Range of Cellular & GNSS Product Lines

5G Module Roadmap





2023

LTE-A Module Roadmap



2021~2023 SIM7912X-M2 R2 SIM7912X • LTE Cat 12 • LTE Cat 12 • 600M DL/150M UL • 600M DL/150M UL **Cat.12** M.2 Interface LGA Form Factor • -E/-A/-G SIM7906X-M2 R2 SIM7906X • LTE Cat 6 LTE Cat 6 • 300M DL/50M UL • 300M DL/50M UL M.2 Interface LGA Form Factor Cat.6 • -E/-A • -E/-A/-G Note: Special variants for CBRS/LAA/4x4 MIMO SDX12

LTE Module Roadmap



	30x30 Family	24x27 Family	24x24 Family	Other Series
Cat.4	SIM7600X-H Series 30x30mm -E/-NA/-JC/-SA/-G	SIM7500X-H Series 24x27mm -A/-V/-AD/-E/-JC/- JE/NA*		mPCIE card available SIM7500X Series SIM7600X Series SIM7600X-H Series M.2 card available SIM7600X-H Series
Cat.1	SIM7600X Series SIM7600X Series 30x30mm -E/-SA/-NA/-G	SIM7500X Series 24x27mm -A/-V/-AD/-E/-JC/- JE/NA*	SIM7672X SIM7672X 24x24mm -E/-NA/-G	Small size Package

24x24mm Family Compatible Design 30x30mm Family Compatible Design

LPWA Module Roadmap



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

NB-IoT NTN



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

CAT-M NTN NB-IoT



SIM7070G-S

- LGA
- LTE CATM



SIM7022

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

2021~2023

Automotive Module Roadmap





5G Sub 6Ghz NSA/SA



LGA package 5G+PC5 (Optional)

3GPP release 15 for 5G &C-V2X

•Qualcomm SA515M

5G+V2X

SIM8150 ITS AP



- AP module
- LGA package
- 13K DIMPS
- Quad CPU Cores
 Qualcomm SA2150P

*SIM8820x 5G+V2X+AP

- 5G Sub 6Ghz NSA/SA(200MHz)
- Uplink 2*2 MIMO
- LGA package
- 5G+PC5 (Optional)+AP
- 20K DIMPS

2025 •3GPP release 16 for 5G, •3GPP release 15 for C-V2X

Qualcomm SA525M

*SIM8810x 5G+V2X+AP

- 5G Sub 6Ghz NSA/SA (100MHz)
- LGA package
- 5G+PC5 (Optional)+AP
- 20K DIMPS
- •3GPP release 16 for 5G,
- •3GPP release 15 for C-V2X

•Qualcomm SA522M

4G

MP

Coming



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

Med







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

Entry

Coming Soon

Before 2022

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

Med



SIM8050LH

- LCC+LGA 44.1*45.6*2.8mm
- SDM450
- Octa-Core 1.8GHz
- 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

Before 2022

GNSS Module Roadmap



Multi **Frequency**

SIM68D

SIM68MD

SIM66MD

SIM68AT

SIM68AD

SIM66D

- 16*12.20*2.4mm LNA/SAW Inside Beidou/GPS/GLONASS/ Galileo/QZSS
 - L1+L5
- 10.1*9.7*2.5mm SAW Inside
- Beidou/GPS/GLONASS/ Galileo/QZSS • L1+L5
- 10.1*9.7*2.5mm LNA/SAW Inside Beidou/GPS/GLONASS/ Galileo/QZSS
 - L1+L5: RTK*
- 16*12.20*2.4mm LNA/SAW Inside Beidou/GPS/GLONASS/
 - Galileo/QZSS • L1+L5: RTK

• 16*12.20*2.4mm

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

Multi Mode Single Band



SIM68M

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



SIM33 Series (Embedded Antenna) SIM33ELA/SIM33EAU



SIM66M

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

SIM65M

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

SIM32ELA

(Embedded antenna)

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

WIFI Module Roadmap



For LTE



W58

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

For 5G



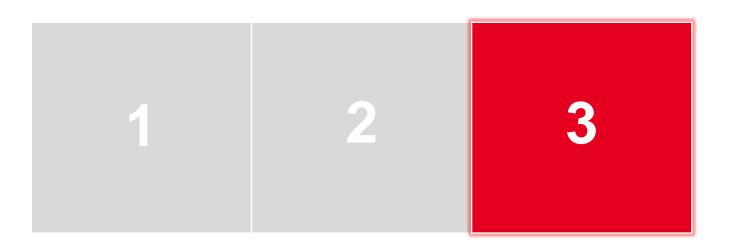
W82

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

2021 2022



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

Typical Applications









Telematics & Transport

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

- OBD
- Vehicle DVRs
- Usage-Based Insurance

Energy

- ElectricityMeters
- 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

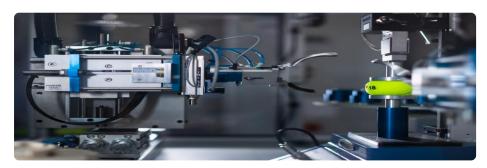
- Vending Machines
- Top-up Machines

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
- Servers

VOIP

- Industrial Routers
- 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.

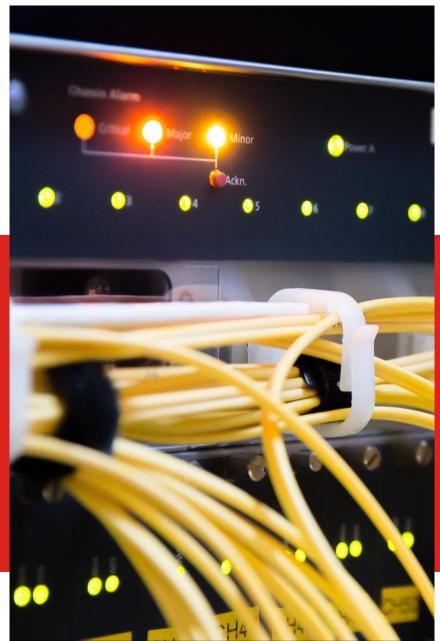




Typical Application Industry Router

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).

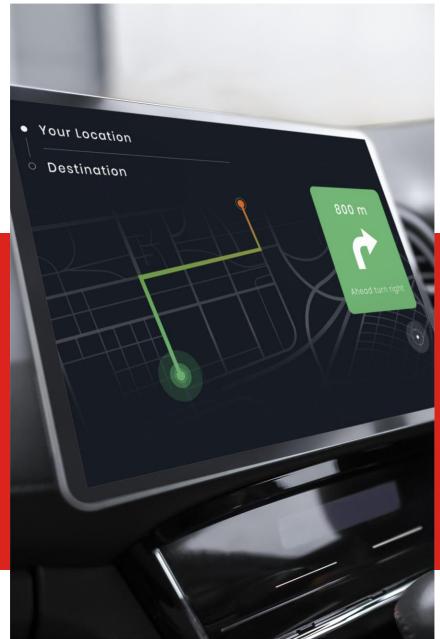




Typical Application In-Vehicle Infotainment(IVI)

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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SIMCom Wireless Solutions

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