

# TMP86C809NG TMP86CH09NG

8-bit microcontroller in 32-pin SDIP package  
suitable for home appliances

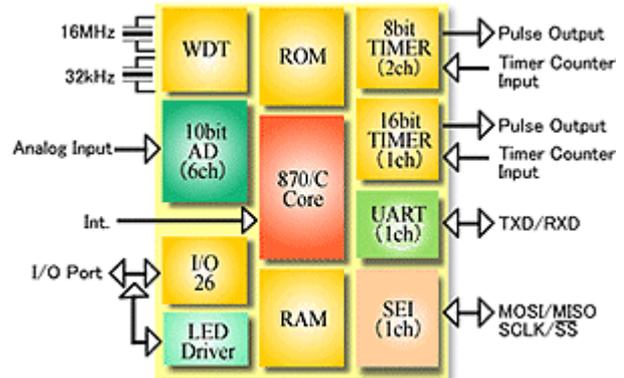
## Features

### TLCS-870/C CPU Core

- ▶ Operating voltage:  
4.5 V at 16 MHz
- ▶ Minimum instruction execution time:  
250 ns (at 16 MHz/ 4.5 to 5.5 V)  
500 ns (at 8 MHz/ 2.7 to 5.5 V)

### Built-in Functions

- ▶ 10-bit AD converter : 6 channels
- ▶ UART : 1 channel
- ▶ SEI : 1 channel
- ▶ 8-bit timer : 2 channels  
(usable as 16-bit timer by cascading connection)
- ▶ 16-bit timer : 1 channel
- ▶ Key-on wake-up : 4 channels



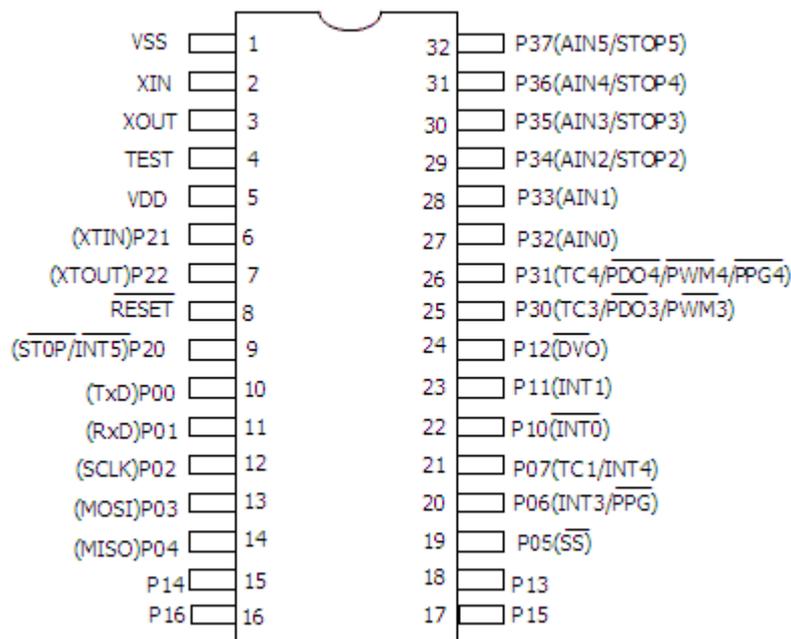
### Memory Size

Part number	ROM	RAM
TMP86C809NG	8 Kbytes	512 bytes
TMP86CH09NG	16 Kbytes	512 bytes

\*Products with flash memory are also available.

## Package Information

### Pin Assignments



Package name: SDIP32-P-400-1.78

# 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 controller and Light emulator comes with a single-seat download license.

## Hardware Products Emulator

RTE870/C model 15 system	Controller	BM1040R0B-G
	Interface module	BMP86A100010B
	Emulation module	BMP86A200020A
	Target connection board	BMP86D032NB0A
	Emulation chip	TMP86C909XB
RTE870/C Light system	Light emulator	BMP86A300020A
	Emulation chip	TMP86C909XB

\* Select either RTE870/C model 15 system or RTE870/C Light system.

\* 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>

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