

WT21 Bluetooth® Module



Key Features

- Highly integrated and cost efficient Bluetooth HCI module
- Bluetooth Class 1 radio based on CSR's BlueCore-6
- Embedded antenna
- ▶ Bluetooth 2.1 + EDR compliant
- Bluetooth Controller subsystem CE, FCC and IC qualified
- ► Extended temperature range from -40 °C to +85 °C
- ▶ 801.11 co-existence interface
- AuriStream baseband codec, which provides better audio quality
- ► Supports any Bluetooth stack with HCI interface

Description

WT21 is intendend for *Bluetooth* applications where a host processor is capable of running the *Bluetooth* software stack. WT21 only implements the low level *Bluetooth* Host Controller Interface (HCI) but still offers advantages of a module - easy implementation and certifications. As based on CSR's BlueCore-6 chip, WT21 offers the lowest current consumption and the highest integration level in its class. WT21 is also fully ready to support the latest *Bluetooth* 2.1 standard.

WT21 also has CSR's AuriStream technology built in, which significantly improves the quality of voice in audio applications.

WT21 supports any *Bluetooth* software stack that implements the standard *Bluetooth* HCl interface. The software stack can interface to the module either via UART. SDIO or SPI interface.

WT21 offers *Bluetooth* in integrated form factor that is easy to understand, manage and source. It is an ideal product for an OEM who does not want to spend significant amount of time and money to RF regulatory approvals and designing a complex 2,4 GHz radio product.

By utilizing Bluegiga's world-class integration services and technical support, OEMs can be assured that their products reach the market quickly and cost efficiently.







TECHNICAL DATA



Firmware & Software

- Supports any standard Bluetooth stack with HCI interface
- 128-bit Bluetooth encryption available

Hardware

- Bluetooth Class 1 radio (100-150 meters)
 - Nominal output power 6 dBm
 - Nominal sensitivity -87 dBm
 - Uses 2.4 GHz ISM band
 - Based on CSR's BC06 chip
- Host processor interface via UART, SDIO or SPI
- 7xGPI0
- PCM interface for audio applications
- Supply voltage: regulated 3.3 VDC
- PCB form factor: 17,1 x 11,6 x 2 mm
- Operating temperature: -40 °C to +85 °C

Product Codes

Chip antenna

WT21-A-HCI

No antenna

WT21-N-HCI

Development and Evaluation

WT21 Evaluation Kit

EKWT21

Other Products

- WT12 Bluetooth Module
- WT11 Bluetooth Module
- WT32 Bluetooth Audio Module
- Access Servers and Access Points

Certifications

- Bluetooth 2.1 + EDR (Controller subsystem)
- CE, FCC and IC

Applications

- PCs and laptops
- PDAs
- Embedded systems

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