DIGI XBEE 3 CELLULAR LTE CAT 1 DEVELOPMENT KIT

The Digi XBee 3 Cellular LTE Cat 1 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 time-consuming and expensive FCC and carrier end-device certification process.

Digi XBee 3 Cellular development kits help developers integrate cellular connectivity into applications 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 communication connectivity for OEM devices like sensors and monitoring systems.

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, Digi XBee customers can seamlessly transition to this embedded modem with only minor software adjustments. OEMs can future-proof your designs by adding

Your kit includes:

- ✓ Digi XBee 3 Cellular 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-V1-T-UB	Digi XBee 3 Cellular LTE Cat 1 Development Kit, Verizon	Yes
XK3-C-A1-T-UB	Digi XBee 3 Cellular LTE Cat 1 Development Kit with XBIB-C Dev Board, AT&T	Yes
XK3-C-A1-UT-U	Digi XBee 3 Cellular LTE Cat 1 Development Kit, AT&T	No

*Service is limited to ~5 MB/month and limited SMS. For testing purposes only; not for production.
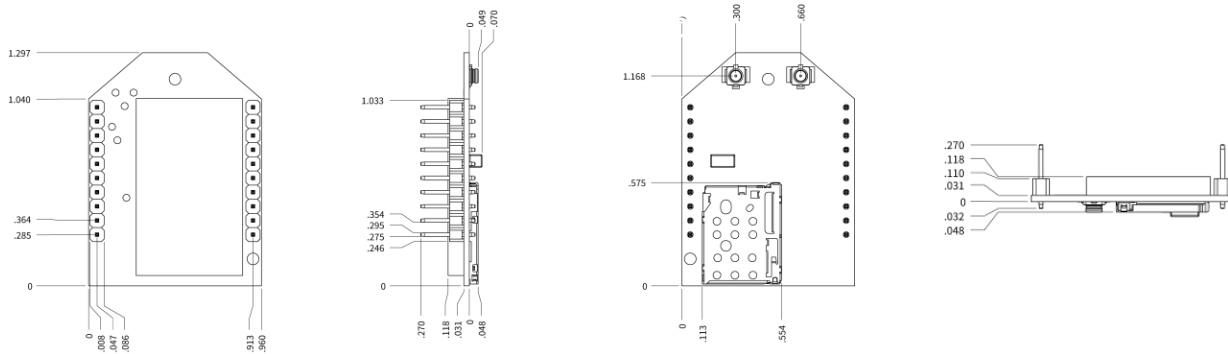**Level 1 review

Digi XBee 3 Cellular. Ideal for any OEM business following an agile roadmap, Digi XBee 3 Cellular provides the flexibility to switch between wireless protocols or migrate to LTE M or NB-IoT.

3 MONTHS OF FREE DATA

Manage this device with Digi Remote Manager

HARDWARE

CELLULAR CHIPSET	Telit LE866A1-NA (AT&T), LE866-SV1 (Verizon)
FORM FACTOR	Digi XBee 20-pin through-hole
ANTENNA OPTIONS	1 U.FL: Cellular Primary, 1 U.FL: Cellular Diversity Embedded Bluetooth® Antenna
DIMENSIONS	24.38 mm x 32.94 mm (0.96 in x 1.3 in)
OPERATING TEMPERATURE	-40º C to 80º C (-40º F to 176º 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 512 kB flash / 64 kB RAM
I/O	4 ADC lines (10-bit), 13 Digital I/O, I2C
BLUETOOTH	BLE

CELLULAR CHARACTERISTICS

TRANSMIT POWER	Up to 23 dBm
RECEIVE SENSITIVITY	-102 dBm
CARRIER APPROVALS	AT&T End-Device Certified Bell End-Device Certified Telus End-Device Certified Verizon End-Device Certified Compatible with other LTE Cat 1 carriers; see Supported Bands
SUPPORTED BANDS	Bands 2, 4, 12 Bands 4, 13 (Verizon module)
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	3.0 to 5.5 V
PEAK TRANSMIT CURRENT	1000 mA Bluetooth disabled 1060 mA Bluetooth enabled
AVG TRANSMIT CURRENT	850 mA
AVG RECEIVE CURRENT	320 mA

REGULATORY AND CARRIER APPROVALS

FCC (USA)	MCQ-XB3C1 and RI7XE866A1NA, MCQ-XB3C1 and RI7LE866SV1A (for Verizon module)
IC (CANADA)	1846A-XB3C1 and 5131A-XE866A1-NA, 1846A-XB3C1 and 5131A-LE866-SV1A (for Verizon module)
AT&T END-DEVICE CERTIFIED	Complete (XB3-C-A1-UT-001 and XK3-C-A1-T-UB only)
VERIZON END-DEVICE CERTIFIED	Complete (XB3-C-V1-UT-001 and XK3-C-A1-T-UB only)
TELUS END-DEVICE CERTIFIED	Complete (XB3-C-A1-UT-001 and XK3-C-A1-T-UB only)
BELL END-DEVICE CERTIFIED	Complete (XB3-C-A1-UT-001 and XK3-C-A1-T-UB only)
PTCRB	Complete (XB3-C-A1-UT-001 and XK3-C-A1-T-UB only)

PRODUCT IMAGES

DIGI REMOTE MANAGER®

CAPABILITIES

– Centralized management of remote devices over 3G/4G/LTE
– Define standard configurations and automatically monitor individual devices for PCI security compliance
– Get alerts and create reports on performance statistics, including connection history, signal quality, latency, data usage and packet loss
– No servers or applications to operate and maintain
– Perform tasks across your entire device network in minutes
– Edit configurations and update firmware for individual devices or groups
– Monitor the status and location of remote devices via a web browser
– Activate or deactivate cellular lines and monitor data consumption to ensure you never incur overage charges

INFRASTRUCTURE

– Hosted in a commercial-grade SAS 70-certified environment
– Superior availability, operating to 99.9% or greater
– Open APIs available to support application development

SECURITY

– Certified SSAE-16 facilities
– Over 175 security controls in place to protect your data
– Enables compliance with security frameworks like PCI, HIPAA, NIST
– Earned SkyHigh's Cloud Trust Program highest rating of Enterprise-Ready

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®