8bit	TLCS-870 Family TLCS-870/C1 Series

TMP89FH42UG

TMP89FM42UG

FLASH

44pin

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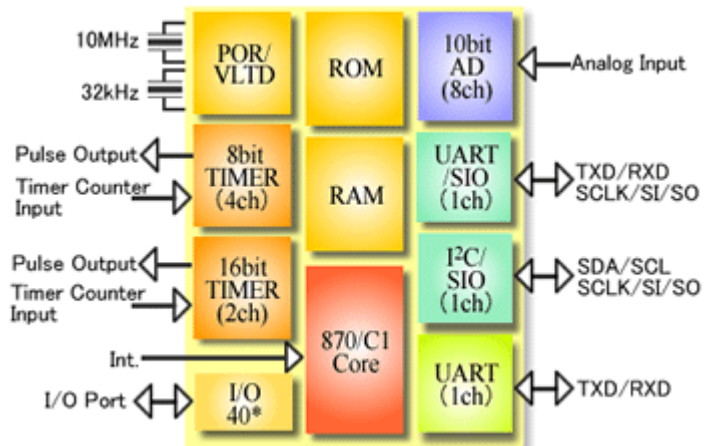
*:Two pins are used for high-frequency oscillation and cannot be used as input/output ports.

● Flash Memory Size

Part number	ROM(Flash)	RAM
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
	Emulation chip	TMP89C900XBG**

› Use either an On-Chip Debug Emulator or an In-Circuit Emulator.
› 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
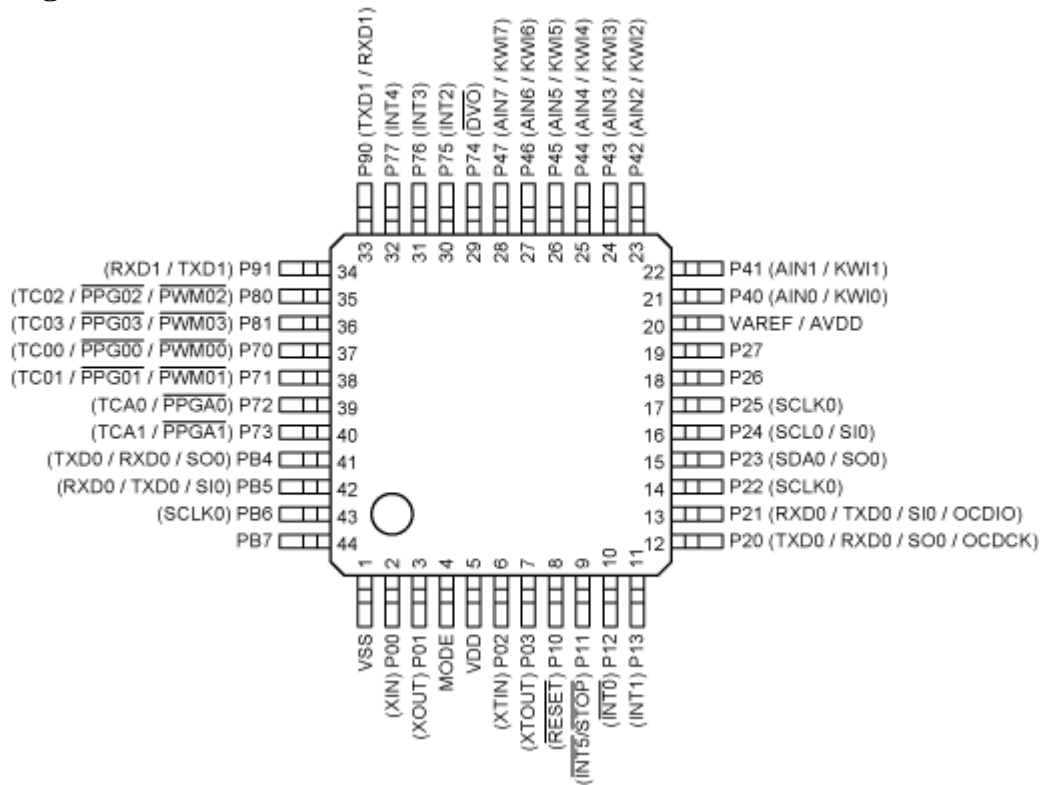
Package name: LQFP44-P-1010-0.80B

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