

XScale based I/O module (with Bluetooth and Linux Embedded Webserver)

Part No:MPFM-RFID-XScaleI/Omod



Introduction

The **XScale based I/O module (with Bluetooth and Linux Embedded Webserver)** is intended for embedding into any product with need for computation power and communication. With a complete Linux system onboard it is easy to develop new software or to use your existing Linux software. The embedded system can communicate wirelessly with a Bluetooth enabled RFID reader, with other Bluetooth or WLAN enabled devices or with computers over Ethernet LAN.

The **XScale based I/O module** can optionally be fitted with GSM/GPRS/EDGE communication capability and Global Positioning (GPS).

With the Bluetooth Linux system included in your product you can access information via the embedded web server. The server can be configured to automatically send alarm e-mails (or SMS if fitted with GSM/GPRS), save log information via the Network File System (NFS) or act as a Samba-server.

Applications

- Vehicle tracking system
(optionally including RFID)
- Central processing & I/O unit for robots and RPVs
- Remote Terminal Unit (RTU)
- Web enablement of multi-sensors in remote sensing

Hardware

An Intel XScale processor is powering the Linux system. The embedded system has extensive I/O that can be configured to fit your

needs, including 4 serial ports, 16 digital I/O ports, Ethernet interface, USB and Bluetooth as standard interfaces.

GSM/GPRS, WLAN, GPS and others can be added in customer specific projects. The embedded system has a physical size of 65×65×19mm.

Software

While the embedded system runs a complete Linux system with the 2.4 kernel, the applications can be developed and tested on any Linux equipped PC and then downloaded to the embedded system. The software is updated with the FTP protocol and can even be remotely updated over a Bluetooth link.

Availability

The Bluetooth Linux System is available as engineering samples.

