RP2364E

NMOS 64 Kbit MASK ROM
(8,192 word × 8 bit)

■ GENERAL DESCRIPTION

The RP2364E is static NMOS Read Only Memory organized as 8,192 words by 8-bits and operate from a single +5V supply.

The RP2364E features automatic power-down mode. When Chip Enable ($\overline{CE}$) goes HIGH level, the supply current is reduced from 100mA (max.) to 20mA (max.).

The device has Chip Enable ($\overline{CE}$) input and output Enable (OE/$\overline{OE}$) inputs allowing up to 32 wired ORs to be tied without external decoding.

According to your order, logic of the following pins may be selected ACTIVE LOW or ACTIVE HIGH or NC.

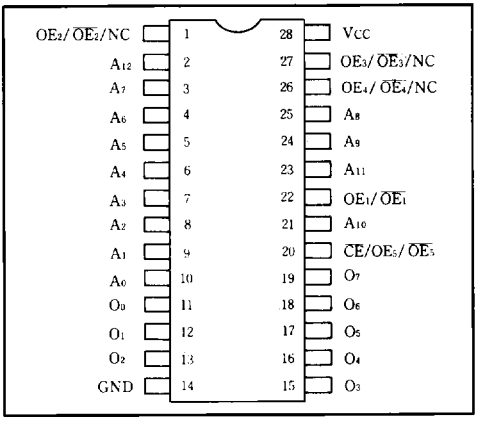
Pins 1, 22, 26 and 27.

and Pin 20 may be selected as $\overline{CE}$ or $\overline{OE}$.

■ FEATURES

- 8,192 words×8 bits organization
- Low power dissipation: Active 550mW max.
  Standby 110mW max.
- Fast access time: 200ns max.
- Single +5V(±10%) power supply
- Completely TTL compatible: All outputs and inputs

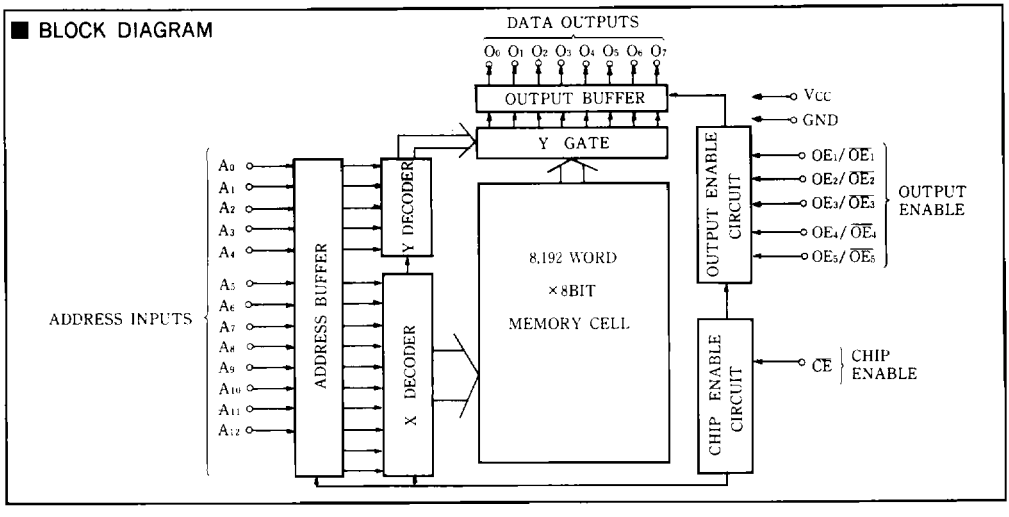
■ PIN CONFIGURATION (Top view)



■ PIN DESCRIPTION

PIN NAME	FUNCTION
$A_0 \sim A_{12}$	Address Input
$O_0 \sim O_7$	Data Output
$\overline{OE}_1 \sim \overline{OE}_5$	Output Enable
$\overline{CE}$	Chip Enable
NC	No Connection
Vcc	Power Supply
GND	GND

■ BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Condition	Limit	Unit
V_{CC}	Supply Voltage	With respect to GND	−0.5～7	V
V_I	Input Voltage		−0.5～7	V
V_O	Output Voltage		−0.5～7	V
Pd	Maximum Power Dissipation	Ta=25℃	700	mW
Topr	Operating Ambient Temperature		0～70	℃
Tstg	Storage Temperature		−40～125	℃

■ RECOMMENDED OPERATING CONDITIONS (Ta=0～70℃)

Symbol	Parameter	Specified Value			Unit
		Min	Typ	Max	
V_{CC}	Supply Voltage	4.5	5.0	5.5	V
V_{IH}	Input High Voltage	2.0		V_{CC}	V
V_{IL}	Input Low Voltage	−0.5		0.8	V

■ ELECTRICAL CHARACTERISTICS

●DC ELECTRICAL CHARACTERISTICS (Ta=0～70℃, V_{CC}=5V±10%)

Symbol	Parameter	Test Condition	Specified Value			Unit
			Min	Typ	Max	
I_{CC1}	Supply Current (Standby)	$\overline{CE}=V_{CC}$			20	mA
I_{CC2}	Supply Current (Active)	I_O=0mA			100	mA
V_{OH}	Output High Voltage	$I_{OH}=-400\mu A$	2.4			V
V_{OL}	Output Low Voltage	I_{OL}=3.2mA			0.4	V
V_{IH}	Input High Voltage		2.0		V_{CC}	V
V_{IL}	Input Low Voltage		−0.5		0.8	V
I_{LI}	Input Leakage Current	V_I=0V～V_{CC}	−10		10	μA
I_{LO}	Output Leakage Current	V_O=0V～V_{CC} Chip Deselected	−10		10	μA

●AC ELECTRICAL CHARACTERISTICS (Ta=0～70℃, V_{CC}=5V±10%)

Symbol	Parameter	Test Condition	Specified Valve			Unit
			Min	Typ	Max	
t_{RC}	Read Cycle Time	Output Load= 1TTL+100pF	200			ns
t_{ACC}	Address Access Time				200	ns
t_{CE}	Chip Enable Access Time				200	ns
t_{OE}	Output Enable Access Time				80	ns
t_{DF}	Output Hold Time after Output Enable Change				80	ns
t_{OH}	Output Hold Time after Address Change		0			ns
t_{CH}	Output Hold Time after Chip Enable Change				80	ns

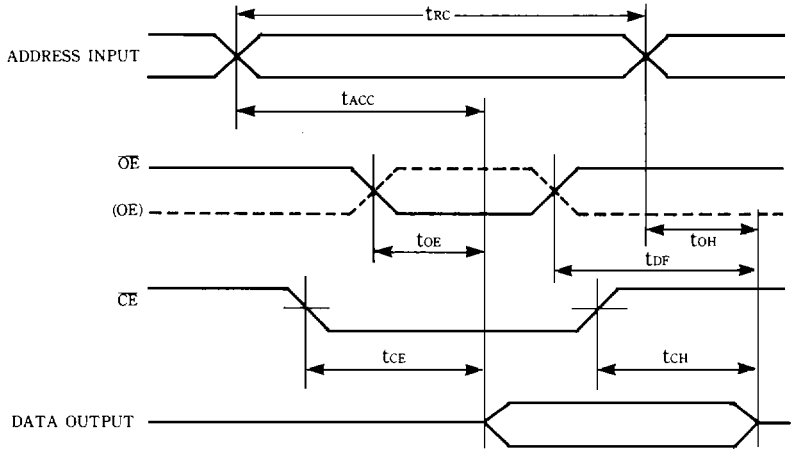
Notes : 1. Input Pulse Levels : V_{IL}=0.6V, V_{IH}=2.2V

2. Output Timing Reference Level : V_{OL}=0.8V, V_{OH}=2.0V

● TERMINAL CAPACITANCE

Symbol	Parameter	Test Condition	Specified Value			Unit
			Min	Typ	Max	
Ci	Input Capacitance	f = 1MHz			8	pF
Co	Output Capacitance				12	pF

■ TIMING CHART



■ 28 PIN PLASTIC PACKAGE (Unit: mm)