

# **Notes and Points for TMPM3xx Flash memory**

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## Revision History

<b>Edition</b>	<b>Date of issue</b>	<b>Description</b>
First Edition	January 31, 2012	• Initial publication
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## 1 Introduction

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This manual describes notes and points especially for writing to Flash memory.

For details of ICE operating instructions, see the microVIEW-PLUS User's Manual (Common Edition) and microVIEW-PLUS User's Manual (MPU-Specific Edition).

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## 2 Supported SLX(ZX) Versions

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SoC	Supported Versions	
	SLX600	ZX600
TMPM330	1.51	4.60
TMPM370	1.51	4.60
Other	2.11	not supported

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## 3 Advance Preparation

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### 3.1 Security

Do not enable the security of built-in flash memory.

Enabling the security causes debug communication failure. ICE cannot be used.

The security becomes enabled if all of the following conditions are satisfied.

(For details, see a data sheet of SoC.)

- SECBIT register bit is set 1.
- All protect bits for writing the built-in flash memory and erase protection are set 1.

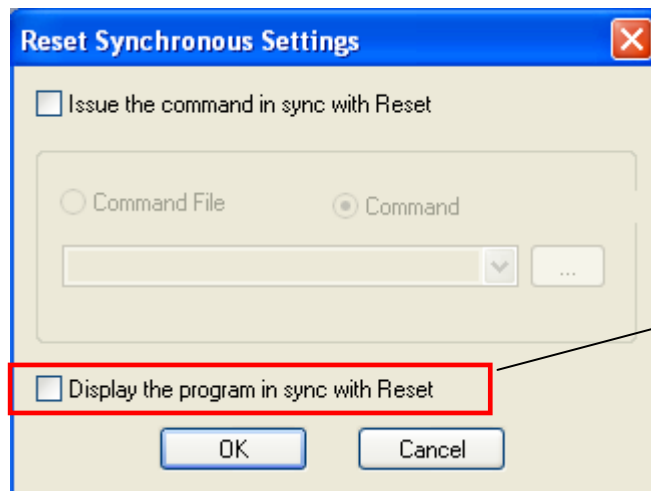
### 3.2 If Nothing is Recorded on the Built-in Flash Memory

microVIEW-PLUS dumps a reset vector area to display a program (disassemble display) after connecting by reset commands.

In case nothing is recorded in the built-in flash memory (a vector table is 0xFFFFFFFF), 0xFFFFFFFFFE will be dumped and “ICE Error No.f58: Sticky error” may occur.

[Provision]

Right-click the Reset button on the toolbar, and then open the Reset Sync. Setting dialog box.



Clear the “Display the program in sync with Reset” checkbox.  
(= does not dump by the reset command)

After downloading the program to the built-in flash memory (correct vector table values are written), select this check box again.

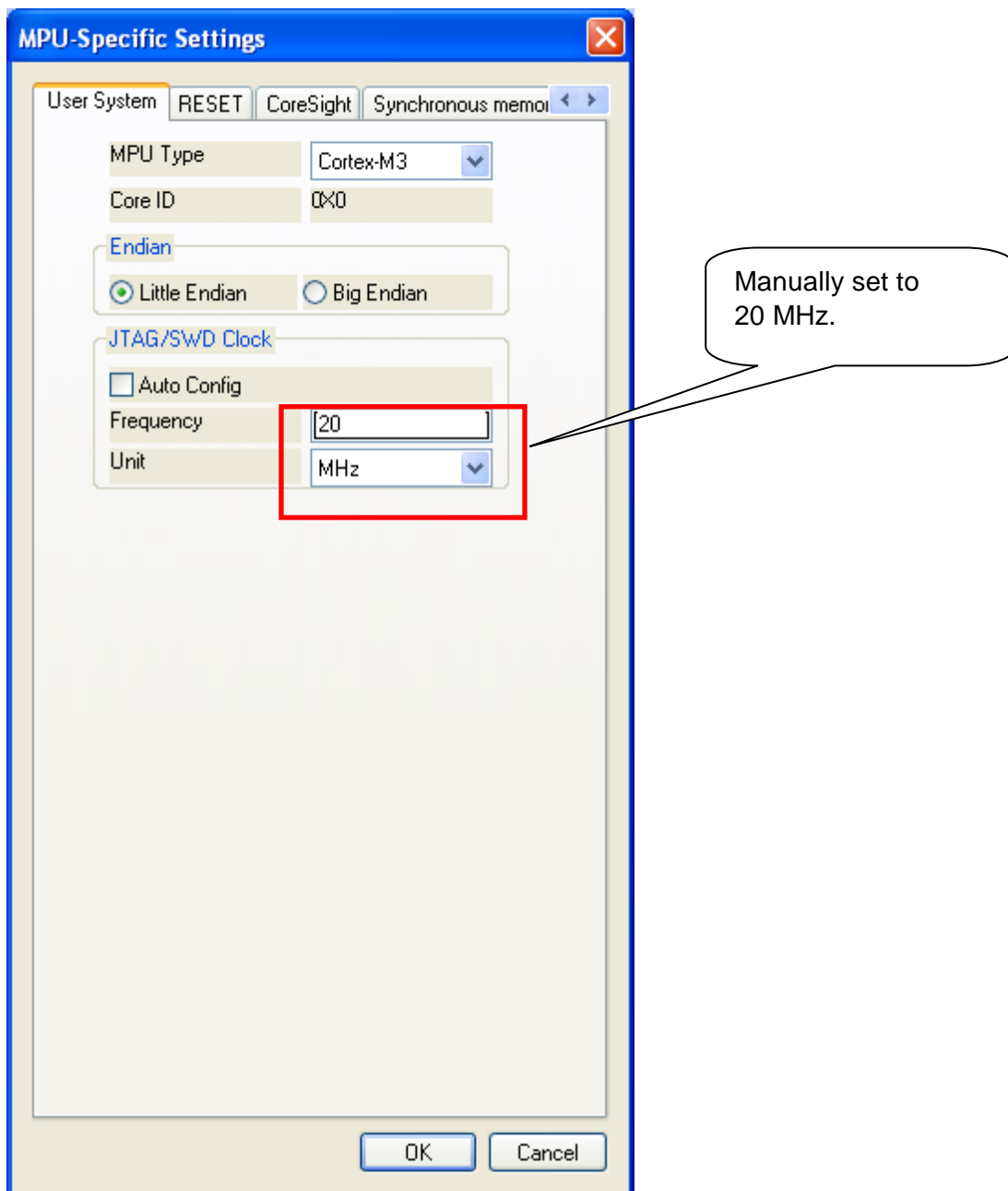
### 3.3 Reset Type

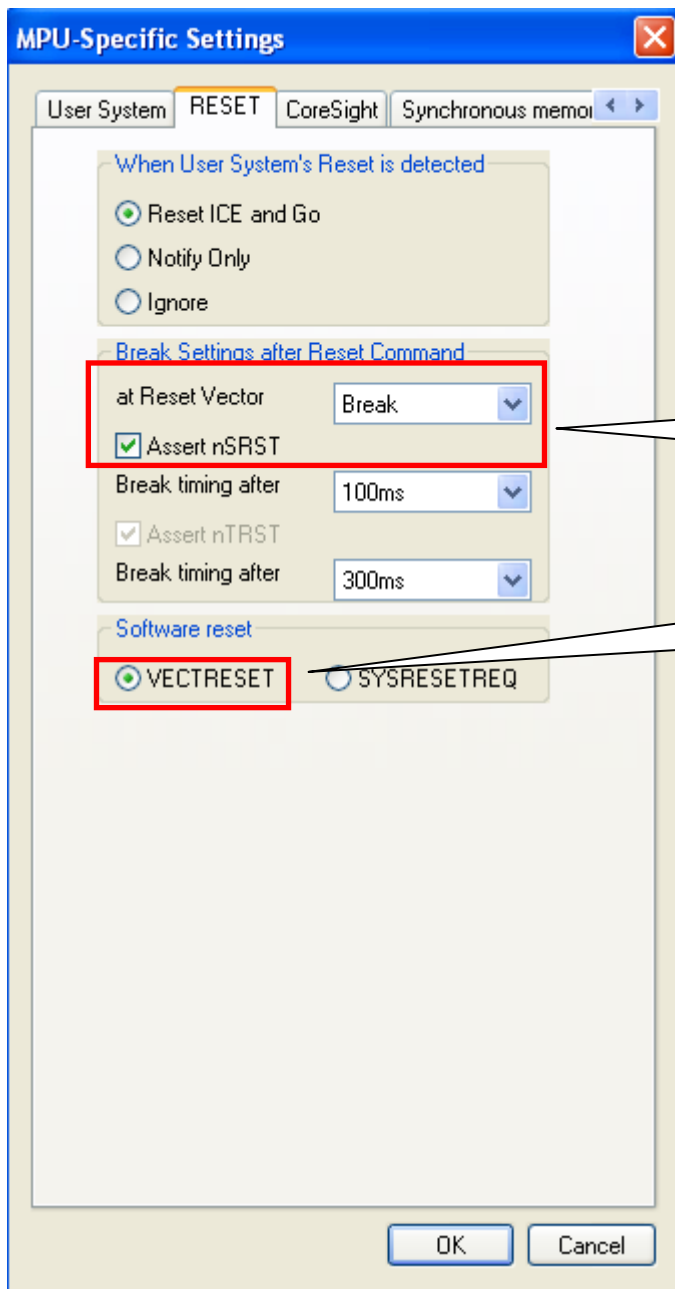
Select **VECTRESET** for the reset type.

### 3.4 When using TMPM350

#### 3.4.1 MPU-Specific Settings

Notes and Points for when setting MPU-specific settings of [MPU] menu:

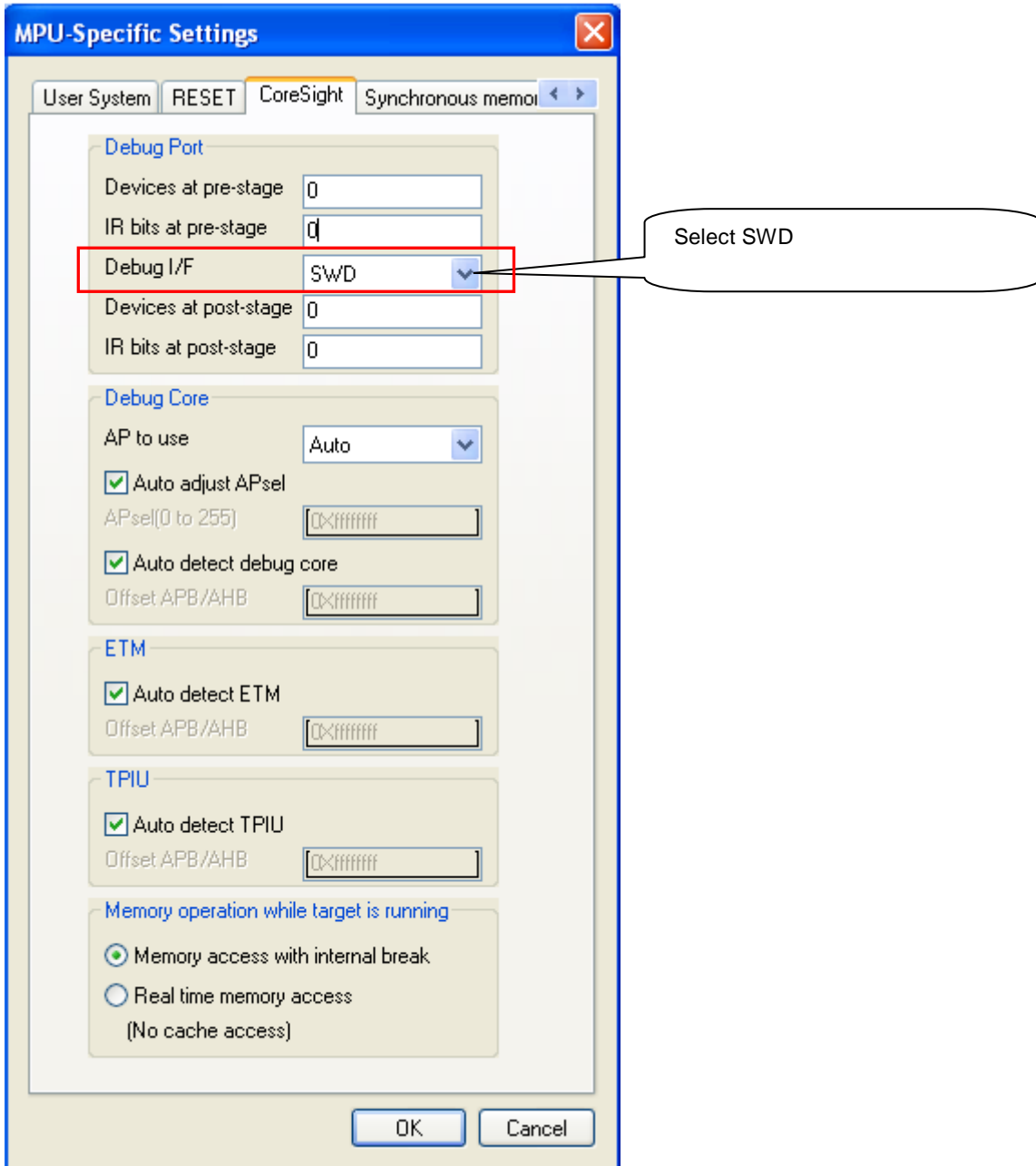




At Reset Vector : Break  
Assert nSRST : Check on this check box.

Select VECTRESET





## 4 Flash Memory I/F Type

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Use 32bit x 1 for the flash memory I/F type.

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## 5 Setting of the Flash Memory Definition File

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Make sure to set the user RAM for ICE for memory mapping.

### 5.1 When using TPM354

Set the flash memory mapping for both Macro 0 and Macro 1.

Use the flash definition file on the table below.

Macro	Flash definition file
0	TMPM354F10T_MACRO0.frd
1	TMPM354F10T_MACRO1.frd

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## 6 Setting up User RAM for ICE

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### 6.1 When using TPM350

Do not set the user RAM for ICE.

## 7 Others

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### 7.1 When using TPM350

#### 7.1.1 Notes and Points for Programming Flash Memory

The total range of flash memory (not a block unit) is a target of write. It is a specification of TPM350 chip. All other data than download data is written by the last value.

#### 7.1.2 Write Protect

##### **SLX600Rev2.16 or earlier or ZX600**

After the writing end to the Flash Memory\*1, all the write protect of TPM350 becomes invalid.

##### **SLX600Rev2.17 or later**

Before and after the writing to the Flash Memory, the state of the protection of TPM350 does not change.

\*1 download , erase , software break for Flash Memory.