

To all our customers

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The semiconductor operations of Hitachi and Mitsubishi Electric were transferred to Renesas Technology Corporation on April 1st 2003. These operations include microcomputer, logic, analog and discrete devices, and memory chips other than DRAMs (flash memory, SRAMs etc.) Accordingly, although Mitsubishi Electric, Mitsubishi Electric Corporation, Mitsubishi Semiconductors, and other Mitsubishi brand names are mentioned in the document, these names have in fact all been changed to Renesas Technology Corp. Thank you for your understanding. Except for our corporate trademark, logo and corporate statement, no changes whatsoever have been made to the contents of the document, and these changes do not constitute any alteration to the contents of the document itself.

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- μ MCP (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 / 1,048,576 bytes asynchronous SRAM fabricated by CMOS technology for the peripheral circuit and CMOS type transistor for the memory cell.

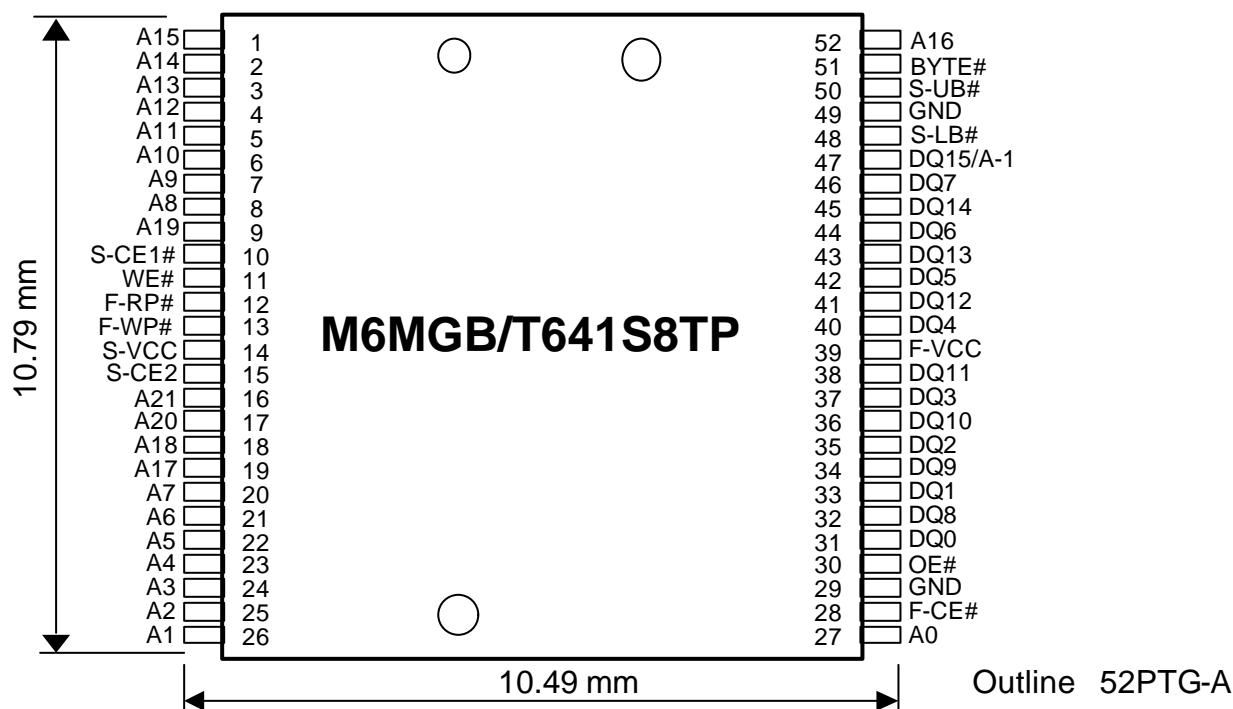
The MITSUBISHI M6MGB/T641S8TP is suitable for a high performance cellular phone and a mobile PC that are required to be small mounting area, weight and small power dissipation.

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)

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

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