

WT41 Long Range Bluetooth Module™



Key Features

- ▶ Bluetooth 3.0 + EDR compliant
- ▶ 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 OEM'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:

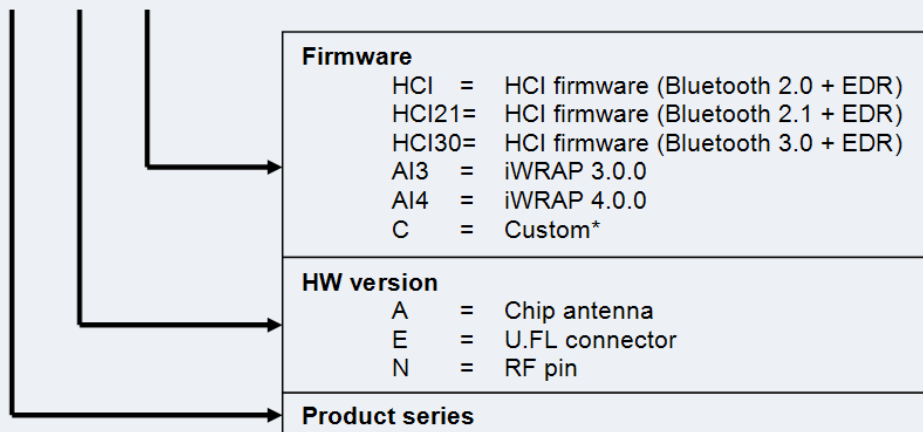
- Evaluation board with an integrated WT41
- RS-232 and USB interfaces
- SPI for upgrading the firmware and parameters
- On- board PCM codec and 3,5mm audio jacks
- 16 pin I/O interface

Certifications

- Fully qualified *Bluetooth* 3.0 + EDR end product
- EN300328, EN300489, FCC, Industry Canada

Product Codes

WT41-A-HCI



For more information about Bluegiga Technologies, please contact:

Bluegiga Technologies Oy
 Sinikalliontie 5 A
 02630 Espoo, Finland
 Phone: +358 9 435 50 60
 Fax: +358 9 435 50 660
 www.bluegiga.com
 sales@bluegiga.com

© Bluegiga Technologies 2000-2010.

Bluegiga Technologies takes no responsibility for any mistakes that might appear in this document. It reserves the right to change devices, software or specifications detailed here at any time without notice, and does not make any commitment to update the information contained here. Bluegiga products are not authorised for any use as critical components in life support devices or systems. Bluegiga Access Server, Access Point, iWRAP and WRAP THOR are trademarks of Bluegiga Technologies. The *Bluetooth* trademark and logo are registered trademarks and are owned by the Bluetooth SIG, Inc.