

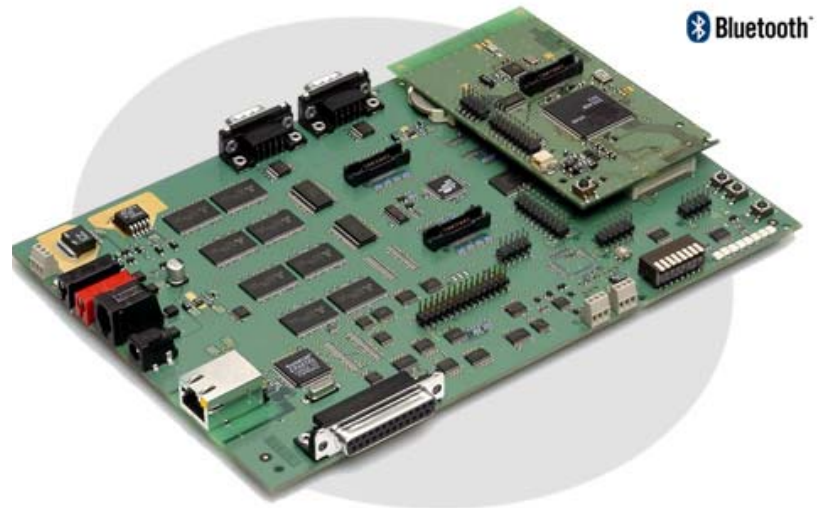
## WIRELESS REMOTE ACCESS PLATFORM (WRAP™)

# WRAP 2151 Complete Bluetooth™ Starter Kit

The WRAP 2151 Starter Kit is a fully functional evaluation and development environment based on BlueGiga's WRAP™ MicroServer Technology. The kit is a flexible tool providing developers with a hardware platform and the software tools for the easy building of embedded wireless applications.

The kit is ideal for developing hostless wireless applications in the industrial environment, enabling wireless machine interaction on three levels: Man-to-Machine, Machine-to-Machine and Machine-to-Networks.

The WRAP 2151 Starter Kit includes the full Bluetooth™ software and a rich set of BlueGiga's application programming interfaces and thinservers.



## Key Features

### Networking

- Fully embedded Bluetooth protocol stack: BaseBand, L2CAP, RFCOMM, SDP, Point-to-point and Point-to-multipoint
- Bluetooth Profiles: Serial Port, LAN Access, GAP
- TCP/IP protocol stack (IP, TCP, UDP, PPP, Utilities: DHCP, PING, Route)
- Plug n' Play LAN Access Point

### Software

- µCLinux™ embedded operating system
- WRAP CoreEngine™ and Bluetooth APIs
- Sample applications, Java applets

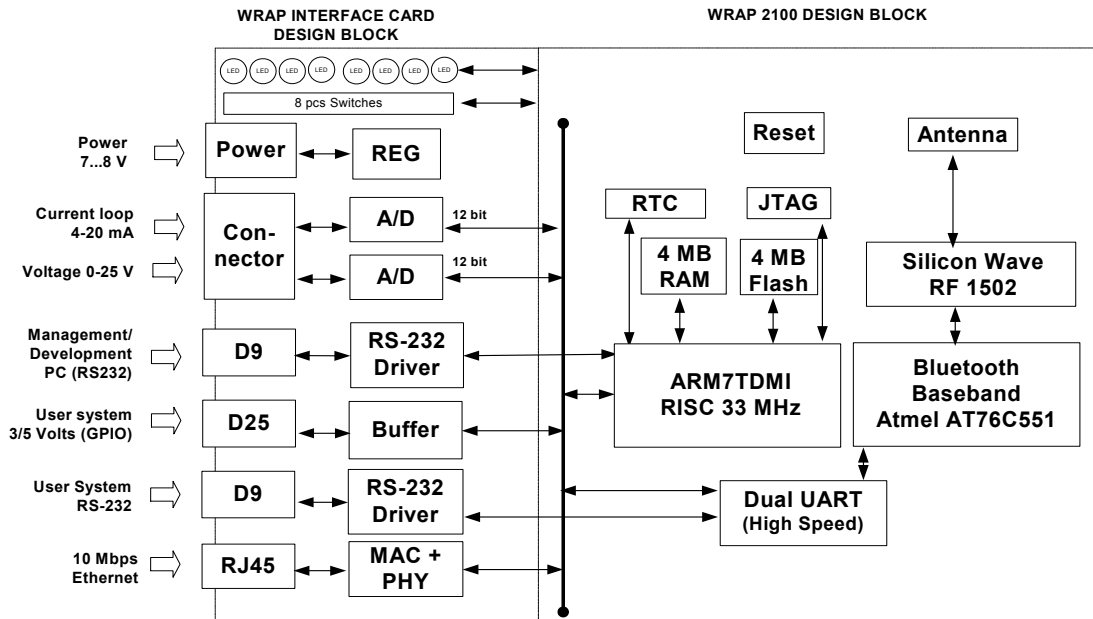
### Hardware

- Atmel Bluetooth BaseBand
- Silicon Wave Radio (RF)
- Integrated antenna
- ARM7TDMI™ Host processor
- Memory: 4 MB RAM, 4 MB Flash
- RS232, D9 for module configuration and installation
- Inputs / Outputs for customer system:
  - RS232 UART, D9
  - Ethernet (RJ45)
  - GPIO at D25 connector (3/5 volts)
  - Current loop analog input 4-20 mA (A/D, 12 bit)
  - Voltage input 0-10 V (A/D, 12 bit)

### Examples of applications which you can start developing with the Starter Kit:

- Replacing embedded keypads, displays and UI applications
- Wireless sensor & process control/monitoring
- Intelligent wireless meter reading
- Intelligent data logging
- Moving factory equipment
- Telemetry applications
- Security & alarm systems
- Industrial automation equipment
- Building automation
- Access management & control detection systems
- Replacing industrial links; serial cables, infra-red and laser links

## Starter-Kit Block Diagram



### WRAP 2151 Starter Kit Deliverables:

- WRAP 2151 Starter Kit Board  
Mechanical Dimension: 160 x 230 mm
- Power supply adaptor 230V / 8V
- Serial cable (D9/D9)
- CD-ROM containing
  - µClinix™ Embedded Operating System
  - GNU Compilers & Tools
  - WABA (Java-like) Virtual Machine
  - Automated Installation Tools
  - WRAP CoreEngine™ [Beta version] including:
    - Full Bluetooth Protocol Stack\* (including LAN Access and Serial Port Profiles)
    - WRAP Bluetooth Socket Interface
    - WRAP System Tools
    - Integrated HTTP Server
    - Java Applets
- Sample applications
  - Man-to-Machine
  - Machine-to-Machine
  - Machine-to-Networks
- 30 day limited e-mail software support at [support@bluegiga.com](mailto:support@bluegiga.com)

### ORDERING INFORMATION

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\* Bluetooth 1.1 compliant

#### About BlueGiga

BlueGiga Technologies is an innovative wireless technology company based in Espoo & Turku, Finland and Stockholm, Sweden who develops and markets integrated product solutions tailored to industrial customers' needs.

Our mission is to help OEMs in creating wireless remote connectivity and pervasive access in electronic devices and systems in order to realise substantial cost- and time savings and productivity improvements.

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