

WT11i *Bluetooth* Class 1 Module™



Description

WT11i is a fully integrated *Bluetooth* 2.1 + EDR, class 1 module combining antenna, *Bluetooth* radio and an on-board *Bluetooth* stack. The WT11i module utilizes Bluegiga's latest generation RF technology and provides better performance than Bluegiga's previous class 1 *Bluetooth* module WT11. For OEMs WT11i offers trouble free *Bluetooth* integration for applications where the best performance is needed and it is a drop-in performance upgrade for designs where WT11 is already used. WT11i comes with Bluegiga's iWRAP firmware offering the users simple software integration without the need of *Bluetooth* protocol or profile development.

Benefits

- ▶ Fully integrated solution
 - Lower cost
 - Faster time to market
- ▶ Good radio performance
 - Long range and robust connections
 - Programmable TX power
- ▶ *Bluetooth* qualified
 - Proven interoperability
 - No qualification costs
- ▶ WT11 compatible
 - Drop-in upgrade for WT11 based designs

Key Features

- ▶ *Bluetooth* v.2.1 + EDR, class 1
- ▶ Radio performance
 - Transmit power : +17 dBm
 - Receiver sensitivity: -86 dBm
- ▶ Integrated iWRAP *Bluetooth* stack
 - 14 integrated *Bluetooth* profiles
 - Simple ASCII based host protocol
- ▶ Standard HCI over UART or USB
- ▶ Industrial temperature range: -40C to +85C
- ▶ *Bluetooth* end product, CE, FCC and IC qualified
- ▶ WT11i with integrated chip antenna and HCI USB 2.0 + EDR WT11i-A-HCI

Target Markets

- ▶ M2M
- ▶ Industrial
- ▶ Healthcare and medical
- ▶ Point-of-sale
- ▶ Automotive

Target Applications

- ▶ RFID and bar code scanners
- ▶ Point-of-sale terminals
- ▶ Industrial PCs and PDAs
- ▶ Medical device gateways
- ▶ Industrial sensors and collectors



TECHNICAL DATA

Hardware

- Interfaces
 - 1 x UART, flow control, 3Mbps (host interface)
 - 1 x USB 2.0 device (host interface)
 - 1 x SPI (Programming/debugging interface)
 - 1 x 8-bit AIO
 - 6 x GPIO
 - 1 x PCM (audio interface)
- Power supply: 3.3V
- Internal antenna or 50 OHM RF pin
- Dimensions: 35.8 x 14.5 x 2.3mm
- Surface mount
- Processor core: 16-bit XAP2

Firmware

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

Product Codes

- WT11i with integrated chip antenna and iWRAP4 WT11i-A-AI4
- WT11i with USB and HCI 2.1 + EDR WT11i-A-HCI21
- WT11i with integrated chip antenna and iWRAP HDP WT11i-A-eHealth
- WT11i with integrated chip antenna and IEEE manager WT11i-A-mgr 2738

Evaluation Tools

- WT11i Evaluation Board EBWT11i

Certifications

- *Bluetooth* 2.1 + EDR
- CE (EN300328, EN300489)
- FCC
- Industry Canada

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