



# DIGI XBEE® CELLULAR DEVELOPMENT KIT

XBee Cellular LTE Cat 1 development kit provides OEMs with a simple, quick way to integrate cellular connectivity into their devices.

The new Digi XBee Cellular embedded modem brings together the power and flexibility of the XBee ecosystem with the latest in 4G cellular technology. OEMs can quickly integrate cutting edge 4G cellular into their devices and applications, eliminating the painful, time-consuming and expensive FCC and carrier end-device certification process. Digi's XBee Cellular Development Kit offers a great way to learn how to integrate cellular connectivity using XBee 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 will include 6 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 setting up data plan, ordering and provisioning a SIM from the carrier.

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 XBee API frames and AT commands, existing XBee customers can seamlessly transition to this new embedded modem with only minor software

## The Kit Includes:

- ✓ 1 Digi XBee Cellular LTE Cat 1 embedded modem
- ✓ 1 Digi XBee Development Board
- ✓ 1 LTE Cat 1 SIM for Verizon
- ✓ 6 months of free cellular service\*
- ✓ Antennas and power supply

NUMBER	DESCRIPTION
XKC-V1T-U	Digi XBee Cellular LTE Cat 1 Development Kit, Verizon LTE Cat 1, USA

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

adjustments. When OEMs add the XBee Cellular to their design, they create a future-proof design with flexibility to switch between wireless protocols or upgrade to LTE Cat M1 or NB1 as those networks are deployed—ideal for any OEM business with an agile roadmap.

# SPECIFICATIONS

# Digi XBee® Cellular LTE Cat 1

## INTERFACES AND HARDWARE

<b>SERIAL DATA INTERFACE</b>	UART (SPI coming soon)
<b>ANALOG I/O</b>	4 ADC lines (coming soon)
<b>DIGITAL I/O</b>	15 DIO lines (coming soon)
<b>FORM FACTOR</b>	20-pin XBee through-hole
<b>ANTENNA OPTIONS</b>	2 U.FL for primary and secondary antennas
<b>DIMENSIONS</b>	0.960 x 1.297 in (2.438 x 3.294 cm)
<b>CHIPSET REFERENCE</b>	Telit/Altair
<b>OPERATING TEMPERATURE</b>	-40° C to +80° C

## RF CHARACTERISTICS

<b>MODULATION</b>	LTE/4G – QPSK, 16QAM
<b>TRANSMIT POWER</b>	23dBm
<b>RECEIVE SENSITIVITY</b>	-102 dBm

## NETWORKING AND CARRIER

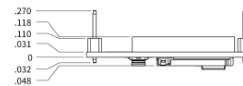
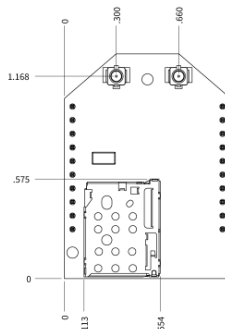
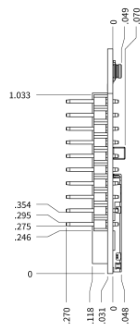
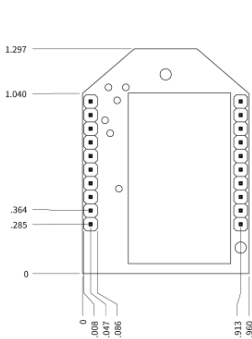
<b>CARRIER AND TECHNOLOGY</b>	Verizon 4G LTE Cat 1
<b>SUPPORTED BANDS</b>	4/13
<b>TRUSTFENCE™ SECURITY</b>	Secure Boot, Encrypted Storage, Protected JTAG
<b>DATA RATES</b>	921 Kbps via UART
<b>DATA PLAN OPTIONS</b>	Digi data plans available - Contact Digi for more information

## POWER REQUIREMENTS

<b>SUPPLY VOLTAGE</b>	3.0 to 5.5v
<b>TRANSMIT CURRENT</b>	860 mA average, 1020 mA Peak @ 3.3V
<b>RECEIVE CURRENT</b>	530 mA average @ 3.3V
<b>IDLE CURRENT (LISTENING)</b>	143 mA @ 3.3V
<b>DEEP SLEEP</b>	Approximately 10µA

## REGULATORY AND CARRIER APPROVALS

<b>FCC (USA)</b>	Contains: FCC: RI7LE866SV1
<b>IC (CANADA)</b>	Contains: IC: 5131A-LE866SV1
<b>VERIZON END-DEVICE</b>	Certified and ready for immediate use



It's the easy and fast way to build a wireless cellular device using Digi's XBee modules. To learn more visit [www.digi.com/xbeecellular](http://www.digi.com/xbeecellular).

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