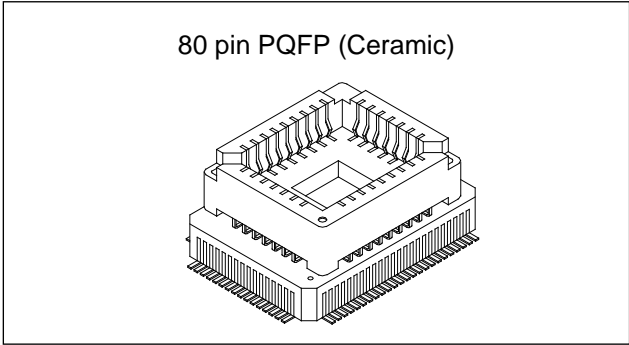


Description

The CXP84400 is a CMOS 8-bit single chip microcomputer of piggyback/evaluator combined type, which is developed for evaluating the function of the CXP84412/84416.



Features

- A wide instruction set (213 instructions) which cover various types of data.
 - 16-bit operation/multiplication and division/boolean bit operation instructions
- Minimum instruction cycle 400ns at 10MHz operation
- Applicable EPROM LCC type 27C128, LCC type 27C256
(Maximum 16K bytes are available)
- Incorporated RAM capacity 448bytes
- Peripheral functions
 - A/D converter 8-bit, 8-channel, successive approximation method
(Conversion time of 32μs/10MHz)
 - Serial interface Incorporated 8-bit, 8-stage FIFO
(Auto transfer for 1 to 8 bytes), 1 circuit 2 channels
 - Timer 8-bit timer
 8-bit timer/counter
 19-bit time base timer
 32kHz timer/counter
 - Remote control receiving circuit 8-bit pulse measurement counter with on-chip 6-stage FIFO
 - PWM output 14bits, 1channel
- Interruption 12 factors, 12 vectors, multi-interruption possible
- Standby mode SLEEP/STOP
- Package 80-pin ceramic PQFP

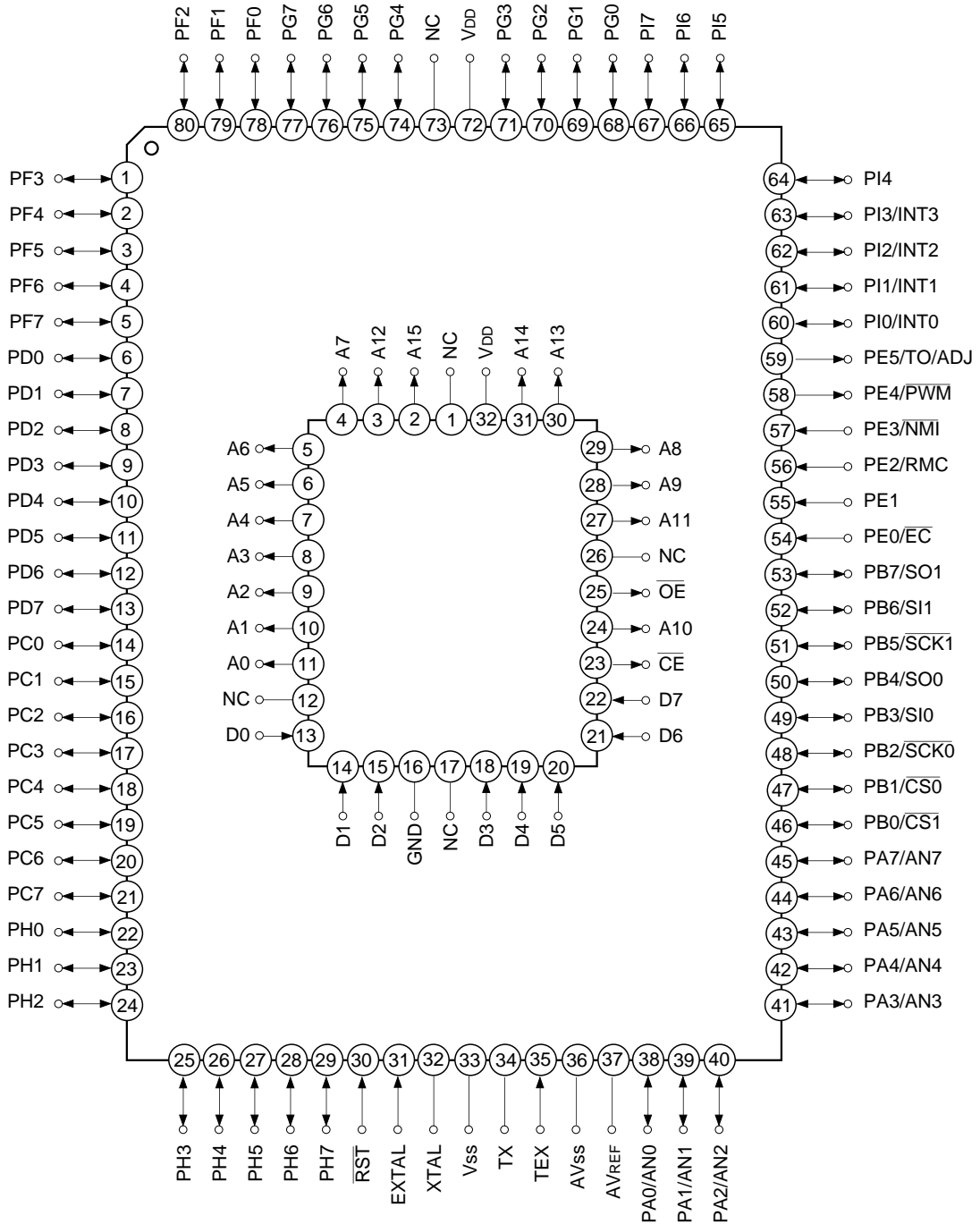
Note) Mask option depends on the type of the CXP84400. Refer to the Products List for details.

Structure

Silicon gate CMOS IC

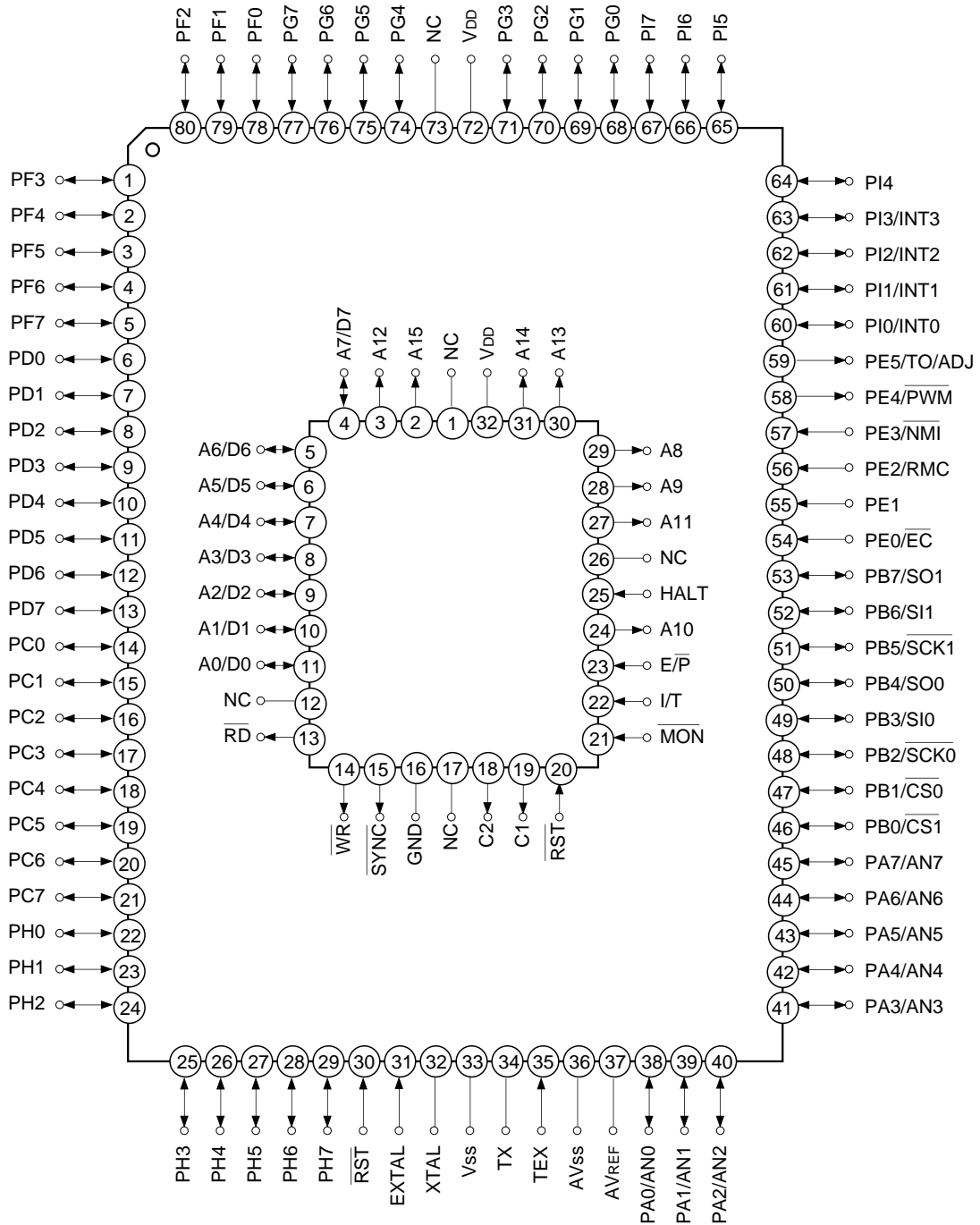
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Pin Assignment in Piggyback Mode



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

Pin Assignment in Evaluator Mode

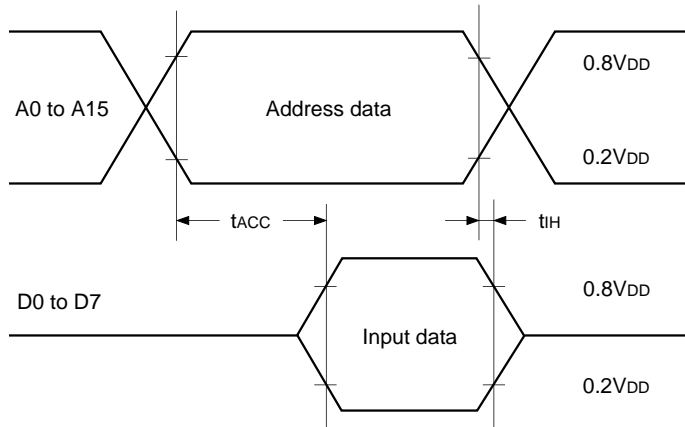


Note NC (Pin 73) is always connected to VDD.

EPROM Read Timing

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

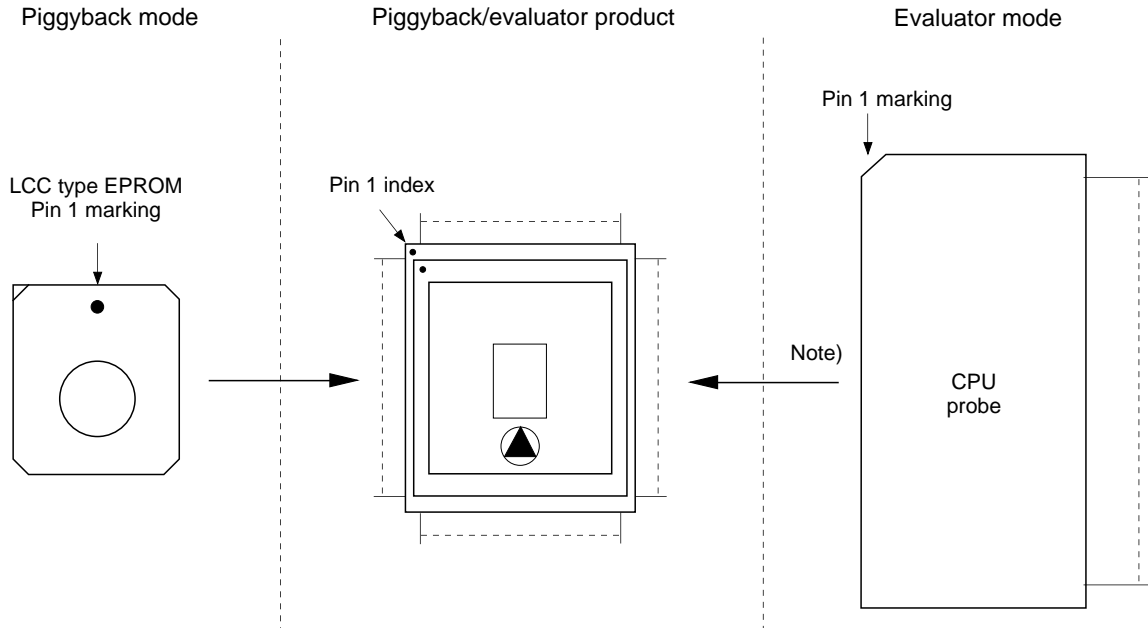
Item	Symbol	Pin	Min.	Max.	Unit
Address → data Input delay time	t_{ACC}	A0 to A15 D0 to D7		120	ns
Address → data Hold time	t_{IH}	A0 to A15 D0 to D7	0		ns



Products List

Option item	Products		
	Mask product		Piggyback/evaluator product
	CXP84412	CXP84416	CXP84400-U01Q
Package	80-pin plastic QFP		80-pin ceramic PQFP
ROM capacity	12K bytes	16K bytes	EPROM 16K bytes
Pull-up resistor for reset pin	Existent/Non-existent		Existent

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



Note) Evaluation cap should be connected to CPU probe.

Package Outline Unit: mm

