

## CMOS 8-bit Single Chip Microcomputer

Piggyback/  
evaluator type**Description**

The CXP84300 is a CMOS 8-bit single chip micro-computer of piggyback/evaluator combined type, which is developed for evaluating the function of the CXP84332/84340.

**Features**

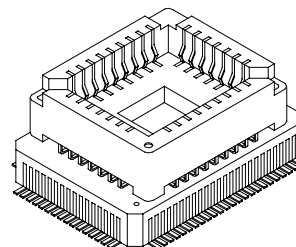
- Wide-range instruction system (213 instructions) to cover various types of data
  - 16-bit operation/multiplication and division/Boolean bit operation instructions
- Minimum instruction cycle      400ns at 10MHz operation  
   122 $\mu$ s at 32kHz operation
- Applicable EPROM                    LCC type 27C512  
   (Maximum 40K bytes are available.)
- Incorporated RAM capacity        1120 bytes
- Peripheral functions
  - A/D converter                        8-bit, 8-channel, successive approximation method  
   (Conversion time of 32 $\mu$ s/10MHz)
  - Serial interface                        Incorporated 8-bit, 8-stage FIFO  
   (Auto transfer for 1 to 8 bytes), 1 channel  
   8-bit clock sync type, 1 channel
  - Timer                                      8-bit timer  
   8-bit timer/counter  
   19-bit time base timer  
   16-bit capture timer/counter  
   32kHz timer/counter
  - Remote control reception circuit   8-bit pulse measurement counter with on-chip 6-stage FIFO
  - PWM output                            14 bits, 1 channel
- Interruption                            15 factors, 15 vectors, multi-interruption possible
- Standby mode                           Sleep/stop
- Package                                    80-pin ceramic QFP

**Note)** Mask option depends on the type of the CXP84300. Refer to the Products List for details.

**Structure**

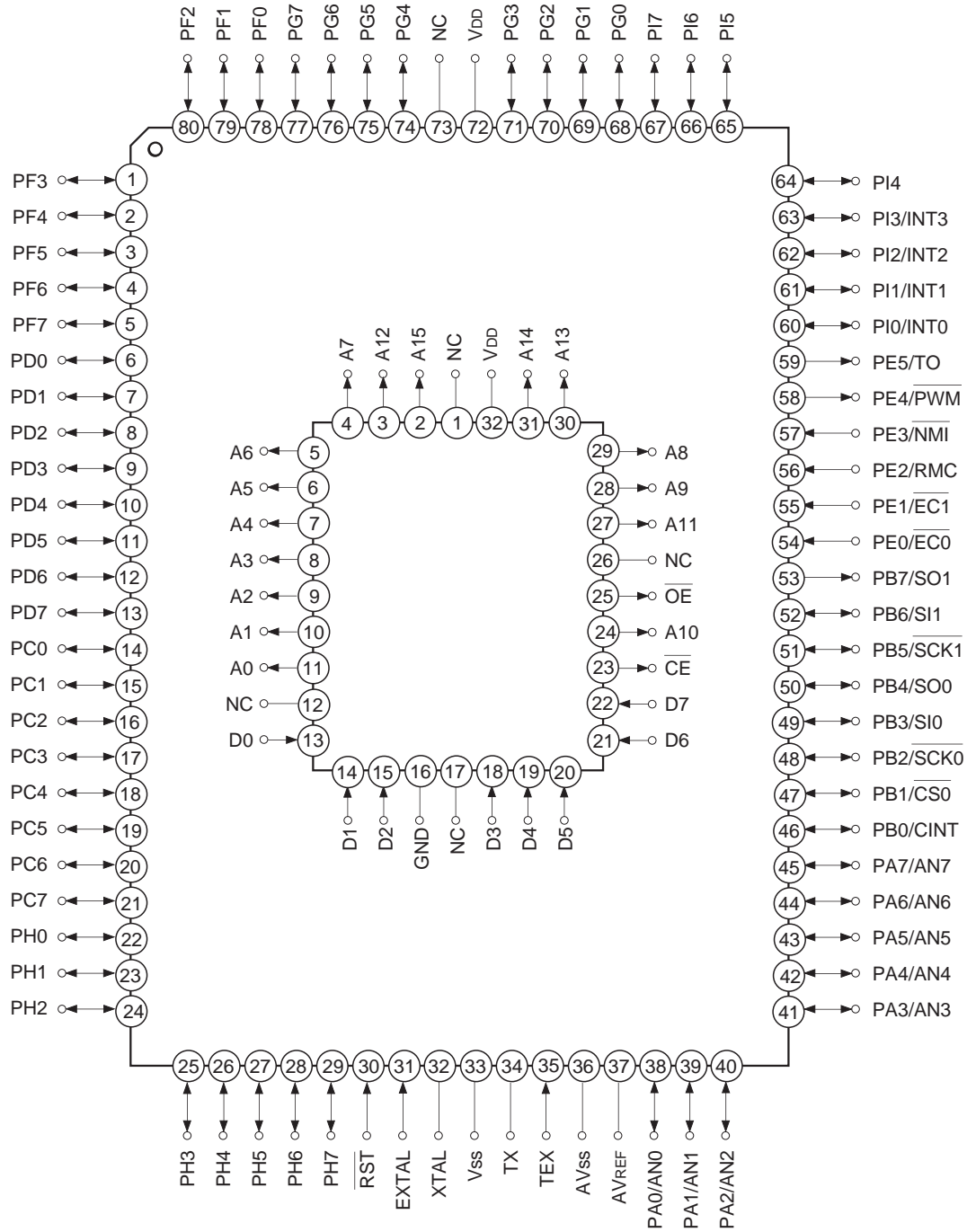
Silicon gate CMOS IC

80 pin PQFP (Ceramic)



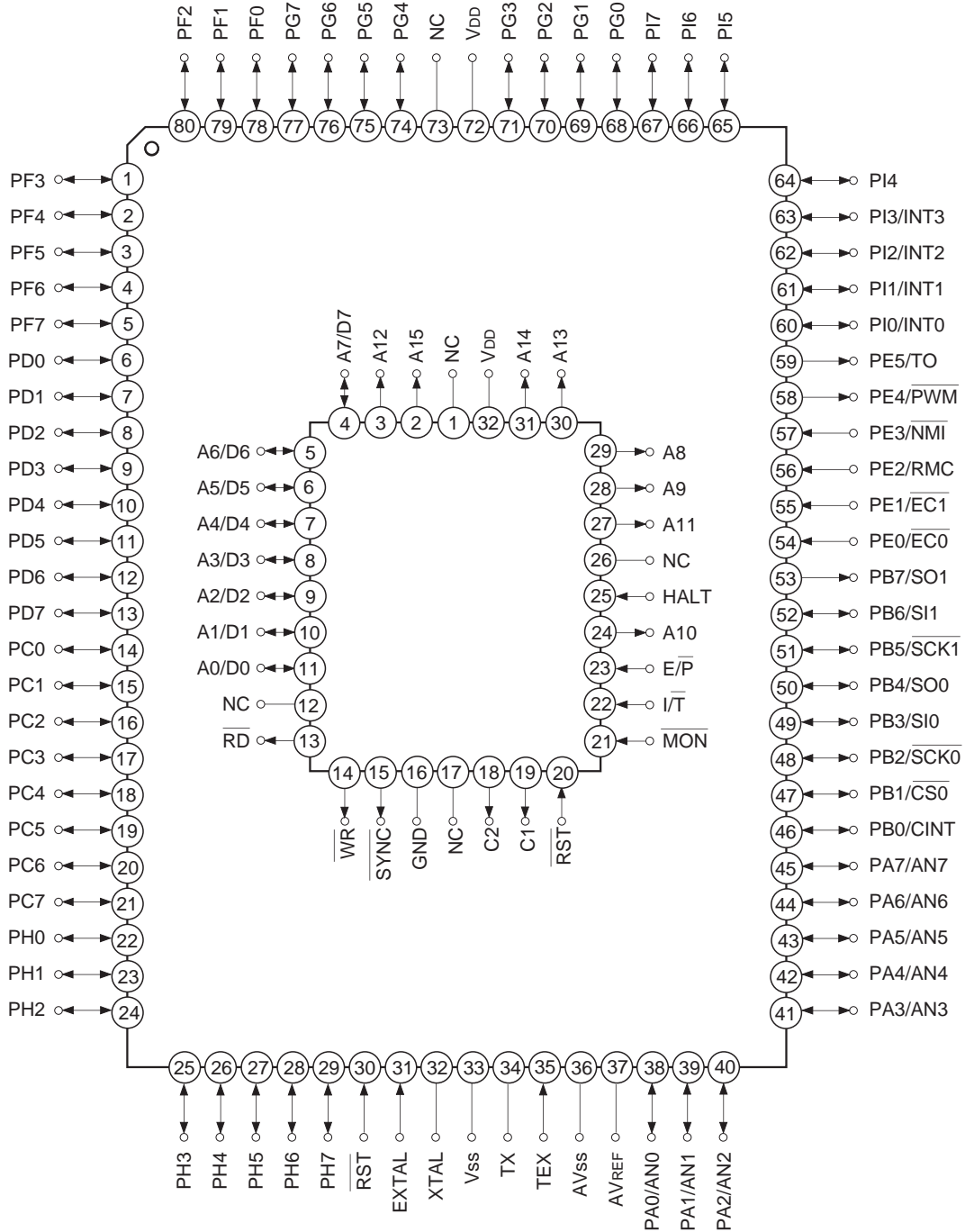
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Pin Assignment in Piggyback Mode



**Note)** NC (Pin 73) is always connected to VDD.

Pin Assignment in Evaluator Mode

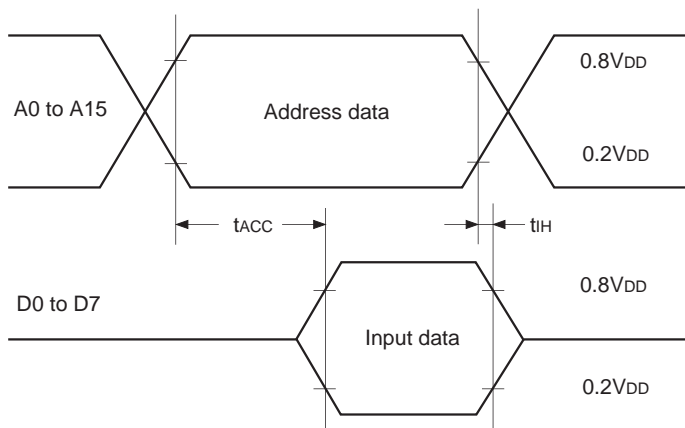


**Note)** NC (Pin 73) is always connected to VDD.

**EPROM Read Timing**

( $T_a = -20$  to  $+75^\circ\text{C}$ ,  $V_{cc} = 4.5$  to  $5.5\text{V}$ ,  $V_{ss} = 0\text{V}$  reference)

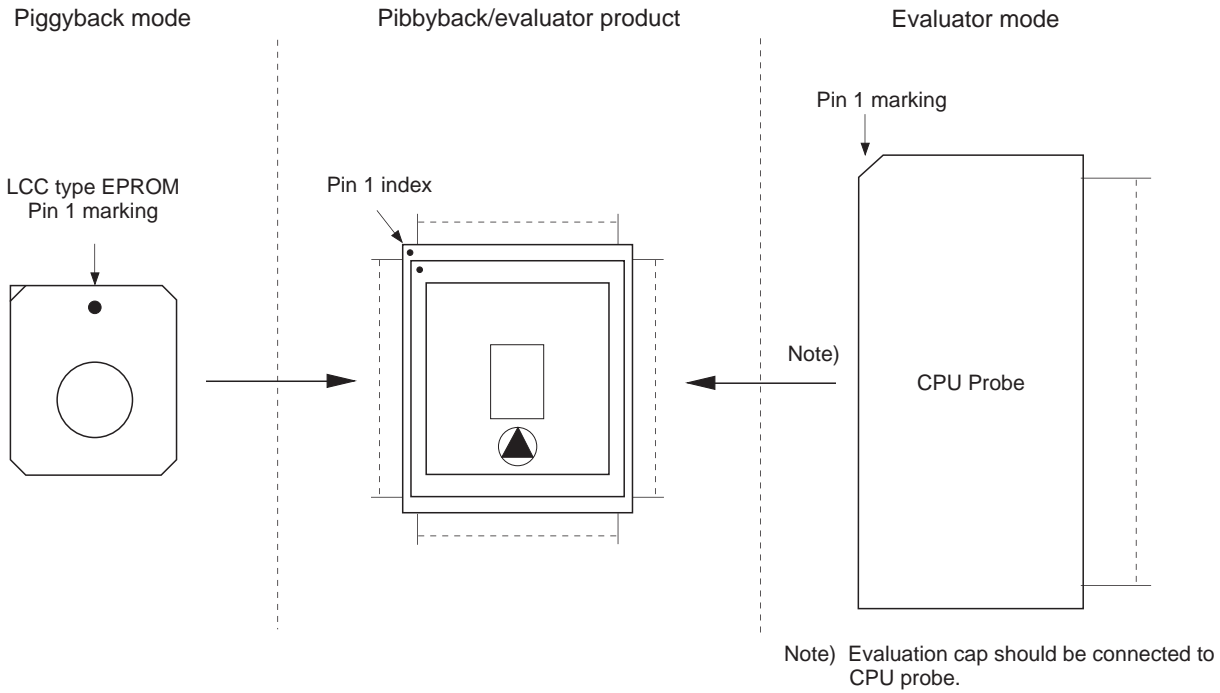
Item	Symbol	Pins	Min.	Max.	Unit
Address → Data Input delay time	$t_{ACC}$	A0 to A15 D0 to D7		120	ns
Address → Data Hold time	$t_{IH}$	A0 to A15 D0 to D7	0		ns



**Products List**

Option item	Products		
	Mask		Piggyback/evaluator
	CXP84332	CXP84340	CXP84300-U01Q
Package	80-pin plastic QFP		80-pin ceramic PQFP
ROM capacitance	32K bytes	40K bytes	EPROM 40K bytes
Pull-up resistance for reset pin	Existent/Non-existent		Existent
Power-on reset circuit	Non-existent		Non-existent

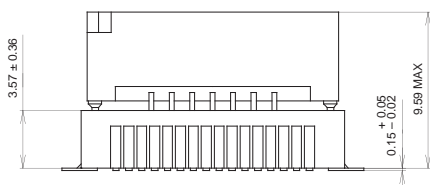
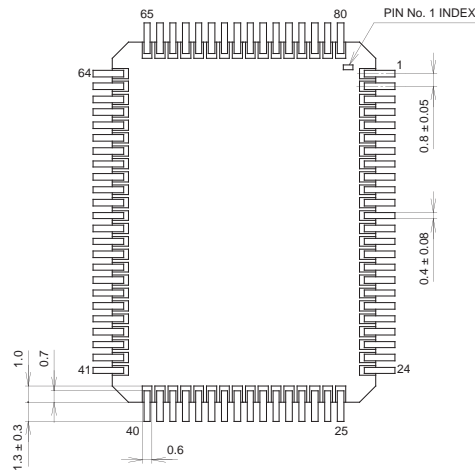
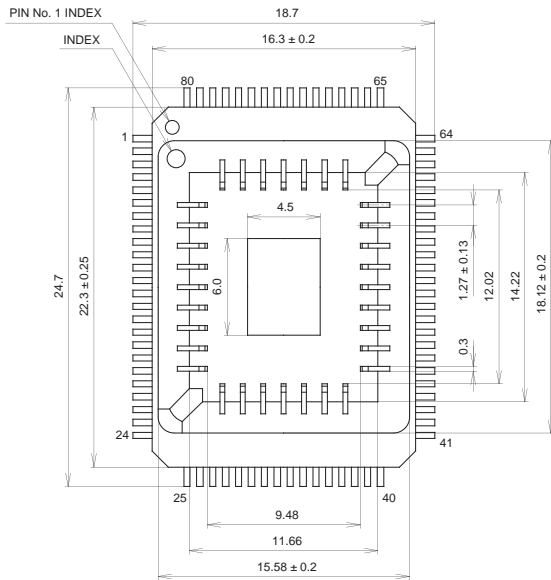
Piggyback mode/evaluator mode can be switched as shown below.



Package Outline

Unit: mm

80PIN PQFP (CERAMIC)



PACKAGE STRUCTURE

PACKAGE MATERIAL	CERAMIC
LEAD TREATMENT	GOLD PLATING
LEAD MATERIAL	42 ALLOY
PACKAGE WEIGHT	5.7g

SONY CODE	PQFP-80C-L01
EIAJ CODE	AQFP080-C-0000-A
JEDEC CODE	