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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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- MICRO FORM FACTOR
- DIGI TRUSTFENCE® SECURED
- MICROPYTHON PROGRAMMABLE

1/3 THE SIZE  
OF CURRENT  
DIGI XBEE SMT



# DIGI XBEE<sup>3</sup> 802.15.4

Low-cost, easy-to-deploy modules for critical end-point device and sensor connectivity.

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.

Digi XBee3 802.15.4 modules are ideal for applications requiring low latency and predictable communication timing. Providing quick, robust communication in point-to-point, peer-to-peer, and multipoint/star configurations, Digi XBee3 enables robust end-point connectivity with ease.

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

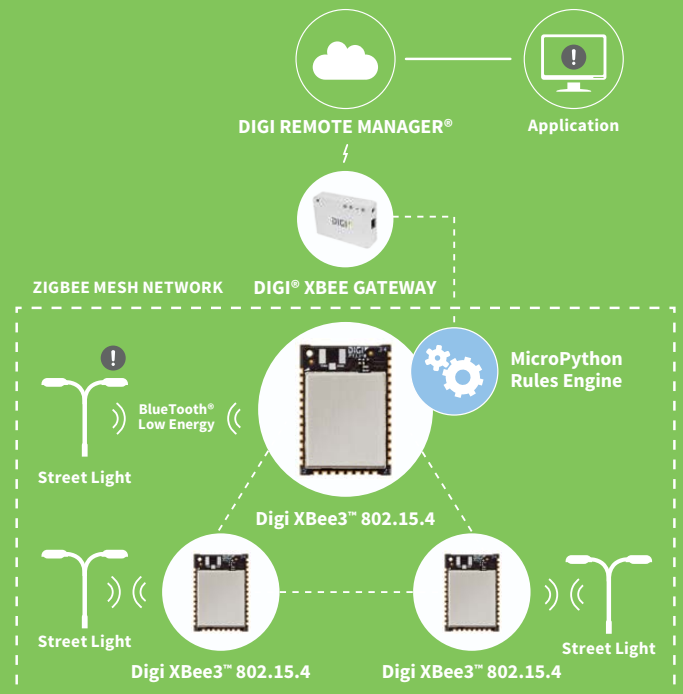
## PROGRAMMABILITY

- 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



## RELATED PRODUCTS AND SERVICES



Development Kits



Digi XCTU



Digi TrustFence®



Digi Remote Manager®



Digi Design Services

## SPECIFICATIONS

Digi XBee3™ 802.15.4

Digi XBee3™ PRO 802.15.4

## PERFORMANCE

<b>DATA RATE</b>	RF 250 Kbps, Serial up to 1 Mbps	
<b>INDOOR/URBAN RANGE*</b>	Up to 200 ft (60 m)	Up to 300 ft (90 m)
<b>OUTDOOR/RF LINE-OF-SIGHT RANGE*</b>	Up to 4000 ft (1200 m)	Up to 2 miles (3200 m)
<b>TRANSMIT POWER</b>	+8 dBm	+19 dBm
<b>RECEIVER SENSITIVITY (1% PER)</b>	-103 dBm Normal Mode	

## FEATURES

<b>SERIAL DATA INTERFACE</b>	UART, SPI, I <sup>2</sup> C
<b>CONFIGURATION METHOD</b>	API or AT commands, local or over-the-air (OTA)
<b>FREQUENCY BAND</b>	ISM 2.4 GHz
<b>FORM FACTOR</b>	Micro
<b>INTERFERENCE IMMUNITY</b>	DSSS (Direct Sequence Spread Spectrum)
<b>ADC INPUTS</b>	(4) 10-bit ADC inputs
<b>DIGITAL I/O</b>	15
<b>ANTENNA OPTIONS</b>	Micro: U.FL Antenna, RF Pad, Chip Antenna
<b>OPERATING TEMPERATURE</b>	-40° C to +85° C
<b>DIMENSIONS (L X W X H)</b>	Micro: 0.533 x 0.76 x 0.087 in (13 x 19 x 2 mm)

## PROGRAMMABILITY

<b>MEMORY</b>	1 MB / 128 KB RAM
<b>CPU/CLOCK SPEED</b>	HCS08 / up to 50.33 MHz

## NETWORKING AND SECURITY

<b>PROTOCOL</b>	802.15.4
<b>ENCRYPTION</b>	128/256 bit AES
<b>RELIABLE PACKET DELIVERY</b>	Retries/Acknowledgements
<b>IDS</b>	PAN ID and addresses, cluster IDs and endpoints (optional)
<b>CHANNELS</b>	16 channels

## POWER REQUIREMENTS

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

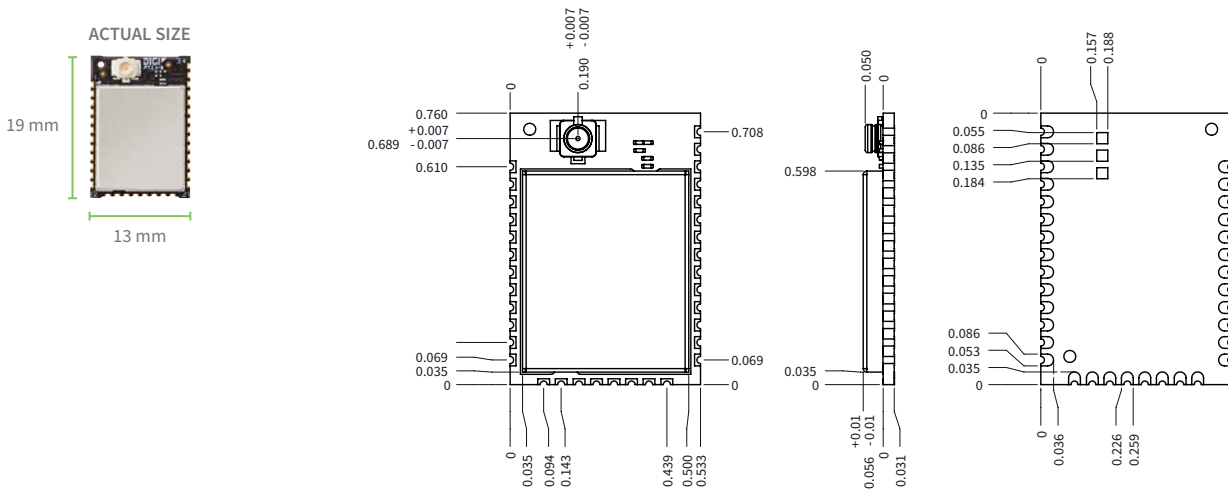
## REGULATORY APPROVALS

<b>FCC, IC (NORTH AMERICA)</b>	Yes	Yes
<b>ETSI (EUROPE)</b>	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.

PART NUMBERS	DESCRIPTION
XB3-24ARM-J	Digi XBee3, 2.4 Ghz, 802.15.4, Micro, RF Pad Ant, MMT
XB3-24AUM-J	Digi XBee3, 2.4 Ghz, 802.15.4, Micro, U.FL Ant, MMT
XB3-24ACM-J	Digi XBee3, 2.4 Ghz, 802.15.4, Micro, Chip Ant, MMT
XB3-24ARM	Digi XBee3 PRO, 2.4 Ghz, 802.15.4, Micro, RF Pad Ant, MMT
XB3-24AUM	Digi XBee3 PRO, 2.4 Ghz, 802.15.4, Micro, U.FL Ant, MMT
XB3-24ACM	Digi XBee3 PRO, 2.4 Ghz, 802.15.4, Micro, Chip Ant, MMT

## PRODUCT DIMENSIONS



FOR MORE INFORMATION  
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