



# DIGI XBEE 3 GLOBAL LTE CAT 1 DEVELOPMENT KIT

The Digi XBee 3 Global LTE Cat 1 Development Kit provides OEMs with a simple, quick way to integrate cellular connectivity into their devices

Digi XBee® 3 Global LTE Cat 1 embedded smart modems bring together the power and flexibility of the [Digi XBee Ecosystem](#) with the latest in LTE cellular technology. OEMs can quickly integrate cutting-edge LTE cellular into their devices and applications, eliminating the time-consuming and expensive FCC and carrier end-device certification process.

Starting with simple examples, we provide step-by-step guidance as you assemble the Digi XBee 3 Global LTE Cat 1 Development Kit components to create reliable, low-power cellular communication connectivity for OEM devices like sensors and monitoring systems using Digi XBee 3 Global LTE Cat 1 embedded modems.

Each kit includes three months of cellular data service, pre-activated and ready to go, so your team can focus on your primary goal: prototyping and developing products.

This kit is designed for anyone interested in getting started in the world of embedded cellular. Hardware and software engineers, corporate technologists, or educators and students can quickly learn more about cellular integration using the hands-on examples included in the kit.

With the full suite of standard Digi XBee API frames and AT commands, MicroPython and [Digi XCTU®](#), Digi XBee customers can seamlessly transition to this embedded modem with only minor software adjustments. OEMs can future-proof your designs by adding Digi XBee 3 Global LTE Cat 1.

## Your kit includes:

- ✓ Digi XBee 3 Global LTE Cat 1 embedded modem
- ✓ Digi XBee 3 Development Board
- ✓ SIM card for LTE Cat 1 cellular service out of the box
- ✓ 3 months of free cellular service\*
- ✓ Free schematic review by [Digi WDS\\*\\*](#)
- ✓ Antennas and power cable

PART NUMBER	DESCRIPTION	RECOMMENDED FOR NEW DESIGNS
XK3-C-A1-T-EB	Digi XBee 3 Global LTE Cat 1 Development Kit	Yes

\*Service is limited to ~5 MB/month and limited SMS. For testing purposes only; not for production.

\*\*Level 1 review

Ideal for any OEM business following an agile roadmap, Digi XBee 3 Global LTE Cat 1 provides the flexibility to switch between wireless protocols or migrate to LTE M or NB-IoT. [Digi Remote Manager®](#) allows you to configure, deploy and manage devices from a central platform.

## SPECIFICATIONS

## DIGI XBEE 3 GLOBAL LTE CAT 1

## DIGI XBEE 3 NORTH AMERICA LTE CAT 1

## HARDWARE

CELLULAR CHIPSET	Thales PLS63-W	Thales PLS63-X
FORM FACTOR (CONNECTOR FOOTPRINT)	Digi XBee® 20-pin through-hole	
ANTENNA OPTIONS	2 U.FL: cellular diversity, 1 U.FL: GNSS Embedded Bluetooth® antenna	
DIMENSIONS	30.48 mm x 43.18 mm (1.2 in x 1.7 in)	
OPERATING TEMPERATURE	-40 °C to 80 °C (-40 °F to 176 °F)	
SIM SIZE	4FF Nano	

## INTERFACE AND I/O

DATA INTERFACE	UART, SPI, USB	
OPERATING MODES	Transparent and API over serial, PPP over USB	
SECURITY	Digi TrustFence® security with secure boot and protected JTAG	
CONFIGURATION TOOLS	Digi XCTU® (local), Digi Remote Manager® (OTA)	
EMBEDDED PROGRAMMABILITY	MicroPython with 8 MB flash / 64 kB RAM	
I/O	4 ADC lines (10-bit), 13 digital I/O, I2C	
BLUETOOTH	Bluetooth Low Energy (BLE)	

## CELLULAR CHARACTERISTICS

TRANSMIT POWER: 4G LTE/3G/2G	23 dBm / 23.5 dBm / 30-33 dBm	23 dBm / 23.5 dBm / NA
RECEIVE SENSITIVITY: 4G LTE/3G/2G	103 dBm / 110 dBm / 108 dBm	103 dBm / 110 dBm / NA
SUPPORTED BANDS	Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 18, 19, 20, 25, 26, 28, 66; TDD: 38, 40, 41	Bands 2, 4, 5, 12, 13, 14, 25, 26, 66, 71
DOWNLINK/UPLINK SPEEDS	10 mbps downlink, 5 mbps uplink (USB) 921 kbps downlink and uplink (UART)	
DUPLEX MODE	Full-duplex	

## POWER REQUIREMENTS (AT 3.3 VDC INPUT POWER)

SUPPLY VOLTAGE	2.8 to 5.5 V	
PEAK TRANSMIT CURRENT	1050 mA with Bluetooth disabled; 1090 mA with Bluetooth enabled	
AVG TRANSMIT CURRENT	890 mA	
AVG RECEIVE CURRENT	320 mA	

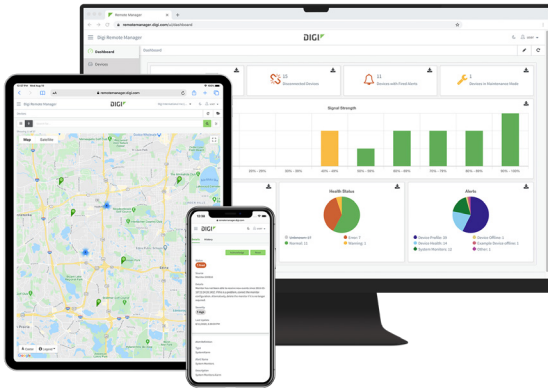
## REGULATORY AND CARRIER APPROVALS

FCC (USA)	MCQ-XB3C2 and QIPPLS63-W	MCQ-XB3C2 and QIPPLS63-X
ISED (CANADA)	1846A-XB3C2 and 7830A-PLS63W	1846A-XB3C2 and 7830A-PLS63X
CE / RED (EUROPE)	Complete	
RCM (AUSTRALIA/NEW ZEALAND)	Pending	
UKCA (UNITED KINGDOM)	Complete	
PTCRB, AT&T AND VERIZON	PTCRB and AT&T complete for all SKUs; Verizon pending (Q3 2022)	

## WARRANTY

PRODUCT WARRANTY	1-year	
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## DIGI REMOTE MANAGER



Digi Remote Manager® is the technology platform that brings networks to the next level, allowing networks — and the people who manage them — to work smarter. With Digi Remote Manager you can transform a multitude of dispersed IoT devices into a dynamic, intelligent network. Now you can easily deploy, monitor and diagnose thousands of mission-critical devices from a single point of command — on your desktop, tablet or phone. All the while, its software-defined security diligently safeguards your entire Digi ecosystem.

Learn more at [www.digi.com/digi-remote-manager](http://www.digi.com/digi-remote-manager)

### CAPABILITIES

- Activate, monitor and diagnose your mission-critical devices from a single point of command and control
- Schedule key operations — including firmware updates and file management — on a single device or on a group of devices, keeping your network functionality up-to-date and maintaining compliance standards
- Manage edge devices out-of-band via console terminal access
- Keep tabs on device health and connectivity across device deployments of any size
- Create detailed reports and enable real-time alerts for specified conditions
- Integrate device data through open APIs to gain deeper insights and control with third-party applications
- Report and alert on performance statistics, including connection history, signal quality, latency, data usage and packet loss

### INFRASTRUCTURE

- Hosted in a commercial-grade cloud server environment that meets SOC 1®, SOC 2® and SOC 3® standards
- Superior availability, operating to 99.9% or greater
- Open APIs available to support application development

### SECURITY

- More than 175 security controls in place to protect your data
- Member of the Center for Internet Security® (CIS®)
- Enables compliance with security frameworks like ISO27002, HIPAA, NIST and more
- Earned Skyhigh's CloudTrust™ Program highest rating of Enterprise-Ready

## DIGI WIRELESS DESIGN SERVICES



### DEFINITION



### DEVELOPMENT



### CERTIFICATION



### MANUFACTURING

### GET TO MARKET FASTER WITH DIGI WDS

Digi Wireless Design Services (WDS) has a 15-year history of helping clients speed down the path to success by guiding them around the technological and regulatory certification pitfalls that botch budgets and disrupt product introductions.

We begin by actively listening to your business and technical requirements, and then leverage our proven methodology, world-class engineering expertise and library of IP to design a cost-effective solution that is tailored to your specific needs.

Accelerate toward the solution that is right for you and your customers. Contact [Digi WDS](#) to find out how we can guide you to success.

### DIGI WDS SERVICES

We offer services to support you wherever you are along your development path:

- Proof of concept
- Architecture consultation
- Requirements definition
- System, software and electrical design
- Design reviews
- Certifications
- Prototype build
- Manufacturing test fixtures

### DIGI WDS RECORD

Our record speaks for itself.

- 250+ product development projects
- 100+ certification failure rescues
- 100 million connected devices around the globe

## DIGI XBEE TOOLS

The Digi XBee® Ecosystem is fully supported with the award-winning Digi XBee Tools suite. Designed to support the full product lifecycle, from prototyping and development to deployment and ongoing monitoring, Digi XBee Tools includes code libraries, testing and prototyping tools, product development and manufacturing support, and tools for deploying and managing end devices in the field.



DEVELOP



BUILD



DEPLOY



MANAGE

## DIGI DATA PLAN SERVICES



### READY TO ACTIVATE

Modem includes SIM, ready to activate.

Work with Digi for your SIM and data management plan.

Visit [shop.digi.com](https://shop.digi.com) to activate.

- Ease of deployment and support with a single supplier
- Avoid extra costs and the complexity of having to purchase and insert SIM/program APN during manufacturing process
- No internal staff needed to manage carrier contracts and billing
- Leverage Digi's buying power; we work with carriers to secure volume pricing that we pass on to you, so you can roll out at your own pace, regardless of your deployment size

FOR MORE INFORMATION  
PLEASE VISIT **DIGI.COM**

**DIGI SERVICE AND SUPPORT** / You can purchase with confidence knowing that Digi is always available to serve you with expert technical support and our industry leading warranty. For detailed information visit [www.digi.com/support](https://www.digi.com/support).

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