Internet of Things

Create smart, connected products that unlock new business opportunities
When your products are part of the IoT, you can deliver new kinds of services, offer customers more value, and compete on more than just price.

IoT-enabled products create new business opportunities. You can offer data services that make products work in exciting new ways. And collect invaluable data on how customers use your products, leading to further innovation. Our solutions utilise advanced RFID, NFC and other technologies. Your products can log, calibrate, read and transmit data, including sensor readings of environmental conditions. Data can even be transmitted a battery.

Partnering with DELTA, you can develop cutting-edge features and lead your field.

A new wave of information technology is upon us. One in which any product can be smart and connected, via the Internet of Things (IoT).

Wireless connectivity is now everywhere. Components are small enough to fit in anything, even a credit card or a button. Once-lifeless products can get updates, send notifications, be controlled remotely, and more.

It means continuous opportunities to sell services and data, instead of a one-time physical product sale. And greater value for customers. Even in industries where electronics have not featured before — now is the moment to redefine what’s possible.

‘Things’ are getting smarter. Lead the IoT revolution

1960s  1980s  Today

First IT wave  Second IT wave  Third IT wave

Automated, computerised processes led to improved productivity and efficiency.
The Internet began to emerge, enabling easier coordination of data and activities.
IT is being integrated in a massive range of products, improving functionality and performance.

IoT and your products

What’s in an IoT product?

When your products are part of the IoT, you can deliver new kinds of services, offer customers more value, and compete on more than just price.

You need just three elements to build a smart, connected product:

· **A physical product**
  You can connect almost any existing product to the IoT

· **Smart components**
  Sensors and software collect and process data

· **Connectivity components**
  NFC, RFID, Wi-Fi or Bluetooth transmit data

DELTA can deliver complete smart product solutions, which also feature built-in security. Since the 1980s, we’ve used powerful encryption to protect our products, data and customers from security risks.
The DELTA way

DELTA has deep semiconductor industry expertise, having worked with chip design since 1984. We are partnered with companies from a wide range of industries worldwide, at various engagement levels.

Our IoT product solutions can assist you every step of the way, from design to high-volume delivery. Typical project phases include:

- Idea
- Specification
- Design
- Proof of concept
- Prototyping
- Implementation
- Testing
- Manufacture

Our skilled teams can guide you seamlessly throughout this process, providing all of the knowledge and support you need.

How can we help you?

We want to help you explore and succeed with smart products, with minimal risk — and that means providing a fast, low-cost path to proof-of-concept. Our specialised technology and experiences in a wide range of industries can take you there. DELTA also understands that your goals and requirements are unique. We build optimal solutions, using the right mix of components to deliver on your cost, size and power consumption needs.

**Sensing the environment**
With just one image sensor, your products can digitally monitor environmental conditions including shock, acceleration, humidity, temperature and pressure.

**No battery required**
Effective smart products must keep working without the need for frequent recharging. DELTA has developed extremely-low-power components that harvest radio wave energy to achieve battery-free data transmission.

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### Specialisations

**Medical**
- Monitoring
- Body sensors
- Alarm systems
- Pharmaceuticals

**Automotive**
- Safety issues
- Service related
- Data during driving
- Production parameters

**Environmental**
- Useability
- Movement
- Maintenance
- Mechanical data

**Food**
- Humidity
- Traceability
- Temperature
- Mechanical shock

**Diverse industry experience**

- Mechanical conditions
- Battery-free and wireless
- Energy harvesting
- Image sensors
- Intelligence
- Sensors
- Sound
Customer story

Gooee
World's smallest sensor for LED lightning and IoT
DELTA is the provider of a major component of the revolutionary Gooee IoT lighting ecosystem, which provides unprecedented control and energy efficiency for enterprise lighting systems.

The Gooee system uses the world’s smallest sensor for LED, which features DELTA Artificial Eye technology. The sensor can monitor environmental, human and LED, including motion, direction, ambient light, LED colour temperature (CCT) variance and LED lux variance — all in a tiny 5 x 5mm chip.