



# DIGI XBEE

## Test Code for Certification Testing

Completing regulatory testing is an important step in wireless product deployment, and it is one that can create significant delays in time-to-market when development teams do not plan for it. Digi is committed to helping OEMs and systems integrators to remove barriers to certification, testing and production, so they can get products to market in the regions they choose as cost-efficiently as possible.

Most Digi XBee® modules are pre-certified as wireless devices in many countries and they carry the appropriate labels and Digi Certifications. However, there are typically some additional steps to take when embedding these modules into a product or application:

- The host product manufacturer that is integrating the XBee is responsible for ensuring that the device does not have any electronic emissions present that are excessive or out of compliance when the final product operates as intended. It should not be necessary for the host installer to re-test all of the available transmitter modes or settings of the XBee module.
- When integrating the module into a final application, additional testing may be needed or required to complete your product. To accommodate these testing scenarios, Digi can provide test code that will transmit a modulated (continuous test data) or un-modulated (tone) signal for in-house testing purposes. The host manufacturer should address the interpretation of FCC requirements and recommendations with an FCC-certified test lab.

For more information regarding FCC requirements, search the internet using the following phrases to find guidance on integrating the module into your product.

“FCC Modular Integration Page”

“FCC Modular Integration Guide”

### Loading Test Code onto XBee Modules

Digi XBee modules can be provided to you with pre-loaded test code. You must first send the modules to Digi Technical Support. You can either drop-ship

them from your supplier or send modules you have on hand. Digi will load the test code and return the modules to you with operating instructions. An NDA is required. This is necessary for the following modules:

- Digi XBee Wi-Fi
- Digi XBee SX 900
- Digi XBee SX 868
- Digi XTend 900 MHz
- Digi XBee-PRO XSC

With specific families of XBee radios, the test code can be sent electronically under a non-disclosure agreement (NDA) directly to your certified testing facility. Instructions will be provided for installing and operating the test code. This applies to the following modules:

Applies to modules:

- Digi XBee-PRO 900HP
- Digi XBee Zigbee(S2C, S1)
- Digi XBee 802.15.4 (S2C, S1)
- Digi XBee DigiMesh 2.4 (S2C, S1)

### Obtaining or Enabling Test Mode on Newer XBee 3 Models

The Digi XBee 3 radios can run in test mode by executing a specific set of internal commands. An NDA is required to receive the commands and instructions. Please use the contact information at the end of this document.

Applies to modules:

- Digi XBee 3 802.15.4
- Digi XBee 3 DigiMesh
- Digi XBee 3 Zigbee

### Enabling Test Modes for XBee Cellular Radios

The test modes of the XBee Cellular radios can be executed with commands sent directly to the cellular chipset on the radio using USB direct communication. Contact Digi Technical Support by email ([tech.support@digi.com](mailto:tech.support@digi.com)) for the instructions in using these commands. Please see additional contact information at the end of this document.

Applies to modules:

- Digi XBee Cellular 3G
- Digi XBee Cellular LTE Cat 1

## Enabling Test Modes for XBee 3 Cellular Radios

Digi XBee 3 is a new radio with more memory, and therefore you do not need to work with Digi Technical Support.

You can execute the test modes of the XBee 3 cellular radios by using a recent version of [XCTU](#). You can do this by downloading the regulatory firmware using the “General Preferences” option and then loading the test code using the XCTU. The radio will then allow the AT test command instructions shown in the XBee 3 Cellular User Guide.

You can reference the XBee module’s respective user guide and find the section **Regulatory Firmware** by clicking the **Product Support** tab from the following links:

[Digi XBee 3 Cellular LTE-M/NB-IoT \(u-blox SARA-R410M-02B\)](#)

[Digi XBee 3 Cellular LTE Cat 1 \(Telit LE866A1-NA \(AT&T\), LE866-SV1 \(Verizon\)\)](#)

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