



The TiWi-uB2 Bluetooth® Smart Ready module is a high performance 2.4 GHz Bluetooth 2.1+EDR and Bluetooth Low Energy radio in a cost effective, pre-certified footprint. This module fully supports the dual mode Bluetooth and Bluetooth LE operation, and the output power can support class 1.5. This ultra-small SiP module provides UART interface/audio PCM interface for Bluetooth through the HCI transport layer.

## FEATURES AND BENEFITS

- Bluetooth 2.1+EDR and Low Energy 4.0
- Low Profile: 7 mm x 7 mm x 1.5 mm
- Operating temperature: -30° to +85°C
- FCC (USA), ISED (Canada) and EU, Giteki(Japan), Bluetooth® SIG module certification
- Based on Texas Instruments CC2564 transceiver
- HCI UART host data path interface
- Bluetooth advanced audio interfaces
- Low power operation mode

## APPLICATION AREAS

- Medical
- Heating/cooling control
- Industrial sensors
- Entertainment/mobile accessories

## MODULE PERFORMANCE

SPECIFICATION	VALUE
Footprint	7 mm x 7 mm x 1.5 mm
Operating Temperature	-30° to +85°C
Operating Voltage	1.62 V to 4.8 V
Transmit Power	10 dBm
Sensitivity	-93 dBm, GFSK at 0.1% BER -85 dBm, 8DPSK at 0.01% BER

*For full specifications on TiWi-uB2 modules, please see the appropriate datasheet*

### TECHNICAL DETAILS

Support for Class 1.5 (high output power) applications

Power consumption: 47 mA in Tx, 13 mA in Rx

HCI UART and audio PCM interfaces for Bluetooth

### KEY FEATURES

Supports maximum Bluetooth data rates over HCI UART interface

Supports multiple Bluetooth profiles with enhanced QoS, mono, and stereo

Bluetooth® Bluetooth stack protocols and profiles

## ORDER INFORMATION

PART NUMBER	DESCRIPTION
450-0104	TiWi-uB2 module, tray
450-0104R	TiWi-uB2 module, tape & reel
450-0105	TiWi-uB2 EM board

