To all our customers

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Note : Mitsubishi Electric will continue the business operations of high frequency & optical devices and power devices.

Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

M6MGB/T641S8TP

67,108,864-BIT (4,194,304-WORD BY 16-BIT / 8,388,608-WORD BY 8-BIT) CMOS FLASH MEMORY &

8,388,608-BIT (524,288-WORD BY 16-BIT / 1,048,576-WORD BY 8-BIT) CMOS SRAM

Stacked-ｍMCP (micro Multi Chip Package)

DESCRIPTION

The MITSUBISHI M6MGB/T641S8TP is a Stacked micro Multi Chip Package (S-μ MCP) that contents 64M-bit Flash memory and 8M-bit Static RAM in a 52-pin TSOP.

64M-bit Flash memory is a 4,194,304 words / 8,388,608 bytes single power supply and high performance non-volatile memory fabricated by CMOS technology for the peripheral circuit and DINOR IV (Divided bit-line NOR IV) architecture for the memory cell. All memory blocks are locked and can not be programmed or erased, when F-WP# is Low. Using Software Lock Release function, program or erase operation can be executed.

8M-bit SRAM is a 524,288 words / 1,048576 bytes asynchronous SRAM fabricated by CMOS technology for the peripheral circuit and CMOS type transistor for the memory cell.

The MITSUBISHI M6MGB/T641S8TP is suitable for a high performance cellular phone and a mobile PC that are required to be small mounting area, weight and small power dissipation.

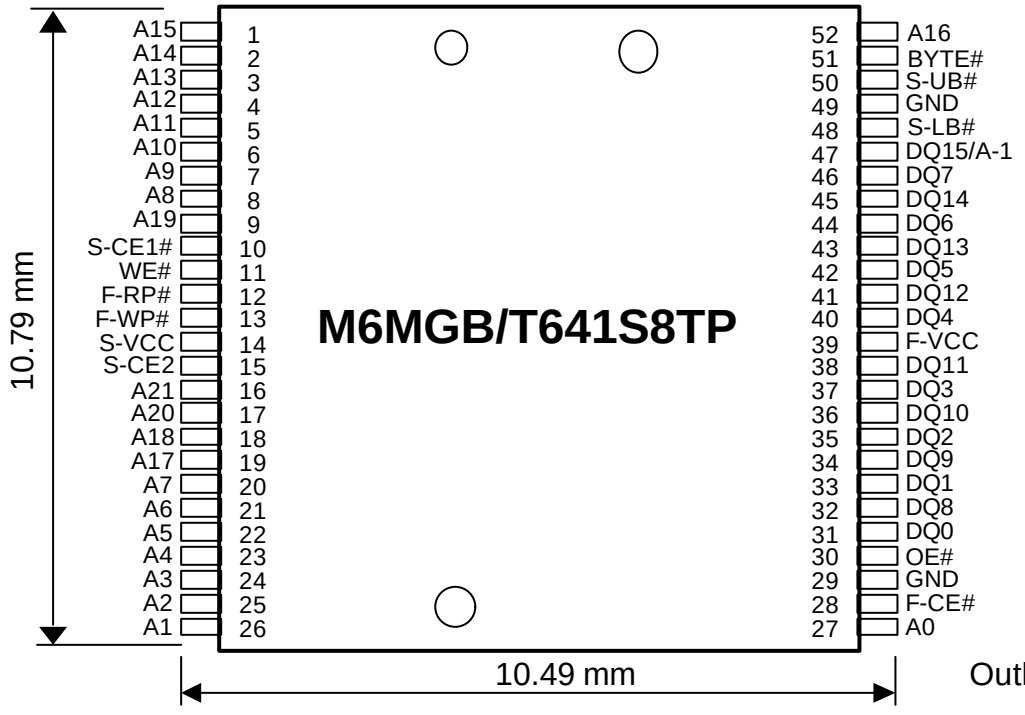
FEATURES

Access time	Flash	85ns (Max.)
	SRAM	85ns (Max.)
Supply voltage		VCC = 2.7 ~ 3.0V
Ambient temperature		Ta=-20 ~ 85 °C
Package	52pin TSOP(Type-II), Lead pitch 0.4mm	

APPLICATION

Mobile communication products

PIN CONFIGURATION (TOP VIEW)



Outline 52PTG-A

F-VCC	:Vcc for Flash
S-VCC	:Vcc for SRAM
GND	:GND for Flash/SRAM
A-1-A18	:Flash/SRAM common Address
A19-A21	:Address for Flash
DQ0-DQ15	:Data I/O
F-CE#	:Flash Chip Enable
S-CE#,S-CE2	:SRAM Chip Enable
OE#	:Flash/SRAM Output Enable
WE#	:Flash/SRAM Write Enable
F-WP#	:Flash Write Protect
F-RP#	:Flash Reset Power Down
BYTE#	:Flash/SRAM Byte Enable
S-LB#	:SRAM Lower Byte
S-UB#	:SRAM Upper Byte

RENESAS
Renesas Technology Corp.

Keep safety first in your circuit designs!

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