Version: V3.3

# YM02 Programmer Specification-FUJITSU

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## In Advance:

- 1) Standard Packing
- Programmer 1
- 16pin cable 1
- USB cable 1
- ➢ 5V adapter 1

Software Version:

Open the UI  $\rightarrow$  Help  $\rightarrow$  About YM.

Firmware Version:

Connect the programmer to PC, open the software and connect. The version will display on

the right side of the software. And display in the LCD of programmer too.

Like VXXXX.

Programmer ID:

Connect the programmer to PC, open the software and connect. The version will display on the right side of the software. And display in the LCD of programmer too.

It is 8 decimal digit, like XXXXXXXX.

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# 1. Hardware Parameter



3.3V/5V switch; 16pin cable interface; USB cable interface; DC 5V input;

Item	Parameter
Work power	DC 5V input, USB input.
Work environment	Temp.: -20 - +50°C, Humidity: 10 - 80% RH
Keep environment	Temp.: -30 - +60°C, Humidity: 10 - 80% RH
Boundary dimension	110×80×25 mm
PC OS	Windows 2K/XP/2003/Vista/7

#### Sheet 1: Hardware Parameter

# 2. Driver Install

The first time connect the programmer to PC, driver must need. The driver is in the folder "DRIVER\_YMOX".

# 3. Hardware Function

- > 16pin cable is used for connectting the programmer and target device.
- > The 3.3V/5V switch: turn to left is 3.3V output, turn to right is 5V output.
- ➤ A short buzz means program succeed.
- > A Long buzz means software download succeed.
- > Two buzz means with internal software and initialization succeed, reset succeed.
- Three buzz means program failed or software download failed or internal software verify failed.

Programmer interface:



1: Program interface

#### Special Pin:

- Pin 10 ----- GND
- Pin 15 ----- Vout Voltage out always
- > Pin 16 ----- Key Same as the program key. It is valid when low level

#### Note:

♦ The pin no used please keep open, don't connect any.

#### LCD Display:

The sum will display on the top line of LCD in normal. The "OK" will display in the left on the under line of LCD in normal. The "T:" in the right means the program time limited, and "N" means the times is no limit.

When used the serial number function, if program successful, the serial number will display in the lift on the under line of LCD.

sheet 2: The program pin need

No.	1	2	3	4	5	7	10	15
Name	GND	RESET	RxD/SI	Vdd	TxD/SO	SCK	P13	MOD
F2MC-8FX_SPI	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	×	0
F2MC-8FX_UART	$\checkmark$	0	$\checkmark$	$\checkmark$	$\checkmark$	0	0	0
NEW-8FX	$\checkmark$	0	$\checkmark$	$\checkmark$	$\checkmark$	×	×	×
FM3	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	×	×	0

 $\checkmark$ : must connect  $\times$ : keep open  $\bigcirc$ : alternative use

#### NOTE:

## ♦ The pin3 and pin5 must short when program some chip.







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4: NEW-8XF



5: FM3

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# 5. Software

#### Open the software UI:

💟 YM02 Programm	mer-FUJITSU	
File(F) Tool(T)	Help(H)	
Connect Device	Select MCU Interface ctl Security ctl Prog ctl sequence num ctl MCU: Select MCU Flash Size: Vulimited Limited Number: 000000	Download Program
Frogram Era	se Checksum Programmer Inf fw. version: Device ID: Last Program Inf MCU: Limited number: Success time: Failure time: Program Inf MCU : Download file: Limited Number: Checksum:	

6: UI

## 5.1 Firmware Update

Firmware update function is in the menu "Help". Select the update file(\*.rec). the update mode select: YM02\_FW\_Vxxxx\_UserPart.rec, select "UserPart". YM02\_FW\_Vxxxx\_All.rec, select "All". Connect the programmer to PC and reset, then update.

🖳 Device	Update				
file nam - Update	ne: <mark>Choose</mark> mode	program	file	• • •	
_ ⊚ ai	L	⊙ USER	PART		
	Reset	Uj	pdate		
					:

7: firmware update

# 5.2 Programmer Information

Some information of programmer displayed in the bottom right corner of UI.

Programmer Inf fw. version: Device ID:
Last Program Inf MCU: Limited number: Success time: Failure time:
Program Inf MCU : Download file: Limited Number: Checksum:

8: programmer information

# 5.3 Chip Setting

Times limit: if select no limit you can set the times 999999 maximum.

Flash security: disabling any read/write access to the Flash momory from any external pin.

Select MCV	Interface ctl Security	y ctl Prog ctl sequence num ctl
MCV: S	Select MCV	Flash Size:
☑ Unli Limited Nu	mited umber: 000000	🗸 Flash Security

9: chip setting

🔍 Select MCU	
Manufacture: 	Partnumber: MB95F562 MB95F563 MB95F564 MB95F572 MB95F573 MB95F574 MB95F582 MB95F583 MB95F584
	Select

Chip select: select the target Part number.

10: chip select

### 5.4 Program Control

Program delay: the program operation will delay any time after the target chip power on. If the large bulk capacitance in the target system you can use this function.

#### NOTE:

 $\diamond$  ~ The delay time set more large maybe failure in program. Default is 1, unit is "ms".

Sel	ect MCV	Interface ctl	Security ctl	Prog	ctl sequence	e num ctl
-0	Operation	Mode			Prog Delay Ta	ime(ms)
(	) Chip	Start		·] .	_	
(	O Block	End				1
[	Not er	ase Dataflash	📃 Run after	prog	🔽 Checksum	after prog

11: program control

## 5.5 Serial Number Control

Write the regular serial number in fixed area of flash.

Select MCU Inte	rface ctl	Security ctl Prog ctl sequence num ctl				
☑ Serial Number Ctl						
start address:	OxFFB2	🔿 HEX 💿 BCD 💿 ASCII				
end address:	0xFFB9	Start W 000000000000000				
Increment:	1	Start No.: 0000000000000000				

12: serial number control 1

The default mode is incremental mode, 8 bytes can write in fixed area. If the area less than 8 bytes, the lower bytes will be write. The current number will change when program succeed. If not use incremental mode select, the current number will no change always.

Select MCV Inte	rface ctl S	Security ctl Prog ctl sequence num ctl				
✓ Serial Number Ctl ✓ Disable Incremental mode						
start address:	0xFFB2	◯ HEX				
end address:	OxFFB9	Sturt W. 1 0000000000000000				
Increment:	1	Start Mo.: 0000000000000000				

13: serial number control 2

If program succeed, the current serial number will display in LCD.

#### NOTE:

- ♦ End address must greater than start address. The range of address must less than 8.
- $\diamond$  When the range of address less than 8, only lower data can be save.

## 5.6 Download Program

Connect the programmer to PC, and click the button "Connect Device", select the MCU partnumber and setting parameter. Click the button "Download Program" and choose the file, the program file will download to the programmer.

Over download, the programmer can disconnect from the PC.



14: Download Program

## 5.7 Online Operation

VM02 Programmer-FUJITSU							
File(F) Tool(T) Help(H)							
	Select MCU Interface ctl Security ctl	Prog ctl s					
	MCV: MB95F564	F1:					
Connect Device	✓ Unlimited Limited Number: 000000						
Program Era	ase Checksum						

#### 15: Online Operation

The online operation can be do when the programmer connect to PC.

Program, Erase, Checksum will validly.

Thank you, more information please click: <u>Http://www.yumingdz.com</u> Email: ym@yumingdz.com