NuProg-E2

Engineering Universal Programmer
User Manual

Version 1.0

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I. Introduction

This manual will be focusing on the hardware specification and the software quick guide for NuProg-E2. NuProg-E2 is an universal engineering programmer. Widely supports most IC types on the market, and also support different types of IC packages. Designed FPGA kernel architecture supplies ultra-high speed programming performance. The Programming project and sockets are compatible with NuProgPlus. Together with built-in SuperSpeed® USB 3.0 for high-speed communication, it is an efficient tool for you to focus on application analysis and product development. If you would like to know more about the Dediware software, please download it from DediProg website.

https://www.dediprog.com/download

II. Product Information

- Support Various Storage IC

    UFS, eMMC, MCU, SPI NOR, SPI NAND, Parallel NOR, Parallel NAND, EEPROM, CPLD, FPGA

- Support All IC Package

    CSP, BGA, QFN, QFP, SOP, TSOP, SSOP, PLCC, DIP, etc.

- Support various file format:

    Binary (bin/rom), Intel Hex (h16/h20/hex), Motorola S19 (mhx/mot/s19/srec) and specific of MCU IC.
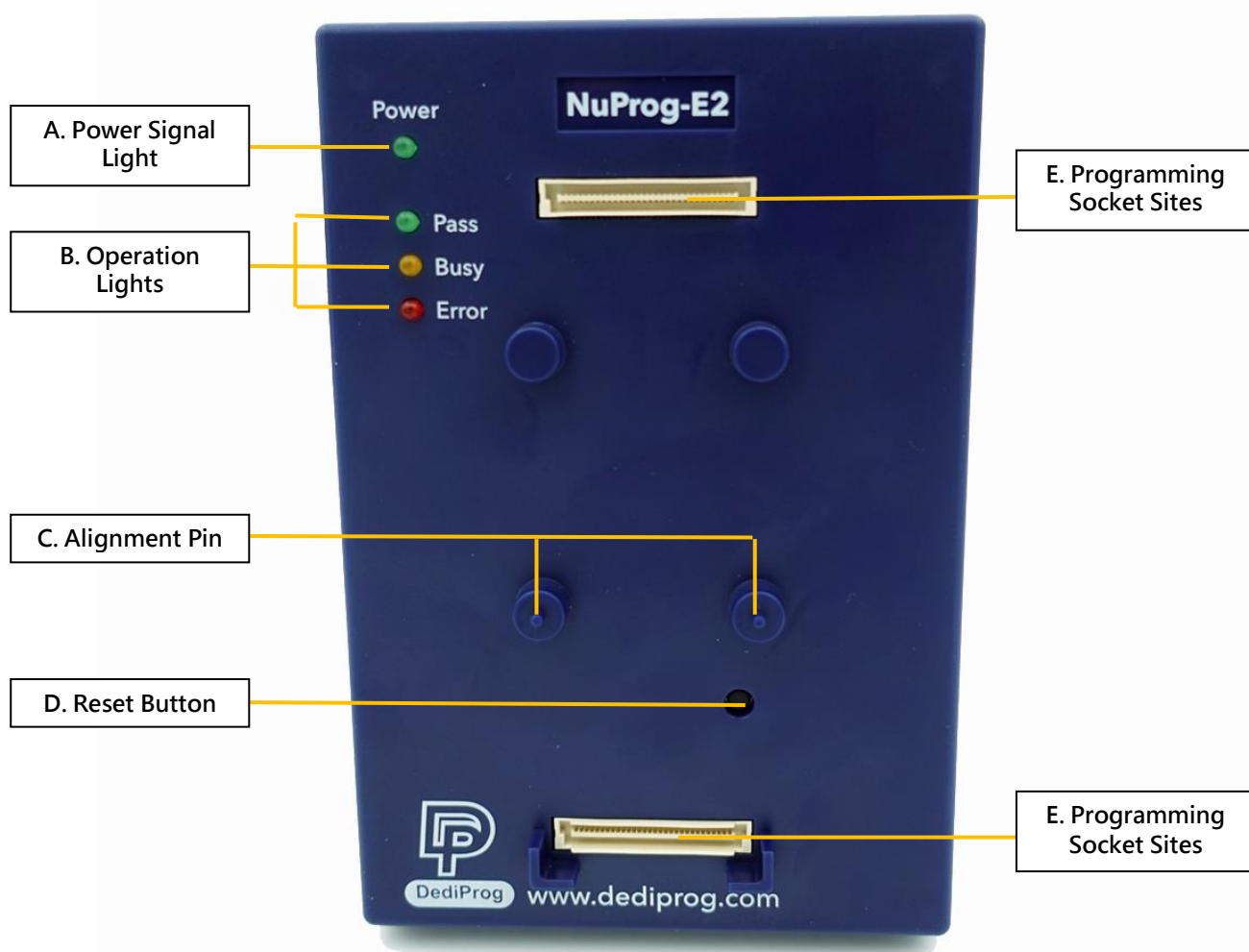
- **Dimension：135 x 91 x 30 mm**
- **Weight：150 g**

III. System Requirement

CPU:	i5 or above
OS:	Windows XP/Vista /7/8/8.1/10
USB Port:	USB 3.0
Free Disk Space:	At least twice of the programming memory

*Since UFS and eMMC have mass volumes, please reserve enough space for buffering.
*Computer performances will affect the read and write speed of UFS, please choose a computer that has higher CPU and better performance.

IV. Product Descriptions

A. Power Signal Light

B. Operation Lights

C. Alignment Pin

D. Reset Button

E. Programming Socket Sites

E. Programming Socket Sites

F. USB 3.0 Port

G. Power Connector

A. Power Signal Light

The light indicates the programmer is powered on.

B. Operation Lights

Red LED (Error): Error; programming has failed.
Yellow LED (Busy): The programmer is operating.
Green LED (Pass): Passed; the programming has completed successfully.

C. Alignment Pin

For socket adaptor installation

D. Reset Button

Only for repair use

E. Programming Socket Sites

Built-in high speed connector, which is for installing socket adaptor.

F. USB 3.0 Port

For connecting programmer with the computer.

G. Power Connector

External power inputs *(In order to make it more stable, please make sure the power adapter is connected, and it is recommended to connect the power first, and then plug in USB cable.)*

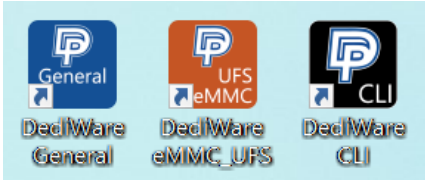# V. Dediware Quick Installation
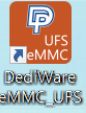
The software is provided with the purchase of NuProg-E2. The latest version is available on our website. **http://www.dediprog.com/download**

5.1 Software Installation (DediWare version 3.16.8.3 above)

1. Install Dediware and driver

2. After installation, three Dediware icons will appear on the desktop.

|	
	Run the software for MCU/Flash/EEPROM programming
	Run the software for eMMC and UFS programming and duplicating.
	Supporting the Command line of the StarProg Series Programmers (Please refer to the Dediware Command Line User Manual)

5.2 Install NuProg-E2 Programmer

1. Connect the power cable to the NuProgPlus-U8 programmer
2. Connect the USB cable to the NuProgPlus-U8 programmer
3. Install the socket adaptor, please refer to **VI. Socket Adaptor Installation**
4. Turn on the power of the programmer
5. Place IC into the socket adaptor
6. Open the software and start programming
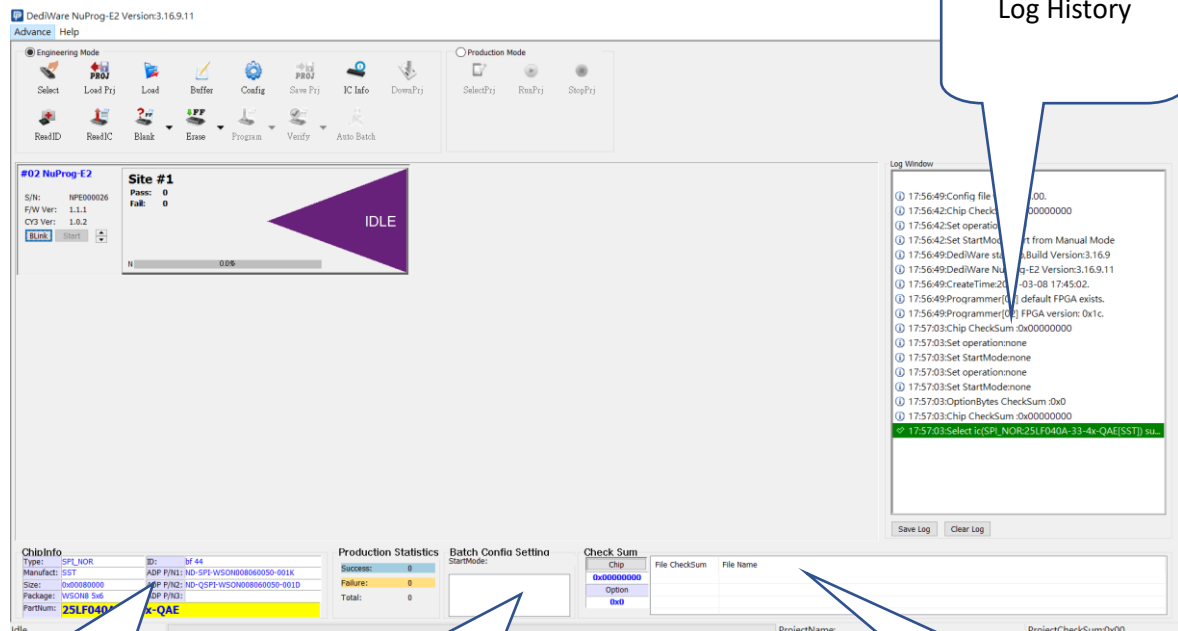
5.3 Dediware (For MCU/Flash/EEPROM)

Note

It is able to create programming project file without connecting to NuProg-E2. The user can create project file on any computer that has installed Dediware. After creating the file, the user can save the file on computer for programming.
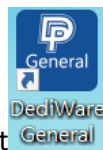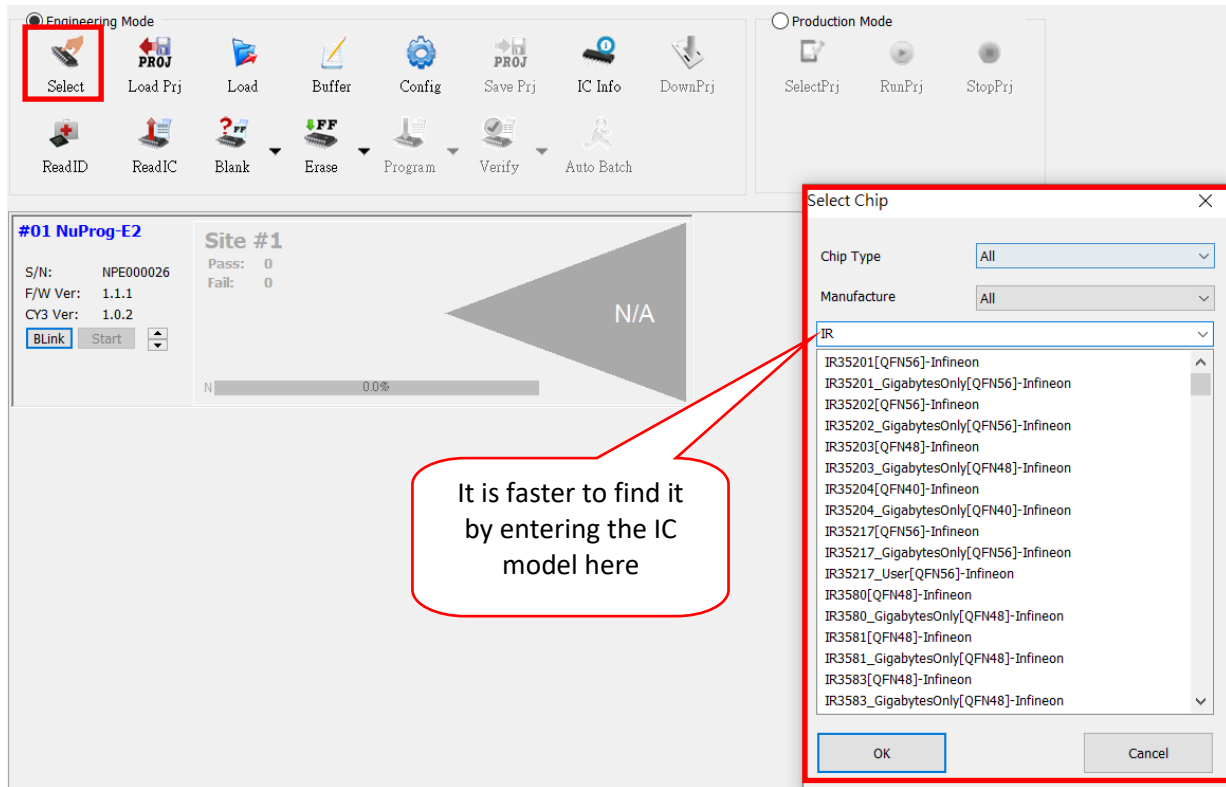
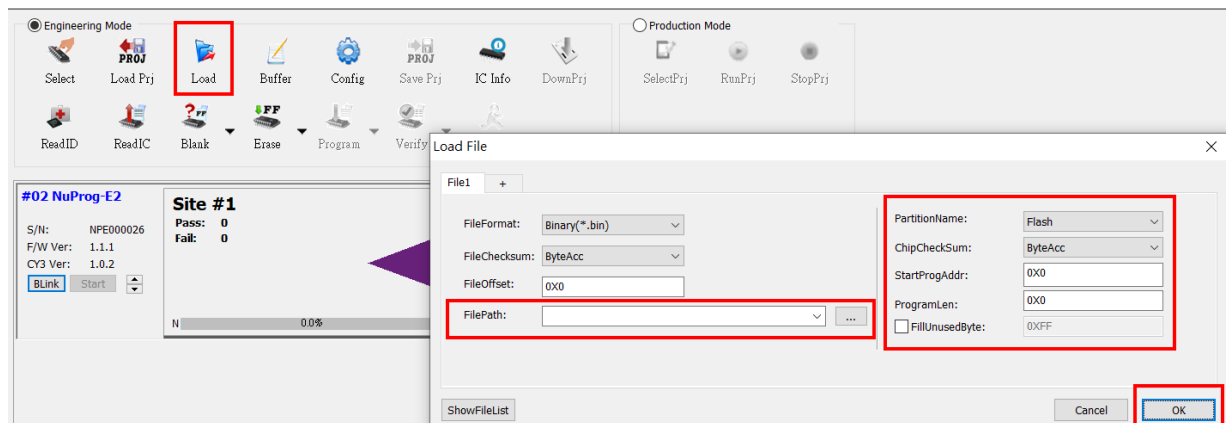1. Double click the software icon to open it

2. Dediware GUI

3. Select IC brand and IC Part Number (or use search to find the model name)
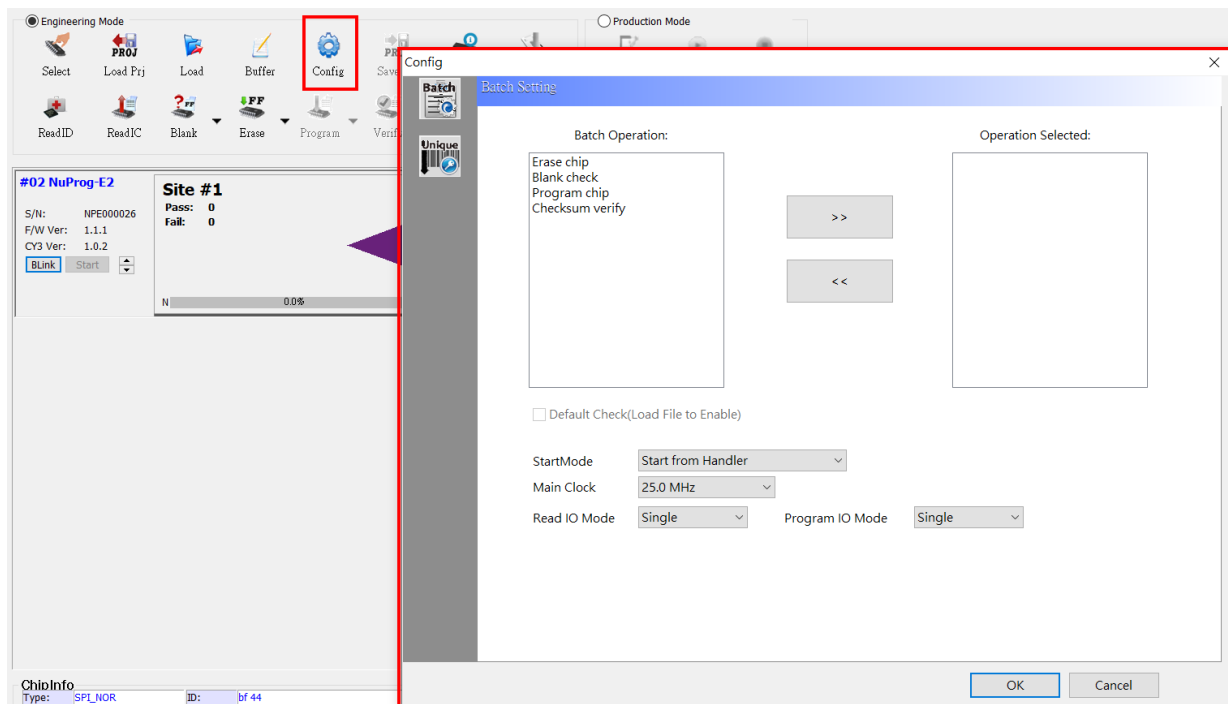

It is faster to find it by entering the IC model here

4. Load the image file

5. Set up the programming procedure and mode

Other than set up Batch according to the programming need, user can also set up the Start Mode and other functions according to different kinds of IC.
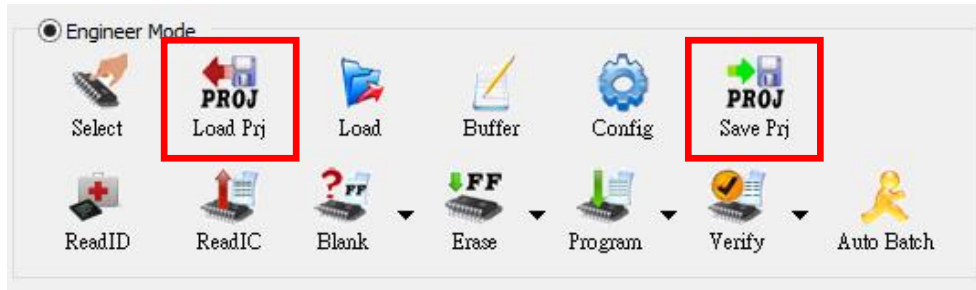

Click Auto Batch to start programming.

6. Save/Load Programming Project File

SavePrj can save the setting of Select/Load/Config，and pack to a project file(*.dprj) ; LoadPrj can load previously saved project files.

Name the project file (*.npprj), once the user click ok, a window will appear for the user to set up the password for production management. If the user has set the password, then it will be requested when loading the project in the production mode. If not, then it will load the file directly.
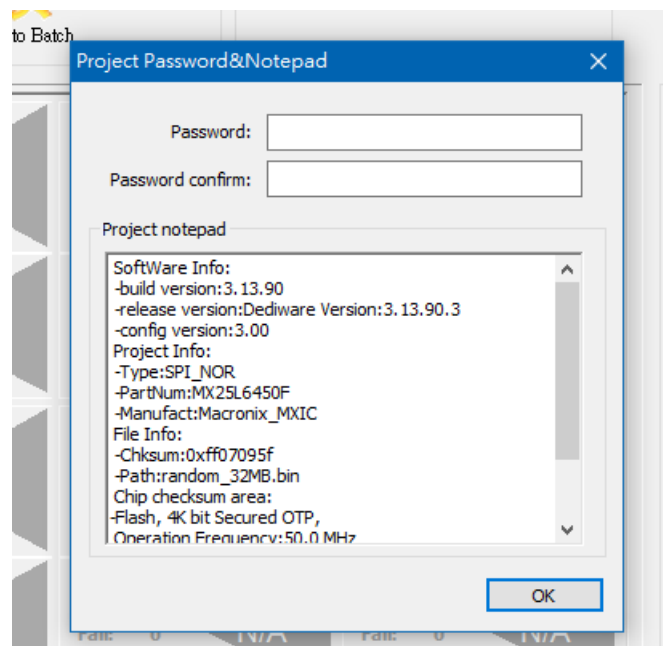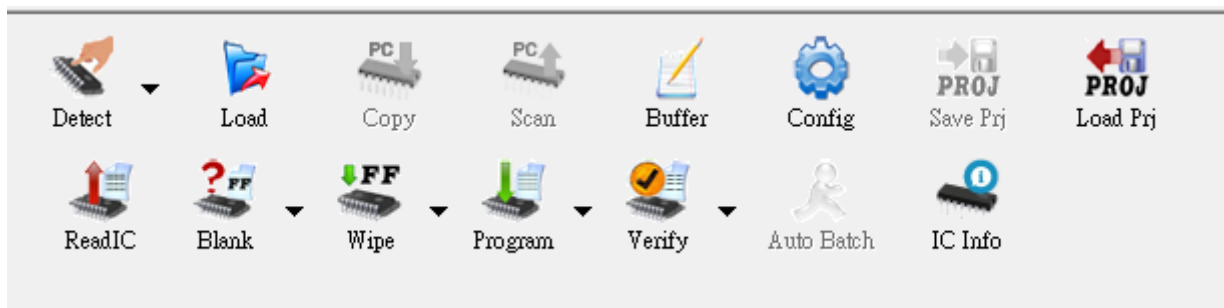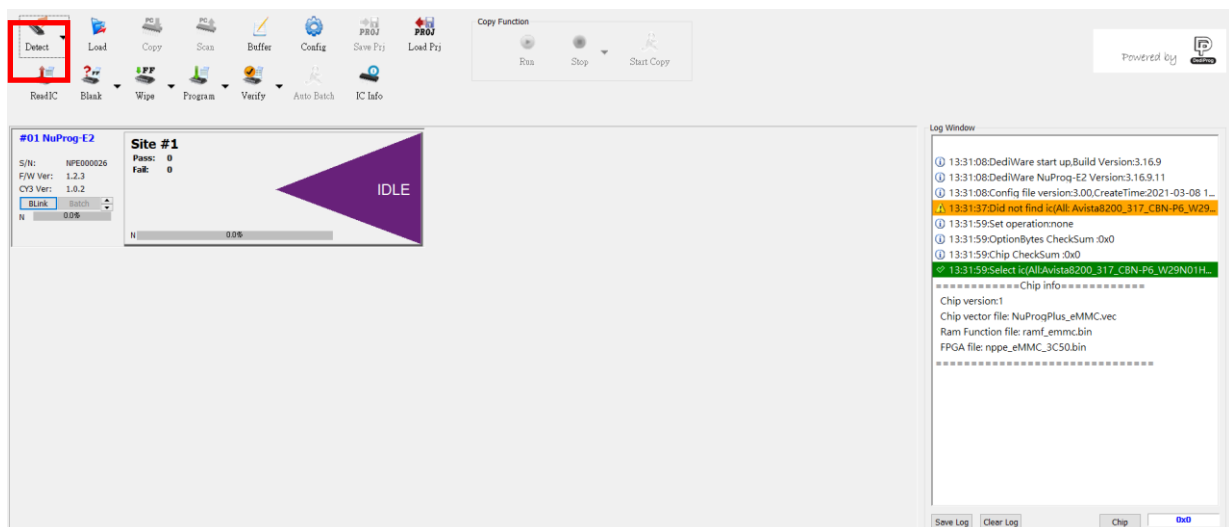
5.4 Dediware (For UFS/eMMC)
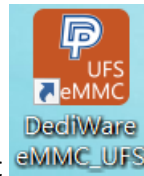
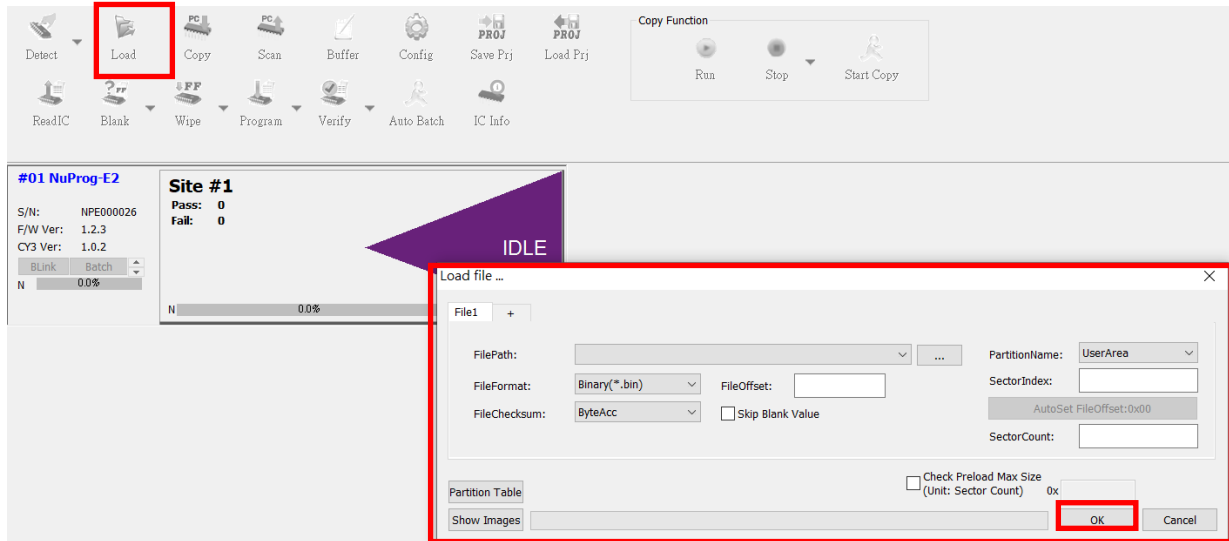

1. Double click the software icon to open it
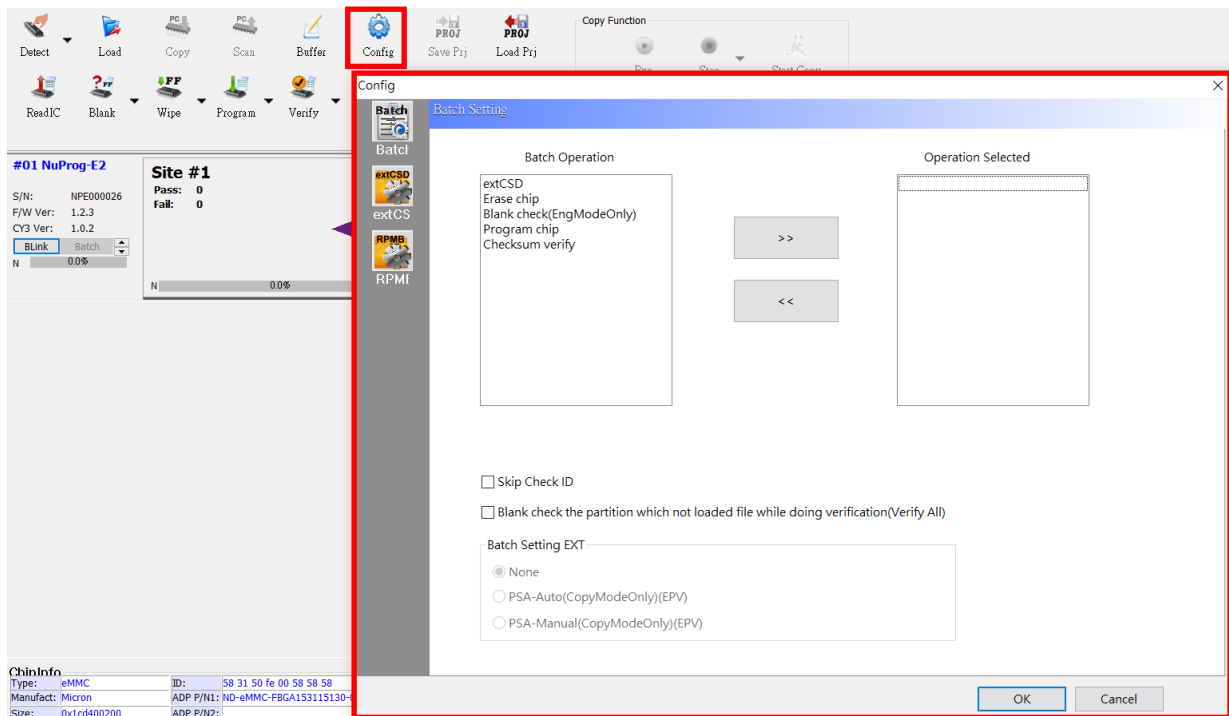

Engineering Mode

2. Click Detect > UFS/EMMC

3. Load the image and choose the target partition.
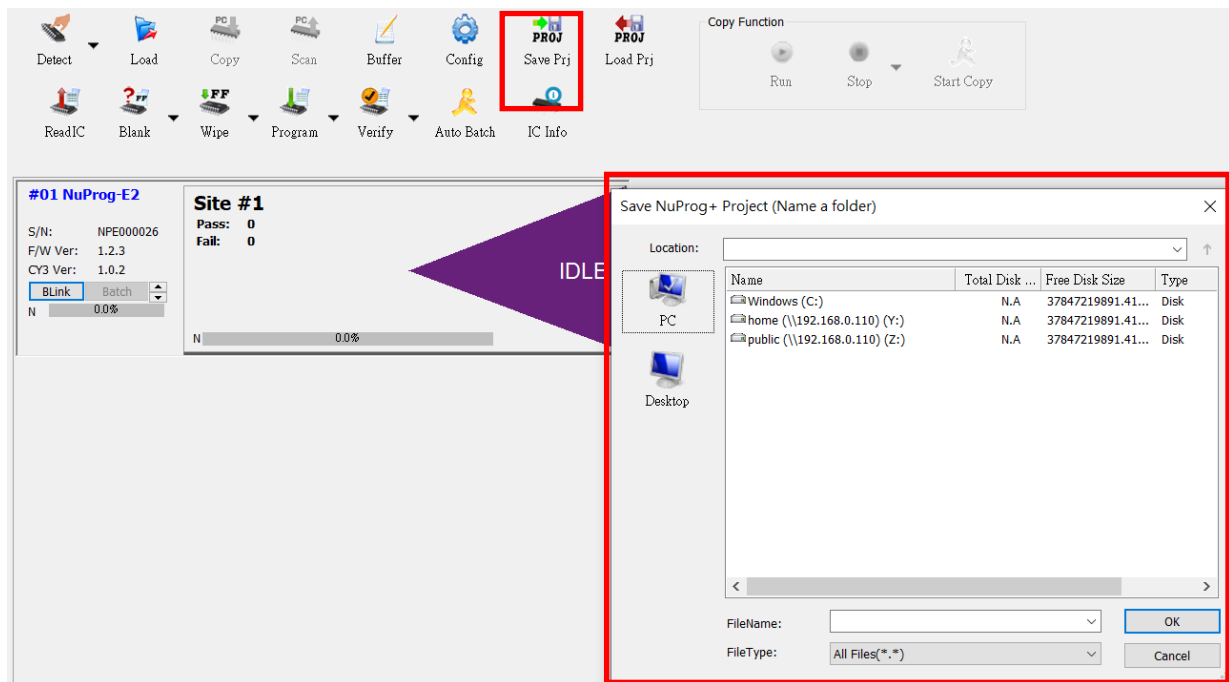

4. Set up programming procedure and mode

Other than set up the Batch setting according to the programming need, the user can turn on the ID check function by checking the Skip Check ID box.

5. Save project file

After naming the file, it will create a folder at the assigned location, and it will store all the setting and content that the project file need.

VI. Socket Adaptor Installation

How to connect socket adaptor to a programmer?

The socket adapter has an alignment hole (the red circle in the picture below). Align the alignment hole with the alignment pin on the NuProg-E2 and then plug it in for use.
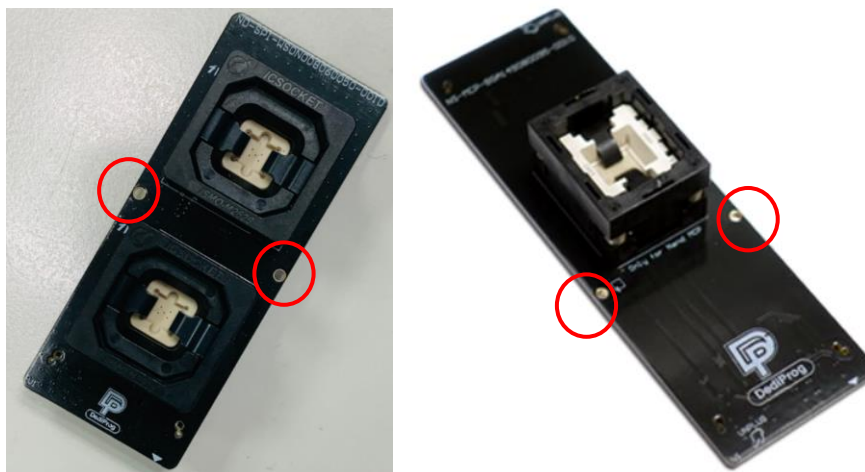
Install the socket adaptor according to the below figure. If the connections are normal, then it is ready for programming.

NuProg-E2 can share the socket with NuProgPlus, and NuProg-E2 only supports the upper socket of the Dual Socket.

Note:
1. Improper installation may cause the damages.

2. Pick up the IC directly by hand may produce dirt or statics which may cause errors during the programming process. Therefore, please use IC picker for pickups.

VII. Revision

Date	Version	Changes
2021/03/30	1.0	Initial

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