

BT5712U provides a bridge solution between Bluetooth & IrDA devices on data transmission.

It converts Data received through Bluetooth (SPP Bluetooth profile support) from sender to traditional IrDA data or vice versa. It is battery powered in addition to AC power operation. So user can use it in the field application.

Application Scenario

Example of Cable Replacement application



BT5712U enables any devices with Bluetooth capability to connect with IrDA devices.

Features and Benefits:

- Configurable Bluetooth baud rate 1,200 bps ~ 1,843,200 bps at the Bluetooth side; configurable IR baud rate: 1.2k, 2.4k, 4.8k, 9.6k, 19.2k, 38.4k, 57.6k and 115.2k bps at the IR side.
- 1.63 μs IR pulse.
- 256 bytes outbound buffer and 256 bytes inbound buffer at IR side.
- Supports Virtual COM port at both IR & Bluetooth sides.
- Provides optional ACT-BT5712U-EK Download Kit and Configuration Utility for Bluetooth and IrDA parameters setting. Supports for pairing mode, device name, PIN code.
- Sniff mode available at Bluetooth side for power saving.
- Supports UART interface & RTS/CTS hardware flow control.
- Supports Bluetooth SPP (Serial Port Profile) as a slave or a master.
- Auto-connect feature when interconnecting two Bluetooth adapters.

| Specifications | | |
|---|------------------------------------|--|
| Model No. | | ACT-BT5712U |
| Standard | | Bluetooth SIG 1.2 |
| Bluetooth Profile | | Serial Port Profile (SPP) only |
| Baud Rate | | Bluetooth side: 1.2k bps ~ 1843.2k bps; Default 9.6k bps IR side:1.2k, 2.4k, 4.8k, 9.6k, 19.2k, 38.4k, 57.6k and 115.2k bps; Default 9.6k bps |
| Configurable Parameters at Bluetooth side | | Baud Rate, Data Bit, Parity Check, Stop Bit, RTS/CTS Flow Control, COM Port, Device Name, Control Flag, PIN Code, Master or Slave, Watchdog Timeout, Supervision Timeout, BD Address |
| RF Specifications | Frequency Band | 2.400~2.4835 GHz unlicensed ISM band |
| | Spectrum | FHSS (Frequency Hopping Spread Spectrum) |
| | Modulation | GFSK |
| | Output Power | 4 dBm (typical) |
| | Receiving Sensitivity | -82 dBm (typical) |
| | Power Class | Class 2 |
| | Antenna | Internal embedded |
| | Range | Up to 10 m (open-air) |
| LED Indicators | | Battery Low,Power & Connection Activities LED |
| Power | | 1. AAA size 1.5V x 4 batteries ; or 2. 7.5 V / 300 mA AC-DC power adapter |
| Physical Dimensions & Environment | Dimensions | 76.5 x 48.5x 28.0 mm (3.01 x 1.91 x 1.10 in.) (L x W x H) |
| | Weight | 50 g (1.76 oz) without batteries |
| | Operating / Storage Temperature | 0° C ~ 55° C (32° F ~ 131 ° F) / -20° C ~ 80° C (-4° F ~ 176° F) |

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