

# TMP88CS77FG TMP88CU77FG TMP88PU77FG

**8-bit high-speed and high-functionality microcontroller  
with vacuum fluorescent tube driver and multi-function timers**

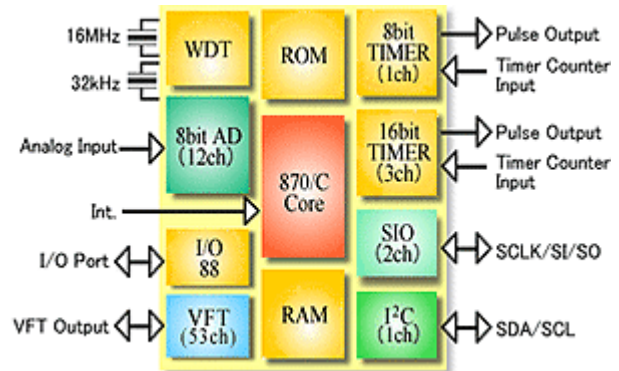
## Features

### TLCS-870/X CPU Core

- ▶ Operating voltage  
2.7 to 5.5 V
- ▶ Minimum instruction execution time  
320 ns (at 12.5 MHz / 4.5 to 5.5 V)  
122 μs (at 34 kHz / 2.7 to 5.5 V)

### Built-in Functions

- ▶ VFT Driver : 53 channels
- ▶ 8-bit AD converter : 12 channels
- ▶ SIO : 2 channels
- ▶ I<sup>2</sup>C : 1 channel
- ▶ 8-bit timer : 1 channel
- ▶ 16-bit timer : 3 channels

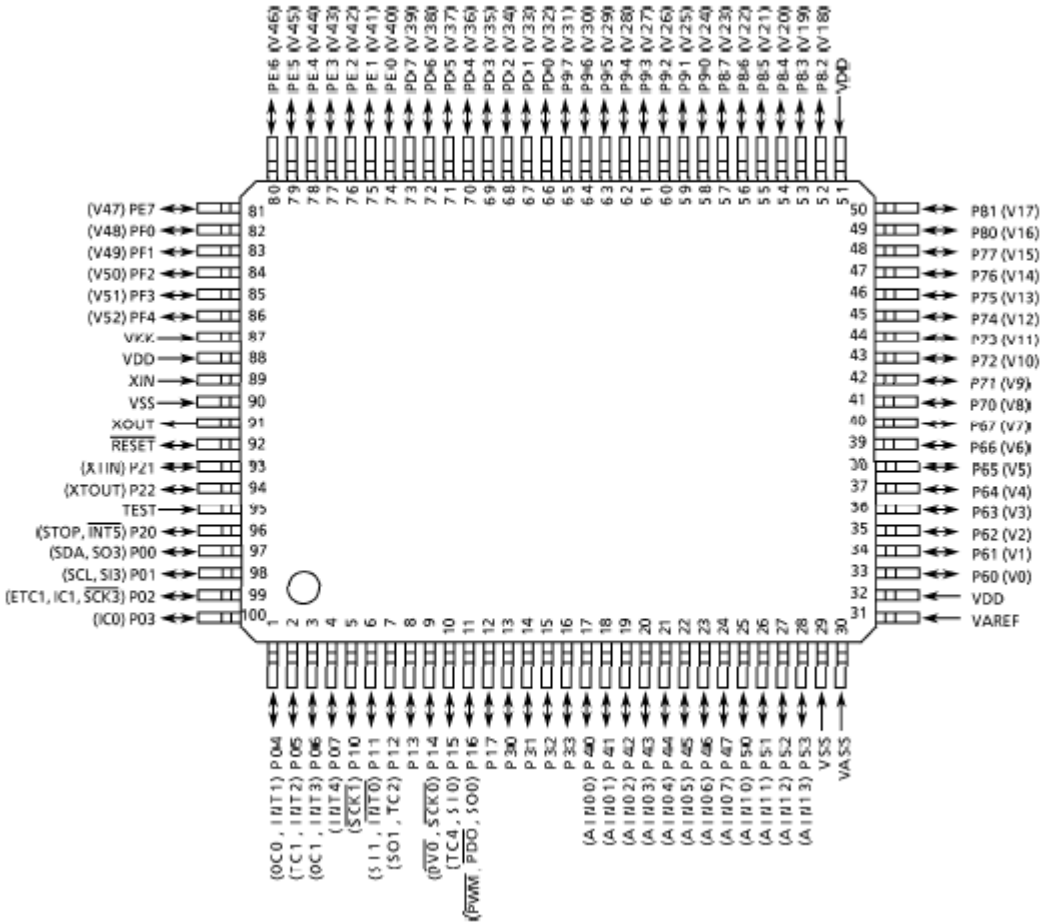


### Memory Size

Part number	ROM	RAM
TMP88CS77FG	64 Kbytes	2 Kbytes
TMP88CU77FG	96 Kbytes	3 Kbytes
TMP88PU77FG	96 Kbytes (OTP)	3 Kbytes

# Package Information

## Pin Assignments



Package name: QFP100-P-1420-0.65A

# Development Systems

## Software Products

<b>C Compiler &amp; Assembler Set</b>	SW88YN0-ZCK: 1 license (Japanese edition) SW88YN0-ZCF: 1 license (English edition) SW88YN3-ZCK: 10 licenses (Japanese edition) SW88YN3-ZCF: 10 licenses (English edition)
<b>Debugger</b>	SW88DN9-ZCK: 1 license (Japanese edition) SW88DN9-ZCF: 1 license (English edition) SW88DN3-ZCK: 10 licenses (Japanese edition) SW88DN3-ZCF: 10 licenses (English edition)

## Hardware Products Emulator

model 25 system	<b>Controller</b>	BM1055R0C
	<b>Emulation pod</b>	BM88CP77F0A

\* As to hardware products, additional accessories are also needed.

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