



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





DIGI XBEE³ ZIGBEE MESH KIT

Explore hands-on mesh networking and connectivity with Digi XBee3™ RF modules.

The Digi XBee3 ZigBee® Mesh Kit offers a great way to learn how to use Digi XBee3 RF modules for device connectivity and ZigBee-based mesh networking. ZigBee is one of the most popular open standard mesh networking protocols, specifically designed for low-data rate and low-power applications. With simple examples and step-by-step guidance, you can quickly assemble kit components to create reliable, low-power device communications and sensor networks.

Mesh networking is a powerful way to route data. Range is extended by allowing data to hop from node to node, and reliability is increased by “self-healing,” the ability to create alternate paths when one node fails or a connection is lost.

Digi XBee3 ZigBee Modules Included in the Kit

Digi XBee3 and XBee3-PRO® ZigBee modules are ideal for applications in the energy and controls markets where time-to-market and reliability are critical. With Digi’s extensive and easy-to-use DIGI XBee API framework, customers can get their ZigBee product to market faster than any other module available in the industry. Features like binding and multicasting also allow for simple integration for building automation applications.

The Kit Includes:

- ✓ 3 Digi XBee Grove Development Board
- ✓ 3 Digi3 XBee ZigBee SMT Modules
- ✓ 3 Micro-USB Cables
- ✓ 3 Antennas
- ✓ Comprehensive Web and Video-Based Instruction

| NUMBER | DESCRIPTION |
|-------------|---------------------------------------|
| XK3-Z8S-WZM | Digi XBee3 ZigBee Mesh Kit, worldwide |

Our modules are available in the popular Digi XBee through-hole, surface mount and now micro-mount form factors, providing customers the flexibility to substitute one Digi XBee technology for another with minimal development time and risk. Using the long-range Digi XBee3-PRO variant, customers can get up to two miles (3200 meters) LoS range.

SPECIFICATIONS

Digi XBee3™ ZigBee 3.0

Digi XBee3™ PRO ZigBee 3.0

PERFORMANCE

| | | |
|--------------------------------|----------------------------------|------------------|
| TRANSCEIVER CHIPSET | Silicon Labs EFR32MG SoC | |
| DATA RATE | RF 250 Kbps, Serial up to 1 Mbps | |
| INDOOR/URBAN RANGE | 200 ft (60 m) | 300 ft (90 m) |
| OUTDOOR/RF LINE-OF-SIGHT RANGE | 4000 ft (1200 m) | 2 miles (3200 m) |
| TRANSMIT POWER | +8 dBm | +19 dBm |
| RECEIVER SENSITIVITY (1% PER) | -103 dBm Normal Mode | |

FEATURES

| | | |
|------------------------|---|--|
| SERIAL DATA INTERFACE | UART, SPI, I ² C | |
| CONFIGURATION METHOD | API or AT commands, local or over-the-air (OTA) | |
| FREQUENCY BAND | ISM 2.4 GHz | |
| FORM FACTOR | Micro, Through-Hole, Surface Mount | |
| INTERFERENCE IMMUNITY | DSSS (Direct Sequence Spread Spectrum) | |
| ADC INPUTS | (4) 10-bit ADC inputs | |
| DIGITAL I/O | 15 | |
| ANTENNA OPTIONS | Through-Hole: PCB Antenna, U.FL Connector, RPSMA Connector SMT: RF Pad, PCB Antenna, or U.FL Connector Micro: U.FL Antenna, RF Pad, Chip Antenna | |
| OPERATING TEMPERATURE | -40° C to +85° C | |
| DIMENSIONS (L X W X H) | Through-Hole: 0.960 x 1.087 in (2.438 x 2.761 cm) SMT: 0.866 x 1.33 x 0.120 in (2.199 x 3.4 x 0.305 cm) Micro: 0.533 x 0.76 x 0.087 in (13 x 19 x 2 mm) | |

PROGRAMMABILITY

| | | |
|-----------------|-------------------------|--|
| MEMORY | 1 MB / 128 KB RAM | |
| CPU/CLOCK SPEED | HCS08 / up to 50.33 MHz | |

NETWORKING AND SECURITY

| | | |
|--------------------------|--|--|
| PROTOCOL | ZigBee® 3.0 | |
| ENCRYPTION | 128/256 bit AES | |
| RELIABLE PACKET DELIVERY | Retries/Acknowledgements | |
| IDS | PAN ID and addresses, cluster IDs and endpoints (optional) | |
| CHANNELS | 16 channels | |

POWER REQUIREMENTS

| | | |
|--------------------|------------------------------|-----------------|
| SUPPLY VOLTAGE | 2.1 to 3.6V | |
| TRANSMIT CURRENT | 40 mA @ 8 dBm | 135 mA @ 19 dBm |
| RECEIVE CURRENT | 15 mA | |
| POWER-DOWN CURRENT | 1.7 micro Amp @ 25 degrees C | |

REGULATORY APPROVALS

| | | |
|-------------------------|-----|-----|
| FCC, IC (NORTH AMERICA) | Yes | Yes |
| ETSI (EUROPE) | Yes | No |

It's the easy and fast way to build a wireless mesh network using Digi XBee3 modules. To learn more visit docs.digi.com.



877-912-3444 | 952-912-3444