# ThingSpace IoT Development Kit

## Prototype. Connect. Launch.

verizon√

The ThingSpace IoT Development Kit with NXP combines the hardware and software you need to get your next cellular IoT project off the ground. This development kit enables a wide diversity of applications by combining best in class processing, cloud capabilities, credited Verizon open development end-device certification, and an IoT developer plan.

The kit is powered by a two-board solution, combining an NXP Freedom K82F development kit with a NimbeLink Skywire® development kit. It is ideal for rapid prototyping of microcontroller-based applications. The NXP Freedom K82 hardware (FRDM-K82F) is a simple yet sophisticated design featuring a Kinetis K series microcontroller built on the ARM® Cortex® M4 core which features advanced crypto and security features. The NimbeLink Sykwire development kit is made for low power IoT solution, featuring a Cat M1 modem from Sequans. The small form-factor modem plugs into the Arduino™ connectors, for ease of use. Also bundled is a Cat M1 SIM card with instructions on simple activation through NimbeLink.

This kit also comes with the ability to connect your device to Verizon's ThingSpace Platform. ThingSpace is an IoT connectivity and device management solution for 3G, 4G, and Cat M devices that are certified on Verizon.

## Parts

| Part Number | Description | Resale |
|---|---|---|
| VZ-IOT-DEV-002 | ThingSpace Cellular IoT Development Kit with NXP | $249 |



## What's included

- Freedom Board for Kinetis K82F Hardware (FRDM-K82F)
- Verizon Open Development certified NimbeLink Skywire® Cat M1 development board
- Single LTE Antenna supporting Bands 13 and 4
- 5V AC/DC USB Power Supply
- Cat M1 SIM with a Verizon profile
- Downloadable tutorials and documentation

## Features

The Freedom Board for Kinetis K82F Hardware (FRDM-K82F) includes

- MK82FN256VLL15 MCU—150 MHz, 256 KB flash memory, 256 KB RAM, low-power, QuadSPI controller, ROM Secure Bootloader, and crystal-less USB in 100 LQFP package 1 user LED shared with Arduino™, Advanced Security Features: Hardware Crypto Acceleration for AES, DES, RSA, and ECC, True Random Number Generator, on-the-fly decryption from NOR flash, and multiple levels of embedded flash protection.
- Two user push buttons
- Optional header for add-on Bluetooth module
- Flexible power supply options

The NimbeLink Skywire includes:

- Verizon OD Certified NimbeLink Skywire® Cat M1 Cellular Modem
- Arduino™ headers
- 2 SMA ports for cellular antenna flexibility

## Target Applications

- Smart City
- Utilities
- Parking Meters

## Verizon IoT Business Development

embedded.solutions@verizon.com