Ordering number : EN 2947B

SANYO

No.2947B

LC3764P

CMOS LSI

8192 Words × 8 Bits CMOS Mask-Programmable ROM

Overview

The LC3764P is an 8192 words × 8-bit low-power CMOS mask-programmable read-only memory with a maximum access time of 150ns. All inputs and outputs are fully TTL-compatible.

The output enable (OE) control pin is mask-programmable to be active-low, active-high or Don't Care (outputs are always enabled).

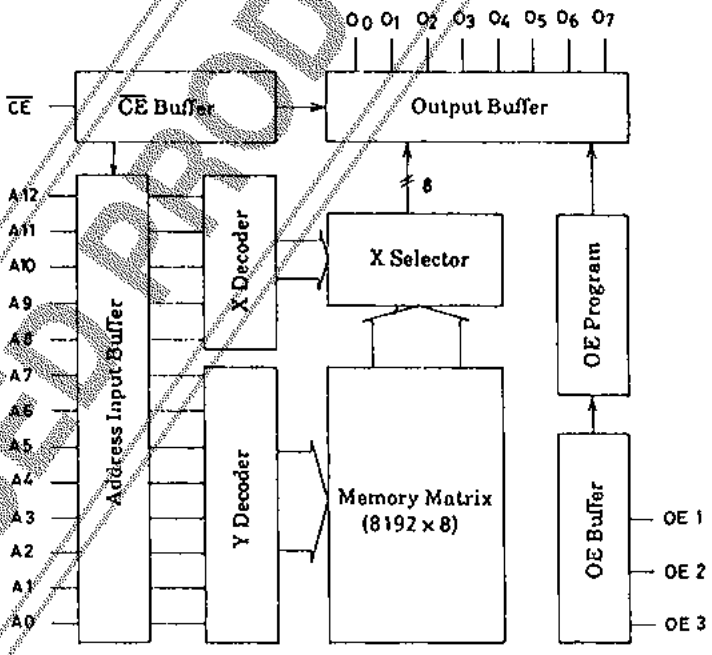
The LC3764P operates from a single 5.0V ± 10% supply, and is available in either standard 28-pin plastic DIPs or compact 28-pin plastic MFPs.

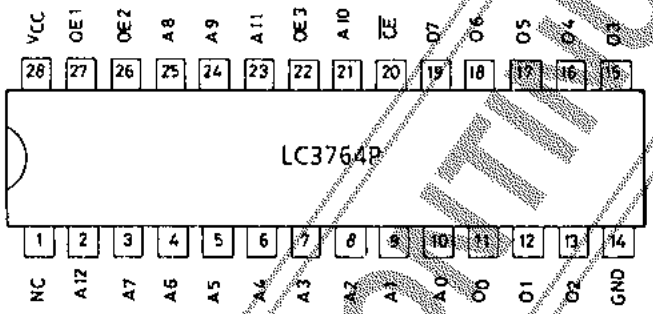
Features

- 8192 × 8-bit configuration
- 150ns maximum access time
- Low-power CMOS process
- Tri-state outputs
- TTL-compatible inputs and outputs
- Programmable inputs and output

Pin Name

A0 to A12	: Address select inputs
OE1,OE2,OE3	: Output enable inputs
O0 to O7	: Data outputs
$\overline{CE}$	: Chip enable input

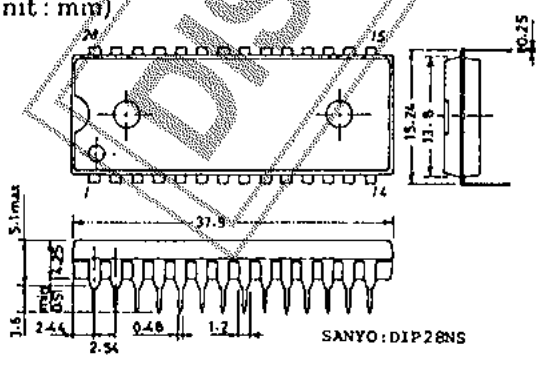




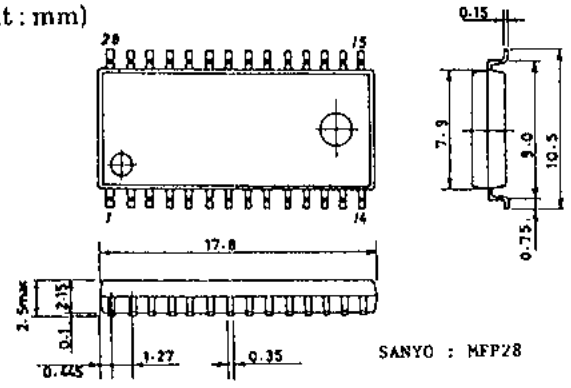
OE1	OE2	OE3
0	0	0
1	1	1
X	X	X

0 : Active "0"
1 : Active "1"
X : Don't care

Case Outline 3081-D28NS
(unit : mm)



Case Outline 3091-M28IC
(unit : mm)



Specifications and information herein are subject to change without notice.

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Absolute Maximum Ratings at Ta = 25°C

			unit
Supply Voltage	V_{CC} max	−0.3 to +7.0	V
Input Voltage	V_I	−0.3 to V_{CC}+0.3	V
Output Voltage	V_O	−0.3 to V_{CC}+0.3	V
Operating Temperature	Topr	0 to +70	°C
Storage Temperature	Tstg	−55 to +150	°C

Capacitance at Ta = 25°C

			min	typ	max	unit
Input Capacitance	C_I	f = 1MHz			8	pF
Output Capacitance	C_O	f = 1MHz			10	pF

DC Characteristics at Ta = 0 to +70°C, V_{CC} = +5.0V ± 10%

			min	typ	max	unit
'H'-Level Input Voltage	V_{IH}		2.2		V_{CC}+0.3	V
'L'-Level Input Voltage	V_{IL}		−0.3		0.8	V
'H'-Level Output Voltage	V_{OH}	I_{OH} = −1.0mA	2.4			V
'L'-Level Output Voltage	V_{OL}	I_{OL} = 2.0mA			0.4	V
Input Leakage Current	I_{LI}	V_I = 0 to V_{CC}	−1.0		1.0	μA
Output Leakage Current	I_{LO}	$\overline{CE}$ = V_{IH}, V_O = 0 to V_{CC}	−1.0		1.0	μA
Operating Supply Current	I_{CCA1}	$\overline{CE}$ = 0V, V_I = V_{CC}/GND		7	15	mA
	I_{CCA2}	$\overline{CE}$ = V_{IL}, V_I = V_{IH}/V_{IL}		10	20	mA
	I_{CCA3}	$\overline{CE}$ = V_{IL}, V_I = V_{IH}/V_{IL} at minimum cycle		20	30	mA
Standby Current	I_{CCS1}	$\overline{CE}$ = V_{CC} − 0.2V			20	μA
	I_{CCS2}	$\overline{CE}$ = V_{IH}			1.0	mA

AC Characteristics at Ta = 0 to +70°C, V_{CC} = +5.0V ± 10%

			min	typ	max	unit
Address Access Time	t_{AA}	Input voltage: 2.4V/0.6V,			150	ns
$\overline{CE}$ Access Time	t_{CA}	tr/tf = 5ns			150	ns
OE1 to OE3 Access Time	t_{OA}	all input/output timing measured			100	ns
Output Hold Time	t_{OH}	at a 1.5V reference level	0			ns
Output Enable Time	t_{OE}	1 TTL load + 100pF	10			ns
Output Disable Time	t_{OD}				50	ns

Timing Waveforms