

8-bit Microcontrollers MB95330H Series



MB95330H is a series of general-purpose, single-chip microcontrollers. In addition to a compact instruction set, the microcontrollers of this series contain a variety of peripheral resources. It is possible to use it for the equipment that needs the motor control like general home appliances and the power tools widely.

■ FEATURES

- **F²MC-8FX CPU**
Instruction set optimized for controllers
- **Clock**
Maximum clock frequency : 16.25MHz
- **Timer**
8/16-bit composite timer : 2 channels
8/16-bit PPG timer : 3 channels
16-bit PPG timer : 1 channel
16-bit reload timer : 1 channel
Time-base timer : 1 channel
Watch prescaler : 1 channel
- **UART/SIO** : 1 channel
- **I²C** : 1 channel
- **Multi-pulse generator (for DC motor control)** : 1 channel
- **LIN/UART** : 1 channel
- **External interrupt** : 10 channels
 - Interrupt by edge detection
 - Can be used to wake up the device from different low power consumption (standby) modes
- **8/10-bit A/D converter** : 8 channels
- **Low power consumption (standby) modes**
Stop mode
Sleep mode
Watch mode
Time-base timer mode
- **I/O port**
MB95F332K/F333K/F334K : 29
MB95F332H/F333H/F334H : 28
- **On-chip debug**
 - 1-wire serial control
 - Serial writing supported (asynchronous mode)
- **Low-voltage detection reset circuit**
- **Clock supervisor counter**
- **Dual operation Flash memory**
- **Flash memory security function**
- **Power supply** : 2.4~5.5V
*The range of the power supply voltage is different according to the operating frequency and the operating temperature.

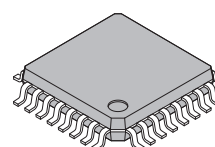
■ PRODUCT LINEUP

Part number Parameter	MB95F332H	MB95F333H	MB95F334H	MB95F332K	MB95F333K	MB95F334K
Type	Flash memory product					
ROM (Byte)	8K	12K	20K	8K	12K	20K
RAM (Byte)	240	496	1008	240	496	1008
Low-voltage detection reset	No			Yes		

■ ORDERING INFORMATION

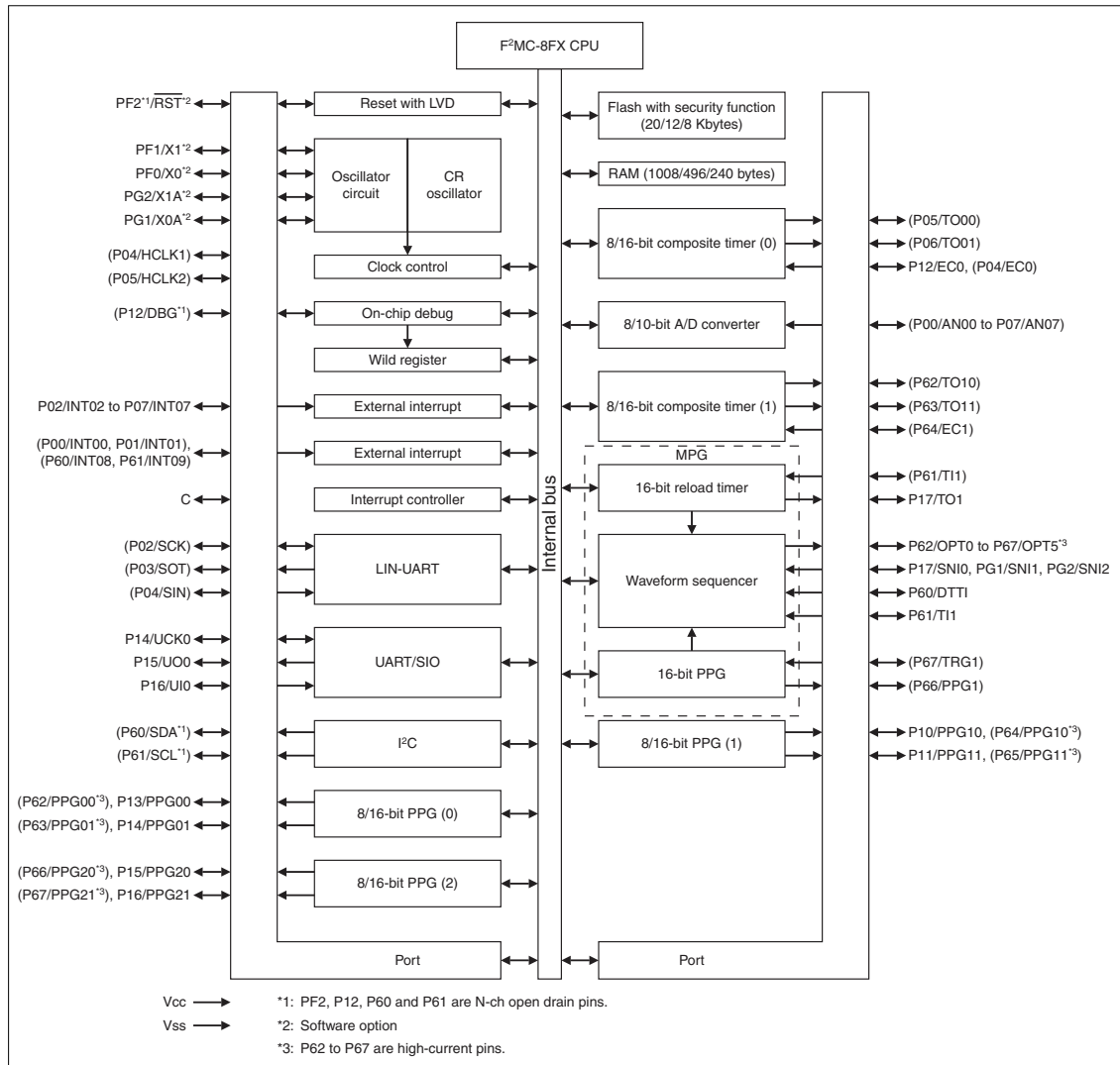
Product name	Package	Remarks
MB95F332HPMC MB95F332KPMC MB95F333HPMC MB95F333KPMC MB95F334HPMC MB95F334KPMC	Plastic • LQFP, 32-pis (FPT-32P-M30) 7.0mm□, 0.80mm pitch	-
MB95F332HP MB95F332KP MB95F333HP MB95F333KP MB95F334HP MB95F334KP	Plastic • SH-DIP, 32-pins (DIP-32P-M06) 28.0mm×8.89mm, 1.778mm pitch	-
MB95F332HWQN MB95F332KWQN MB95F333HWQN MB95F333KWQN MB95F334HWQN MB95F334KWQN	Plastic • QFN, 32-pins (LCC-32P-M19) 5.0mm□, 0.50mm pitch	-

■ PACKAGE EXAMPLE OF REFERENCE



Plastic • LQFP, 32-pins
(FPT-32P-M30)

■ BLOCK DIAGRAM



■ SUPPORT TOOL

• HARDWARE

Name	Part Number	Remarks
BGM adapter	MB2146-08-E	F²MC-8FX MB95200 series in common
PC cable	USB cable	Attached to MB2146-08-E, 1.0m
Evaluation board	MB2146-440-E	-

• SOFTWARE

Software	Part Number	Operating System
SOFTUNE V3 Professional Pack	SP3603Z008-P01	Windows2000/XP/Vista

• FLASH MICROCONTROLLER PROGRAMMER

Name	Remarks
Parallel programmer	Made by Flash Support Group, etc. (Under contemplation)
Serial on board programmer	FUJITSU FLASH MCU Programmer