The RYSE NW-0101 is a Wi-Fi enabled, Linux compute module, designed specifically for IoT applications. It provides a drop-in, low-power solution ideal for building IoT hubs and devices.

The module measures 35x20x2.8 mm and features a MIPS 24KEc processor running at 580 MHz, built-in DDR2 DRAM, flash storage, and a 2.4 GHz 802.11b/g/n Wi-Fi radio. It supports a wide variety of I/O protocols, with 42 GPIO pins available to the developer. The module is self-contained and only requires a power supply and an external WiFi antenna to operate.

By virtue of the Linux operating system, developers can create their own applications using a programming language of their choice, and make use of existing network stacks and a rich set of software packages to implement their desired software functionality.

Key highlights:

- Drop-in Wi-Fi enabled Linux compute module for IoT applications
- Dual mode 2.4 GHz 802.11 b/g/n Wi-Fi – simultaneously host a WiFi access point and connect to existing WiFi networks
- CPU, memory, and flash storage are built-in – Only requires external antenna
- Runs OpenWRT Linux operating system out of the box
- Features USB, SD/eMMC storage interface, ethernet, 3x UARTs, I2C, SPI, GPIOs interfaces
- FCC and IC certified