# Nu-Link2-Pro

The Nu-Link2-Pro debugger/ programmer contains the existing debugging and programming functions of the previous generation Nu-Link-Pro. It also includes various functions such as ETM (Embedded Trace Macrocell) tracking function, USB to serial communication, serial data analysis and product firmware upgrade.

In terms of debugging, the Nu-Link2-Pro enhances the SWD interface speed of previous-generation Nu-Link-Pro. It also provides ETM real-time instruction tracking for NuMicro® series microcontrollers. In addition, users can update the Nu-Link2-Pro firmware through drag-and-drop programming, which can support the Arm® DAPLink debugging and programming adapter.

In terms of programming, the programming speed of Nu-Link2-Pro is faster than the previous generation of Nu-Link-Pro. The programming time required for large capacity production of 512 KB Flash has been greatly reduced from 19 seconds to 5 seconds, by which the mass production capacity has been greatly increased. The Nu-Link2-Pro has a variety of programming methods. In addition to the original computer connection programming and button offline programming without computer connection, it also provides a new interface that can be connected to an "Automatic IC Programming System" for automatic offline programing to increase the convenience of mass production. The Nu-Link2-Pro provides three kinds of offline programming file storage methods, including built-in large-capacity memory space, Micro SD card and USB Flash drive, making mass production programming easier.

The Nu-Link2-Pro also includes a new "Bridge" connection interface and provides a serial data analysis function to analyze data on the SPI / $I^2C$ / RS-485 / CAN serial communication interface. The USB to UART / SPI / $I^2C$ / RS-485 / CAN serial communication bridge can be used to send or receive related serial data. It can also use the Bridge connection interface to upgrade the firmware of the product.

In terms of product firmware upgrade (In-system programming, ISP), Nuvoton provides complete resources from program development to firmware upgrade. With the built-in UART, $I^2C$, SPI, CAN or RS-485 communication interface of Bridge to perform ISP programming, users can complete the update without purchasing other serial communication bridges. In addition, users can use the corresponding ISP programs in the NuMicro® Board Support Package (BSP) without the need to develop by themselves, which can save the development time of firmware upgrade.

The new-generation Nu-Link2-Pro has debugging functions, ETM tracking, serial data analysis, and USB-to-serial communication bridge. The fast programming speed and convenient firmware upgrade of ISP products allow customers to process more quickly and conveniently at every stage from development to mass production, increasing the development and mass production efficiency. It is an indispensable weapon for engineers' product development and mass production upgrade.

USB Connector

Micro USB Connector

Micro SD Card Slot

ICE LED

ICP LED

Green LED

Red LED

Bridge Connector

ETM Connector

Offline Button

SWD Connector

**ETM Cable**

**Micro USB Cable**

**SWD Cable**

**Bridge Cable**