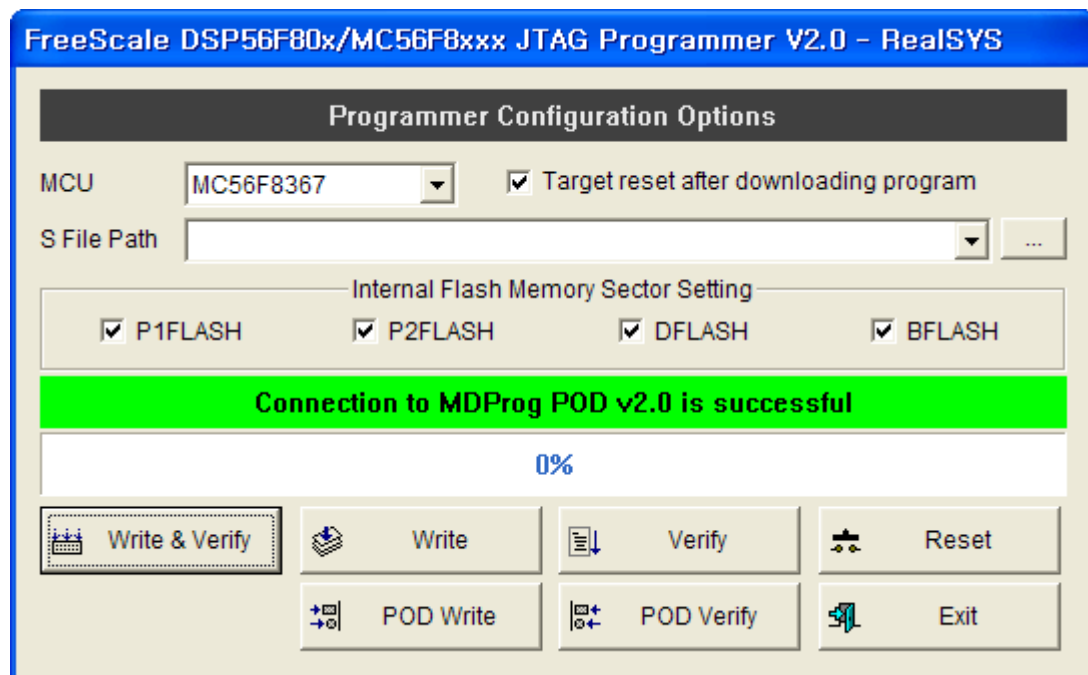

FreeScale DSP Programmer MDProg v2.0 Window Program User Manual



RealSYS

Web: www.realsys.co.kr

Tel: 031-343-0001 Fax: 031-343-0003

1. MDProg v2.0 POD and Program Feature

- A. FreeScale DSP internal flash memory is written and verified by JTAG port
- B. User program of *.S file can be saved to internal serial EEPROM of the MDProg POD
- C. User program stored to POD's internal serial EEPROM is written to FreeScale DSP internal flash memory and verified by push write or verify button on the POD
- D. User can setup internal flash memory sector to is written and verified
- E. MDProg v2.0 window program support MDProg16(v1.0) POD and MDProg v2.0 POD
- F. When use MDProg16(v1.0) POD : Support DSP56F803/805/807
- G. When use MDProg v2.0 POD : Support DSP56F803/805/807 and MC56F8037/8367
- H. USB Communication Interface for fast writing & verifying (PC <-> POD)
- I. Power Supply : USB(DC 5V) or Target Board VCC (DC 5V or DC 3.3V selection)
- J. Supported OS : Windows98/Me/2K/XP/Vista/7

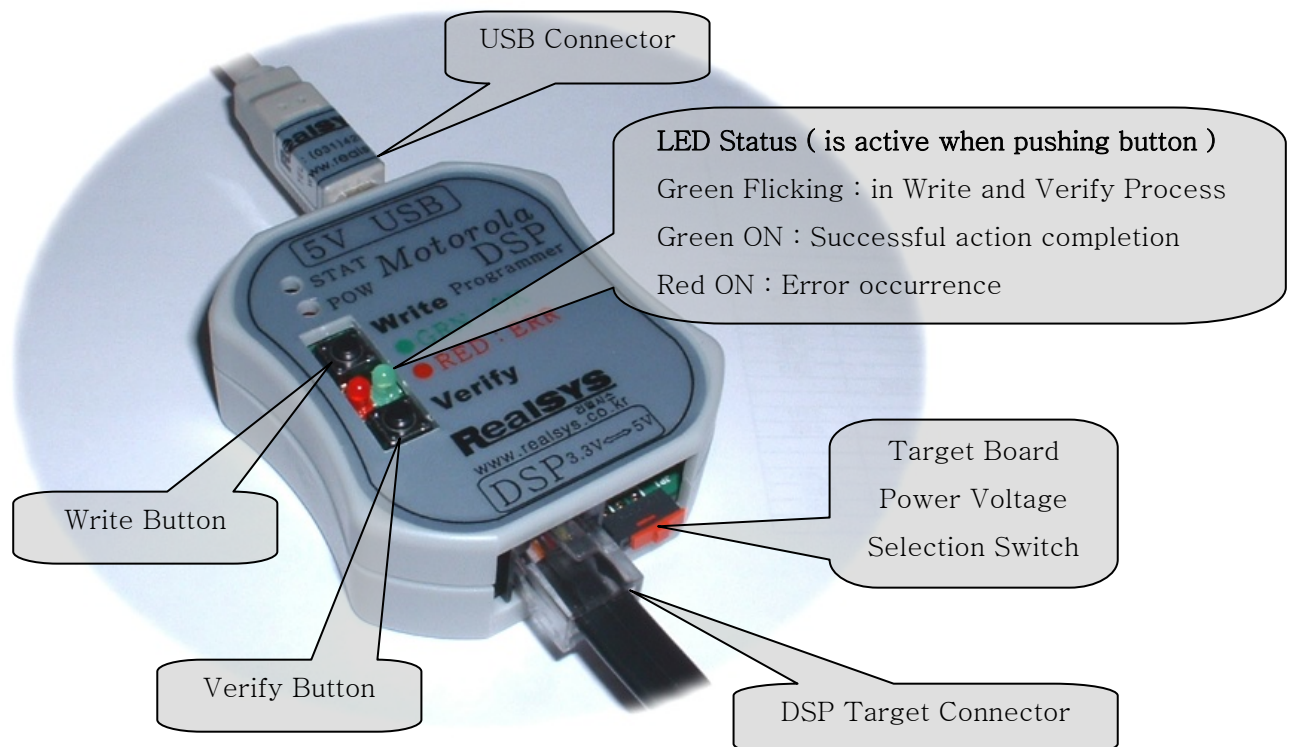
2. MDProg POD Hardware Description

A-1. MDProg16(v1.0) POD (Support DSP56F803/805/807)

A-2. MDProg v2.0 POD (Support DSP56F803/805/807 and MC56F8037/8367 지원)

- 1) Not support data monitoring for debugging
- 2) Electric non-isolation on JTAG signal between POD and target board

[MDProg16(v1.0) POD]

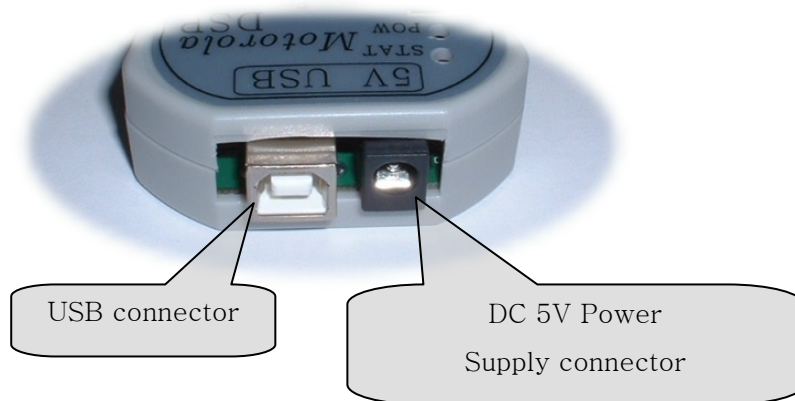


[MDPProg v2.0 POD]

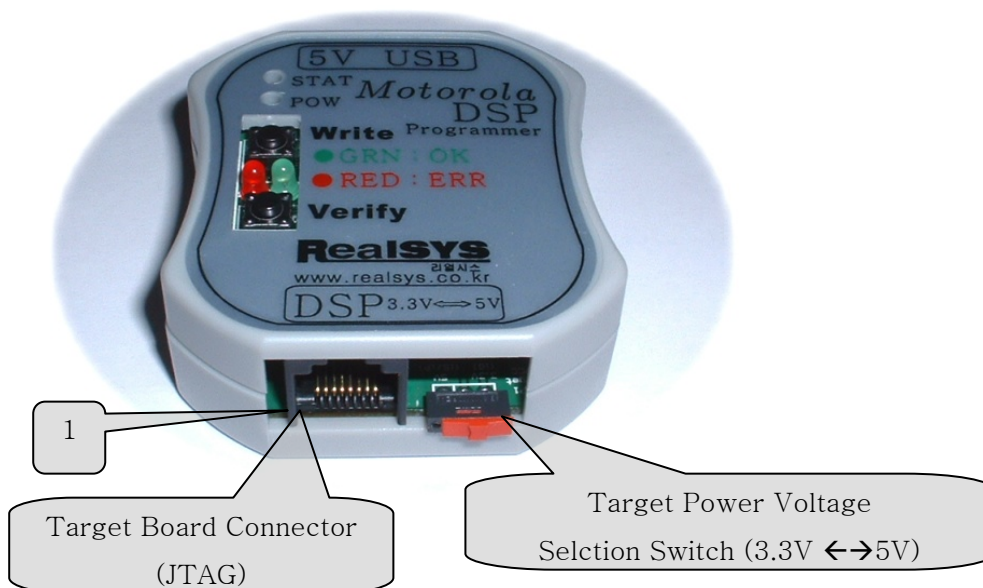


Have same function and appearance of above
MDProg16(v1.0) POD

< PC측 연결부 구성 >



< 타겟 DSP측 연결부 구성 >



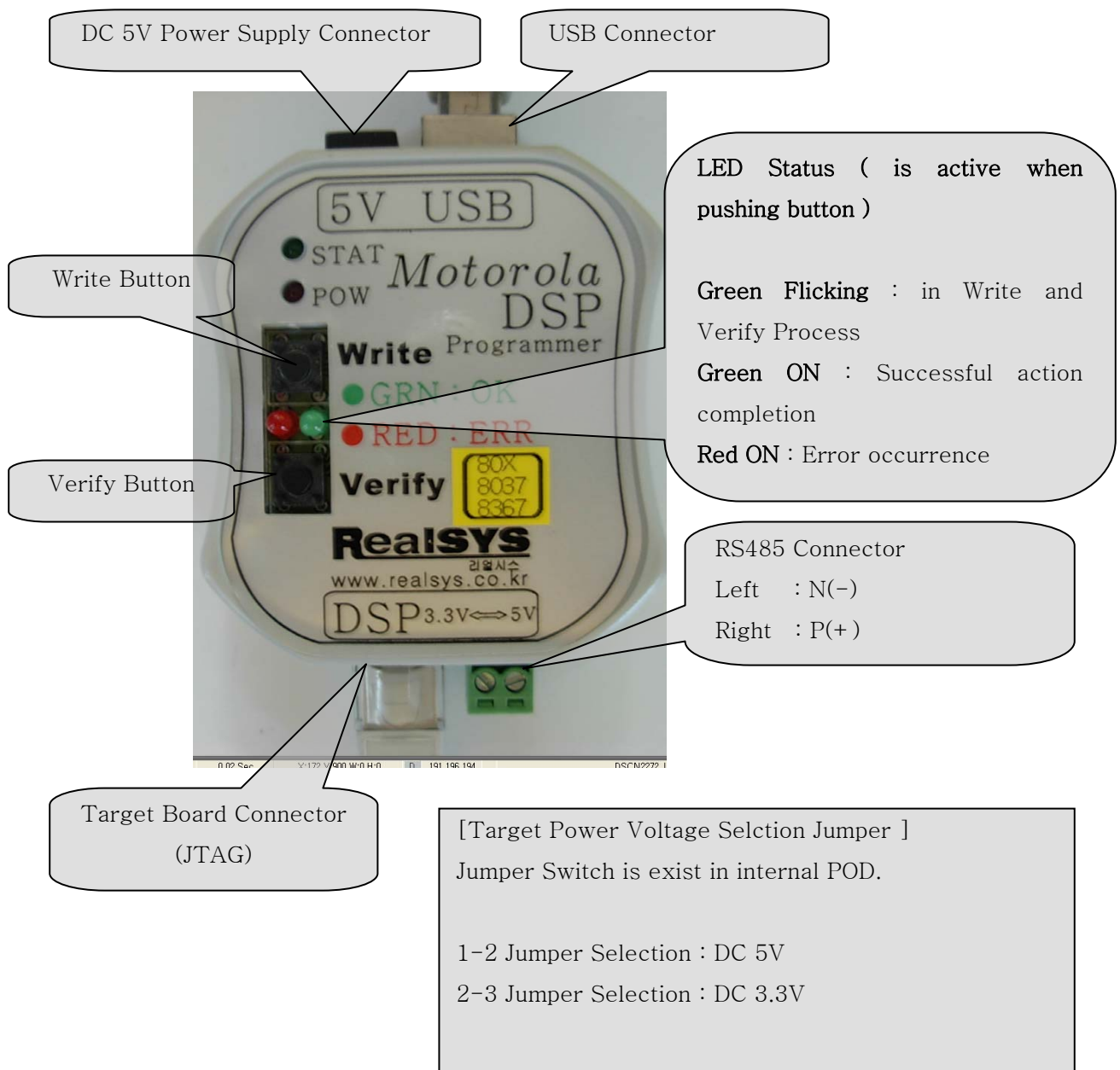
< Caution >: 3.3V is selected for SV-iG and 5V for SV-iP series of LGIS invertor

< Target Board Connector Pin Infomation – is same at MDPProg v1.0 / v2.0 POD >

1	2	3	4	5	6	7	8
TRST	GND	/RESET	TMS	TDO	TCK	VCC	TDI
To DSP	GND	To DSP	To DSP	From DSP	To DSP	5V or 3.3V	To DSP

B. MDPProg Developer v2.0 POD (Support DSP56F803/805/807 and MC56F8037/8367)

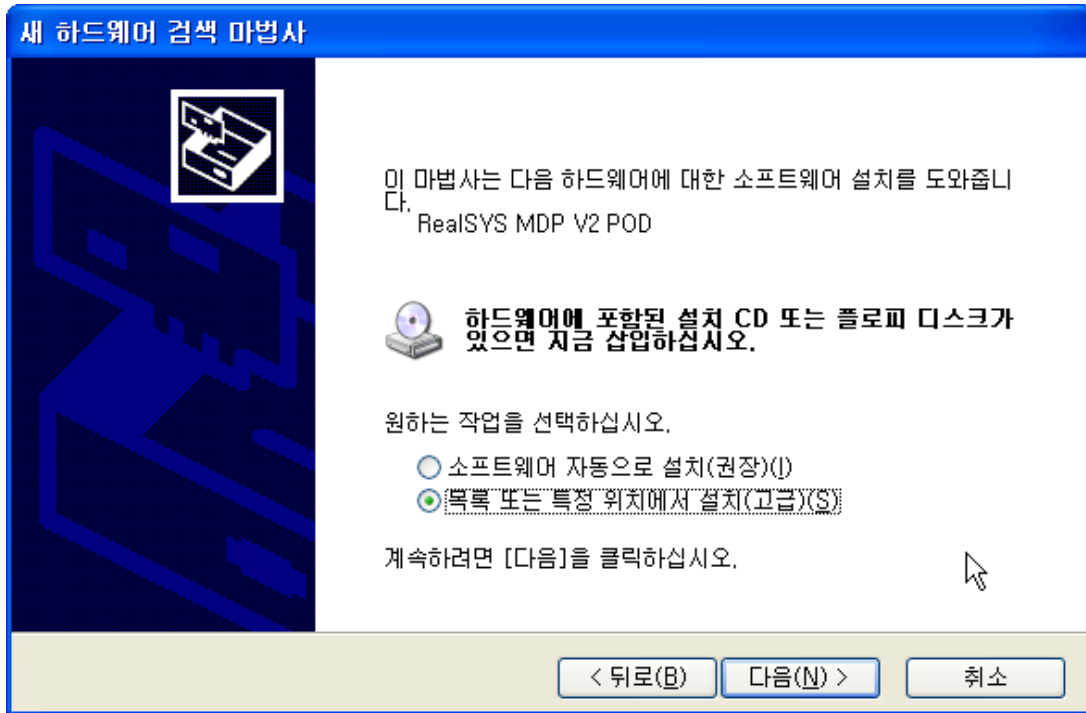
- 1) Support data monitoring for debugging
- 2) Electric isolation on JTAG signal between POD and target board



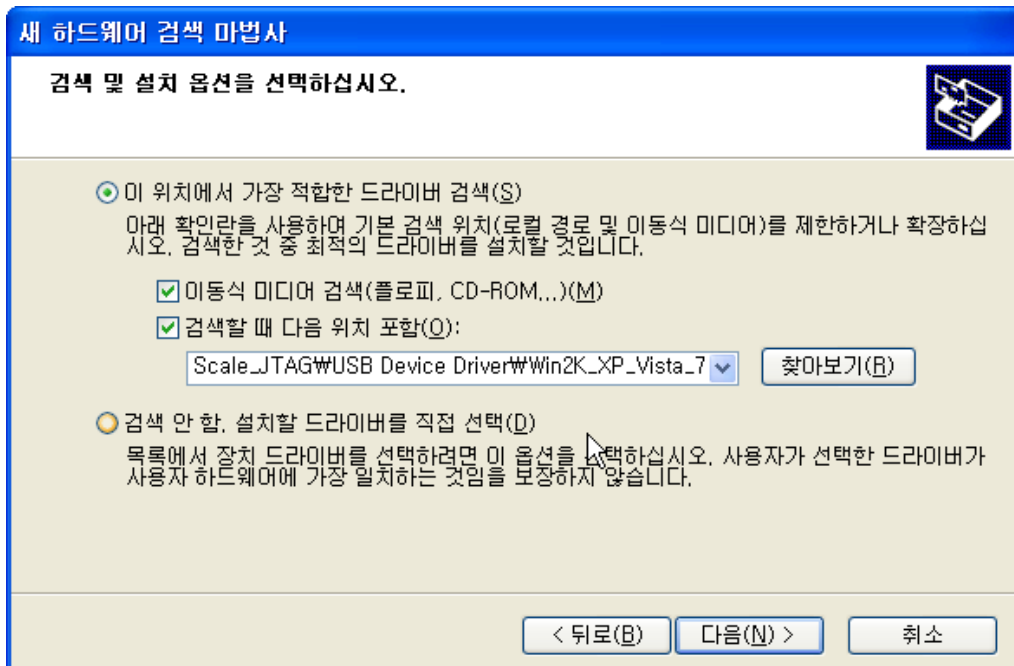
3. USB Device Driver and MDPProg v2.0 Window Program Installation

Before install device driver, please confirm that you have MDPProg16(v1.0) or MDPProg v2.0 USB Programmer POD, USB cable and application & device driver software in CD.

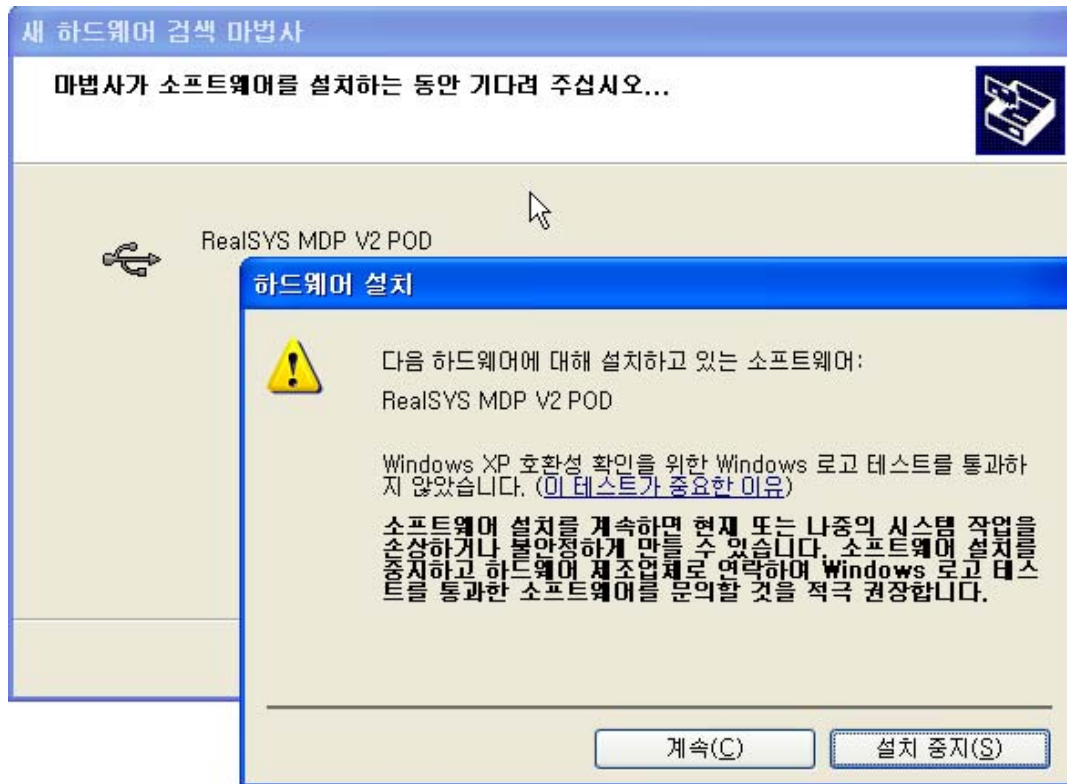
- 1) When connect USB cable between PC and USB POD, following screen comes out.
click next button after selecting "At specification location installation" option.



- 2) Click next button after selecting folder location having device driver software.

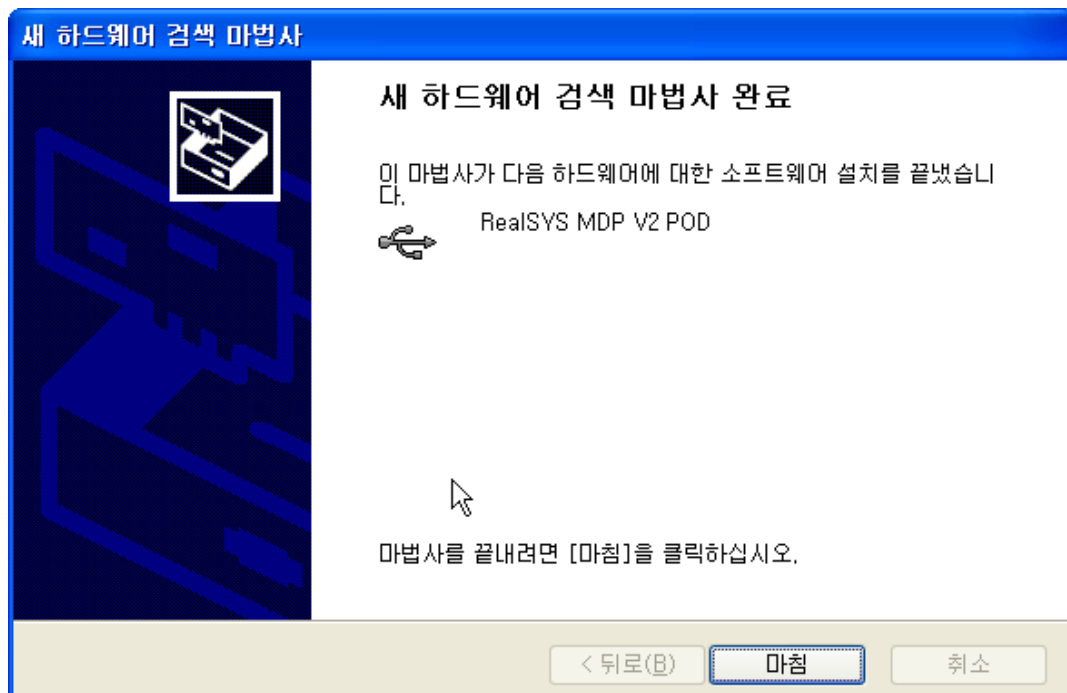


Supplied USB device driver yet did not receive "Windows Device Driver Compatible Authentication". Therefore, if screen such as lower part appears, continue installation by clicking next button. this is no any negative effect in product performance

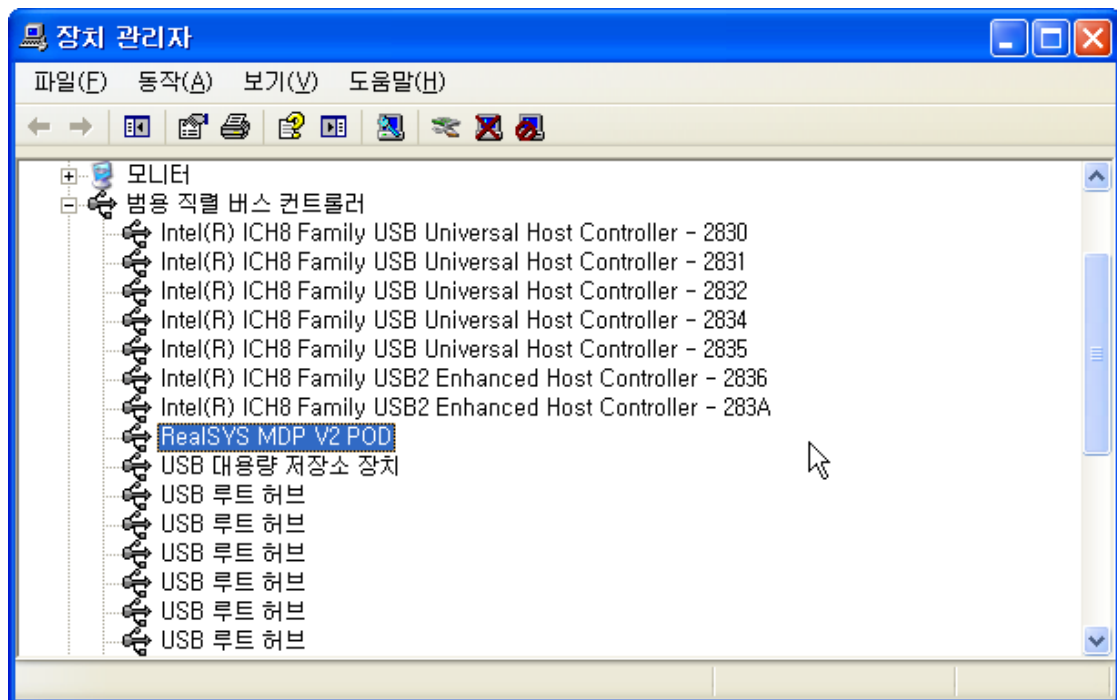


3) If did above procedure, USB device driver installation is completed.

If problem happens when installation, In first, check USB cable connection.



If you install USB device driver, you will see MDProg POD connection status in windows control panel like below picture.

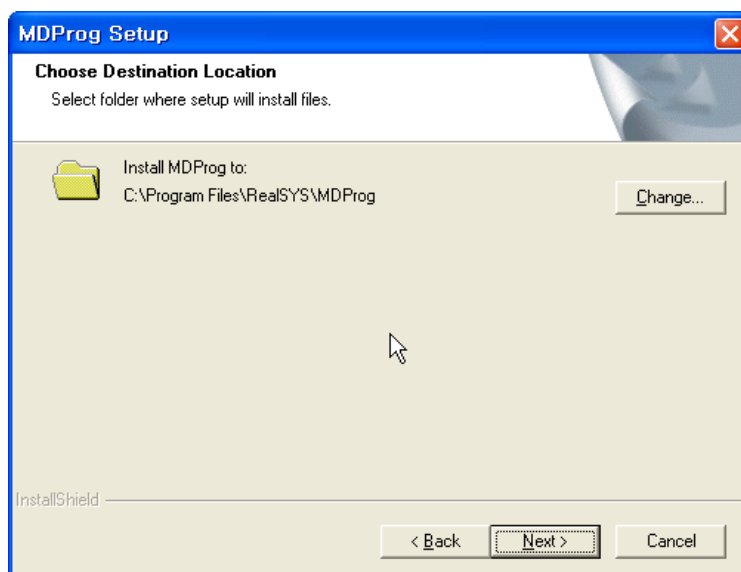


[MDProg v2.0 Application Program Setup]

- 1) If double-click MDProg_v2.0.exe file in CD, installation process begin.



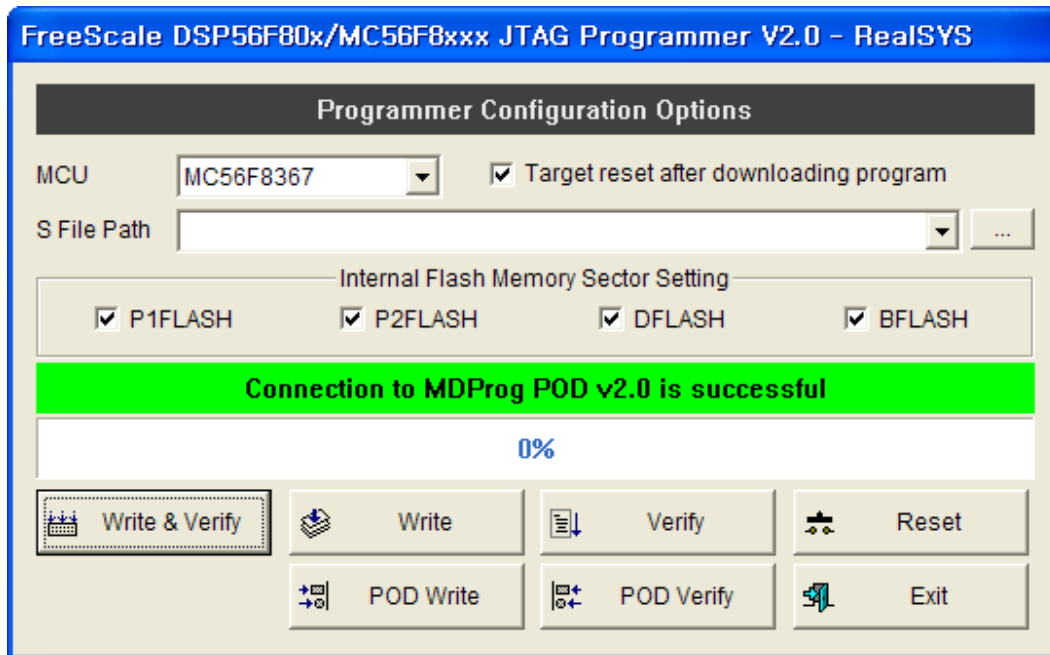
- 2) If click next button after selecting install folder location, installation process is completed successfully. and short-cut icon is created on main screen.



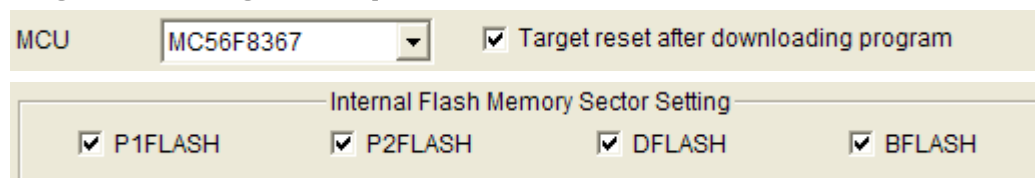
4. MDProg v2.0 Application Program

First, before use this application program, confirm that PC, USB POD and target board are connected rightly according to above hardware setup description.

< Main Program Screen >



① Programmer Configuration Options



- MCU
Select target DSP MCU type
When use MDProg16(v1.0) POD : support DSP56F803/805/807
When use MDProg v2.0 POD : support DSP56F803/805/807 and MC56F8037/8367
 - Target reset after download program
If check this option, reset target board after writing & verifying action and if unchecked, don't reset.
 - Internal Flash Memory Sector Setting
Writing or Verifying action is doing on the checked flash memory sector and the unchecked memory sector is skipped.
-

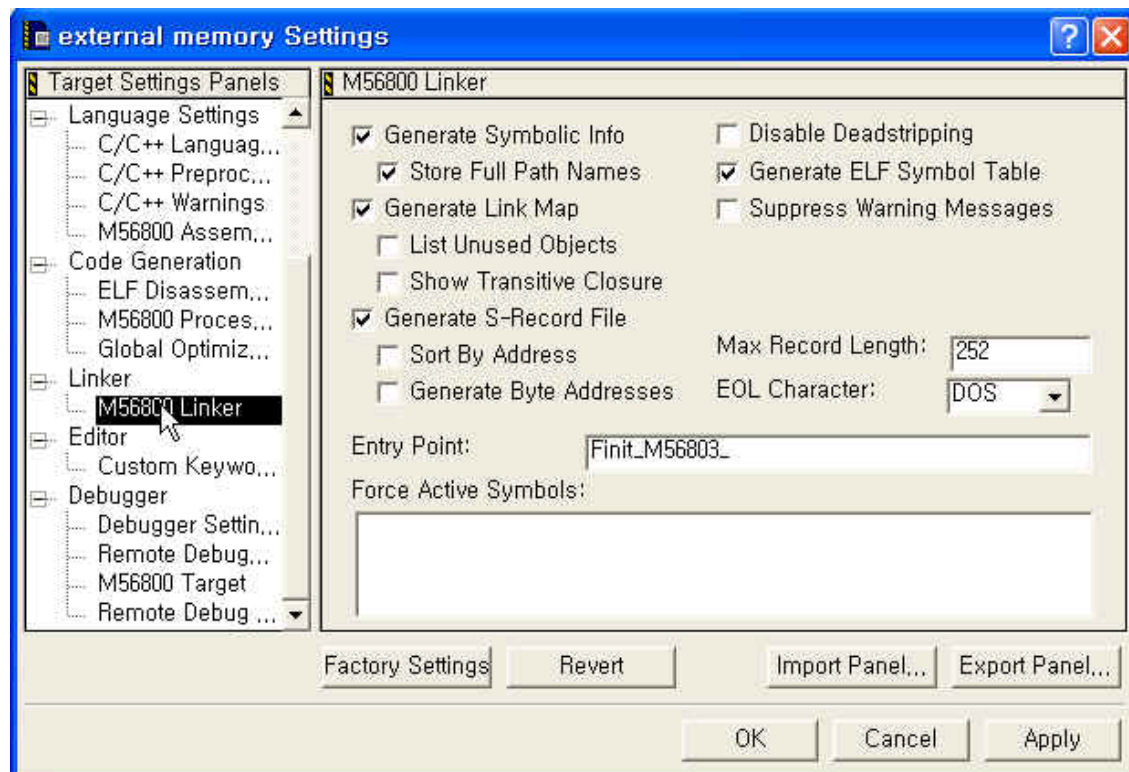
② User program (*.S File) Path Setting



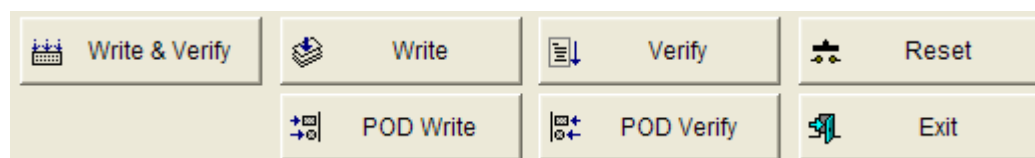
This part is used when specify file path(*.S File) for writing and verifying target DSP. you click "..." button when search user program file(*S File). This program save recent used *.S file path information up to 10 number and therefore, if you reload file before used, please select one item in list of combo-box.

[S File is generated when using Metrowerks CodeWarrior for FreeScale DSP]

Select “Generated S-Record File” option in Linker Option



③ Function Button



A. Write & Verify

Verify after writing user program data, which is loaded from *.S file, to internal flash memory of target DSP.

B. Write

Write user program data, which is loaded from *.S file, to internal flash memory of

target DSP.

C. Verify

Verify user program data, which is loaded from *.S file, with internal flash memory of target DSP.

D. Reset

Reset target board and initialize JTAG TAP controller of target DSP.

E. POD Write

Write user program data, which is loaded from *.S file, and configuration options to internal serial EEPROM in USB POD.

F. POD Verify

Verify user program data, which is loaded from *.S file, and configuration options with internal serial EEPROM in USB POD.

G. Exit

Exit application program.

④ Display Current Write & Verify Status



When doing "POD Write, POD Verify, Target Write, Target Write & Verify and Target Verify", display current action process status and if any problem happens, display error information.
