

# EX Commander

## Quick Start Guide



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# About this Manual

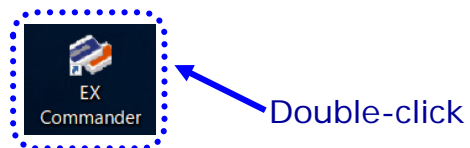
This manual provide a simple explanation about usage of the EX Commander.

- 
- \* Please refer to the "EX Commander User manual" for more information.
  - \* GUI screen has some differences depending on the version of the EX Commander.
-

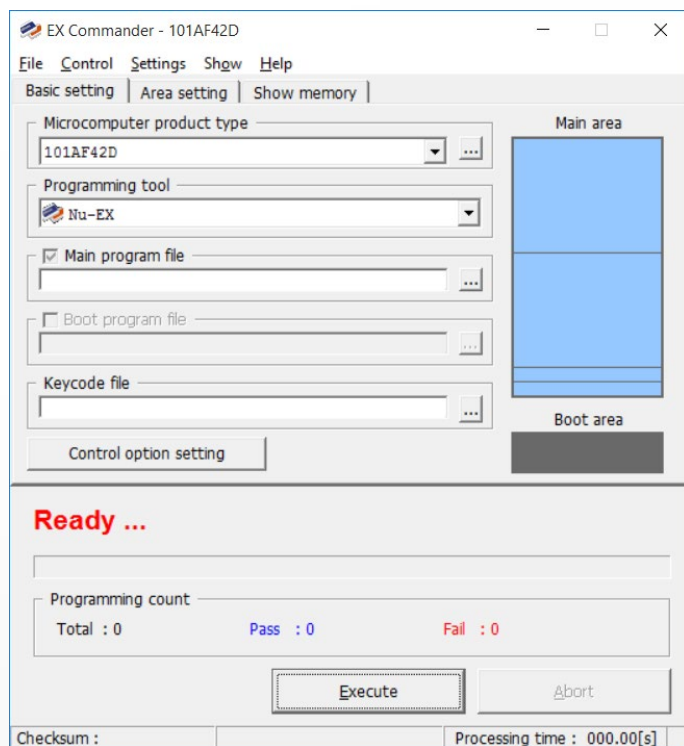
# Startup

\* For detail about the startup options, refer to the User manual "3.5 Startup Options".

(1) Double-click the EX Commander icon.

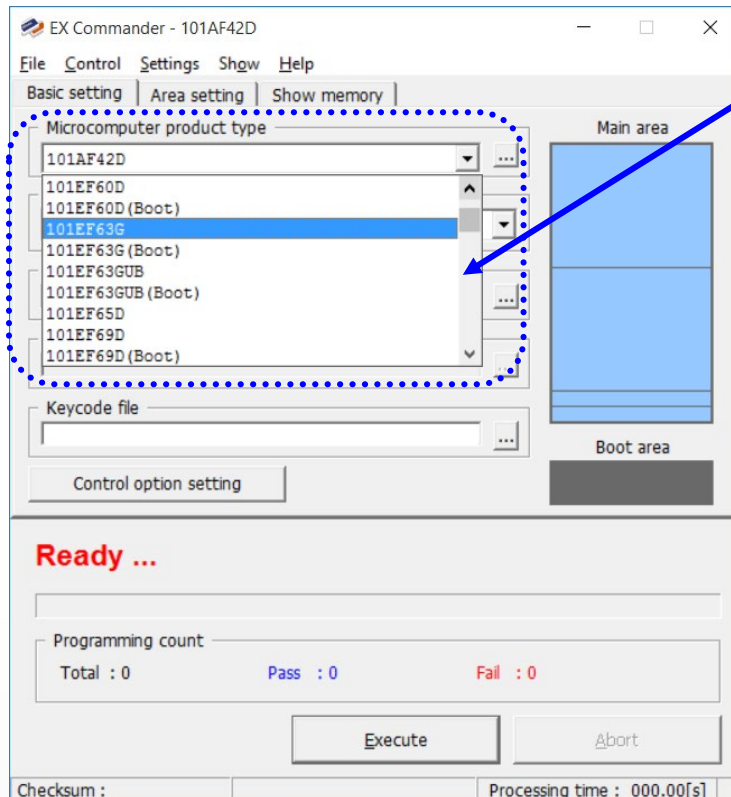


(2) When the EX Commander startup normally, the following window will be displayed.

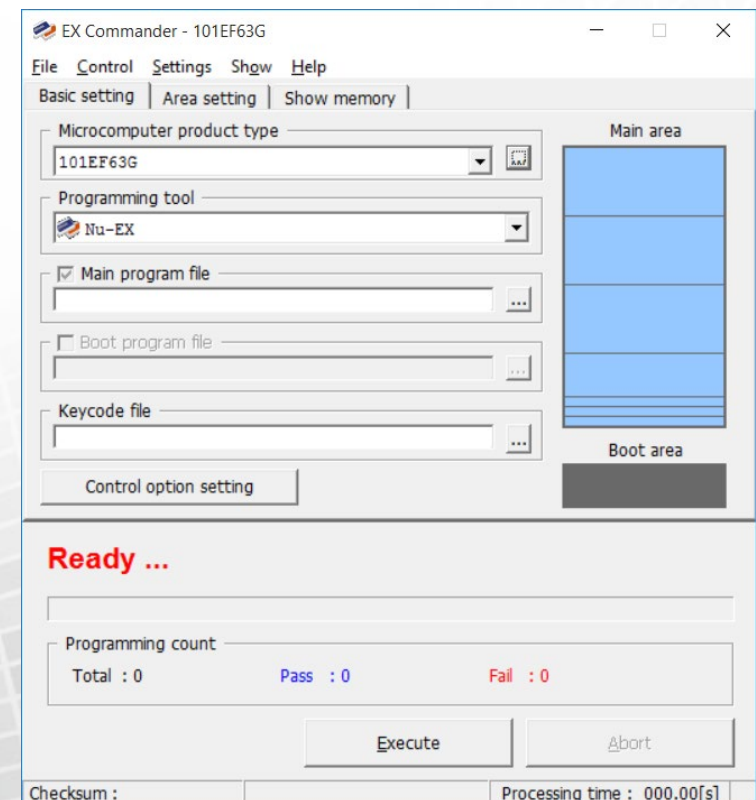


# Setup (1/4)

- (1) Select the Microcomputer product type from the drop-down list.  
 (If it is hard to find, click the <...> button for search)

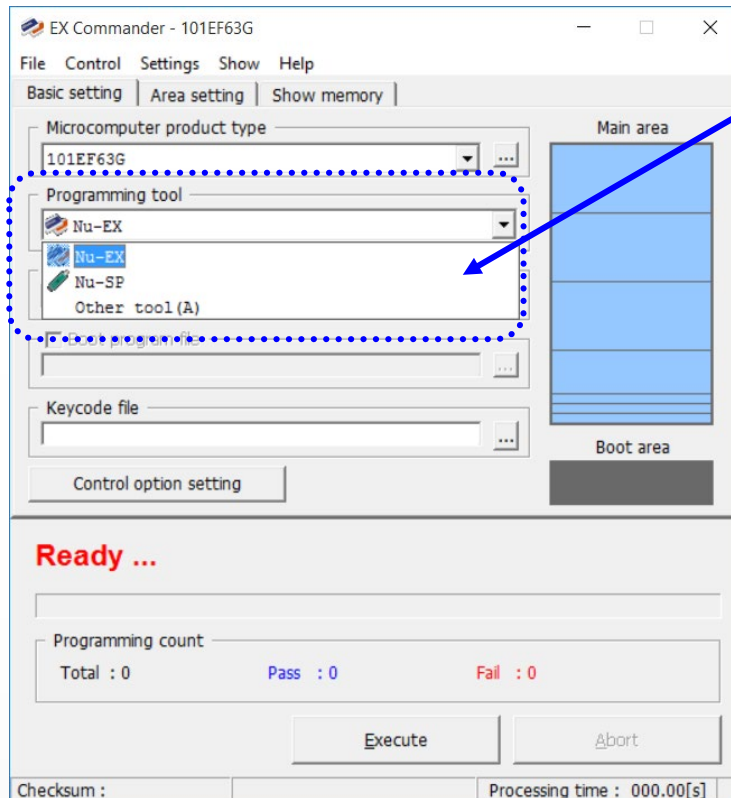


Select the Microcomputer product type

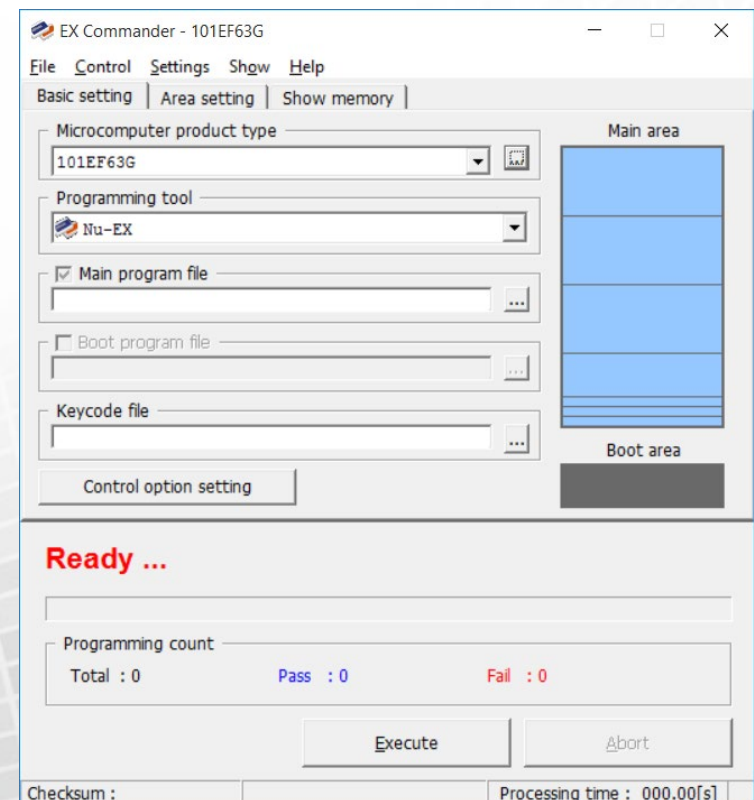
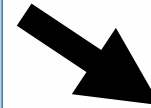


# Setup (2/4)

- (2) Select the Programming tool from the drop-down list.  
 The programming tool that support the selected Microcomputer product type will be listed.

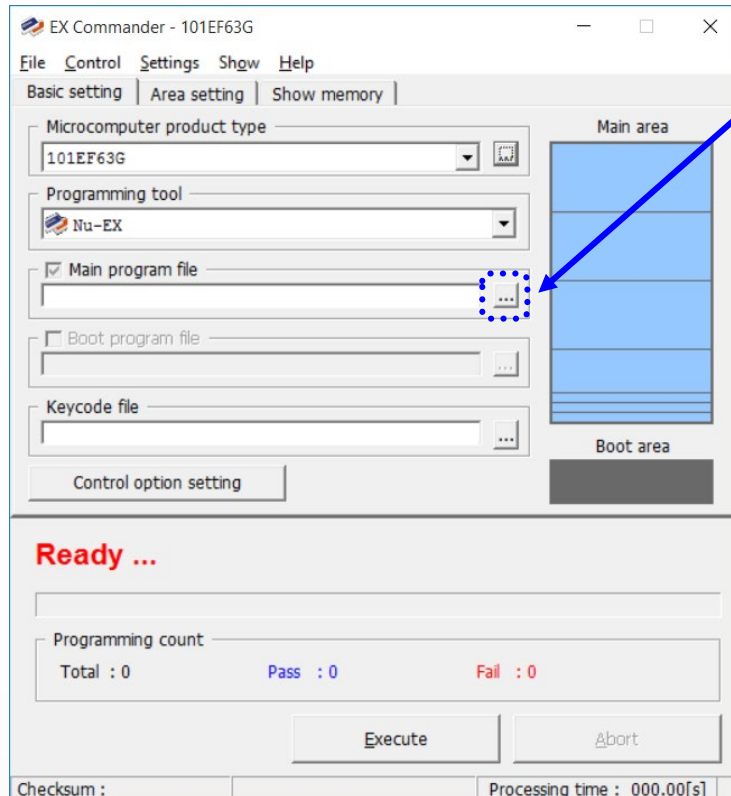


Select the Programming tool

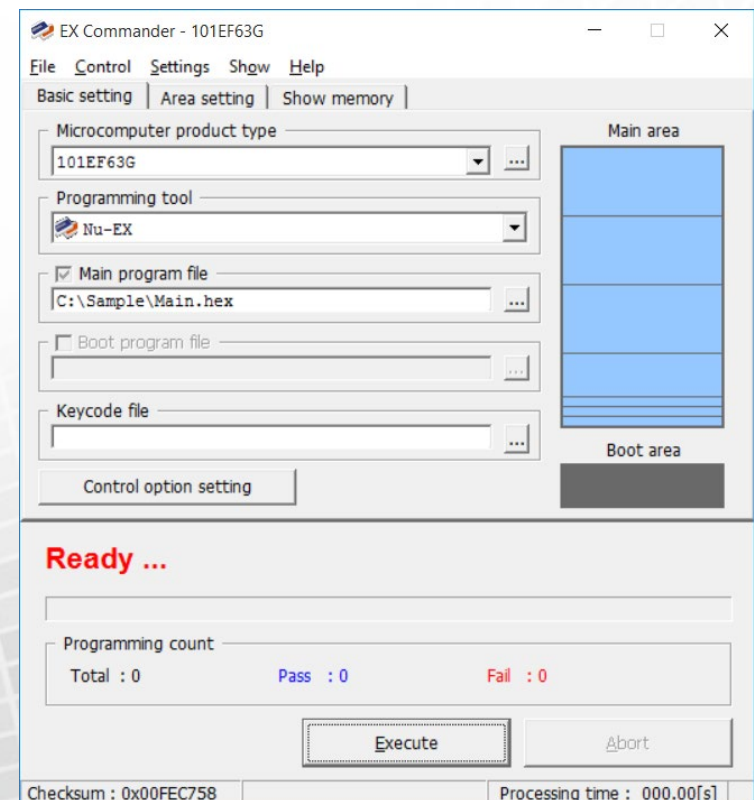


# Setup (3/4)

- (3) Select the program file.  
 (The program file can be loaded by drag-and-drop)



Click the <...> button, and select the program file





# Setup (4/4)

\* For detail about the control options, refer to "Control Option Settings" on the User manual "3.1.1.3 Settings".

(4) If necessary, select the menu [Settings] - [Control option setting...] and set the control options.

Control option setting

Program file option

Padding value 0x

Address offset [(-)0x7FFFFFFF - (+)0x7FFFFFFF]   +  -

Target communication setting

Communication frequency

Communication time-out period [1000 - 30000](ms)

Security setting

Set the keycode of dedicated area storage method with programming

Verify mode

Checksum  All data

Execution button setting

Load program file  Erase

Program  Verify

Enable external execute button

Event notification

Target board setting

Supply power to the target board  +3.3V  +5.0V

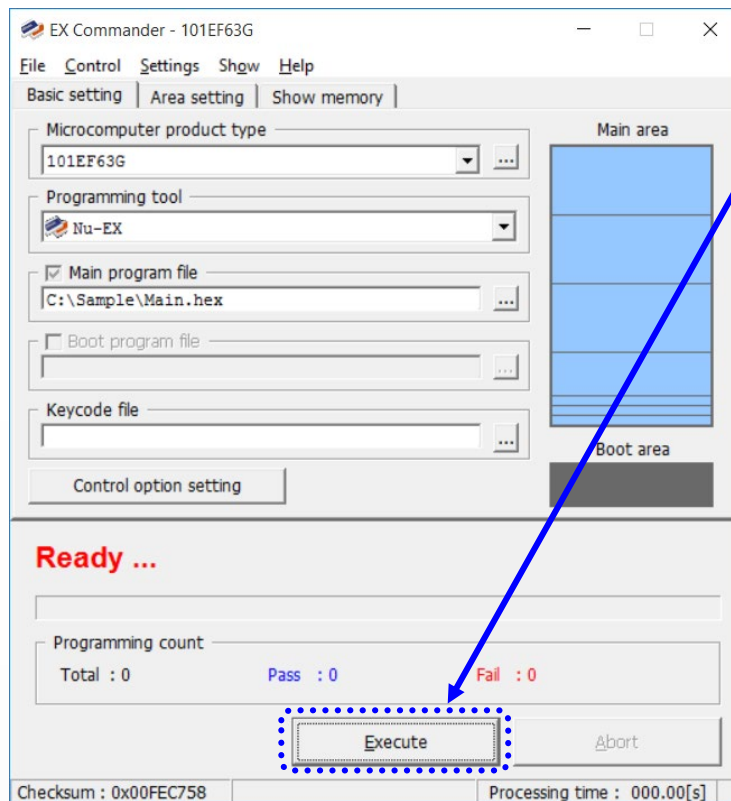
Wait time after power supply [1 - 30000](ms)

Keep reset except programmer controls

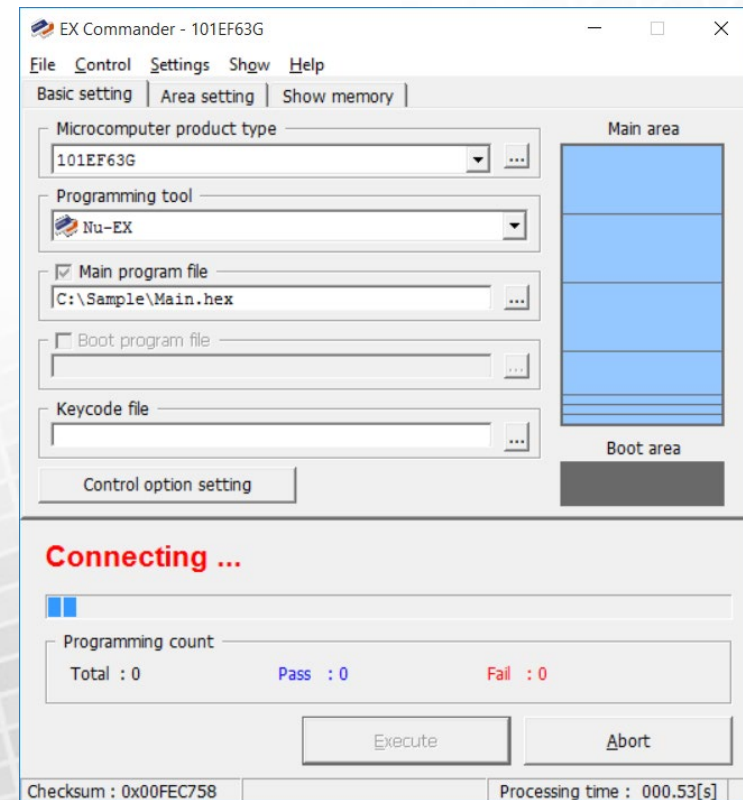
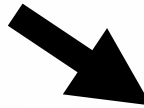


# Programming (1/3)

(1) Click the <Execute >button. Then the EX Commander will start the programming.

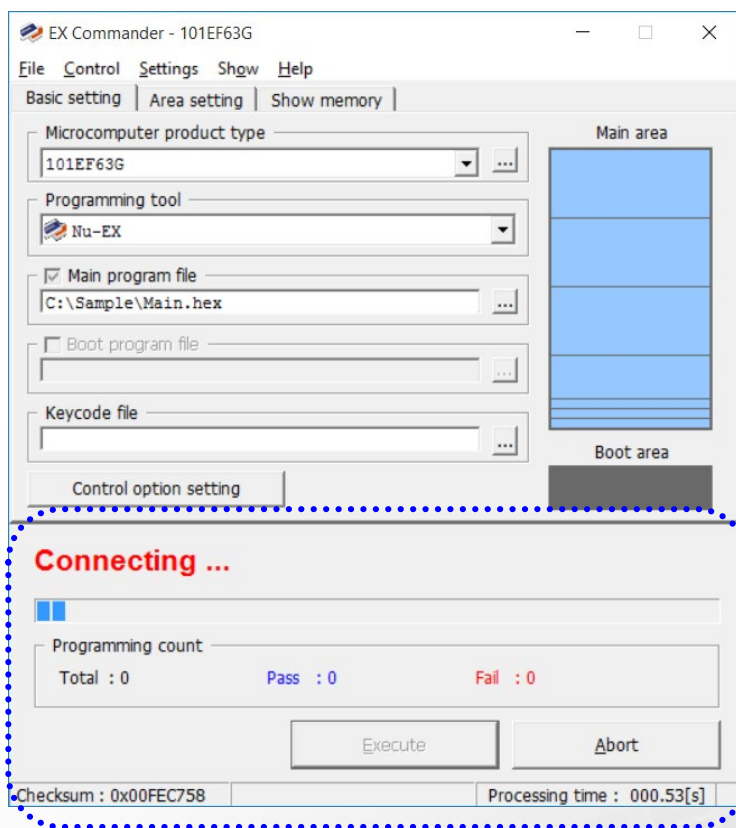


Click the <Execute > button

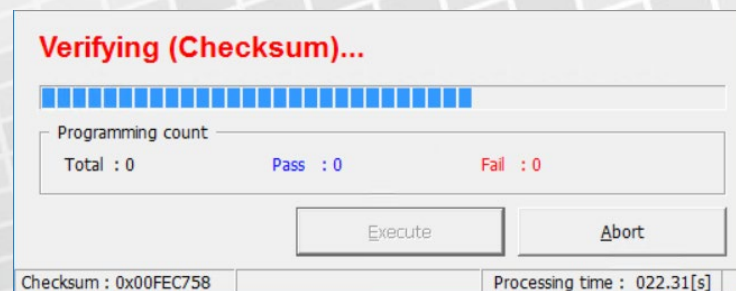
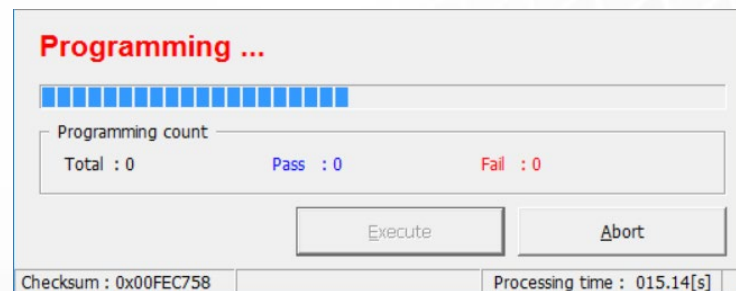


# Programming (2/3)

(2) During programming, status is displayed in the Status Area ("Programming", etc. ).

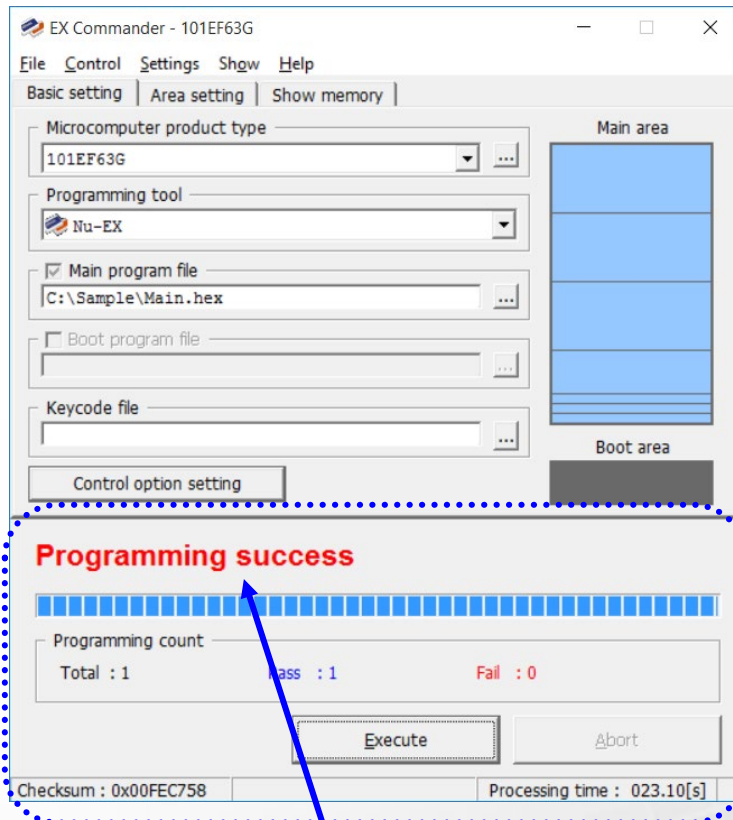


Status Area

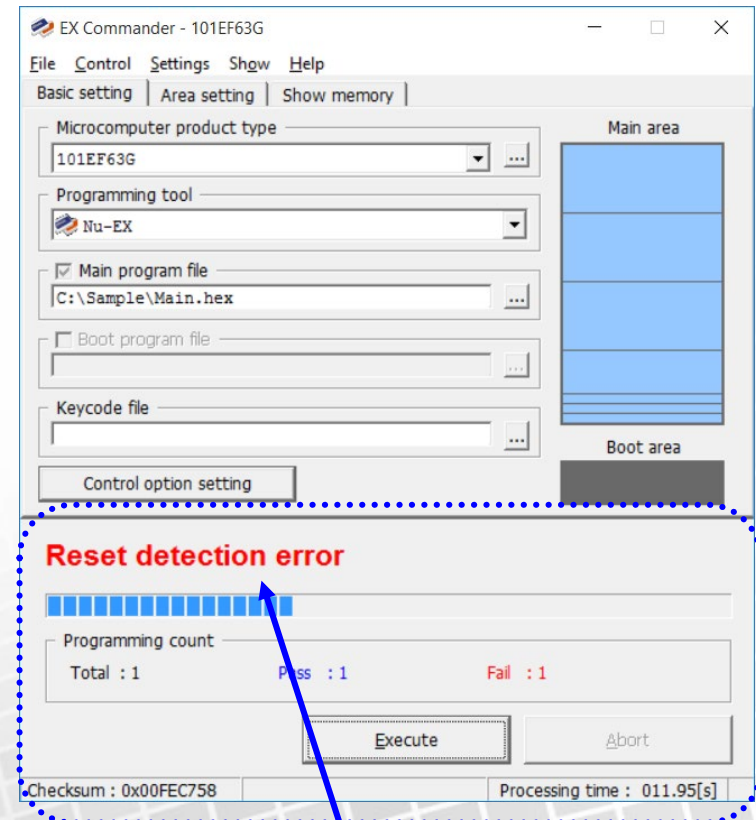


# Programming (3/3)

(3) When the programming is finished, the result will be displayed on the Status Area.



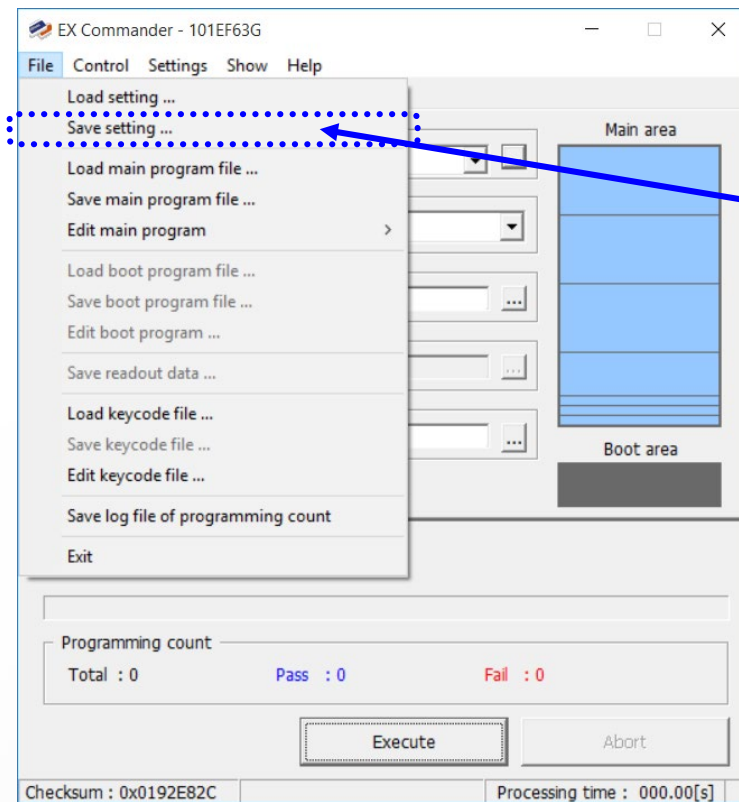
Result (Success)



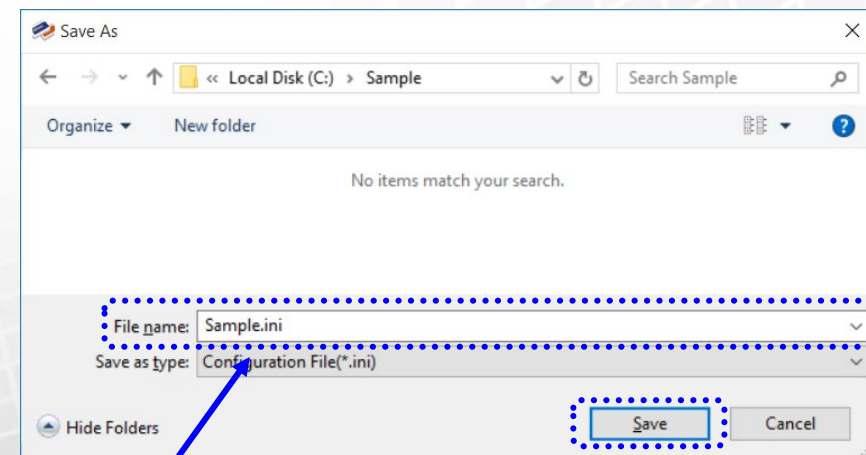
Result (Error)

# Save Settings

(1) Select the menu [File] – [Save setting...]



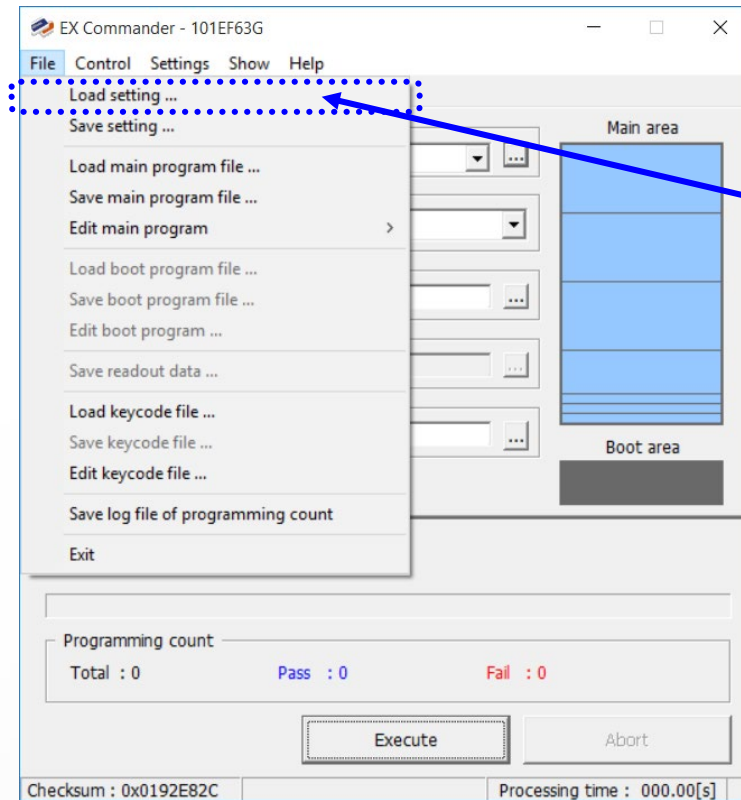
Select [Save setting...]



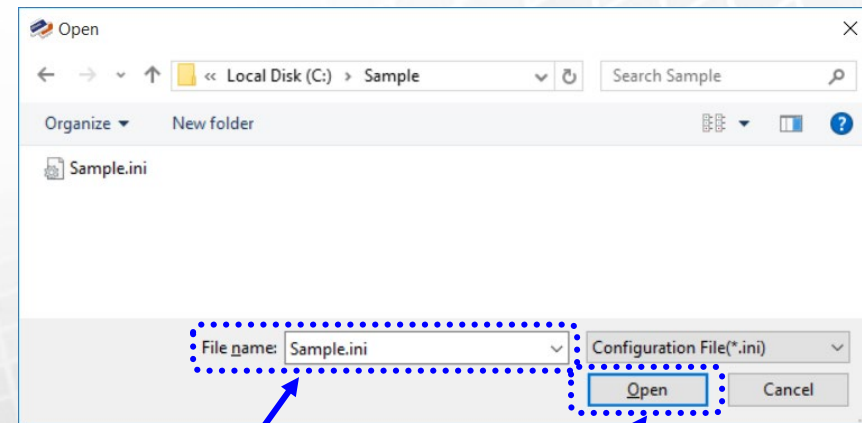
Input file name, and click the <Save> button

# Load Settings

(1) Select the menu [File] – [Load setting...]



Select [Load setting...]

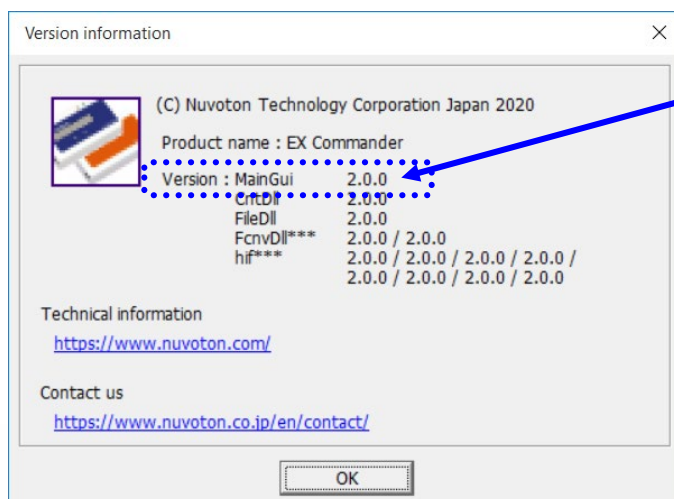


Select the Configuration file, and click the <Open> button



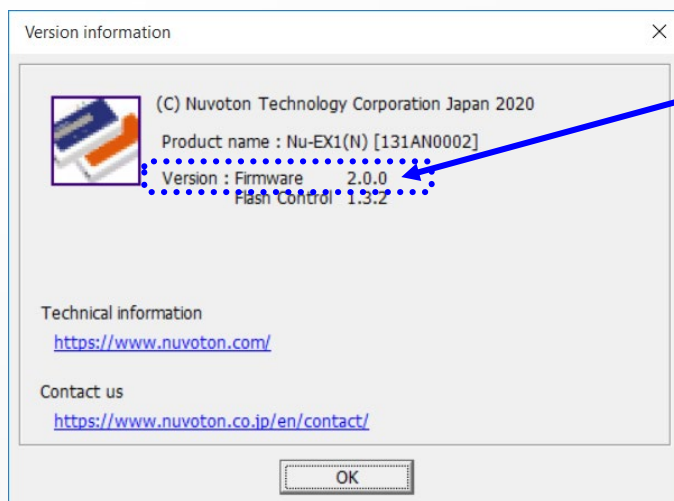
# Check Version

(1) Select the menu [Help] – [EX Commander version ...].



EX Commander version

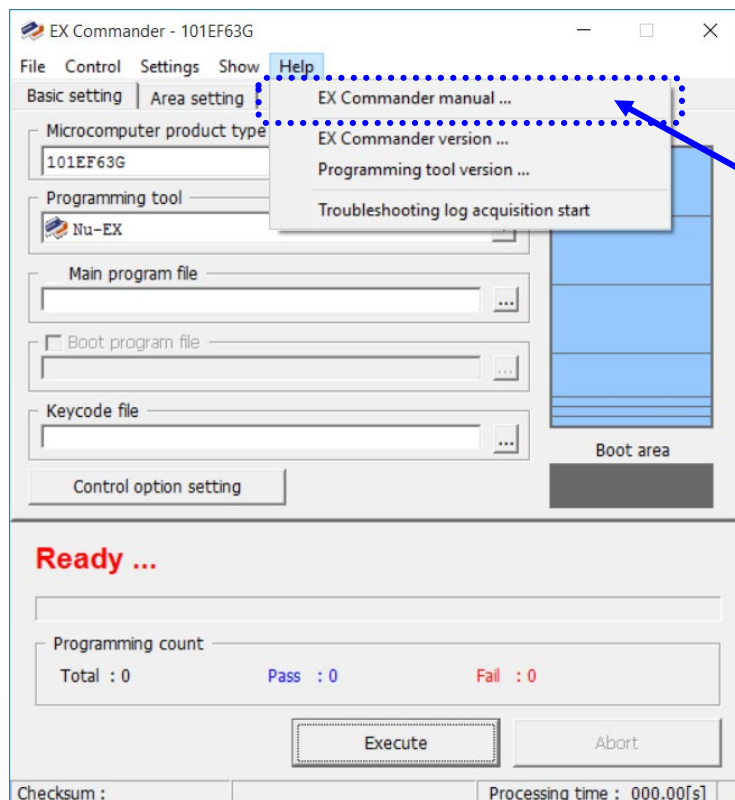
(2) Select the menu [Help] – [Programming tool version ...].



Programming tool version

# Help

- (1) Select the menu [Help] – [EX Commander manual ...].  
 EX Commander User Manual (PDF format) opens.



Select [EX Commander manual...]



# Standalone Settings (1/4)

\* For detail about the standalone setting, refer to "Standalone Setting" on the User manual "3.1.1.3 Settings".

- (1) Refer to "Setup" described above on this manual, and prepare the programming.
- (2) Select the menu [Settings] – [Standalone setting...].
- (3) Select the row of the registration number you want, and click the <register> button.

The image shows two screenshots from the EX Commander software. The left screenshot shows the 'Settings' menu with 'Standalone setting...' selected. The right screenshot shows the 'Standalone setting' dialog box with the 'Register' button highlighted.

**EX Commander - 101EF63G**

File Control **Settings** Show Help

Basic setting Control option setting ...  
 Standalone setting ...  
 Gang programmer unit setting ...

Microcomp 101EF63G

Programming tool Nu-EX

Main program file C:\Sample\Main.hex

Boot program file

Keycode file

Control option setting

Ready ...

Programming count  
 Total : 0 Pass : 0 Fail : 0

Execute Abort

Checksum : 0x00FEC758 Processing time : 000.00[s]

**Standalone setting**

Target for setup  
 Serial No. 191AM0001

Up	W.	V.	Setting name
	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		

Down

Load Register Delete

Standalone movement option  
 Continue the Execute by pushing the <SET> button once

Auto start mode option  
 Programming start condition Button of programming tool

Waiting time before control[1-30000](ms) 100

LCD display option  
 Display the checksum value after verify  
 Display the processing time of Execute  
 Display when operating with power supply of target board

Remote control option  
 Remote mode Disable

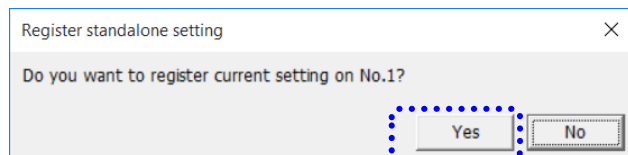
Output the control state  
 Disable <SEL> / <SET> button of the Nu-EX2

Close

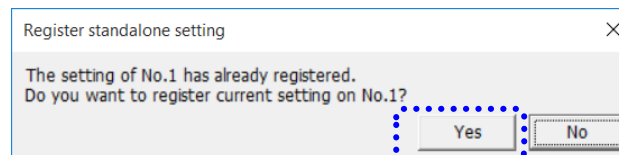
# Standalone Settings (2/4)

\* For detail about the standalone setting, refer to "Standalone Setting" on the User manual "3.1.1.3 Settings".

(4) Click the <Yes> button on the registration confirmation message box.



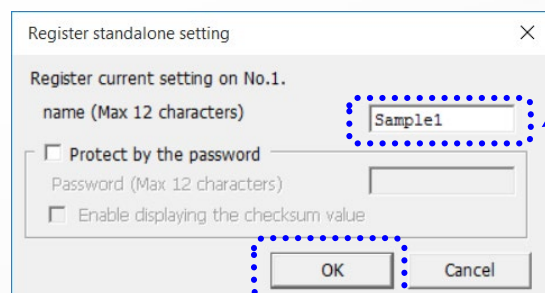
Click the <Yes> button



Click the <Yes> button

(5) Input name and click the <OK> button.

Setting name is displayed in the stand-alone configuration dialog box. It is also displayed in the [Select Setting] menu in standalone operation of Nu-EX2.



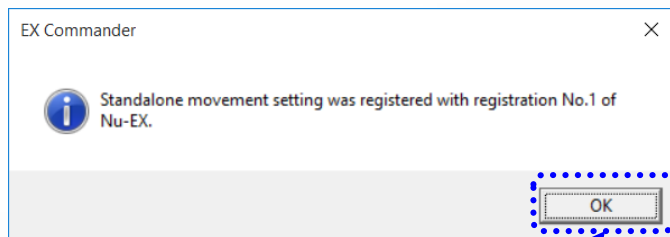
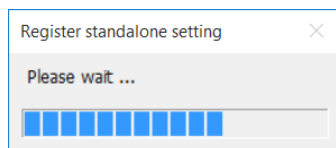
Input name

Click the <OK> button

# Standalone Settings (3/4)

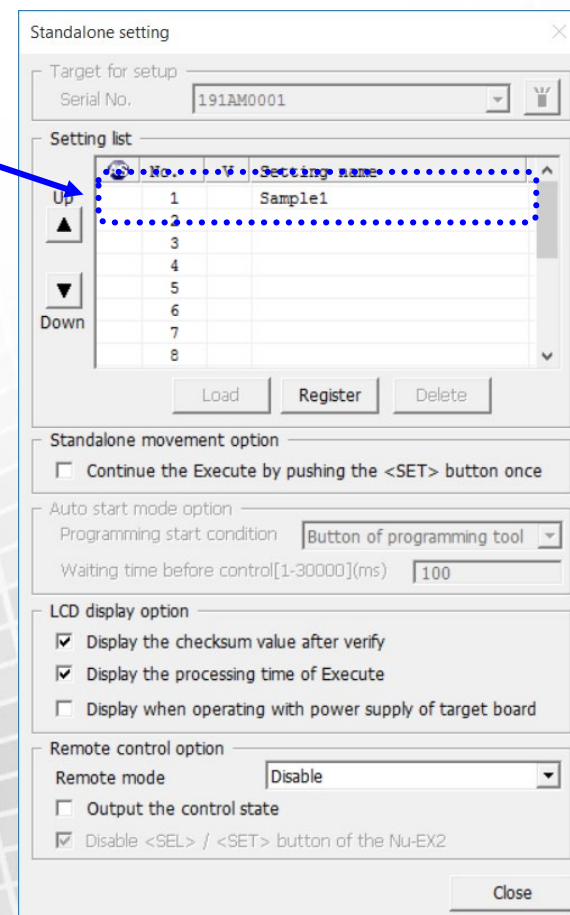
\* For detail about the standalone setting, refer to "Standalone Setting" on the User manual "3.1.1.3 Settings".

(6) Click the <OK> button in the following dialog box that is displayed after registration completed. Setting list on the standalone setting dialog box will be updated.



Click the <OK> button

Registered setting



# Standalone Settings (4/4)

\* For detail about the standalone setting, refer to "Standalone Setting" on the User manual "3.1.1.3 Settings".

(7) If you want to enable the Auto Start Mode, click the (AS) column.

When Auto start mode is enabled, the programming tool will startup with selecting specified standalone setting, and it start programming by pushing the button once.

Click the (AS) column

Auto start mode is enabled

Standalone setting

Target for setup  
Serial No. 191AM0001

Setting list

Up	AS	No.	V	Setting name
▲		1		Sample1
		2		
		3		
		4		
		5		
		6		
		7		
		8		

Load Register Delete

Standalone movement option  
 Continue the Execute by pushing the <SET> button once

Auto start mode option  
Programming start condition Button of programming tool  
Waiting time before control[1-30000](ms) 100

LCD display option  
 Display the checksum value after verify  
 Display the processing time of Execute  
 Display when operating with power supply of target board

Remote control option  
Remote mode Disable  
 Output the control state  
 Disable <SEL> / <SET> button of the Nu-EX2

Close

Standalone setting

Target for setup  
Serial No. 191AM0001

Setting list

Up	AS	No.	V	Setting name
▲	✓	1		Sample1
		2		
		3		
		4		
		5		
		6		
		7		
		8		

Load Register Delete

Standalone movement option  
 Continue the Execute by pushing the <SET> button once

Auto start mode option  
Programming start condition Button of programming tool  
Waiting time before control[1-30000](ms) 100

LCD display option  
 Display the checksum value after verify  
 Display the processing time of Execute  
 Display when operating with power supply of target board

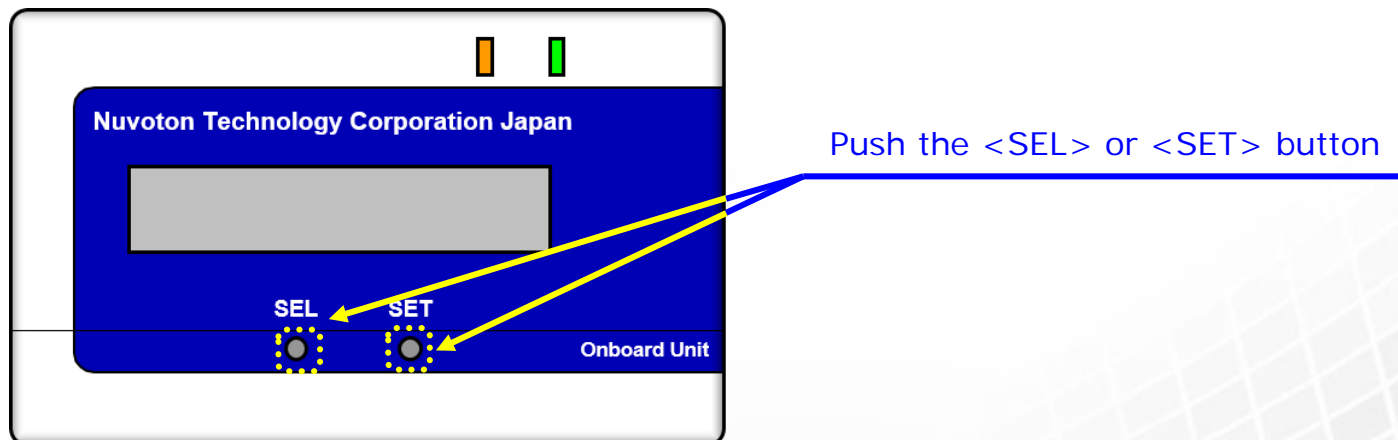
Remote control option  
Remote mode Disable  
 Output the control state  
 Disable <SEL> / <SET> button of the Nu-EX2

Close

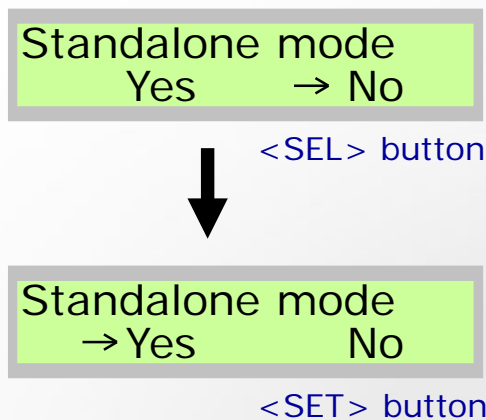
# Nu-EX2 Standalone Operation (1/3)

\* For detail about the standalone operation, refer to the User manual "3.6 Nu-EX2 Standalone Operation".

(1) Startup the Nu-EX2, and push the <SEL> or <SET> button.



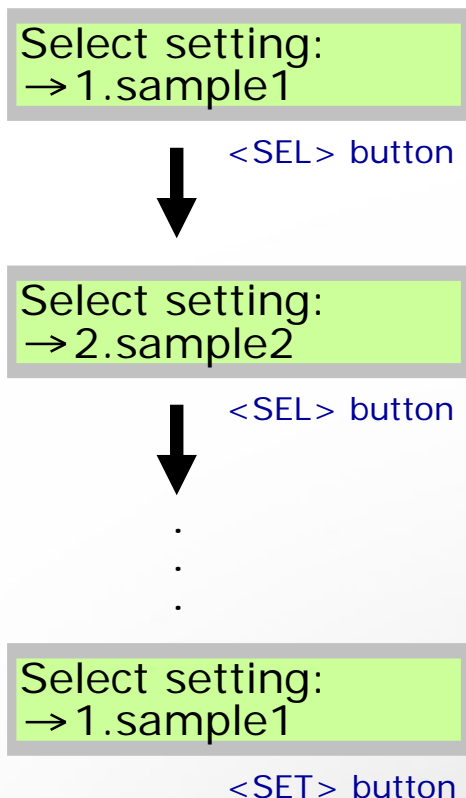
(2) Select "Yes" in the [Standalone mode] menu, and push the <SET> button.



# Nu-EX2 Standalone Operation (2/3)

\* For detail about the standalone operation, refer to the User manual "3.6 Nu-EX2 Standalone Operation".

(3) Select standalone setting you want in the [Select setting] menu, and push the <SET> button.





# Nu-EX2 Standalone Operation (3/3)

\* For detail about the standalone operation, refer to the User manual "3.6 Nu-EX2 Standalone Operation".

(4) Select "Yes" in the [Execute] menu, and push the <SET> button.  
 Then the Nu-EX2 will start the programming.

Execute  
 Yes → No



<SEL> button

Execute  
 → Yes No



<SET> button

Executing(EP)  
 ■■■ 35%

(5) When the programming is finished, the result is displayed on the LCD.  
 Push the <SET> button to return to the [Execute] menu.

Completed ↓

<SET> button

Error #115  
 TgtPower=Off ↓

<SET> button



# Nu-EX2 Standalone Operation (Auto start mode)

\* For detail about the standalone operation, refer to the User manual "3.6 Nu-EX2 Standalone Operation".

- (1) Startup the Nu-EX2, and wait until the "Push SET Button" is displayed on the LCD.
- (2) Push the <SET> button, then the Nu-EX2 will start the programming.

Push SET Button  
 → 1.sample1

<SEL> button

- (3) When the programming is finished, the result is displayed on the LCD.  
 Push the <SET> button to return to the [Execute] menu.

Completed



<SET> button

Error #115  
 TgtPower=Off

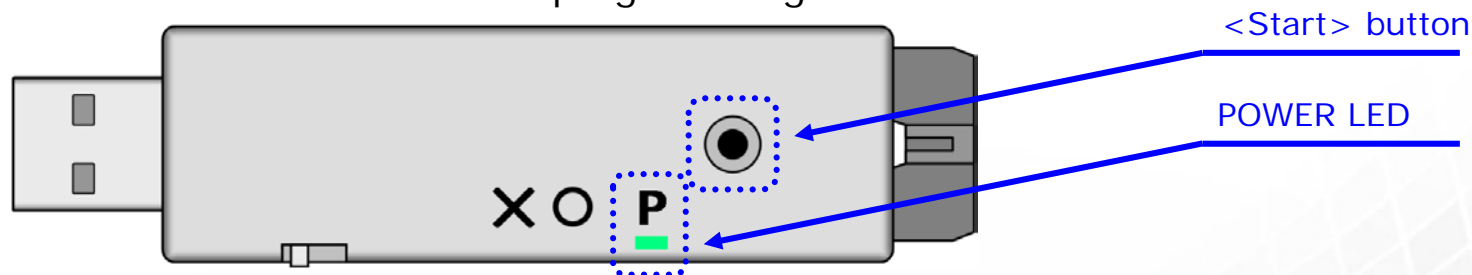


<SET> button

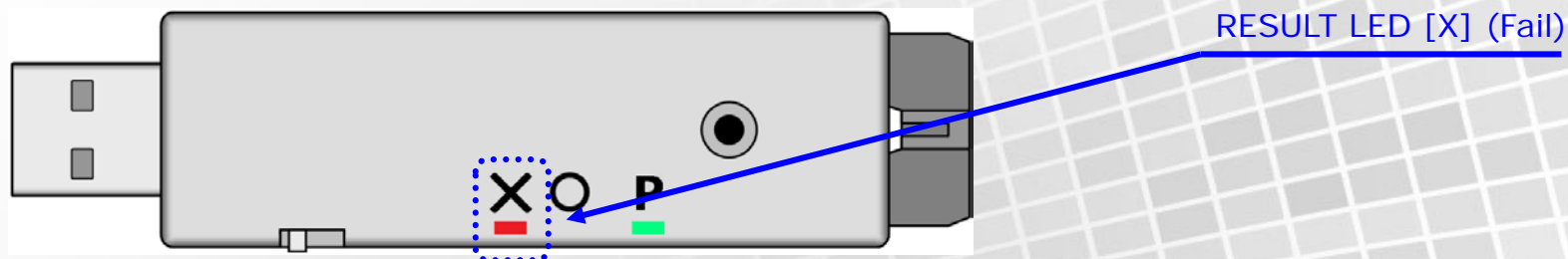
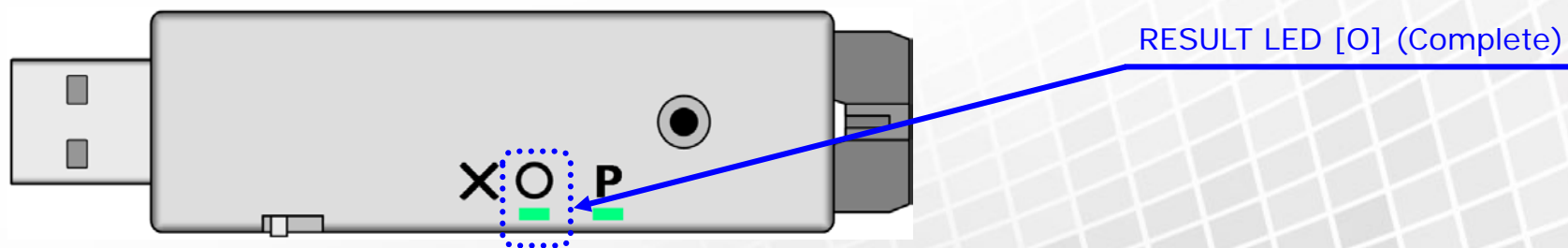
# Nu-SP Standalone Operation

\* For detail about the standalone operation, refer to the User manual "3.7 Nu-SP Standalone Operation".

- (1) Push the <Start> button when the POWER LED is lighting.  
 Then the Nu-SP will start the programming.



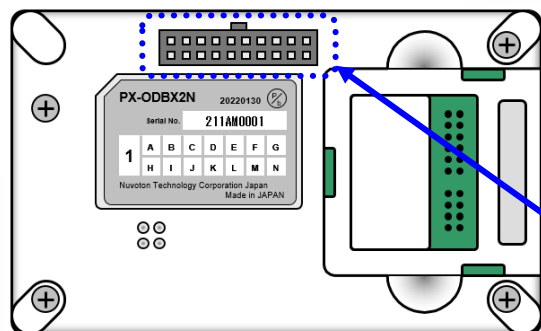
- (2) When the programming is finished, the result is indicated in the LED.



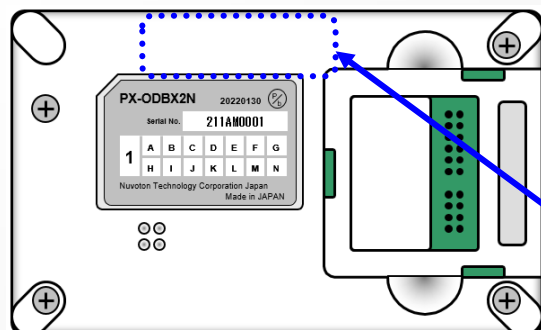
# Nu-EX2 Remote Control (1/3)

\* For detail about the remote control, refer to the User manual "3.8 Nu-EX2 Remote Control".

- \* When using remote control function, the Nu-EX2 is required that supports the remote control.
- \* If you want the Nu-EX2 supports the remote control function, specify option at the time of purchase.
- \* If you want to add the remote control function to the Nu-EX2 already purchased, contact us via the Semiconductor Support system (Refer to "Support" on this manual).



Remote Control is supported  
 (Extended connector is mounted)



Remote Control is not supported  
 (Extended connector is not mounted)

# Nu-EX2 Remote Control (2/3)

\* For detail about the remote control, refer to the User manual "3.8 Nu-EX2 Remote Control".

- (1) Select the menu [Settings] – [Standalone setting...].
- (2) Select remote mode from drop-down list, and click the <Close> button.

**EX Commander - 101EF63G**

File Control **Settings** Show Help

Basic setting Control option setting ...  
Standalone setting ...  
Gang programmer unit setting ...

Microcom 101EF63G

Programming tool Nu-EX

Main program file C:\Sample\Main.hex

Boot program file

Keycode file

Control option setting

Main area

Boot area

**Ready ...**

Programming count  
Total : 0 Pass : 0 Fail : 0

Execute Abort

Checksum : 0x00FEC758 Processing time : 000.00[s]

**Standalone setting**

Target for setup  
Serial No. 191AM0001

Setting list

No.	V	Setting name
1		Sample1
2		
3		
4		
5		
6		
7		
8		

Load Register Delete

Standalone movement option  
 Continue the Execute by pushing the <SET> button once

Auto start mode option  
Programming start condition Button of programming tool  
Waiting time before control[1-30000](ms) 100

LCD display option  
 Display the checksum value after verify  
 Display the processing time of Execute  
 Display when operating with power supply of target board

Remote control option  
Remote mode External pin control  
 Output the control status  
 Disable <SEL> / <SET>

Close

Select [Standalone setting...]

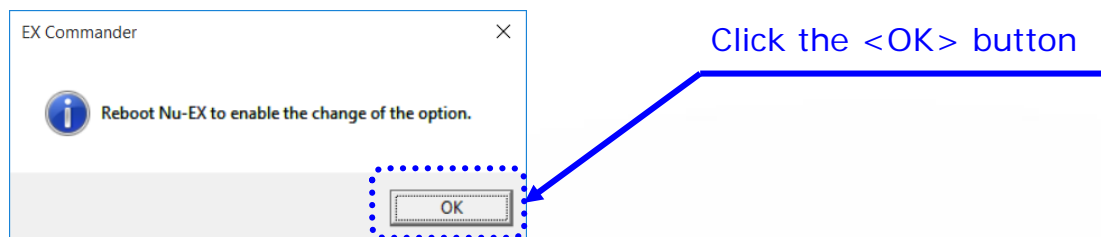
Select remote mode

Click the <Close> button

# Nu-EX2 Remote Control (3/3)

\* For detail about the remote control, refer to the User manual "3.8 Nu-EX2 Remote Control".

(3) Click the <OK> button, and reboot the Nu-EX2 in order to enable the remote control. Unplug the USB connector, and connect again.



(4) After "Remote mode" appears on the LCD, you can control Nu-EX2 by extended connector pins.

Remote mode

# Gang Programmer Mode (1/2)

\* For detail about the gang programmer mode, refer to the User manual "3.4 Gang Programmer Mode".

- (1) Refer to "Setup" described above on this manual, and prepare the programming.
- (2) Select the menu [Control] – [Gang programmer mode ...].
- (3) Programming information and each programming tool information are displayed on [Gang programmer mode] dialog. Programming tools that are connected are listed.

Select [Gang programmer mode ...]

**Programming information**

Product type: 101EF63G  
 Main program: C:\Sample\Main.hex  
 Boot program:   
 Keycode:   
 Error:   
 Programming count: Total : 0 Pass : 0 Fail : 0  
 Execute Abort  
 Checksum : 0x00FEC758 Processing time : 000.00[s]

**EX Commander : Gang programmer mode**

Programming information

Product type: 101EF63G  
 Main program: C:\Sample\Main.hex  
 Boot program:   
 Keycode:   
 Error: Ready ...  
 Programming count: Total : 0 Pass : 0 Fail : 0  
 Execute  
 Checksum : 0x00FEC758 Processing time : 000.00[s]

No.	Serial No.	Status
1	131AN0002	Ready ...
2	211AN0001	Ready ...
3	211AN0003	Ready ...
4	221AM0102	Ready ...
5		
6		
7		
8		

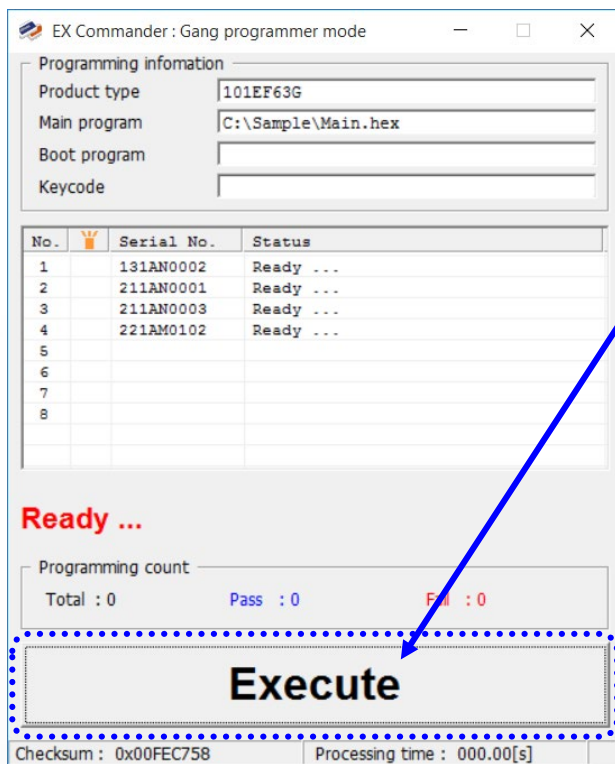
**Programming tool information**



# Gang Programmer Mode (2/2)

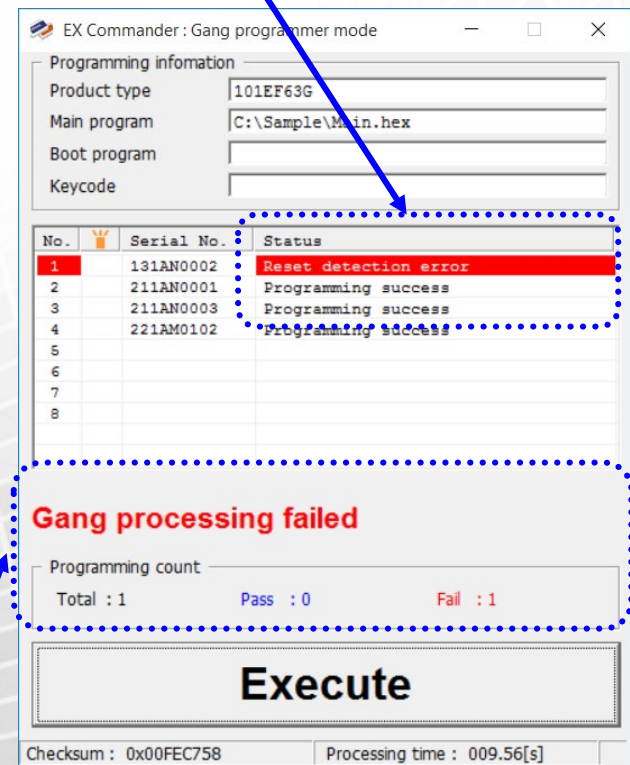
\* For detail about the gang programmer mode, refer to the User manual "3.4 Gang Programmer Mode".

- (4) Click the <Execute >button. Then all programming tools will start the programming.
- (5) When the programming is finished, the result will be displayed on the list and the Status Area.



[Status] column  
 (result of each programming tools)

<Execute> button



Status Area  
 (result of all programming tools)



# Support

- The latest version of EX Commander and related files of Nu-EX series and Nu-SP are available from the following URL  
<https://nuvoton.co.jp/semi-spt/general/>
- "EX Commander User Manual" provide more detailed explanation.  
The latest version of "EX Commander User Manual" is available from the following URL.  
<https://nuvoton.co.jp/semi-spt/general/>
- If you have other questions, contact us via the following URL.  
<https://nuvoton.co.jp/semi-spt/general/>