## **Topics**

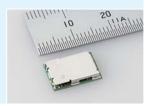
## 2016

#### April 5

## Commercialization of Wireless Module Compatible with High-Speed Wireless Communication Standard

We successfully commercialized a wireless module that conforms to the IEEE802.11ac Wi-Fi standard and can utilize the 2.4 GHz and 5 GHz bandwidths.

Realizing ease of connection and high-speed wireless communication in locations where heavy use is made of wireless, such as inside factories, in addition to machine-to-machine (M2M) robot controls and handy terminals, this is the optimal product for surveillance cameras.



#### September 27

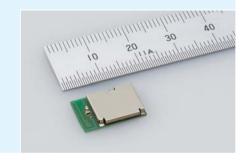
#### Industry-Leading Capacitance Realized with Low-Profile Ceramic Capacitor

Intended for smartphones and wearable devices, we achieved a capacitance of  $0.47~\mu\text{F}$  at a height of 0.11~mm—the world's thinnest profile for a multilayer ceramic capacitor—by increasing the sophistication of our capacitance enhancement technologies and making the external electrodes thinner.

#### September 28

#### Dual-Mode Modules Compatible Even with Low Power Consumption Bluetooth® Realized

We commercialized dual-mode modules that are compatible with both Bluetooth® and Bluetooth® Low Energy communication standards and are approximately one-third of the mounting area compared with conventional models. These products are ideal for various small, thin devices intended for wearable devices and healthcare equipment, including IoT-related devices that require short-range communications.



## 2017

#### February 27

### World's Smallest High-Frequency Multilayer Ceramic Capacitor Realized

We succeeded in commercializing the world's smallest 0201 size (0.25 x 0.125 x 0.125 mm) high-frequency multilayer ceramic capacitor. Despite being roughly 75% smaller than our existing 0402 size capacitors, our 100-item lineup is compatible with the high-frequency circuits of devices that utilize the diverse range of telecom standards and frequency ranges that have been adopted around the world.



#### March 27

# Automotive SMD Power Inductor with Operating Temperature of up to 150°C Commercialized

We commercialized an SMD power inductor, which is capable of withstanding operating temperatures of up to 150°C and features a vibration resistance of 30G, for the power supply circuits used in powertrains, such as automobile engines and transmissions. Furthermore, to strengthen quality control a unique Data Matrix Barcode is printed on each unit, which

allows traceability throughout all processes, including production and distribution.

