



WT41 Long Range Bluetooth Module™



Key Features

- ▶ Bluetooth 2.1+ EDR
- ▶ Integrates a *Bluetooth* radio, *Bluetooth* stack and profiles
- Exceptional radio performance
 - Transmit power: +20dBm
 - Receiver sensitivity: -90dBm
- Available with high efficiency chip antenna or U.FL connector
- ▶ Industrial temperature range -40°C to +85°C
- Supported Bluetooth profiles: SPP, DUN, HFP, HSP, HID, AVRCP, DI, PBAP, OPP, FTP and HDP
- Standard HCI over UART or USB
- ▶ Bluetooth end product, CE, FCC and IC qualified

Description

WT41 is truly a long range *Bluetooth* module offering impressive 1000 meters range between two WT41 *Bluetooth* modules. The module utilizes Bluegiga's sophisticated radio frequency design methodologies and offers 0EM's a trouble free product even with tight integration with surrounding electronics.

WT41 comes with Bluegiga's iWRAP firmware offering the users a simple software integration without the need of *Bluetooth* protocol or profile development. iWRAP is an embedded *Bluetooth* stack firmware for Bluegiga's *Bluetooth*. It exposes a powerful but easy-to-use command interface to manage *Bluetooth* operations. iWRAP hides the complexity of *Bluetooth* protocol stack and profiles from the end user.

Applications

- M2M
- Medical devices
- Industrial devices
- Point-of-sale systems
- Barcode readers
- PCs and PDA's
- Computer accessories
- Automotive diagnostics units







TECHNICAL DATA

Firmware

- iWRAP™ firmware including all relevant Bluetooth profiles and simple control interface to access the Bluetooth functionality
- Standard HCI over UART/USB available
- Possibility to develop custom firmware

Hardware

- Size: 35 x 14 x 3,5 mm (L x W x H)
- TX power: +20 dBm
- RX sensitivity: -90 dBm
- UART with hardware flow control
- USB device interface (USB 2.0 compatible
- 6 x GPIO
- 1 x 8-bit AIO
- Support for 802.11 coexistence

Development and Evaluation

WT41-A Evaluation Board:

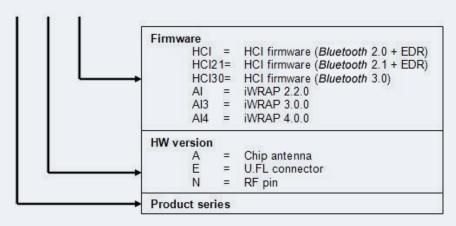
- Evaluation board with an integrated WT41
- RS-232 and USB interfaces
- SPI for upgrading the firmware and parameters
- On- board PCM codec and 3,5mm audio jacks
- 16 pin I/O interface

Certifications

- Fully qualified Bluetooth 2.1 + EDR end product
- EN300328, EN300489, FCC, Industry Canada

Product Codes

WT41-A-HCI



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<u>WT41-A-HDP391</u> <u>WT41-A-mgr2738</u> <u>WT41-A-AI4</u> <u>WT41-A-HCI21</u> <u>WT41-A-HCI3</u> <u>WT41-E-AI4</u> <u>WT41-E-HCI3</u> EBWT41-A WT41-A-eHealth-HDP337 WT41-A-eHealth-mgr2522 WT41-A-AI5 WT41-E-AI5