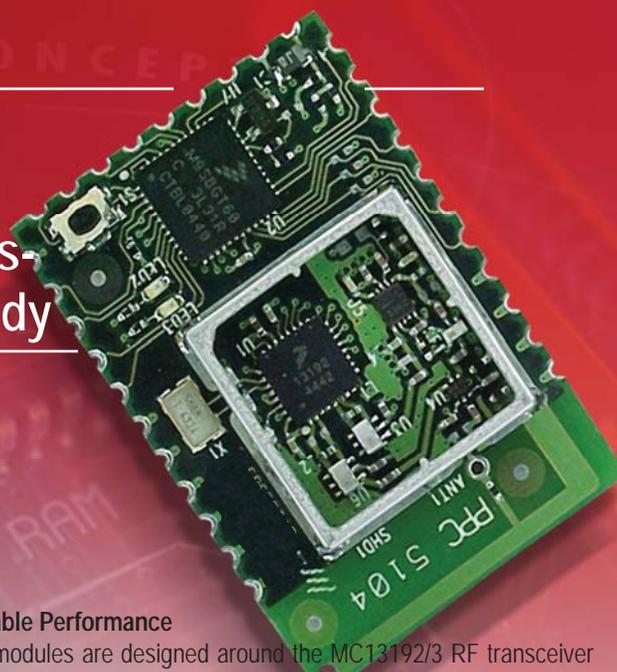


Bluetronix-BlueStar ZigBee Ready Swarm Intelligent 802.15.4 Modules- Military Designed-Commercial Ready



FEATURES :

1. Communications Modes
 - a. Point-to-point
 - b. Point-to-multipoint
 - c. **Swarm Intelligent Networking * SARA**
2. 4000+ feet line of sight performance
3. Very small form factor 1.4" x 1.0" (Postage Stamp)
4. Integrated PCB Trace Antenna
5. FCC, IC, and CE Certified
6. Direct Sequence Spread Spectrum
7. CSMA-CA
8. Wireless boot loader
9. Flash-based/upgradable
10. 10 Bit A/D (2 inputs)
11. General Purpose I/O (8 ports)
12. Microsoft® Windows®-based Configuration and Test Tool
13. Simple Serial UART Interface
14. Over 1,000,000 network addresses

SPECIFICATIONS :

1. Frequency: 2400 to 2483.5 MHz
2. Output Power: 10mW, 100mW (software controlled)
3. Receiver sensitivity: -92 dBm @ 1% PER
4. RF data rate: 250 kbps
5. RF channels: 16 (channel 16 is set at a reduced power level)
6. Maximum nodes per network 1,000,000
7. FCC / IC / CE certified
8. Voltage input: 2.4 to 3.6 V
9. Power consumption:
 - a. Transmit mode:
 - i. 10 mW – 125 mA
 - ii. 100 mW – 150 mA
 - b. Receive mode: < 42 mA
 - c. Standby mode: 5 µA
10. Host interface: Serial TTL
11. Operating temperature: -40°C to 85°C



Available: Late 2006



Long Range & Reliable Performance

Bluetronix BlueStar modules are designed around the MC13192/3 RF transceiver from Freescale™, which are based on the IEEE-802.15.4 standard. The BlueStar modules are ideally suited for use in a point to point/multipoint network or ZigBee™ mesh applications. They provide enhanced range performance over standard 802.15.4 or ZigBee implementations with an integrated 100mW power amplifier and an integrated antenna allowing the modules to communicate over 4000 feet line of sight. These modules include the MC9S08GT60CFD uP, 100mW power amplifier, a power supply, and an inverted-F PCB antenna. The modules are FCC and CE certified for fast and simple integration into any end to end application. Bluetronix can provide product modification to accommodate specific application requirements for OEMs or end users.



Size of postage stamp and weight of feather

Swarm Autonomous Routing Algorithm (SARA)

BlueStar modules have unique algorithms for communicating in ad-hoc networks both stationary and mobile. These algorithms were funded and developed and funded for DARPA Defense Advance Research Agency and the US Army CECOM to provide the ultimate in ad hoc wireless connectivity. These ad-hoc routing algorithms blow past mesh for battlefield reliable wireless communications, and are now ready for commercial applications. Adding or deleting nodes requires no set-up or configuration and there is no need for access points, coordinators or control points. Each node is an agent in a living biological networking system—operating, learning and constantly adapting with Swarm Intelligence (SI) and distributed actions



Call Bluetronix for immediate assistance for your applications or product needs.

