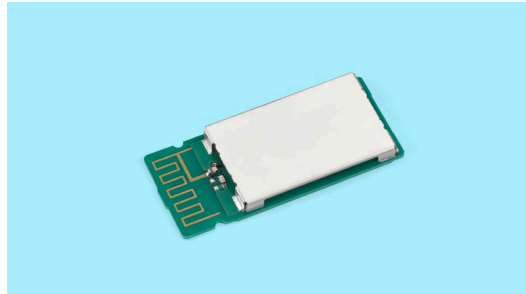# SMK Develops Dual Mode Communication Module Equipped with Both Bluetooth® Classic and Bluetooth® Low Energy

SMK Corporation has developed dual-mode Bluetooth modules "BT801" and "BT801-AP2" (collectively called "BT801 Series") that support both Bluetooth Classic and Bluetooth Low Energy communications. The new series has the same shape and pin- and command-compatibility with the conventional BT401 Series, making it easy to replace them.

The dual-mode support enables both the use of the older Bluetooth Classic standard for high-speed transmission of large amounts of data and the newer Bluetooth Low Energy standard for low-speed, ultra-low power consumption, which is suitable for IoT devices. That makes it easy for customers to implement Bluetooth.

The BT801 is a complete module that implements both SPP*[1] and SSS*[2], a serial communication service developed by SMK, and enables data communication with smartphones and tablet devices. The BT801-AP2 supports Apple's iAP*[3] protocol in addition to the specifications of the BT801, enabling data communication with iPhone and iPad via iAP.

SMK intends to continue expanding the lineup of RF modules to meet the customers' diverse needs.

【Applications】

Mobile printers, barcode readers, measuring instruments, healthcare equipment, and smartphone accessories, etc.

Supported Profile/Service	Bluetooth Classic		Bluetooth Low Energy
	SPP	iAP	SSS
BT801	✓	-	✓
BT801-AP2	✓	✓	✓

*1 SPP: A Bluetooth profile, which defines the procedures for sending and receiving data by using Bluetooth communication like a virtual serial port.

*2 SSS: Abbreviation of SMK Serial port Service. An original service of SMK for serial communication over Generic attribute profile (GATT).

*3 iAP: Abbreviation of iPod Accessory Protocol of Apple Inc.
It will be necessary to join Apple Inc.'s MFi license program to use the BT801-AP2 module.

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* iPhone and iPad are trademarks of Apple Inc., registered in the U.S. and other countries.

Published Date	October 7th, 2020
Press Release Number	1132RD
Product Name	Dual-Mode Bluetooth® Module "BT801 Series"
Features	1) Equipped with both Bluetooth Classic and Bluetooth Low Energy. 2) Surface mounting module with a built-in printed antenna. 3) Acts as Master/Slave or Central/Peripheral. 4) Certified for Bluetooth. Radio Act certification has been obtained in Japan (Construction Design Certification) and will be obtained in the U.S. (FCC) and Canada (ISED). 5) Has the same shape as the conventional "BT401 Series" and also has pin- and command-compatibility, making it easy to replace them.

Major Specifications	Bluetooth Specification	Version 5.0
	Upper Interface	UART
	Supply Voltage	2.7 to 3.6V DC
	Output Power	+8dBm (Typ.)
	Antenna Type	Build-in printed antenna
	External Dimensions	25.0mm (W) × 11.0 (D) × 2.3mm (H)
	Operating Temperature Range	-40°C to +85°C
Start Taking Orders From	Started	
Goes Into Mass Production From	December 2020 (BT801), March 2021 (BT801-AP2)	
Inquiry	For more information, please contact R&D Center	