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!

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1/3 THE SIZE OF CURRENT DIGI XBEE SMT

DIGI XBEE³ DIGIMESH 2.4

Wireless connectivity using the innovative and easy-to-deploy DigiMesh protocol.

Digi XBee3™ modules accelerate time to market for designers, OEMs and solution providers by quickly enabling wireless connectivity and easy-to-add functionality. Building on industry-leading technology, pre-certified Digi XBee3 modules offer the flexibility to switch between multiple frequencies and wireless protocols as needed.

These modules use the DigiMesh® networking protocol using a globally deployable 2.4 GHz transceiver. This peer-to-peer mesh network offers users added network stability through self-healing, dense network operation, extending the operational life of battery dependent networks and provides an upgrade path to IEEE 802.15.4 or ZigBee® mesh protocols, if desired.

With Digi Remote Manager®, Digi XBee3 modules can be easily configured and controlled from a simple, central platform. Built-in Digi TrustFence® security, identity and data privacy features use more than 175 controls to protect against new and evolving cyber threats. MicroPython and XCTU software tools simplify adding functionality, configuration and testing.

From edge computing to future migration, Digi XBee modules offer size, weight, power and performance advantages ideal for scalable device connectivity. A versatile addition to the expanding Digi XBee Ecosystem of wireless modules, adapters and software, the Digi XBee3 series is engineered to accelerate development and deployment.

SIZE AND FLEXIBILITY

– At 13 mm x 19 mm, the new Digi XBee3 micro form factor allows for more compact and portable applications

– Digi XBee3 is one module for all protocols including: ZigBee, 802.15.4, DigiMesh, and BLE, all configurable via Digi XCTU

PROGRAMMABILITY

– Eliminate the need for an external microcontroller and create smart end nodes and low-end gateways using MicroPython

SECURITY

– Intrinsic IoT security with Digi TrustFence®, a layered approach securing the edge device, through the gateway, into and out of the IoT

APPLICATION EXAMPLE

DIGI REMOTE MANAGER®

Application

DIGI® XBEE GATEWAY

ZIGBEE MESH NETWORK

MicroPython Rules Engine

Street Light

BlueTooth® Low Energy

Digi XBee3™ DigiMesh

Street Light

Digi XBee3™ DigiMesh

Digi XBee3™ DigiMesh

Street Light

RELATED PRODUCTS AND SERVICES

Development Kits

Digi XCTU

Digi TrustFence®

Digi Remote Manager®

Digi Design Services
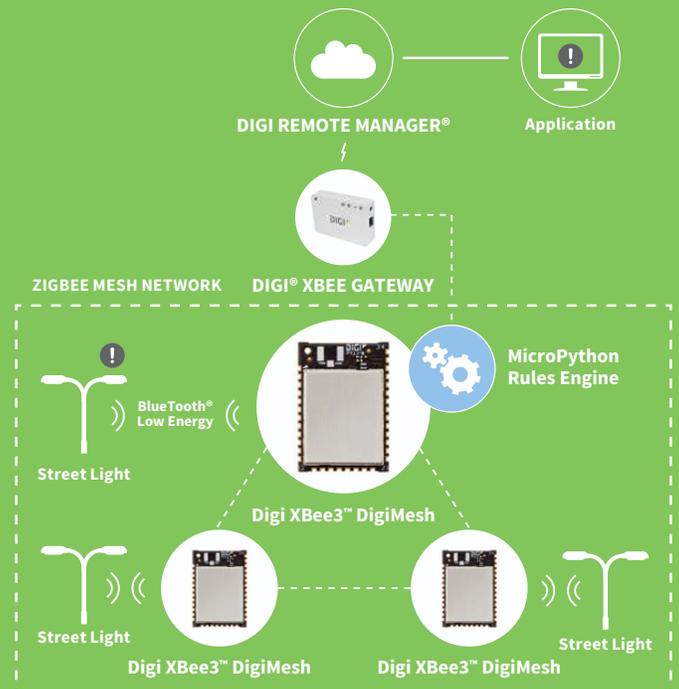
| SPECIFICATIONS	Digi XBee3™ DigiMesh	Digi XBee3™ DigiMesh PRO
PERFORMANCE		
DATA RATE	RF 250 Kbps, Serial up to 1 Mbps	
INDOOR/URBAN RANGE*	Up to 200 ft (60 m)	Up to 300 ft (90 m)
OUTDOOR/RF LINE-OF-SIGHT RANGE*	Up to 4000 ft (1200 m)	Up to 2 miles (3200 m)
TRANSMIT POWER	+8 dBm	+19 dBm
RECEIVER SENSITIVITY (1% PER)	-103 dBm Normal Mode	
FEATURES		
SERIAL DATA INTERFACE	UART, SPI, I²C	
CONFIGURATION METHOD	API or AT commands, local or over-the-air (OTA)	
FREQUENCY BAND	ISM 2.4 GHz	
FORM FACTOR	Micro	
INTERFERENCE IMMUNITY	DSSS (Direct Sequence Spread Spectrum)	
ADC INPUTS	(4) 10-bit ADC inputs	
DIGITAL I/O	15	
ANTENNA OPTIONS	Micro: U.FL Antenna, RF Pad, Chip Antenna	
OPERATING TEMPERATURE	-40° C to +85° C	
DIMENSIONS (L X W X H)	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	802.15.4	
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	
RECEIVE CURRENT	15 mA	135 mA @ 19 dBm
POWER-DOWN CURRENT	1.7 micro Amp @ 25 degrees C	
REGULATORY APPROVALS		
FCC, IC (NORTH AMERICA)	Yes	Yes
ETSI (EUROPE)	Yes	No

*Range figure estimates are based on free-air terrain with limited sources of interference. Actual range will vary based on transmitting power, orientation of transmitter and receiver, height of transmitting antenna, height of receiving antenna, weather conditions, interference sources in the area, and terrain between receiver and transmitter, including indoor and outdoor structures such as walls, trees, buildings, hills, and mountains.

DIGI.

PART NUMBERS	DESCRIPTION
XB3-24DMRM-J	Digi XBee3, 2.4 Ghz, DigiMesh, Micro, RF Pad Ant, MMT
XB3-24DMUM-J	Digi XBee3, 2.4 Ghz, DigiMesh, Micro, U.FL Ant, MMT
XB3-24DMCM-J	Digi XBee3, 2.4 Ghz, DigiMesh, Micro, Chip Ant, MMT
XB3-24DMRM	Digi XBee3 PRO, 2.4 Ghz, DigiMesh, Micro, RF Pad Ant, MMT
XB3-24DMUM	Digi XBee3 PRO, 2.4 Ghz, DigiMesh, Micro, U.FL Ant, MMT
XB3-24DMCM	Digi XBee3 PRO, 2.4 Ghz, DigiMesh, Micro, Chip Ant, MMT

PRODUCT DIMENSIONS

ACTUAL SIZE

19 mm

13 mm

ACTUAL PITCH 1.25mm/.0492"
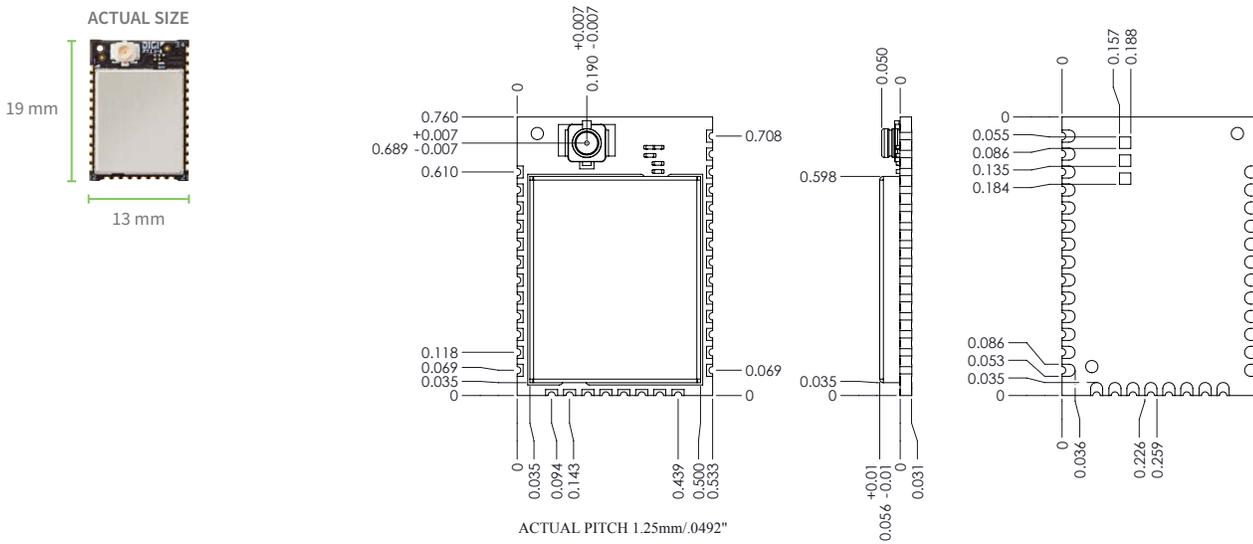
FOR MORE INFORMATION
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