## TLCS-870 Family TLCS-870/C Series

8-bit / 64-pin

# TMP86CH21AUG TMP86CH21FG

# 8-bit microcontrollers with LCD driver supporting 128 pixels

## **Features**

## TLCS-870/C CPU Core

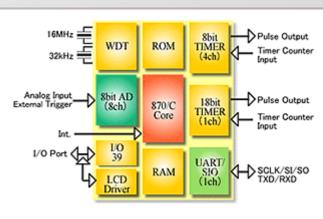
- Operating voltage: 1.8 to 5.5 V
- Minimum instruction execution time: 250 ns (at 16 MHz/ 4.5 to 5.5 V)
   500 ns (at 8 MHz/ 2.7 to 5.5 V)
   950 ns (at 4.2 MHz/ 1.8 to 5.5 V)

### **Built-in Functions**

- LCD driver : 32 seg.×4com.
- 8-bit AD converter : 8 channels
- UART/SIO : 1 channel
- 8-bit timer : 4 channels
- 18-bit timer : 1 channel

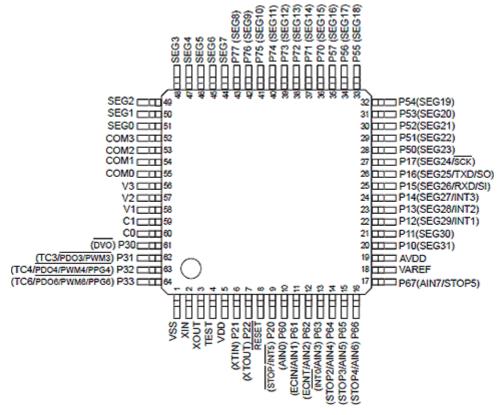
## Package Information

#### **Pin Assignments**



## **Memory Size**

Part number	ROM	RAM
TMP86CH21AUG	16 Kbytes	512 bytes
TMP86CH21FG	16 Kbytes	512 bytes



## Package name UG:LQFP64-P-1010-0.50D FG:QFP64-P-1414-0.80C

## Development Systems

#### Software Products

	C Compiler	SW89CN0-ZCC: 1 license SW89CN3-ZCC: 10 licenses
Toshiba Integrated Development Environment	Integrated Development	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	BMP86A200010B
	Target connection board	BMP86D064DG0A: LQFP64 (10×10) / BMP86D064DE0A: QFP64 (14×14)
	Emulation chip	TMP86C929AXB
RTE870/C Light system	Light emulator	BMP86A300010A
	Emulation chip	TMP86C929AXB

\* 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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