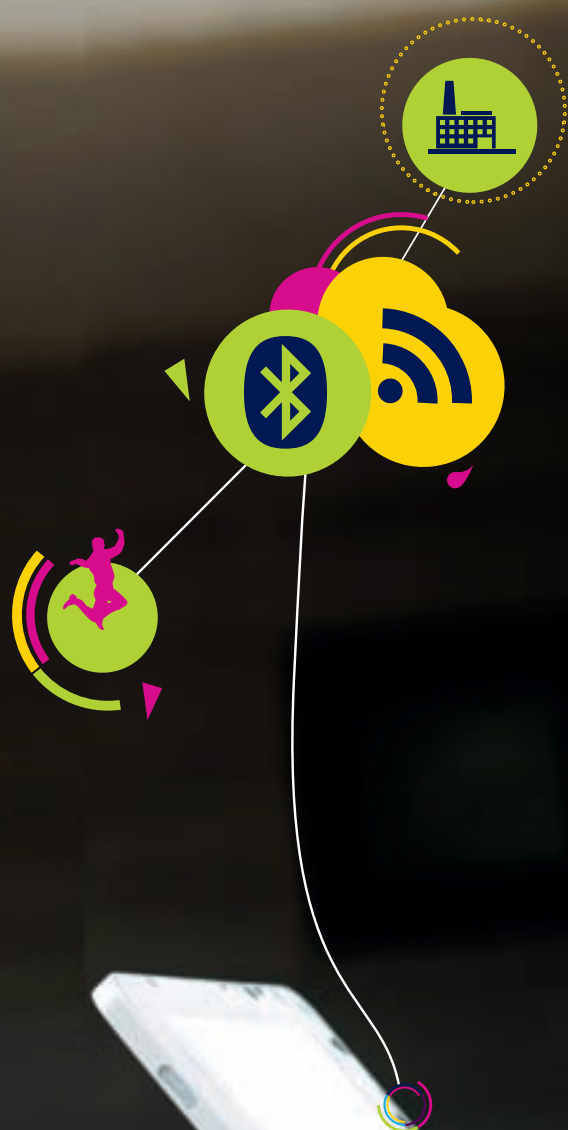
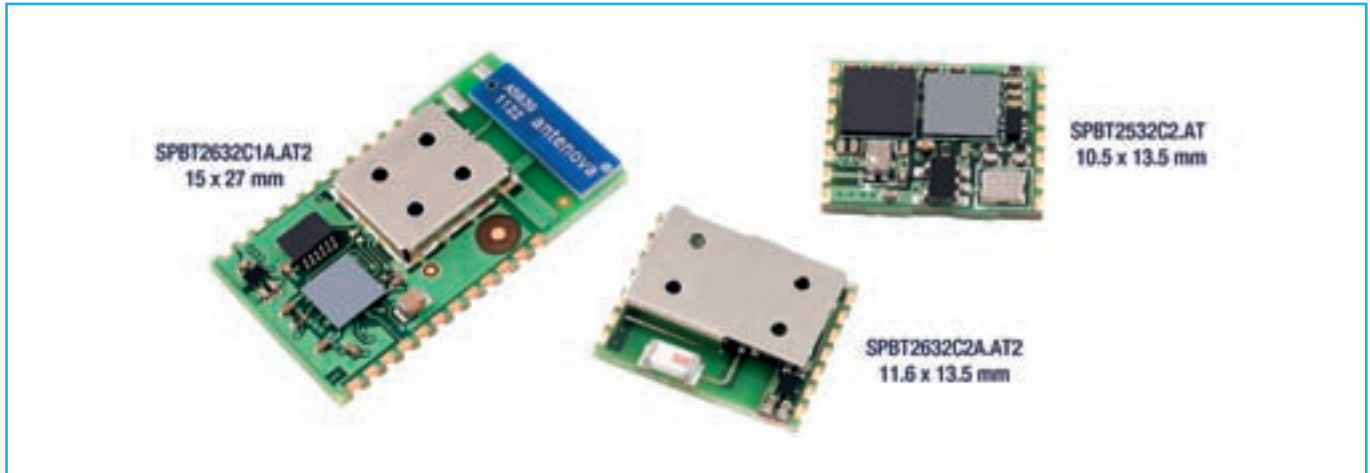


Micro-sized Bluetooth® modules





Fast, flexible and secure



Smart communication in an embedded, qualified Bluetooth solution

2

ST's Blue Module range of wireless modules has been extended with new Bluetooth® 3.0 compliant modules that implement leading-edge Bluetooth® technology. The modules are designed for maximum performance in a minimal space. They include fast-speed UART, general-purpose I/O lines, SPI interface options, and high data throughput. An optimized design allows the integration of a complete Bluetooth modem, enabling low-power mode capability in the minimum possible size.

All the Blue modules are BQB qualified and listed on the SIG website according to EPL (end product listing) rules. The new SPBT2632 series with antenna onboard is fully certified FCC, IC, CE the SPBT2632C2A. AT2 is also TELEC certified.

Blue Modules support the AT command interface based on SPP (serial port profile) featuring fast and secure, transparent serial data transmission and simple automatic connection between predefined devices through smart cable links. In addition, the AT2 FW version supports iAP, the iPOD accessory protocol for communication with smartphones and Apple iOS Bluetooth enabled devices.

Key features	Key benefits
Compliant with Bluetooth 2.1 or latest Bluetooth version 3.0	Future-ready module, enhanced security, easier pairing, compatible with Apple products
BQB listed and end product listing (EPL)	Enables EPL without further BQB process; Bluetooth logo can be used on final product as well
Pre-qualified, pre-tested, RF design fully integrated in a unique device	Highly reliable solution, easier design saves development resources and time, shortens time-to-market
Low-power mode supported	Reduces power consumption, increasing final application's battery life
Smart cable and remote mode supported	Ensures easy automatic connection and remote mode control over Bluetooth link
Micro-sized form factor	SMD-like component to fit miniaturized applications

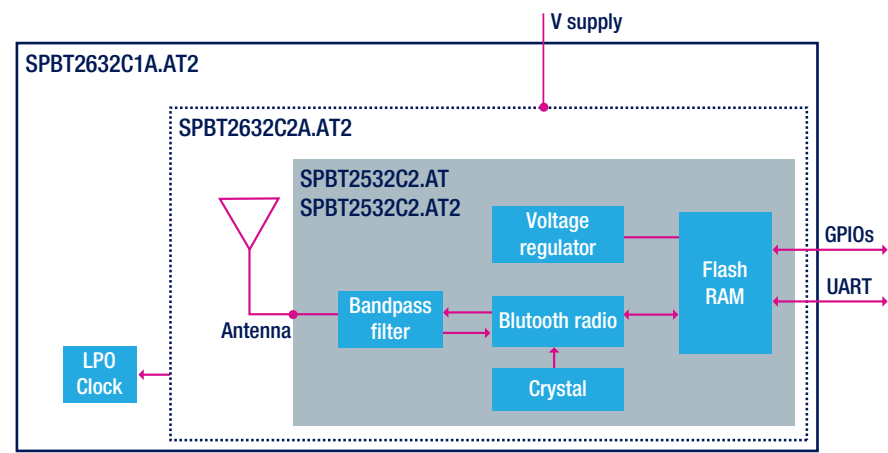
TARGETED APPLICATIONS

- Wireless cable replacement
- M2M
- Smartphones
- Service diagnostics
- Data acquisition equipment
- Mobile health

BEST-IN-CLASS SOLUTION FOR SMARTPHONE COMMUNICATION

The embedded AT2 firmware implemented on the latest Bluetooth versions V2.1+EDR and V3.0 supports communication with Android-smartphone and Apple iOS Bluetooth-enabled devices. ST's new Blue Modules operate with the Apple MFI authentication coprocessor (not embedded in the modules). Customers using the Apple authentication IC must register as developers to become an Apple certified MFI member. The AT2 command firmware is a friendly interface which offers simple control for data transmission that does not require any expertise in Bluetooth technology and RF integration.

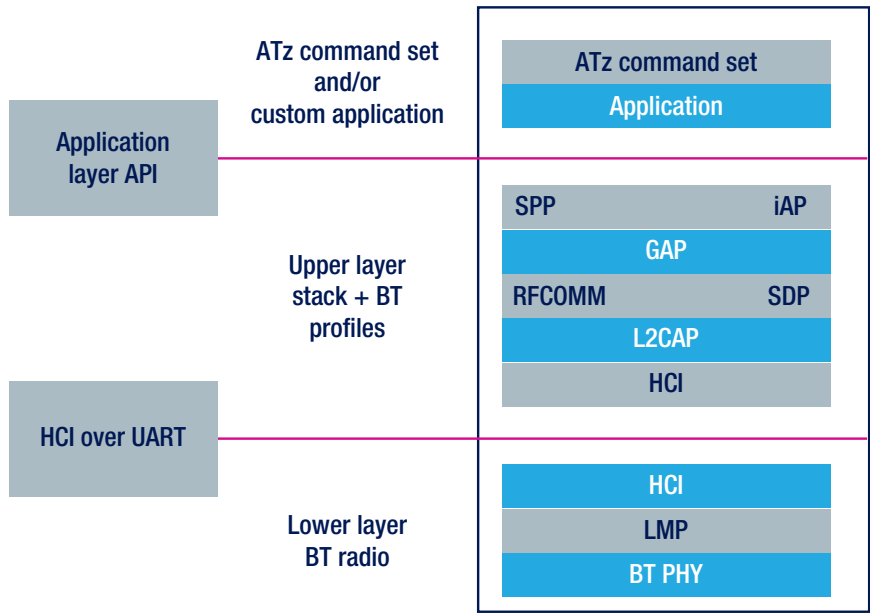
HARDWARE ARCHITECTURE



ST's new SPBT2632 offers a fully-integrated and fully-qualified Bluetooth solution, ready to use with the smallest footprint available in a simple to handle SMD package.



FIRMWARE ARCHITECTURE



The new AT2 command set fully exploits the Bluetooth stack and efficiently supports communication with Android-smartphone and Apple iOS Bluetooth-enabled devices.

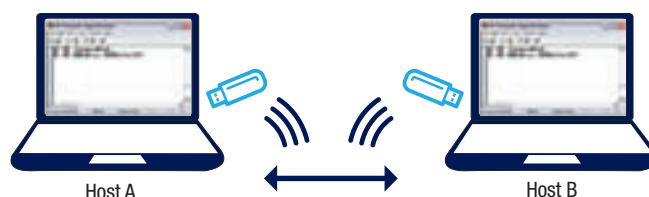
DEVICE SUMMARY

Part number	Description	Bluetooth version	FW release	Certification	Dimension
SPBT2532C2.AT	Class2, external antenna	Bluetooth V2.1+EDR	AT command supporting, M2M	BQB (EPL), CE	10.5 x 13.5 x 2.5 mm
SPBT2532C2.AT2	Class2, external antenna	Bluetooth V2.1+EDR	AT2 command supporting, M2M, smartphones and Apple iOS	BQB (EPL), CE	10.5 x 13.5 x 2.5 mm
SPBT2632C2A.AT2	Class2, onboard antenna	Bluetooth V3.0	AT2 command supporting, M2M, smartphones and Apple iOS	BQB (EPL), CE, FCC, IC	11.6 x 13.5 x 2.9 mm
SPBT2632C1A.AT2	Class1, onboard antenna	Bluetooth V3.0	AT2 command supporting, M2M, smartphones and Apple iOS	BQB (EPL), TELEC, CE, FCC, IC	15.2 x 26.9 x 2.9 mm

DESIGN SUPPORT

The STEVAL-SPBT dongles are an easy solution to test and operate with the Blue module and get familiar with the embedded firmware, which enables the creation of a Bluetooth link with simple AT commands. The AT command list is detailed in the UM1547 user manual.

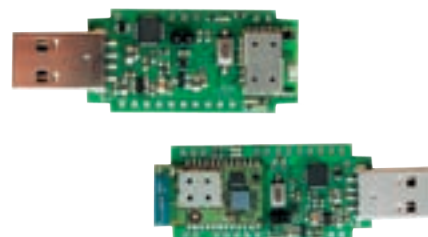
A getting started section is included in each Application Note to easily familiarize with the module setting and features



EVALUATION BOARDS

Part number	Description
STEVAL-SPBT2ATV2	USB dongle, evaluation board for SPBT2532C2.AT
STEVAL-SPBT2ATV3	USB dongle, evaluation board for SPBT2532C2.AT2
STEVAL-SPBT3ATV3	USB dongle, evaluation board for SPBT2632C2A.AT2
STEVAL-SPBT4ATV3	USB dongle, evaluation board for SPBT2632C1A.AT2

Datasheets, application notes, AT command user manual and a Blue module presentation are available at www.st.com/bluemoles



WWW.BLUETOOTH.ORG THE END PRODUCT EPL



ST's Blue Modules are BQB certified and EPL listed. For more details visit www.bluetooth.org



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