SONY

CXP82700

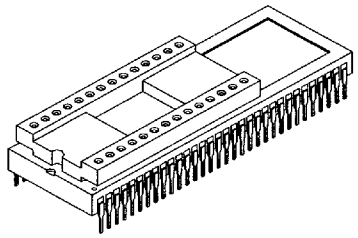
CMOS 8-bit Single Chip Microcomputer

Piggyback/ evaluator type

Description

The CXP82700 is a CMOS 8-bit single chip microcomputer of piggyback/evaluator combined type, which is developed for evaluating the function of the CXP82712/82716.

64 pin PSDIP (Ceramic)



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 16Kbytes are available)
- Incorporated RAM capacity — 448 bytes (LCD 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 144 segments display possible; 1 to 16-digit dynamic display; 24 high voltage drive output port; Dimmer function; High voltage drive output (40V); On-chip pull-down resistor (Mask option); Hardware key scan function (Maximum 8 × 8 key matrix compatible.)
  - — Remote control receiving circuit — 8-bit pulse measurement counter with on-chip 6-stage FIFO
  - — PWM output — 8bit, 1channel
- Interruption — 13 factors, 13 vectors, multi-interruption possible
- Standby mode — SLEEP/STOP
- Package — 64-pin ceramic PSDIP

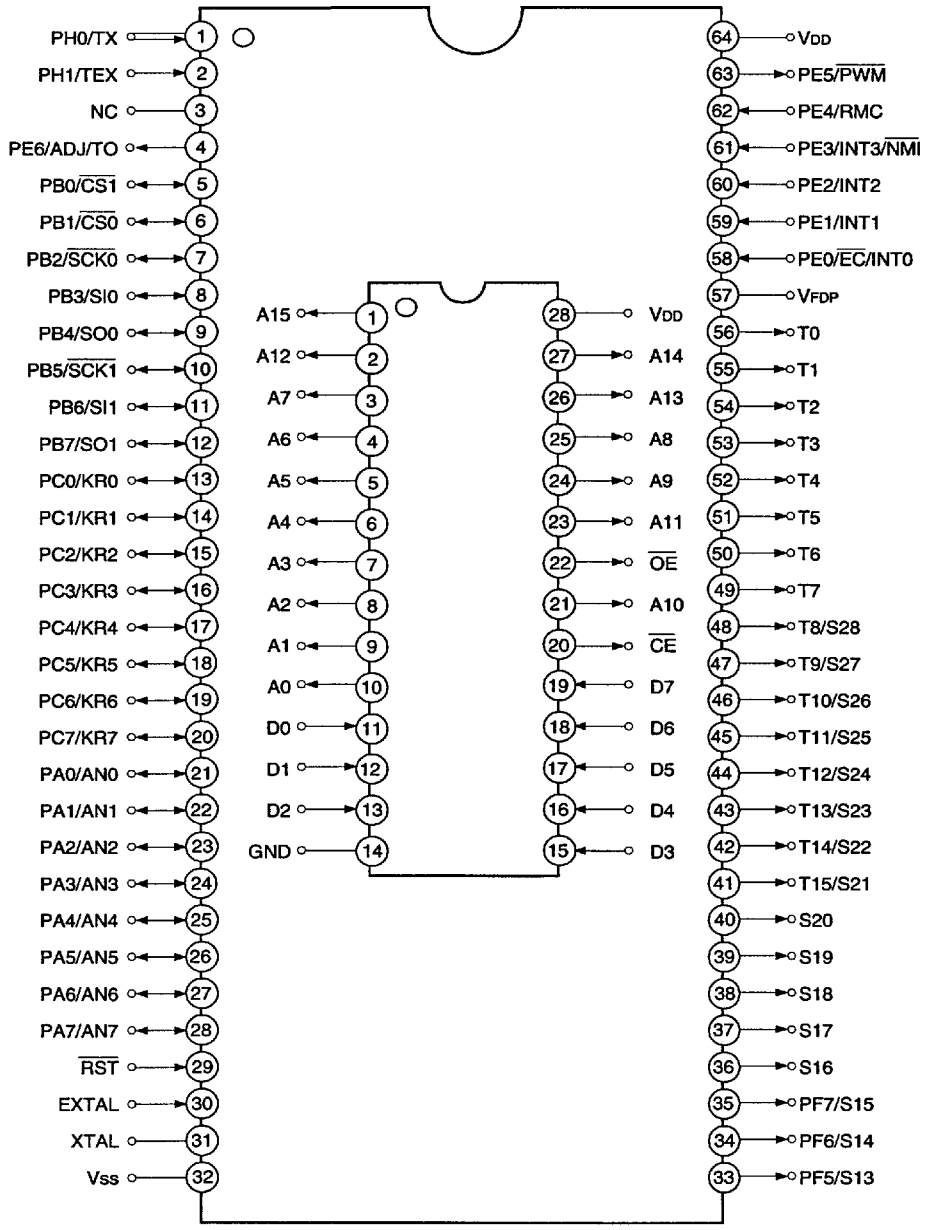
Note) Mask option depends on the type of the CXP82700. Refer to the Products List for details.

Structure

Silicon gate CMOS IC

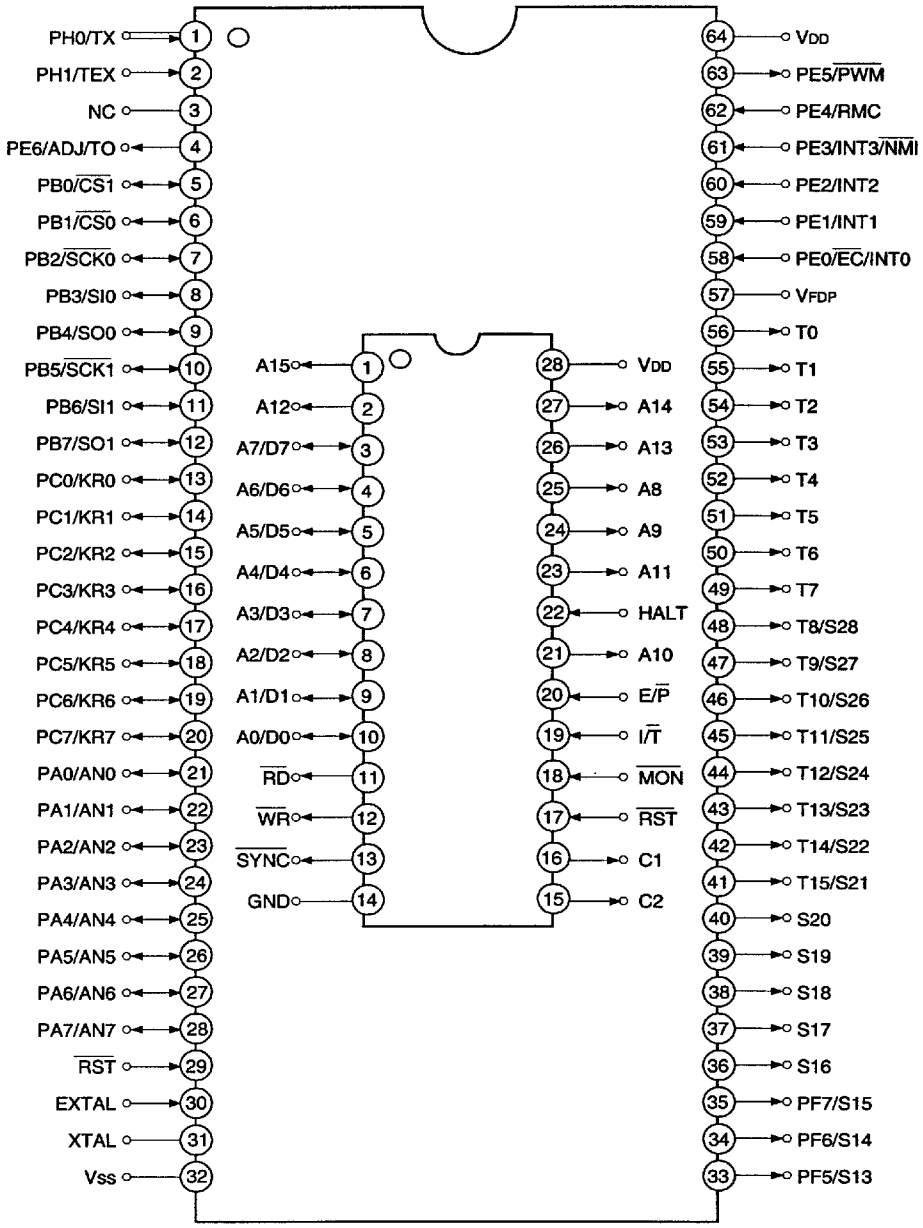
E94X11-PP

Pin Assigument in Piggyback Mode



Note) 1. NC (Pin 3) is always connected to V_{DD}.
2. PH0/TX (Pin 1) is input port during port selection; oscillation output during oscillation selection.

Pin Assigument in Evaluator Mode

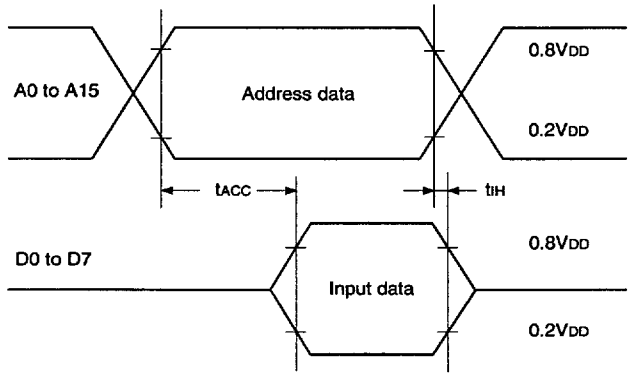


Note) 1. NC (Pin 3) is always connected to V_{DD}.
2. PH0/TX (Pin 1) is input port during port selection; oscillation output during oscillation selection.

EPROM Read Timing

(Ta=–20 to +75°C, V_{DD}=4.5 to 5.5V, V_{SS}=0V reference)

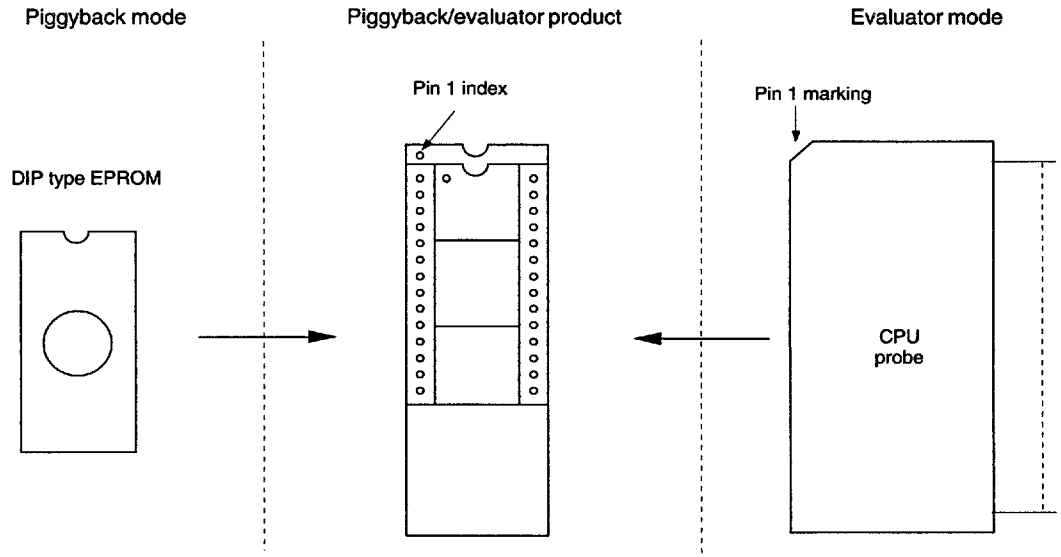
Item	Symbol	Pin	Min.	Max.	Unit
Address → data Input delay time	t_{ACC}	A0 to A15 D0 to D7		120	ns
Address → data Hold time	t_{IH}	A0 to A15 D0 to D7	0		ns



Products List

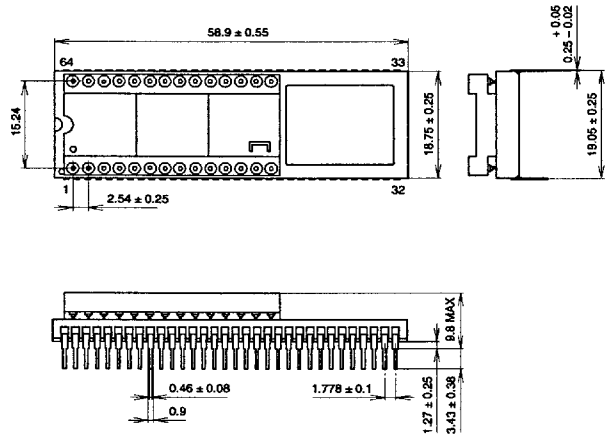
Option item	Products		
	Mask product		Piggyback/evaluator product
	CXP82712	CXP82716	CXP82700-U01S
Package	80-pin plastic SDIP		64-pin ceramic PSDIP
ROM capacity	12Kbytes	16Kbytes	EPROM 16Kbytes
Pull-up resistor for reset pin	Existent/Non-existent		Existent
Pull-down resistor for high voltage drive pin	Existent/Non-existent		Only port for display

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



Package Outline Unit: mm

64PIN PSDIP (CERAMIC) 750mil



SONY CODE	PSDIP-64C-01
EIAJ CODE	ADIP064-C-0750-A
JEDEC CODE	———

PACKAGE STRUCTURE

PACKAGE MATERIAL	CERAMIC
LEAD TREATMENT	GOLD PLATING
LEAD MATERIAL	42 ALLOY
PACKAGE WEIGHT	16.0g