Alcom electronics

Wireless embedded connectivity & sensors

Experts supporting a strong portfolio

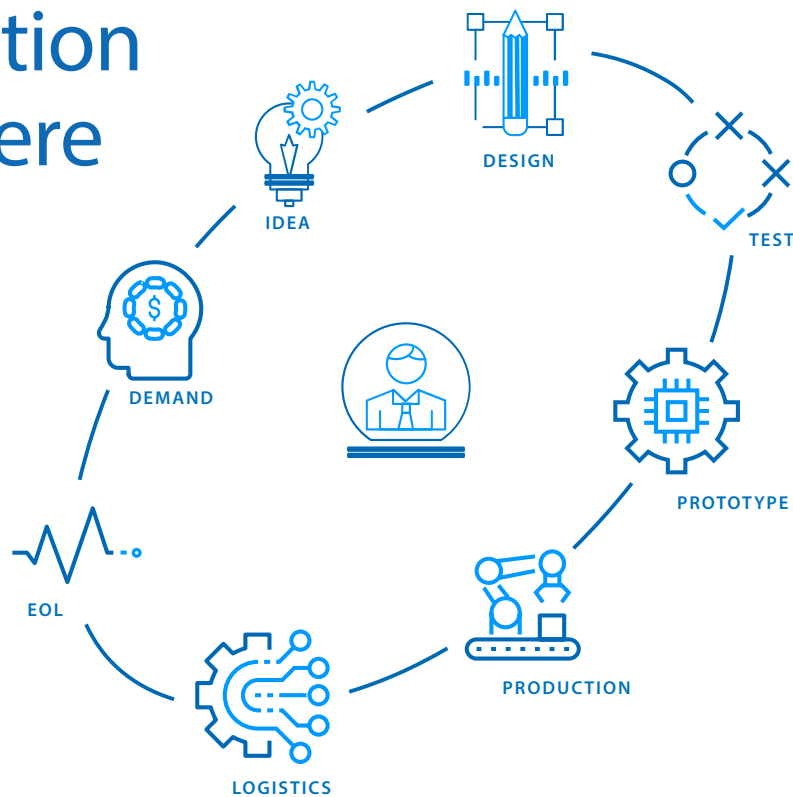of Embedded IoT technologies

Wireless Communication & Alcom

Complete product portfolio including additional services

Alcom electronics represents leading innovators bringing the newest products. Besides components, modules, boards we provide the latest services for remote management, edge/ cloud, and security. We'll guide you through the simple journey on a human scale using the personal assistance of a dedicated Field Application engineer. This allows us to provide a level of commitment, service and expertise that's shared by the added-value strategy of Alcom and its partners. We invite all our customers to get in touch with Alcom today to make your current and future wireless developments optimal and future-proof.

Co-creation starts here

IDEA

DESIGN

TEST

DEMAND

PROTOTYPE

EOL

PRODUCTION

LOGISTICS

Alcom considers everybody an indispensable added value in the collaborative chain with all of its partners.

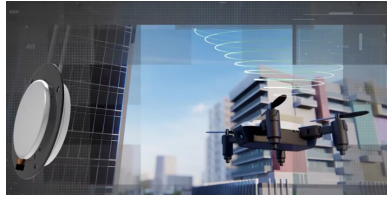# Applications & Markets
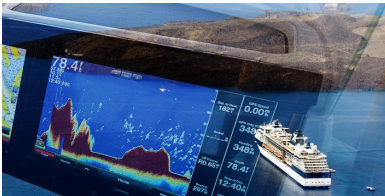

TRANSPORTATION

SMART INDUSTRY

HEALTHCARE

CONSUMER ELECTRONICS

PRECISION POSITIONING

SMART CITIES

MARINE

SECURITY & SAFETY

SMART METERING

Supported protocols

5G	4G LTE	amazon sidewalk	Bluetooth
matter	Multiprotocol	Proprietary	THREAD
Wi-Fi	Wi-SUN	Z-WAVE	ZigBee

Product overview

Antennas

- Embedded & external antenna's
- Cellular, mmWave, Sub 6 GHz, GNSS, WiFI, Bluetooth & NFC, combo, ISM/LoRa, UWB, Satcom,…
- In-building/outdoor & vehicular antennas
- Standard & Custom configured solutions
- Manufacturer-approved antenna solutions for each router or module
- RF Cables & connectors, Assemblies, accessories & mounts

Industrial embedded communication

- 5G/4G/3G/2G/GNSS
- Matter, Bluetooth, BLE, Thread, Zigbee, Z-Wave, Wi-Fi, Sub-Ghz multiprotocol and proprietary ICs and modules
- SBCs with integrated wireless

Managed IoT connectivity and services

- Full hardware and cellular connectivity solution sets
- IoT connectivity management for remote smart Connected products
- Edge-to-Cloud solutions for connecting industrial assets
- IoT device monitoring and cloud services
- Device configuration and programming
- Secure connected industrial devices
- Test and certification support services

Sensors

- Solid State Ultra-Low power CO_2 gas sensors
- Humidity, light, magnetic, optical, temperature, vibration, angular position, magnetic hall effect sensors, current sensors,
- Vibration Gyro sensors, inertial measurement, accelerometer,
- Piezo and ultrasonic transducers
- LoRaWAN wireless IoT sensors
- mmWave presence detection and sensing
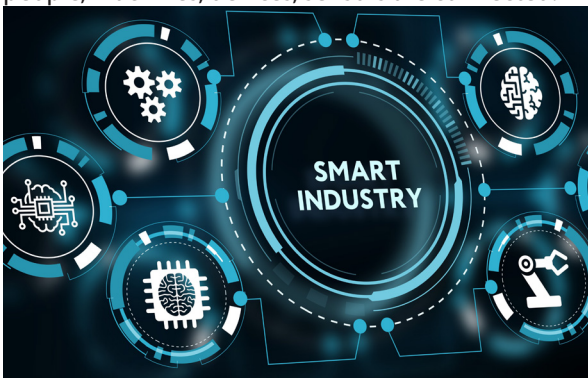

Wireless connectivity SoC's & modules

- WiFi, Bluetooth, Lora, Zigbee, Sub-Ghz, Cellular, proprietary, Sigfox, Matter, Thread, Wi-SUN, Z-Wave, multiprotocol as SoC and/or module
- XBee cellular modems and RF wireless modules for 2.4 Ghz & Sub-1GHz
- WiFi 5 802.11ac/WiFi /6E 802.11ax/Wi-Fi 7 802.11be modules
- 5G/LTE-A/LTE-A Pro/LTE Cat1/Cat M, NB-IoT, 3G,2G wireless modules
- Cellular embedded modems
- Automotive-grade 5G, C-V2X, LTE Cat 6/Cat 4 modules
- GNSS repeaters & positioning modules, trackers & receivers

Innovation & technology partners

Alcom electronics' offer

Alcom has pioneered the wireless revolution by starting actively in this area with cellular M2M communication technology at the end of the '90s. Today, Alcom electronics offers a comprehensive portfolio of **wireless SoCs, modules, antennas and solution services**. We offer best-in class highly integrated hardware solutions designed for rapid development and time-to-market along with a full suite of tools and resources. The wireless components and module portfolio is centered around **cellular & positioning technologies, short range communications, LPWAN and antennas**.

The wide and highly innovative product selection pool allows designers to come to Alcom with almost any wireless connectivity requirement at affordable and highly competitive conditions. No matter what the IoT application requires, Alcom electronics has the right solution. Alcom products can be found into applications such as metering, telematics, industrial machines, automotive, digital billboards, gaming smart cities, public utilities or anywhere where people, machines, devices, sensors are connected.

At Alcom, we are strongly convinced that nobody should left behind in the wireless and IoT revolution.

Contact us today

To make IoT meaningful, it must include the personal human touch. Our qualified technical Sales team and Manufacturers' Certified FAE -team starts by analyzing your needs and assist you in selecting the right devices, technology and services. With focus on your end application, they take an in-depth look at the environment and will be your guide throughout the design-in and certification process.
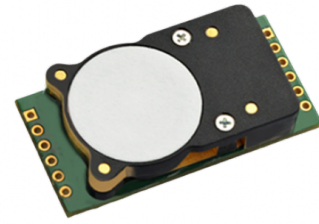
KEY PARTNERS

DIGI	emwicon	EPSON	Fibocom
GSS Gas Sensing Solutions	jjPlus	JORJIN	Laird CONNECTIVITY
LPRS	MULTITECH	Pulse Electronics	SIERRA WIRELESS IS NOW SEMTECH
SILICON LABS	TAOGLAS	Tibbo TECHNOLOGY	Unictron Technologies Corp.

New product releases

Fastest response, lowest power and most robust CO_2 sensors
It's the core solid-state technology that sets GSS apart.
GSS makes special mid infrared LEDs in-house, and use this solid-state technology at the core of sensors to help achieve ambitious power, speed and endurance goals.
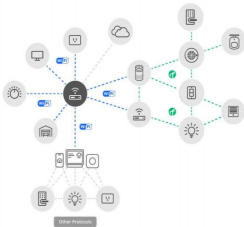
COMPREHENSIVE RANGE IN EMBEDDED AND EXTERNAL ANTENNA'S & ACCESSORIES

Taoglas provides a range of external and embedded antenna solutions for M2M applications such as Telematics, Smart Grid/Metering, Home Automation, Remote Monitoring and Telemedical. This includes standard and custom configured solutions that is carefully build by the cable and antenna builder.

DIGI CONNECTCORE EMBEDDED SOLUTIONS

Digi ConnectCore MP1: Intelligent, wireless and secure embedded system-on-module based on the STM32MP1 MPU family, with turnkey Linux support in the robust Digi SMTplus standard form factor.
Digi ConnectCore 93: Embedded, wireless system-on-module based on the NXP i.MX 93 processor, with AI/ML NPU, designed for longevity and scalability in industrial IoT applications

EXPLORE COMPLETE MATTER SOLUTIONS

Matter drives the convergence between the major IoT ecosystems to create one easy, reliable, and secure wireless protocol to connect all IoT devices and networks. Matter is a home automation connectivity standard designed to reduce fragmentation across different IoT device vendors and achieve interoperability among smart home platforms from different providers. Matter is an application layer that runs over Wi-Fi, Ethernet, and Thread protocols and uses Bluetooth Low Energy (LE) for commissioning.

QUICK OVERVIEW OF OUR BLUETOOTH® HARDWARE WHEN SELECTING THE SOCS AND MODULES

The BG21 has the industry's longest range and is the only SoC with +20 dBm TX power, ideal for line powered devices. The BG22 is the most energy-efficient SoC enabling 10+ years lifetime with a coin cell battery. The ultra-low power BG24 features the largest Flash and RAM capacities in our portfolio and PSA Level 3 Secure Vault Protection and AI/ML Acceleration. The BG27 is our most Battery Versatile SoC, available with DCDC Boost in WLCSP packaging for small form factor applications, from medical devices to wearables and beyond

5G LPWA MODULE FOR NEXT-GENERATION USE CASES

Sierra Wireless' HL7900 offers ultra-low power, increased device longevity and support for 3GPP's latest 5G standards. The module uses new ALT1350 chipset from Sony Semiconductor Israel (Sony) which is claimed by Sony to be the world's first cellular chipset to additionally enable unlicensed spectrum communications protocols, as well as satellite connectivity.

Alcom product portfolio

ELECTRONIC COMPONENT SOLUTIONS	WIRELESS EMBEDDED CONNECTIVITY & SENSORS	WIRELESS & INDUSTRIAL CONTROLS NETWORKING	DISPLAY & TOUCH
LED & SOLID STATE LIGHTING	POWER & EMC	RUGGED MOBILE COMPUTING	EMBEDDED SYSTEMS, AI & EDGE COMPUTING

- Semiconductors
- Frequency & timing
- Power management
- Circuit protection & discretes
- Magnetics
- Passives & electromechanical
- Connectors & cable assemblies
- Photonics

- Wireless modules
- Antenna's
- Sensors

- Routers & gateways
- Wireless embedded computers
- Industrial ethernet and IP variations
- Wired & wireless machine networking
- Antenna's
- Device to cloud solutions
- Connectivity & remote management services
- Networking & connectivity

- Displays
- Touch screens
- Optical bonding
- Total display solutions

- LED light sources
- Optics
- Thermal management
- Power & intelligent controls
- LED modules

- AC/DC power supplies
- DC/DC converters
- Power management modules
- Wireless charging
- E-mobility solutions
- Transformers & power inductors
- UPS
- EMC filters

- Tablets
- PDA's
- Vehicle mount computers
- Accessories

- Computer-on-modules
- Embedded boards
- Industrial PC & automation
- System integration

Bridging the gap between technology, people and business with a human interface.

Get to know us

ALCOM PROVIDES THE WORLD'S MOST ADVANCED TECHNOLOGIES.

With a team of like-minded entrepreneurs, Alcom will continue to inspire its valued customers to use advanced innovative building blocks in vertical markets. The importance of providing high-level services and a human interface based on specialism, knowledge and design-in expertise will remain key differentiators.

Alcom is positioned for growth. We invite all our customers to discuss their current and future concepts and designs. Let's connect, work and grow together.

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