



3 MONTHS OF FREE DATA



Manage this device with Digi Remote Manager

DIGI XBEE 3 CELLULAR LTE-M DEVELOPMENT KIT

Digi XBee 3 Cellular LTE-M development kit provides OEMs with a simple, quick way to integrate cellular connectivity into their devices

The Digi XBee® 3 Cellular embedded smart modem brings 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 painful, time-consuming and expensive FCC and carrier end-device certification process.

Digi's XBee 3 Cellular development kit offers a great way to learn how to integrate cellular connectivity using Digi XBee 3 embedded modems. Starting with simple examples, we provide step-by-step guidance as you assemble the kit components to create reliable, low-power cellular communications for OEM devices like sensors and control/monitoring systems. The kit includes three months of free cellular data service, pre-activated and ready to go right out of the box, allowing developers to immediately focus on their primary goal: developing great products without the hassle of ordering and provisioning a SIM and setting up a data plan.

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, existing XBee customers can seamlessly transition to this embedded modem with only minor software adjustments. By adding Digi XBee 3 Cellular to your design,

Your kit includes:

- ✓ Digi XBee 3 Cellular LTE-M/NB-IoT embedded modem
- ✓ Digi XBee 3 development board
- ✓ LTE-M SIM for AT&T*
- ✓ 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-A2-T-UB	Digi XBee 3 Cellular Smart Modem, LTE-M/NB-IoT Development Kit with XBIB-C Dev Board, AT&T	Yes
XK3-C-N1-T-EB	Digi XBee 3 Cellular Smart Modem, LTE-M/NB-IoT Development Kit with XBIB-C Dev Board	Yes
XK3-C-A2-UT-U	Digi XBee 3 Cellular Smart Modem, LTE-M/NB-IoT Development Kit, AT&T	No
XK3-C-N1-UT-E	Digi XBee 3 Cellular Smart Modem, LTE-M/NB-IoT Development Kit	No

*Service will be limited to ~5 MB/month and limited SMS. For testing purposes only, not for production. XK3-C-A2-UT-U and XK3-C-A2-T-UB only.
**Level 1 review.

you can create a future-proof product with flexibility to switch between wireless protocols or pivot to Cat 1 or NB-IoT as those networks become widely deployed — making Digi XBee 3 ideal for any OEM business with an agile roadmap.



SPECIFICATIONS

Digi XBee 3 Cellular Smart Modem, LTE-M

HARDWARE

CELLULAR CHIPSET	u-blox SARA-R410M-02B
FORM FACTOR	Digi XBee 20-pin through-hole
ANTENNA OPTIONS	1 U.FL (Cellular), 1 U.FL (Bluetooth®)
DIMENSIONS	24.38 mm x 32.94 mm (0.96 in x 1.3 in)
OPERATING TEMPERATURE	-40° C to 85° C (-40° F to 185° F)
SIM SIZE	4FF Nano

INTERFACE AND I/O

DATA INTERFACE	UART, SPI, USB
OPERATING MODES	Transparent and API over serial, PPP over USB or serial
SECURITY	Digi TrustFence® security with secure boot and protected JTAG
CONFIGURATION TOOLS	Digi XCTU® (local), Digi Remote Manager® (OTA)
EMBEDDED PROGRAMMABILITY	MicroPython with 32 kB flash / 32 kB RAM
I/O	4 ADC lines (10-bit), 13 Digital I/O, USB, I ² C
BLUETOOTH	Bluetooth Low Energy Ready

CELLULAR CHARACTERISTICS

TRANSMIT POWER	Up to 23 dBm
RECEIVE SENSITIVITY	-105 dBm
CARRIER APPROVALS	AT&T End Device Certified (LTE-M) Verizon End Device Certified (LTE-M) T-Mobile End Device Certified (NB-IoT)* Vodafone End Device Certified (NB-IoT) Bell End Device Certified (LTE-M) Telus End Device Certified (LTE-M) Compatible with other carriers offering LTE-M and NB-IoT services (see supported bands below)
SUPPORTED BANDS	Bands 1, 2, 3, 4, 5, 8, 12, 13, 17, 18, 19, 20, 25, 26, 28 and 39
DOWNLINK/UPLINK SPEEDS	Up to 375 kbps
DUPLEX MODE	Half-duplex

POWER REQUIREMENTS (AT 3.3 VDC INPUT POWER)

SUPPLY VOLTAGE	3.3 - 4.3 VDC
PEAK TRANSMIT CURRENT	550 mA w/ Bluetooth disabled; 610 mA w/ Bluetooth enabled
AVG TRANSMIT CURRENT	235 mA
POWER SAVE MODE	20 uA
DEEP SLEEP	10 uA

REGULATORY APPROVALS

FCC (USA)	MCQ-XB3M1
IC (CANADA)	1846A-XB3M1
CE / RED (EUROPE)	Complete
RCM (AUSTRALIA/NEW ZEALAND)	Complete

*For use on T-Mobile NB-IoT network for evaluation and development purposes. Full certification will be completed with an upcoming software revision (03B). Contact Digi sales for more information.

DIGI WIRELESS DESIGN SERVICES



DEFINITION



DEVELOPMENT



CERTIFICATION



MANUFACTURING

GET TO MARKET FASTER

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 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.

Acceslerate toward the solution that is right for you and your customers. Contact Digi WDS to find out how we can guide you to success.

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

WDS RECORD

Our record speaks for itself.

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

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.

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