



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

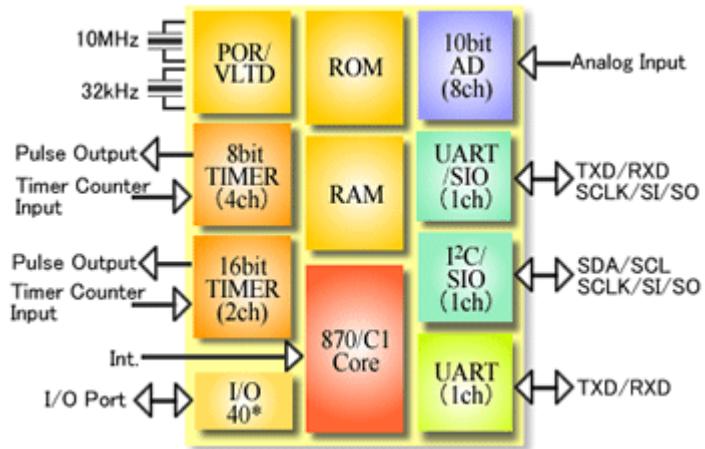
Features

● 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
- I²C/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
TMP89FH42UG	16 Kbytes	2 Kbytes
TMP89FM42UG	32 Kbytes	2 Kbytes

● Product Lineup

Part number	ROM	RAM
TMP89CH42UG	16 Kbytes	2 Kbytes
TMP89CM42UG	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

Use either an On-Chip Debug Emulator or an In-Circuit Emulator.

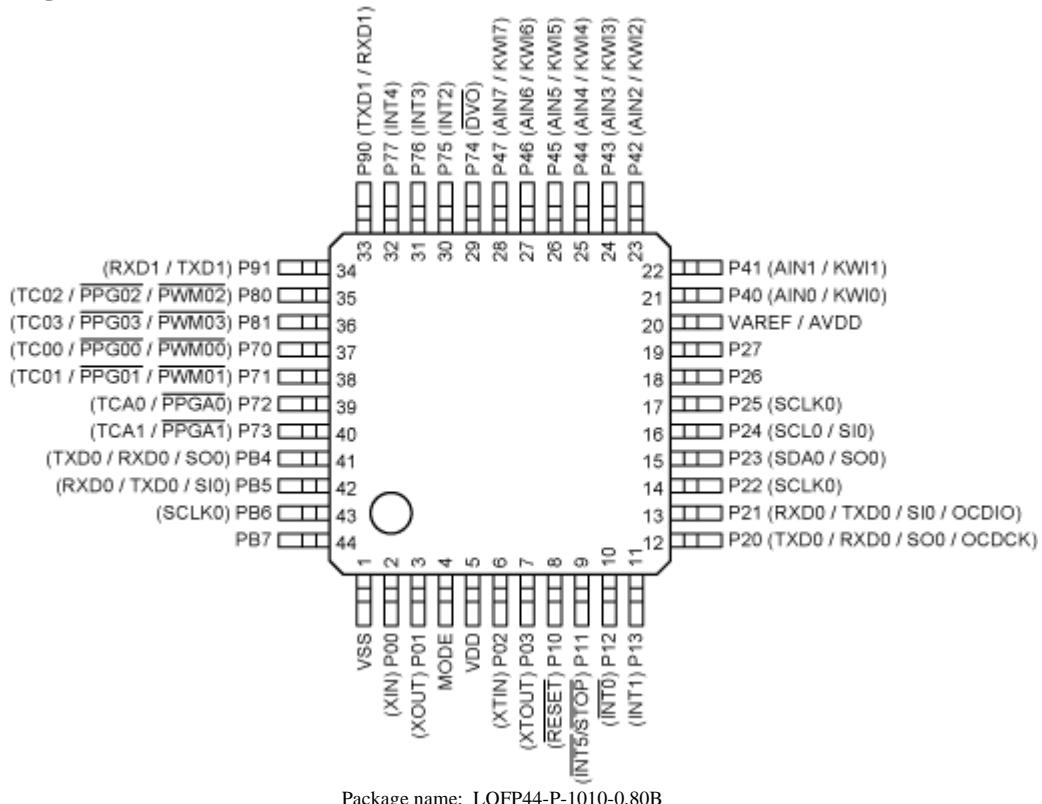
As to hardware products, additional accessories are also needed.

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Package Information

● Pin Assignments



Package name: LQFP44-P-1010-0.80B

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