14th November 2006

Summary of Changes Between
WISMC02BI / WISMC04BI and WISMC01BI / WISMC03BI

Introduction and Background

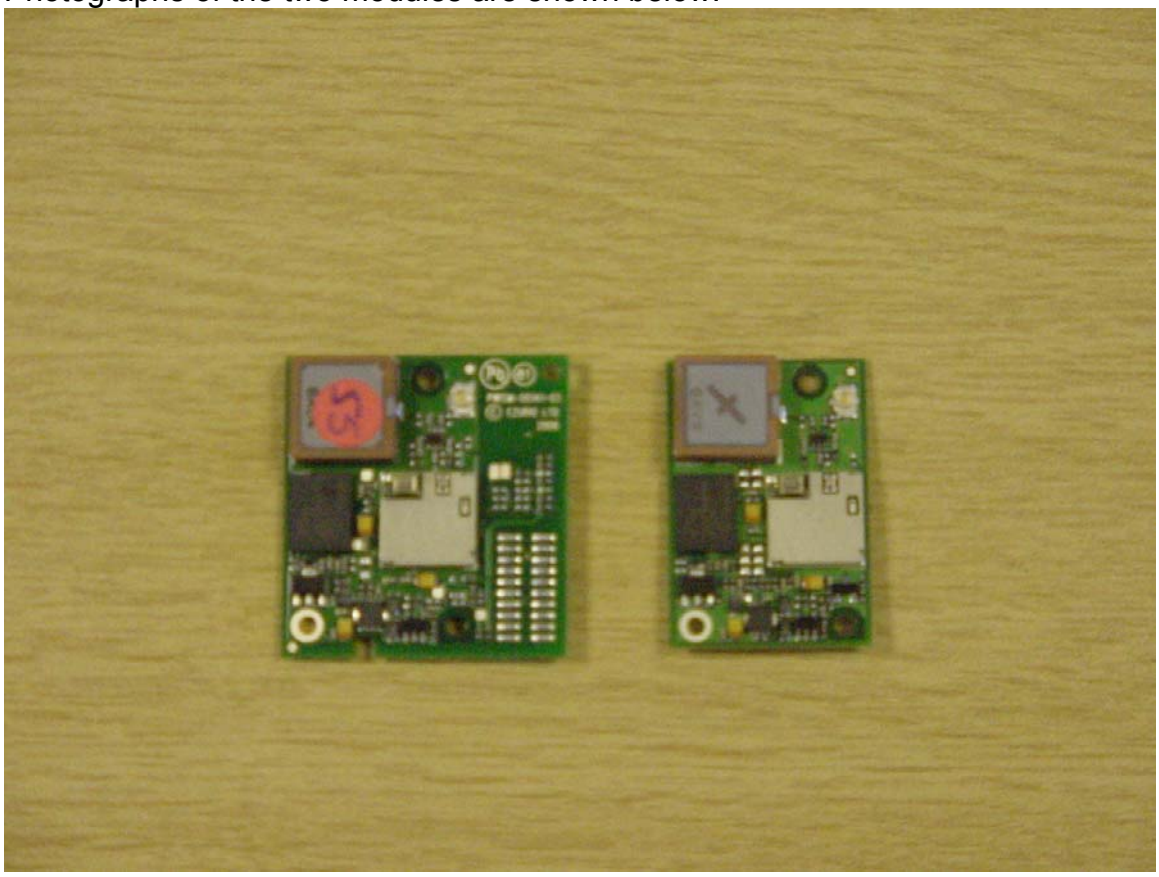
Ezurio have developed a family of Wireless LAN modules that are being submitted for modular CE, FCC and IC approval. There are four variants of the modules which cover two hardware form-factors and two software versions – as follows:

WISMC01BI: BISM connector format, SLIP software interface
WISMC02BI: Industrial connector format, SLIP software interface
WISMC03BI: BISM connector format, TCP/IP software interface
WISMC04BI: Industrial connector format, TCP/IP software interface

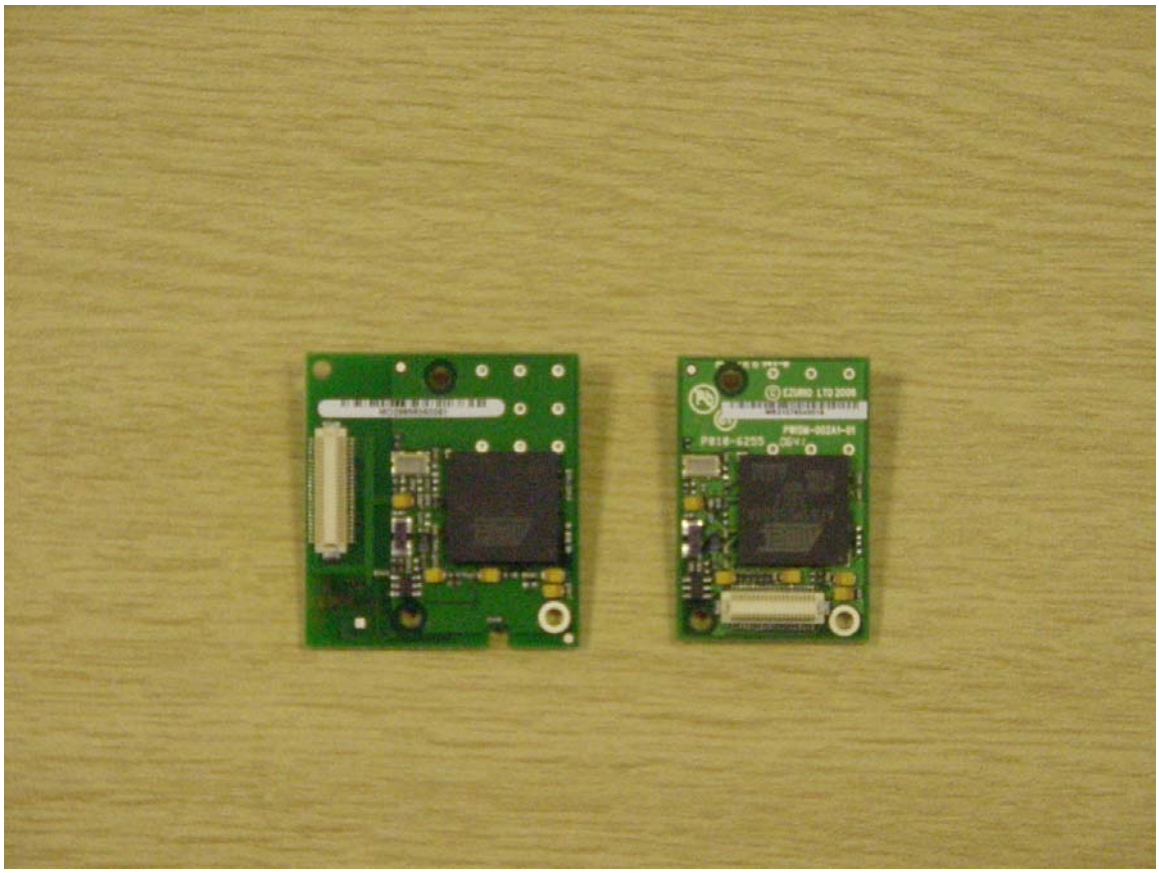
The FCC / CE and IC approvals for the industrial connector format have already been completed. This document describes the hardware differences between the BISM format and industrial format modules.

Hardware Differences

Photographs of the two modules are shown below:



14th November 2006



In each case the industrial connector form-factor module is shown on the left.

The main difference between the two modules is that the connector position has been changed and the additional PCB area required to mount the industrial format connector has been removed.
The complete list of changes between the two modules is listed below:

- 50 way industrial format connector has been removed.
- 40 way BISM format connector has been added.
- Additional GPIO signals have been routed from the Atmel processor to the connector.
- BT co-existence signals have been routed from the WLAN module to the connector.
- Reset circuit modified to allow non-inverted reset signal.
- JTAG test pads moved from area above industrial connector to inside main PCB area.
- The following components have been removed:
    - R38 -> this was used to by pass the reset circuit.
    - R13, R18 -> zero ohm in line resistors on the SPI bus.
    - R14, R15, R17 -> are removed from SPI clock line together with two of the ground pads.
    - R31 and R32 -> three pins antenna select resistors (NF in previous design)

- R20 and R23 -> 0R links, in line with the 3V supply to the WiFi module
- R24 and R29 -> used to give access to reserved pins of the WiFi module (pin 34 and 18)
- C39 and C40 -> decoupling caps for VDD_L pin of the WiFi module (NF in previous design)