MS4508-20G Users Guide

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1. General Description

MS4508-20G is a writing target board for standard serial I/O mode used by connecting to EFP-I/1M or EFP-S2/S2V.

Reading and writing data to microcomputer 4283 and 4508 groups with built-in Renesas Electronics 4 bit QzROM are enabled by using MS4508-20G.

IC socket for 20-pin 0.65mm pitch LSSOP (PLSP0020JB-A) (20P2F-A) is mounted on MS4508-20G.

<Packing contents>

- 1) MS4508-20G
- 2) Users guide (this manual)

External Figure of MS4238-24F is shown in Fig $\,1.1$

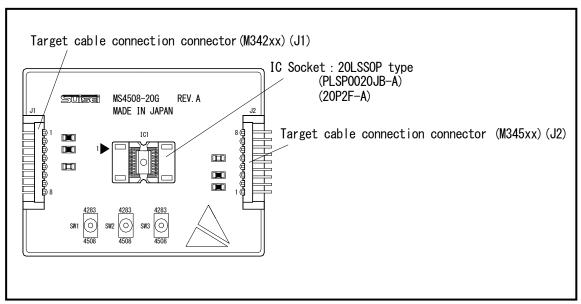


Fig 1.1 MS4508-20G External Figure

2. Device constitution and a connection process

2. 1 Device constitution

Device constitution when you use MS4508-20G is shown in Fig.2.1.

Fig2.1 Device constitution

Main body	Unit	Cable		
EFP-I/1M	EF1SRP-05U	DRAMG GD A (o		
EFP-S2/S2V	EF1SRP-05U+EF1CNT-96P *1	EF1TGCB-A(3-wire target connection cable)(separate sale)		
	EF1SRP-01US2	cable/(separate sale/		

^{*1)} when you use EF1SRP-05U in EFP-S2/S2V, EF1CNT-96P (separate sale) is necessary.

2. 2 Connection Process

In case 4283 group is used, please connect EF1TGCB-A (3-wire target connection cable) to target cable connection connector (M342xx) (J1) as shown in Fig.2.1.

In case 4208 group is used, please connect EF1TGCB-A (3-wire target connection cable) to target cable connection connector (M345xx (J2) as shown in Fig.2.2.

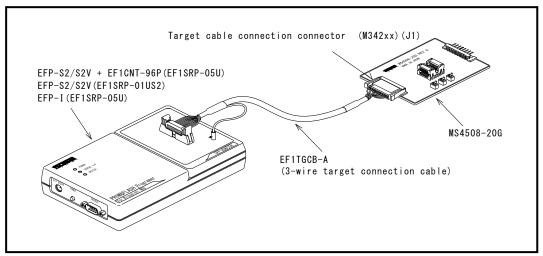


Fig.2.1 4283 Group

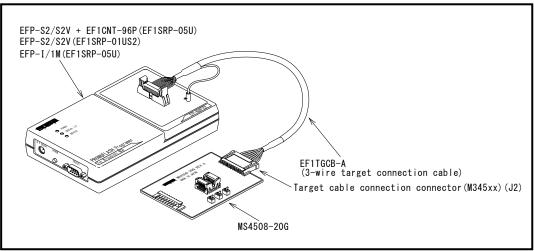


Fig.2.2 4508 Group

3. List of Corresponding MCU and corresponding version

3. 1 List of Corresponding MCU

A corresponding MCU list of MS4508-20G is shown in List.1.1. MS4508-20G switches setting of SW1-SW6 is shown in Fig.3.1.

List.1.1 List of Corresponding MCU of MS4508-20G

Main body	Device type	Correspond ing MCU name	Program Memory Area	SW1~3 Setting	Target cable connection connector	EF1SRP-05U SW setting
EFP-I/1M	M34283G2	M34283G2	0h~	SW1~3:4283	M342xx(J1)	T_VPP : 7.9V side *1
	(Vdd:3.3V,Vpp:7.9V)	GP	7FFh	side	W1542XX(01)	
	M34508G4	M34508G4	0h~	SW1~3:4508	M345xx(J2)	
	(Vdd:4.5V,Vpp:7.9V)	GP	FFFh	side	W1545XX(52)	
EFP-S2/S2V	M3428xG2	M34283G2	0h∼	SW1~3:4283	M342xx(J1)	
		GP	7FFh	side	W1542XX(01)	
	M34508/M34509G4	M34508G4	0h~	SW1~3:4508	M345xx(J2)	
	$(VDD:4\sim4.7V)$	GP	FFFh	side	W1549XX(J2)	

^{*1)} when you use EF1SRP-05U in EFP-S2/S2V, EF1CNT-96P (separate sale) is necessary.

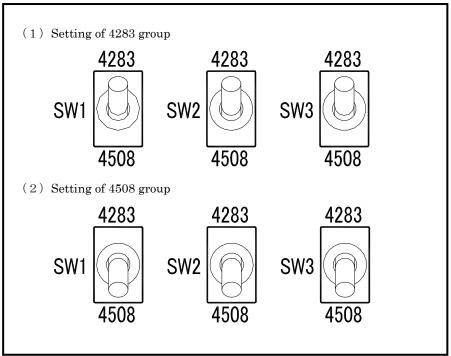


Fig3.1 The setting of the switch

3. 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.

< EFP- I S/W the latest free download site > http://www.suisei.co.jp/download_e/productdata_efp1_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. Insertion Direction of MCU and cleaning of IC socket

4. 1 Insertion Direction of MCU

When MCU is inserted, No.1 pin of the IC socket on MS4508-20G 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 $\,$ 4 .1.

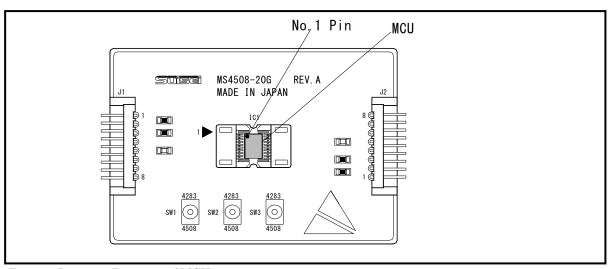


Fig. 4.1 Insertion Direction of MCU

4. 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

5. List of Pin Connection

Connector terminal names target cable connection connector (M342xx) (J1), (M345xx) (J2) of MS4508-20G is shown in List 5.1.

List 5.1 Terminal List of target connection connector (J1, J2)

Pin No	. Terminal Name	I/O(writer side)	Pin No.	Terminal Name	I/O(writer side)
1	BUSY	Input	5	SDA	I/O
2	VPP	Output	6	PGM/OE	Output
3	VDD	Output	7	RESET	Output
4	SCLK	Output	8	GND	_