

CMOS 8-bit Single Chip Microcomputer

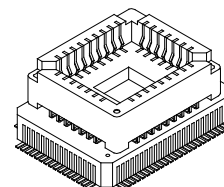
Piggyback/
evaluator type**Description**

The CXP82600 is a CMOS 8-bit single chip microcomputer of piggyback/evaluator combined type, which is developed for evaluating the function of the CXP82612/82616.

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
 - 122μs at 32kHz operation
- Applicable EPROM
 - LCC type 27C128, LCC type 27C256
(Maximum 16K bytes are available.)
- Incorporated RAM capacity
 - 448 bytes (fluorescent display data area included)
- Peripheral functions
 - A/D converter
 - 8-bit, 8-channel, successive approximation method
(Conversion time of 32μs/10MHz)
 - Serial interface
 - Incorporated 8-bit and 8-stage FIFO
(Auto transfer for 1 to 8 bytes), 1 circuit 2channels
 - Timer
 - 8-bit timer, 8-bit timer/counter,
19-bit time base timer, 32kHz timer/counter
 - Fluorescent display panel controller/driver
 - Maximum 336 segments display possible
 - 1 to 16-digit dynamic display
 - Dimmer function
 - High voltage drive output (40V)
 - On-chip pull-down resistor (Mask option)
 - Hardware key scan function
(Maximum 8 × 16 key matrix compatible.)
 - Remote control receiving circuit
 - 8-bit pulse measurement counter with on-chip
6-stage FIFO
- Interruption
 - 13 factors, 13 vectors, multi-interruption possible
- Standby mode
 - SLEEP/STOP
- Package
 - 80-pin ceramic PQFP

80 pin PQFP (Ceramic)



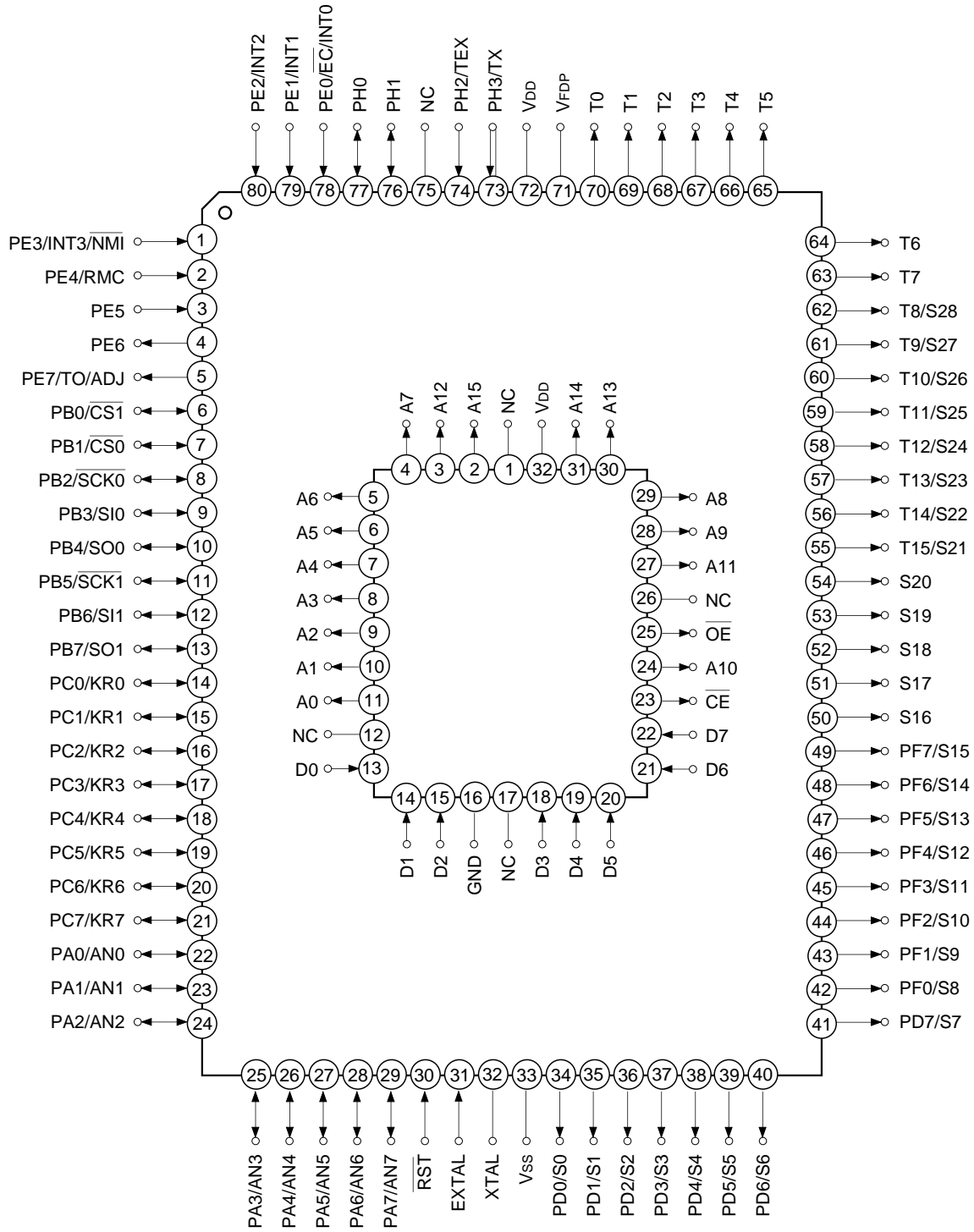
Note) Mask option depends on the type of the CXP82600. Refer to the Products List for details.

Structure

Silicon gate CMOS IC

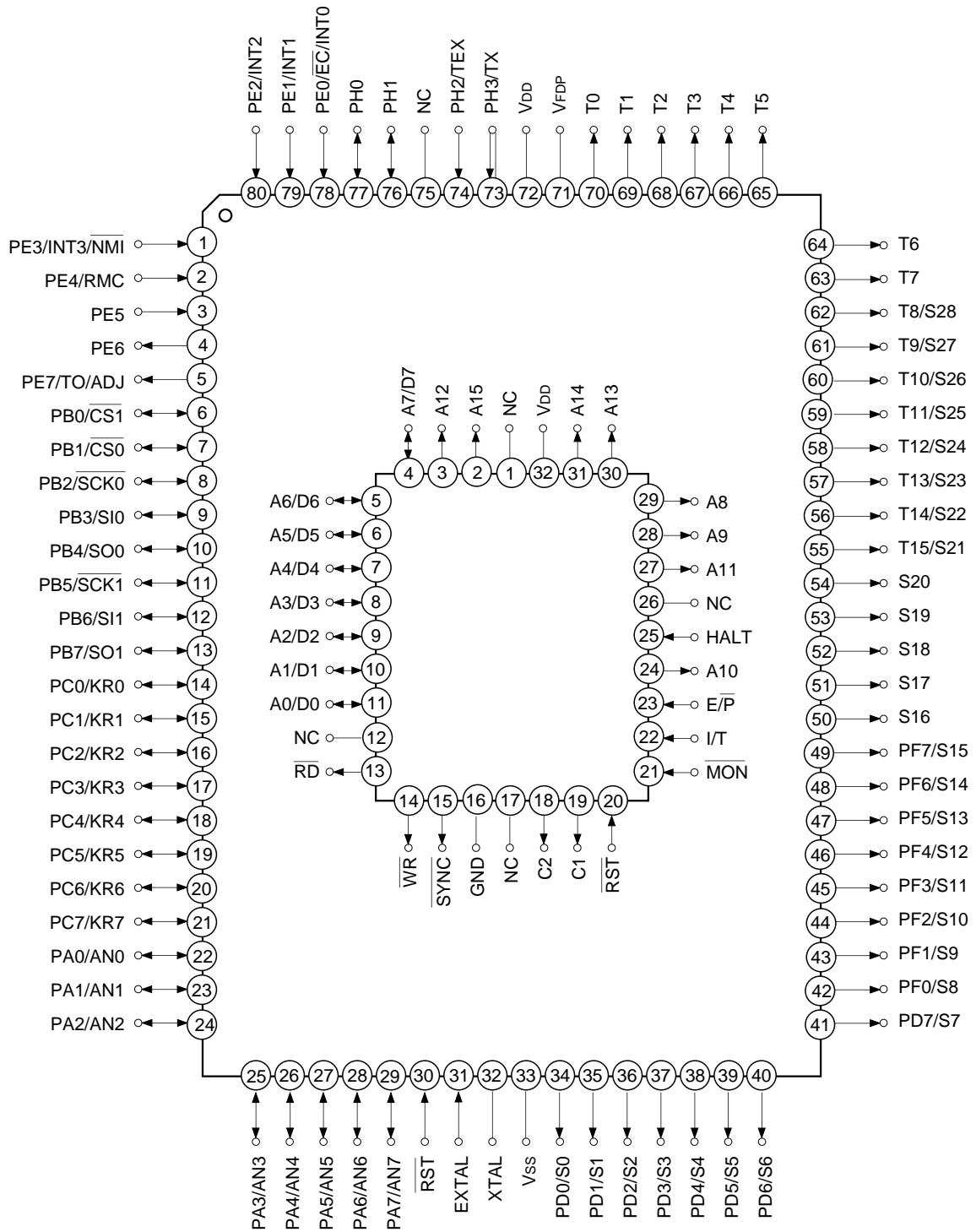
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Pin Assignment in Piggyback Mode



- Note)**
1. NC (Pin 75) is always connected to V_{DD}.
 2. PH3/TX (Pin 73) is input port during port selection; oscillation output during oscillation selection.

Pin Assignment in Evaluator Mode

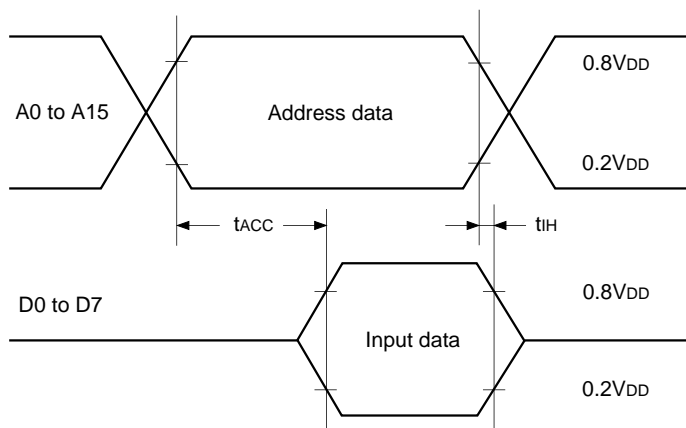


- Note)**
1. NC (Pin 75) is always connected to V_{DD}.
 2. PH3/TX (Pin 73) is input port during port selection; oscillation output during oscillation selection.

EPROM Read Timing

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

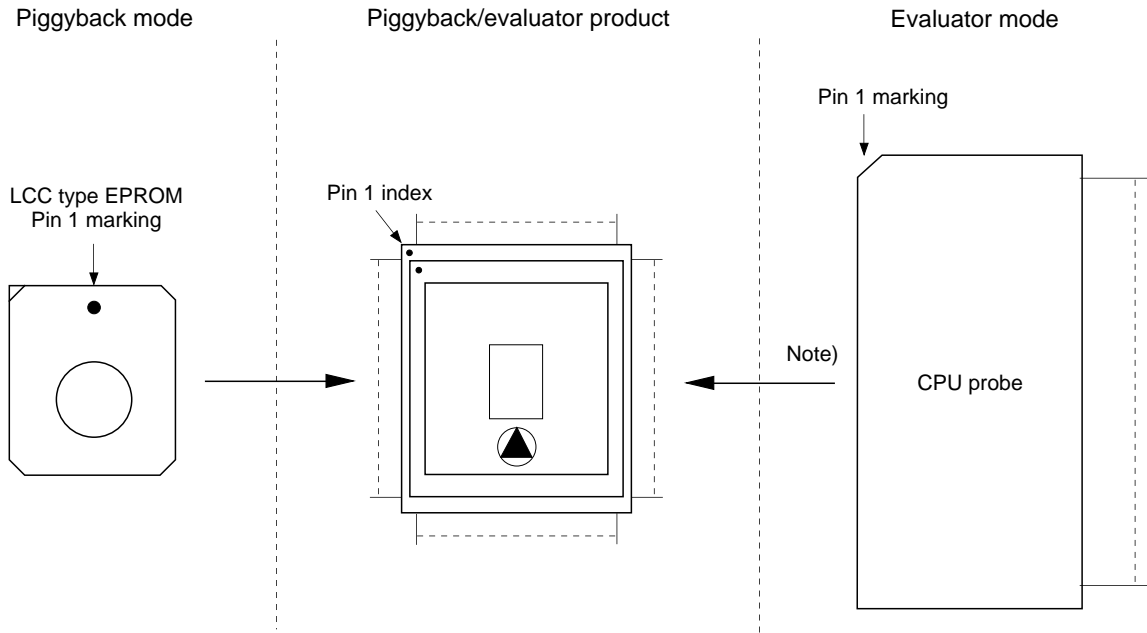
Item	Symbol	Pin	Min.	Max.	Unit
Address → data input delay time	t_{ACC}	A0 to A15 D0 to D7		120	ns
Address → data hold time	t_{IH}	A0 to A15 D0 to D7	0		ns



Products List

Option item	Products		
	Mask product		Piggyback/evaluator product
	CXP82612	CXP82616	CXP82600-U01Q
Package	80-pin plastic QFP		80-pin ceramic PQFP
ROM capacity	12Kbytes	16Kbytes	EPROM 16Kbytes
Pull-up resistance for reset pin	Existent/Non-existent		Existent
Pull-down resistor for high voltage drive pin	Existent/Non-existent		Only port for display

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



Note) Evaluation cap should be connected to CPU probe.

Package Outline

Unit: mm

80PIN PQFP (CERAMIC)

