

# EF7470-32S User's Guide

Suisei Electronics System Co., Ltd  
1<sup>st</sup> edition issued August 2001

## 1. General Description

EF7470-32S is a Flash MCU programming adapter designed for the programmer main unit, EFP-I.

The adapter (EF7470-32S) installed on the top of the programmer (EFP-I) allows user to program Renesas 8-bit one time PROM & EPROM MCUs, specifically for 7470 series MCUs. The adapter is equipped with a 32, 42-pin IC socket supporting 32, 42-pin 1.778mm SDIP package (Type No: 32,42P4B-A).

<Packing contents>

- 1) EF7470-32S
- 2) Users guide (this manual)

External Figure of EF7470-32S is shown in Fig.1.1

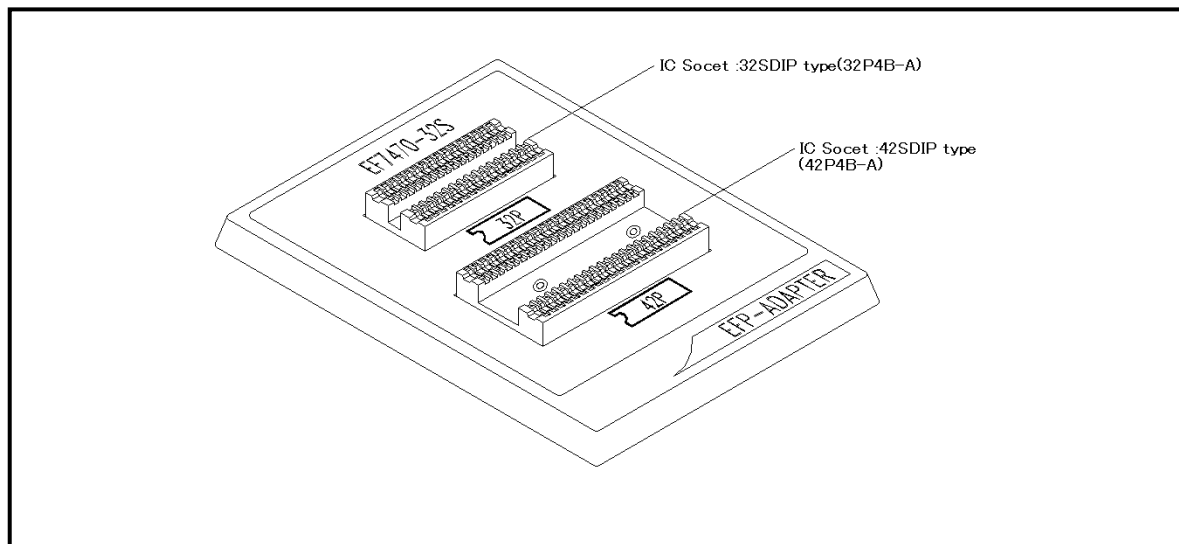


Fig 1.1: Appearance of EF7470-32S

## 2. List of Corresponding MCU and corresponding version

### 2. 1 List of Corresponding MCU

Specifications of the EF7470-32S are listed in Table 3.1.

Table 3.1: EF7470-32S Specifications

MCU Type	Memory Type	Corresponding MCU Name	Program Memory Area
M3747xE4SP	One time PROM	M37470E4SP M37471E4SP	6000H-7FFFH
M3747xE8SP	One time PROM	M37470E8SP M37471E8SP M37477E8SP M37477E8TSP M37478E8SP M37478E8TSP	4000H-7FFFH
M3747xE8SS	EPROM	M37471E8SS M37478E8SS	4000H-7FFFH
Remarks Operation clock: 4MHz (Supplied from ceramic oscillator on EF7470-32S) Power source: Supplied from EFP-I			

### 2. 2 About Software version(S/W)

The version numbers such as EFP-1 and WinEFP are displayed by [Help]→[About] in the WinEFP window menu. Please download the latest version up data on the following site when the S/W version such as EFP-I used is old.

< EFP-I S/W the latest free download site >

[http://www.suisei.co.jp/download\\_e/productdata\\_efp1\\_e.html](http://www.suisei.co.jp/download_e/productdata_efp1_e.html)

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#### 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.

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

#### 3. 1 Insertion Direction of MCU

When MCU is inserted, No.1 pin of the IC socket on EF7470-32S 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.3.1.

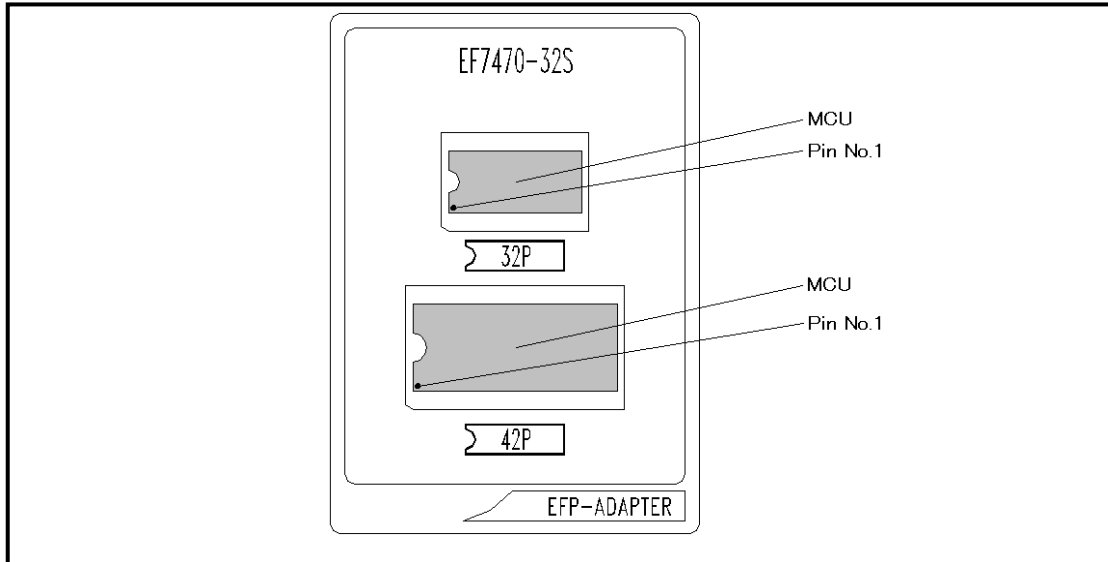


Fig 3.1: Pin Orientation of The socket

#### 3. 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.

##### 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.

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.

##### 【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](http://www.kita-mfg.com/pro_nanotech_e.html)