TOSHIBA
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NEW PRODUCT

September 2008

8bit	TLCS-870 Family TLCS-870/C1 Series	42pin
	[NEW] TMP89FH40NG [NEW] TMP89FM40NG FLASH	

8-bit microcontrollers delivering high functionality and performance in low-pin-count packages

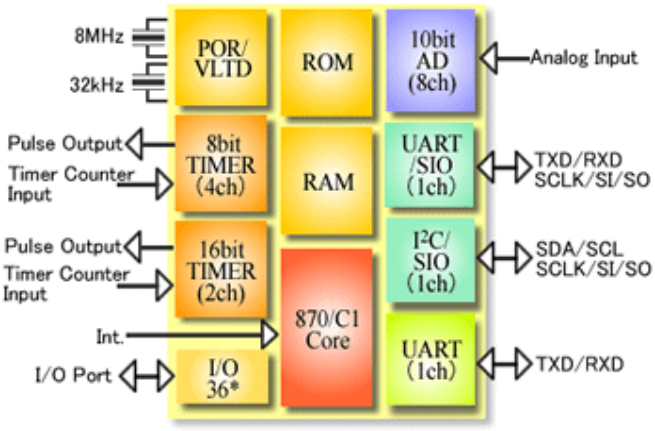
Features

TLCS-870/C1 CPU Core

·Operating voltage
4.3 to 5.5 V at 10 MHz
2.7 to 5.5 V at 4.2 MHz
2.2 to 5.5 V at 2 MHz
·Clock gear
1/4, 1/2, 1/1

Built-in Functions

·Voltage detecting circuit
(Two voltage levels detectable, reset or interrupt selectable)
·Power-on reset circuit
·10-bit AD converter : 8 channels
·8-bit timer : 4 channels
·16-bit timer : 2 channels
·UART/SIO : 1 channel
·UART : 1 channel
·I^2C/SIO : 1 channel
(One SIO channel can be used at a time.)
·Built-in pull-up resistors
·On-chip debug function (Flash version only)



*:Two pins are used for high-frequency oscillation and cannot be used as input/output ports.

Flash Memory Size

Part number	ROM(Flash)	RAM
TMP89FH40NG	16 Kbytes	2 Kbytes
TMP89FM40NG	32 Kbytes	2 Kbytes

Development Systems

Software Products

Toshiba Integrated Development Environment	C Compiler	SW89CN0-ZCC: 1 license SW89CN3-ZCC: 10 licenses
	Integrated Development Environment	SW00MN0-ZCC: 1 license SW00MN3-ZCC: 10 licenses The emulator comes with a single-seat download license.

Hardware Products

**:Under development

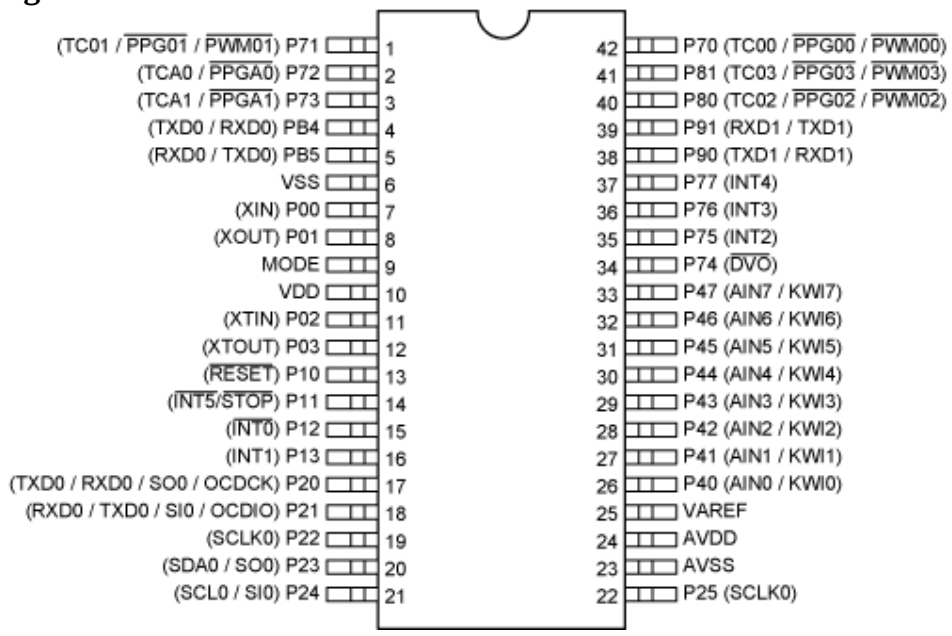
On-Chip Debug Emulator	Emulator	BMP89A400010A-G
In-Circuit Emulator	Emulator	BMP89A300010A-G
	Emulation chip	TMP89C900XBG**

› As to hardware products, additional accessories are also needed.

» For further information about Toshiba microcomputers and Toshiba microcomputer development systems, please visit http://www.semicon.toshiba.co.jp/eng/product/micro/index.html
» Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

Package Information

Pin Assignments



Package name: SDIP42-P-600-1.78

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Semiconductor Company

http://www.semicon.toshiba.co.jp/eng