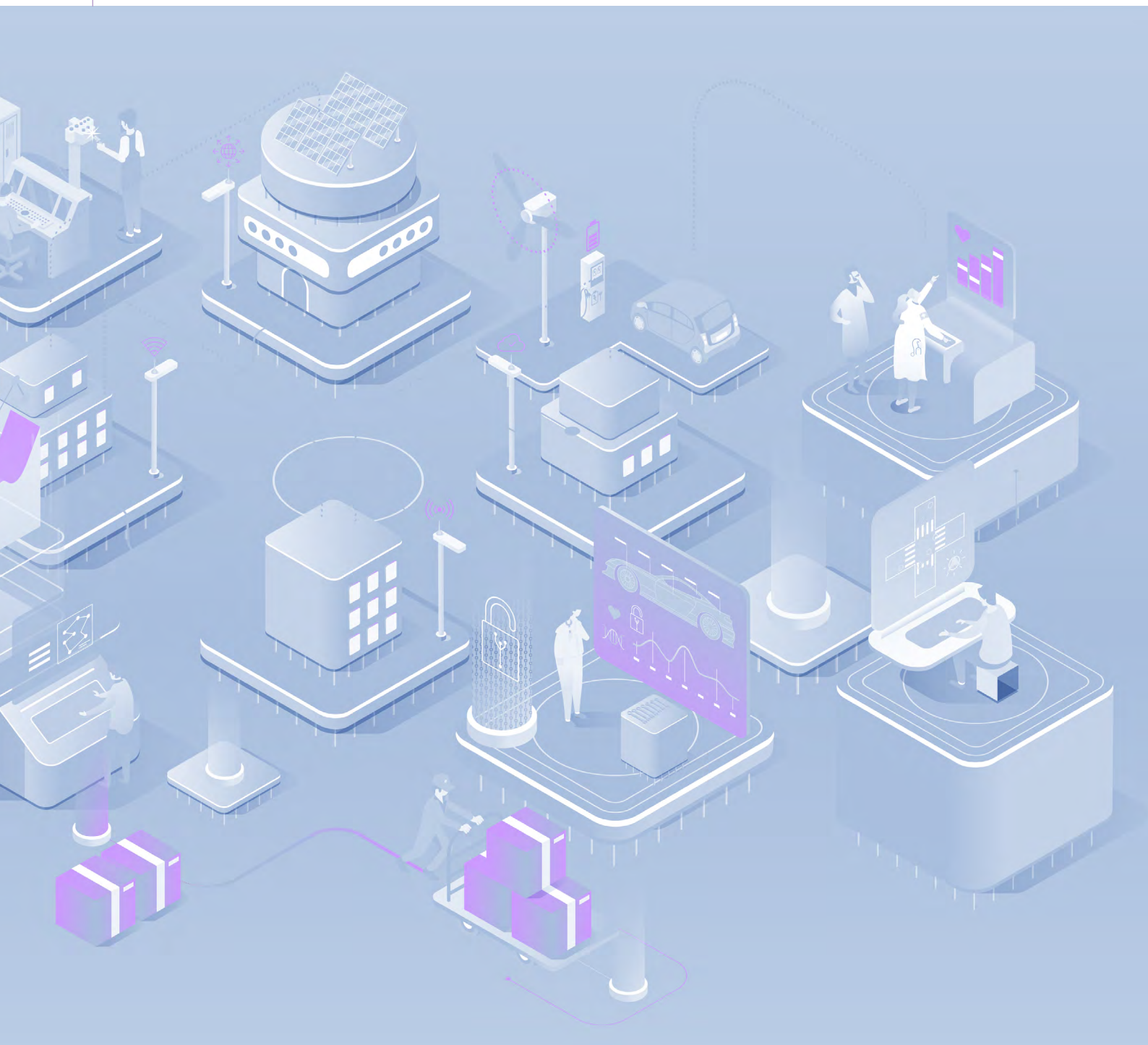




*Selecting the right antenna for your  
next generation IoT solutions*

# Antennas



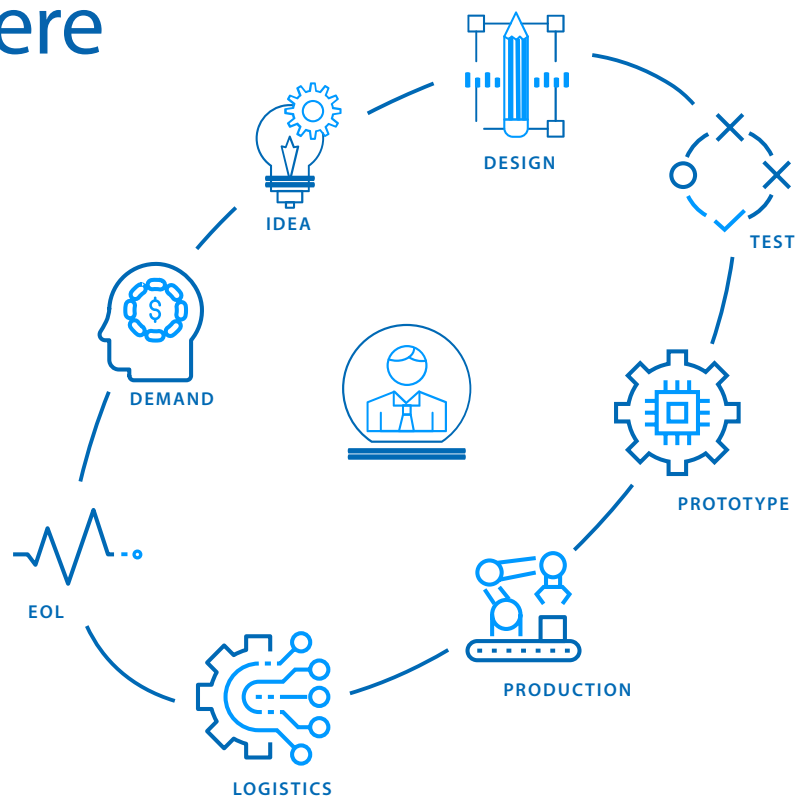
# Antennas & Alcom



Antennas are the eyes and ears of wireless communication. Through them, wireless communication breathes and comes alive!

In the past two decades, antenna technology has emerged as one of the most critical components in the advancement of wireless communication. With the advent of IoT and 5G communications, the adoption of effective antennas will expedite commercialization of solutions which can support high-speed communications. Antenna technologies are expected to play an increasingly pivotal role in mobile wireless communications.

## Co-creation starts here



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



# Markets



CONSUMER ELECTRONICS



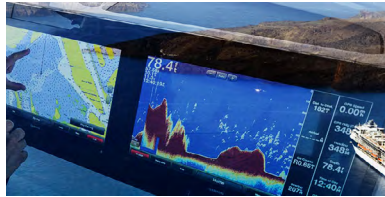
FACTORY AUTOMATION



FACTORY LOGISTICS



HEALTHCARE - MEDICAL



MARINE



NAVIGATION TRACKING



SMART CITIES



SMART METERING



TRAFFIC & TRANSPORTATION



HORTICULTURE/AGRICULTURE



RETAIL



SMART BUILDING

# Applications



Cellular  
Telecommunications



Consumer  
Electronics



Healthcare



High precision  
positioning



Marine electronics



Navigation &  
Tracking



Networking (M2M)



Router & Wireless  
Set-top box



Security & Safety



Smart cities



Smart home



Smart offices &  
factories



Smart  
Transportation



Time  
synchronization



Utilities & Smart  
Metering



Wearables



# Technologies



BOXED INDUSTRIAL WIRELESS & CULLAR



IOT SOLUTIONS & SERVICES



SENSORS



VEHICLE MOUNT COMPUTERS



WIRELESS CONNECTIVITY SOC'S & MODULES



INDUSTRIAL CONTROLS NETWORKING

## One-stop-shop



Initial system analysis



IoT solutions



WiFi



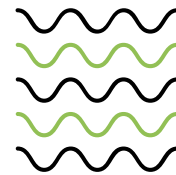
GNSS



Cellular



Sigfox & LoRa



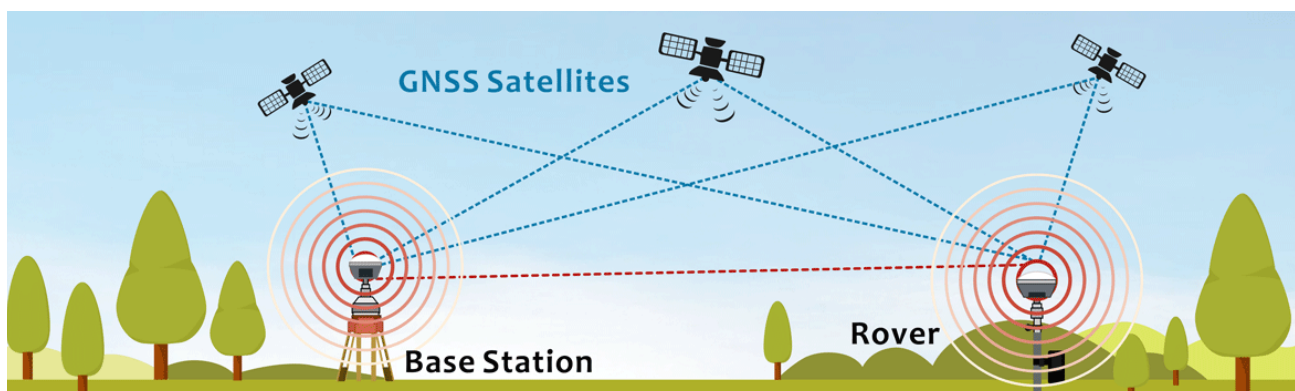
MmWave



NFC



Ultra wide band



# Antenna overview

## Chip Antenna

- GPS/GNSS
- Bluetooth/WiFi/Zigbee
- GNSS+Bluetooth/WiFi
- Sub-Giga ISM
- UWB
- Cellular (3G/4G/5G)
- LPWA (Sigfox, LoRa, NB-IoT)



## Patch Antenna

- Castle
- Patch (through hole)
- Patch (SMT)



## PCB/FPC Antenna

- Bluetooth/WiFi/ZigBee
- Cellular (3G/4G/5G)
- ISM/LPWA (Sigfox, LoRa, NB-IoT)
- GNSS



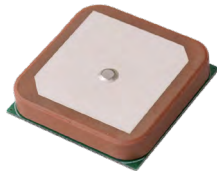
## External Antenna (Single, I/O)

- 5G NR
- Cellular (2G/3G/4G)
- GPS/GNSS
- LPWA (Sigfox, LoRa, NB-IoT)
- Sub-Giga ISM
- WiFi



## Internal Antenna

- Active GPS/GNSS Modules



## External Antenna (Combo, Multiple, I/O)

- Screw Mounted
- Adhesive Mounted
- Magnetic Mounted



## Embedded Antenna

- LDS Antenna
- Metal Stamping Antenna
- NFC/RFID Antenna



## Automotive Antenna

- External One Port GNSS Antenna



# Represented manufacturers



# New product releases

## GNSS STACKED PATCH MULTI-BAND ANTENNA

The Taoglas Accura GVLB258.A, is a dual-band GNSS L1/L5, high-performance antenna for high precision GNSS accuracy and fast positioning. It utilizes a 25\*25\*8mm advanced wide-band dual-stacked ceramic patch antenna with optimized gain for GPS L1/L5, Galileo, GLONASS and BeiDou bands.



## SIERRA WIRELESS AIRLINK® ANTENNAS

Accelerate your deployment with always-on, end-to-end connectivity provided by our portfolio of high performance AirLink® antennas. Tested and certified to provide guaranteed performance with all AirLink routers and gateways, Sierra Wireless offers an extensive portfolio of AirLink antennas—designed to connect a wide range of mobile and fixed applications in public safety, utilities, industrial and distributed enterprises.

## AIRLINK® ANTENNA: 6-IN-1 SHARKFIN

Tested and certified to operate with AirLink routers and gateways, the 6-in-1 SharkFin has a compact OEM style housing that contains 2x2 MiMo antenna function for 2G, 3G, and 4G LTE frequencies, and an active antenna for GNSS with 26dB gain LNA. Mounted via the integral SMA (f) mount, the portable antenna spans 2.4/5.0GHz and, the SharkFin offers dual band 3x3 MiMo Wi-Fi (2.4/5.0GHz) in a compact package.



## WIDEBAND 5G FR1, WI-FI 6E, LOW PROFILE ANTENNA

The LPT600/71DMN antenna is a 5G FR1, Low Profile Transit, M2M, IOT Antenna. With exceptional performance, covering 617-960/1710-7125 MHz, with 2dBi and 5.5dBi gain, respectively, creating superior coverage over long distances when compared to similar antennas on the market. The LPT600/71DMN is economically designed without sacrificing the antenna's performance or mechanical robustness.

## 868/915MHZ DIRECTIONAL TERMINAL MOUNT ANTENNA WITH FLEXIBLE GOOSENECK

The TS.89 Sighunter is a mechanically robust ISM / LoRa / SigFox antenna designed to be directly mounted onto a device via the flexible gooseneck and SMA(M) connector. The adjustable gooseneck cable allows for optimum positioning of the antenna in relation to the device and receive signal. The Sighunter has been designed to operate at either 868MHz or 915MHz frequencies for a fully global LoRa solution.



## SMALLEST SIZE HIGH-PRECISION POSITIONING CASTLE PATCH ANTENNA

The traditional bandwidth of ceramic patch antennas is relatively narrow. In order to achieve the broader bandwidth, a two-layer stacked antenna are commonly used. However, the higher cost and more weight could be an issue in some applications.

# 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

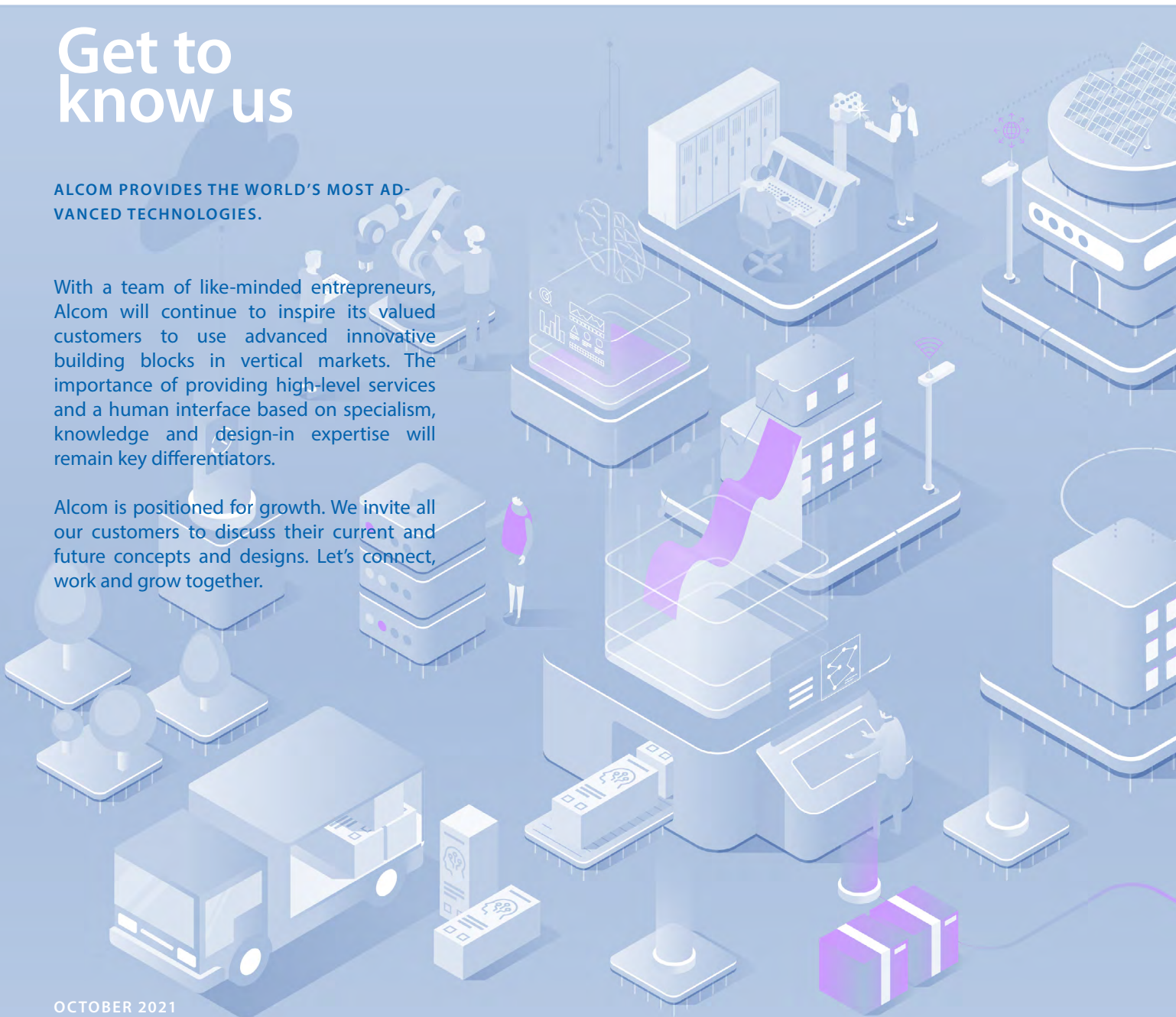
- Tablets
- PDA's
- Vehicle mount computers
- Accessories

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

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







ALCOM PROVIDES THE WORLD'S MOST ADVANCED TECHNOLOGIES.

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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