

iWRAP is an embedded Bluetooth stack firmware for Bluegiga's Bluetooth modules (WT32, WT12, WT11, WT41). It exposes a powerful yet easy-to-use command interface to manage Bluetooth operations. iWRAP hides the complexity of Bluetooth protocol stack and profiles from the end user. A multitude of different Bluetooth profiles are supported that are suitable for a wide variety of applications. iWRAP can be used for almost anything from simple data or audio applications to more complex use cases where interaction with several Bluetooth enabled devices are needed - or even multi-profile environments for simultaneous audio and data connections.

You can download the latest iWRAP user manual from Bluegiga online support pages: techforum.bluegiga.com (registration required)

Bluegiga iWRAP4 firmware is compatible with the iPhone Bluetooth implementation. Contact us and get our detailed design instructions.

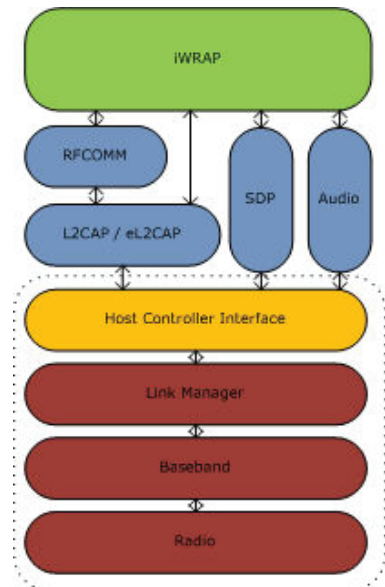
Benefits:

- A simple interface to exploit the power of Bluetooth wireless technology
- UART interface for iWRAP enables integration to almost any product
- iWRAP runs inside the module, no need to run Bluetooth stack on the host system
- Easy to understand commands and responses
- A wide variety of Bluetooth profiles to make complex use cases possible
- All profiles are Bluetooth qualified
- Easy to customise by Bluegiga Technologies
- Ordering codes: iWRAP2= AI (e.g. WT11-A-AI), iWRAP3= AI3 (e.g. WT11-A-AI3), iWRAP4= AI4 (e.g. WT11-A-AI4)

Features:

The latest iWRAP4 firmware version offers the following Bluetooth profiles and features embedded into the module:

- Advanced Audio Distribution Profile (A2DP) : Sink and source modes
- A/V Remote Control Profile (AVRCP) : AVRCP controller and target
- Device Identification Profile (DI)
- Serial Port Profile (SPP) : DevA and DevB
- Hands-Free Profile (HFP) v.1.5 : HPF and HFP-AG modes
- Headset profile v.1.2 (HSP) : HSP and HSP-AG modes
- Dial-up Networking Profile (DUN) : Terminal emulation
- Object Push Profile (OPP) : OPP server and client
- Human Interface Device (HID) : HID device
- Bluegiga proprietary IO Profile (BGIO)
- Bluegiga proprietary OTA (Over-the-Air configuration profile)
- Phone Book Access Profile (PBAP) : PBAP client
- File Transfer Profile (FTP) : FTP client
- Bluetooth Health Device Profile (HDP) : Sink and source modes
- Secure Simple Pairing (SSP)



Applications:

- **Medical and healthcare:** Support for Bluetooth Health Device Profile
- **Hands-Free audio:** Hands-Free and Headset profile support. Optional echo cancellation and noise reduction algorithms available
- **Automotive:** High quality audio streaming via A2DP, mobile phone calls via Hands-Free profile, phone book management, Internet access via dial-up networking. Optional echo cancellation and audio improvement algorithms available
- **Industrial:** Single and multipoint operation. Several optimizations for latency optimizations, low power modes, GPIO and AIO replacement
- Various consumer applications

3rd party extensions for iWRAP

- CSR's Clear Voice Capture - Echo cancellation and noise reduction algorithm
- APT-x audio codec - Nearly lossless quality audio over Bluetooth A2DP
- CSR's FastStream - Low latency audio over Bluetooth A2DP for video application
- Other 3rd party software also available. Contact Bluegiga for more information.

