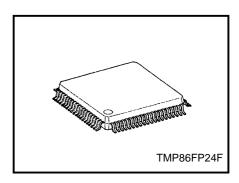
### CMOS 8-Bit Microcontroller

## TMP86FP24F

The TMP86FP24 is a flash type MCU which includes 48 K bytes flash memory. It is a pin compatible with a mask ROM product of the TMP86CP24. Writing the program to built-in flash memory, the TMP86FP24 operates as the same way as the TMP86CP24. The TMP86FP24 has a 2 K bytes BOOT ROM (masked ROM) for programming to flash memory.

Product No.	Flash Memory	BOOT ROM	RAM	Package
TMP86FP24F	48 K × 8 bits	2 K × 8 bits	2 K × 8 bits	P-LQFP80-1212-0.50A



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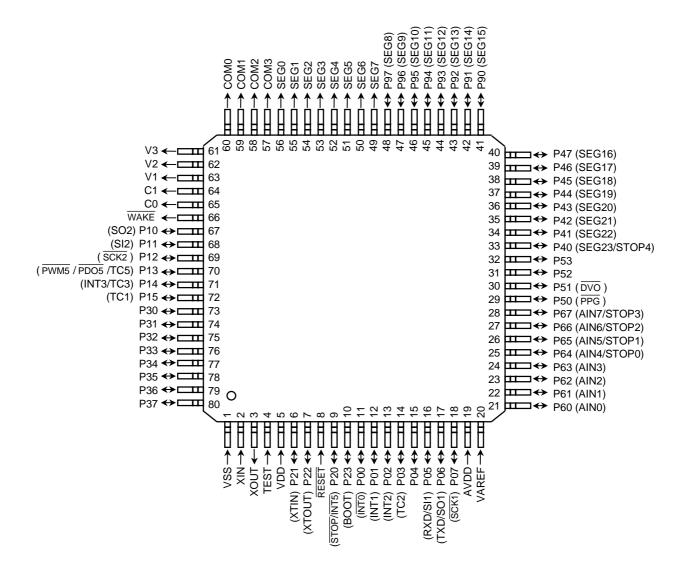


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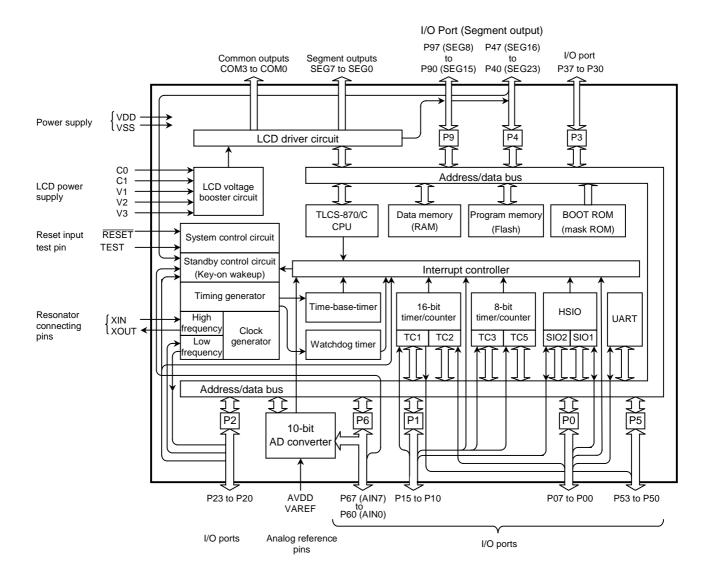
# Pin Assignments (Top view)

P-LQFP80-1212-0.50A



Note: The mask ROM product (TMP86CP24) doesn't have a BOOT function in P23 pin.

# **Block Diagram**



# Pin Funtions

The TMP86FP24 has MCU mode and serial PROM mode.

### (1) MCU mode

In the MCU mode, the TMP86FP24 is a pin compatible with the TMP86CP24 (Make sure to fix the TEST pin to low level).

#### (2) Serial PROM mode

In the serial PROM mode, programming to flash memory is available by executing BOOT ROM. For details, refer to 2.1 "Serial PROM Mode".