# EF38C2F-64H User's Guide

Suisei Electronics System Co., Ltd First edition issued February, 2002

# 1. General Description

EF38C2F-64H is a Flash MCU programming adapter designed for the programmer main unit, EFP-I. The adapter (EF38C2F-64H) installed on the top of the programmer (EFP-I) allows user to program Mitsubishi 8-bit Flash MCUs, specifically for 38C2 Group MCUs. The adapter is equipped with a 64-pin clamshell socket supporting 64-pin 0.5mm QFP package (Type No: 64P6Q-A).

<Packing contents>

- 1) EF38C2F-64H
- 2) Users guide (this manual)

Fig 1.1 shows the adapter appearance.

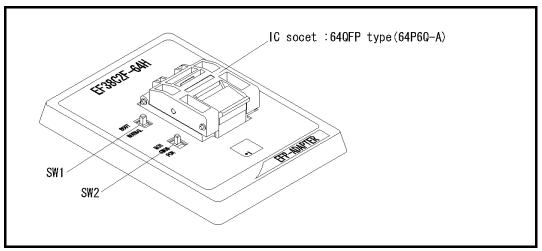


Figure 1.1: Appearance of EF38C2F-64H

#### 2. Insertion Direction of MCU and cleaning of IC socket

#### 2. 1 Insertion Direction of MCU

When MCU is inserted, No.1 pin of the IC socket on EF38C2F-64H and MCU's No.1 pin should be connected. The wrong insertion would cause a serious breakage of MCU.

Insertion direction of MCU is shown in Fig. 2.1.

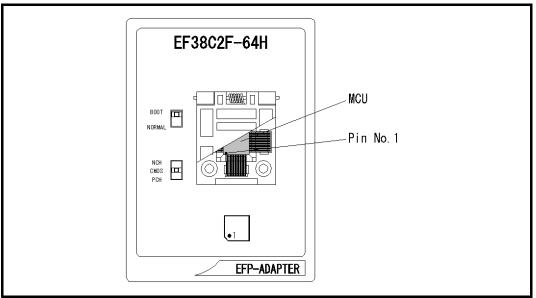


Figure 2.1: Pin Orientation of The socket

#### 2.2 Cleaning of IC Socket

A contact pin inside of the IC socket of the MCU unit might deteriorate and a contact failure might occur because of the number of times used and its age of service. As the contact failure may cause incorrect writing of MCU and malfunction of the writer, please take the below measures.

Though enquiries on contact failures can be made, we regard IC sockets as consumable supplies. We may recommend you to replace them if a contact failure of IC socket occurs due to its use deterioration.

# Measures against IC Socket Contact Failure

- (i) Please clean the contact pin surface inside of IC socket with a brush, etc. regularly, depending on the number of times used.
- (ii) If the product is not to be used for a long period, please keep it with less humidity in a plastic bag, etc.

## [Recommended item for cleaning]

About the cleaning of the contact pin in the IC socket, we recommend the use of the nanotech brush (Kita Mfg Co., Ltd).

The nanotech brush can remove the dirt which stuck to a contact pin, a very small amount of metastasis of solder. When a contact poor problem occurred, please try it.

About nanotech brush, please ask us or Kita Mfg Co., Ltd (refer to the following site).

Nanotech brush (Kita Mfg Co., Ltd.) http://www.kita-mfg.com/pro\_nanotech\_e.html

## 3. Specifications and About Software version (S/W)

## 3.1 Specifications

Specifications of the EF38C2F-64H are listed in Table 3.1.

Table 3.1: EF38C2F-64H Specifications

| MCU Type               | Memory Type  | Corresponding MCU Name | Program Memory<br>Area | SW setting |      |
|------------------------|--------------|------------------------|------------------------|------------|------|
|                        |              |                        |                        | SW1        | SW2  |
| M38C2 x FF (B00T)      | Flash memory | M38C29FFHP             | F000H-FFFFH            | ВООТ       | CMOS |
| M38C2 x FF<br>(NORMAL) | Flash memory | M38C29FFHP             | 1000H-FFFFH            | NORMAL     | CMOS |

## 3.2 About Software version(S/W)

Please download the latest version up data on the following site when the S/W version. Please use S/W of the latest version and confirm S/W version regularly.

## [S/W version confirmation method]

The version numbers are displayed by  $[Help] \rightarrow [About]$  in the WinEFP or WinEFP2 window menu.

```
< EFP-I/IM S/W the latest free download site >
http://www.suisei.co.jp/download_e/productdata_efpl_e.html
```

```
< EFP-S2 S/W the latest free download site > http://www.suisei.co.jp/download_e/productdata_s2_e.html
```

```
< EFP-S2V S/W the latest free download site >
http://www.suisei.co.jp/download_e/productdata_s2_e.html
```

## Note on Corresponding Versions

Above corresponding versions might change without notice on account of the future capability improvement, etc. Furthermore in case the upgrade procedure manual is attached when this product is purchased, please refer to that manual as a priority.

## 4. Erase Command

The erase type parameter contained in the erase command enables you to erase by block or erase all blocks. The erase command parameter input dialog is shown in Figure 5.1.

\*This command has not been described in the WinEFP manual.

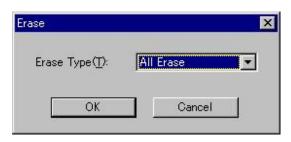


Figure 5.1: Erase Command Parameter Input Dialog

## (1) Erase type

All Erase and block address area (xxxxxxH - xxxxxxH) are displayed in the drop-down list to the right of the erase type parameter display field (displayed by clicking the arrow pointing downward with the mouse). Select the block erase method.

- (2) OK button

  Execute the block erase command.
- (3) Cancel button
  Cancel the command.