

Description

The HY23C64100 high performance read only memory is organized as 4,194,304 x16 bit(word mode) and has an access time of 100/120ns. It needs no external control clock to assure simple operation, because of its asynchronous operation. It is designed to be suitable for use in program memory of game machine, data memory and entertainments. The HY23C64100 is packaged in a 42DIP provides polarity programmable and OE buffer as user option mode.

Key features

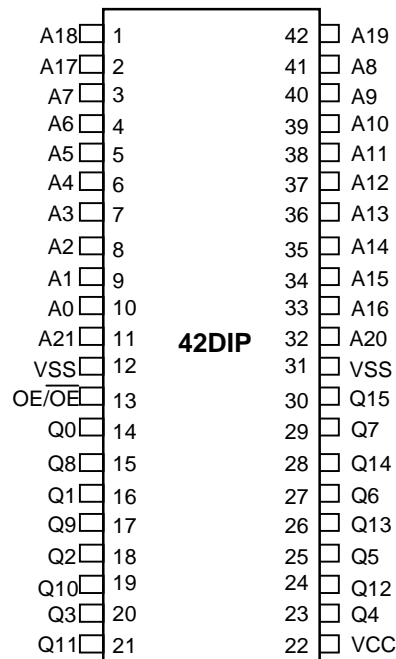
- Word Mode : 4,194,304 X 16 bit
- Single 5V power supply operation
- Access Time : 100/120ns (Max)
- Standby Current : 50uA(Max)
- Operating Current : 60mA(Max)
- TTL compatible inputs and outputs
- 3-State outputs for wired-OR expansion
- Programmable OE pin
- Fully static operation
- High reliability
- Package
HY23C64100D : 42pin Plastic DIP(600mil)

Pin Description

Pin	Function
A0 ~ A21	Address Inputs
Q0 ~ Q15	Data Outputs
OE/ $\overline{\text{OE}}$ *	Output Enable input
VCC	Power Supply (+5V)
VSS	Ground

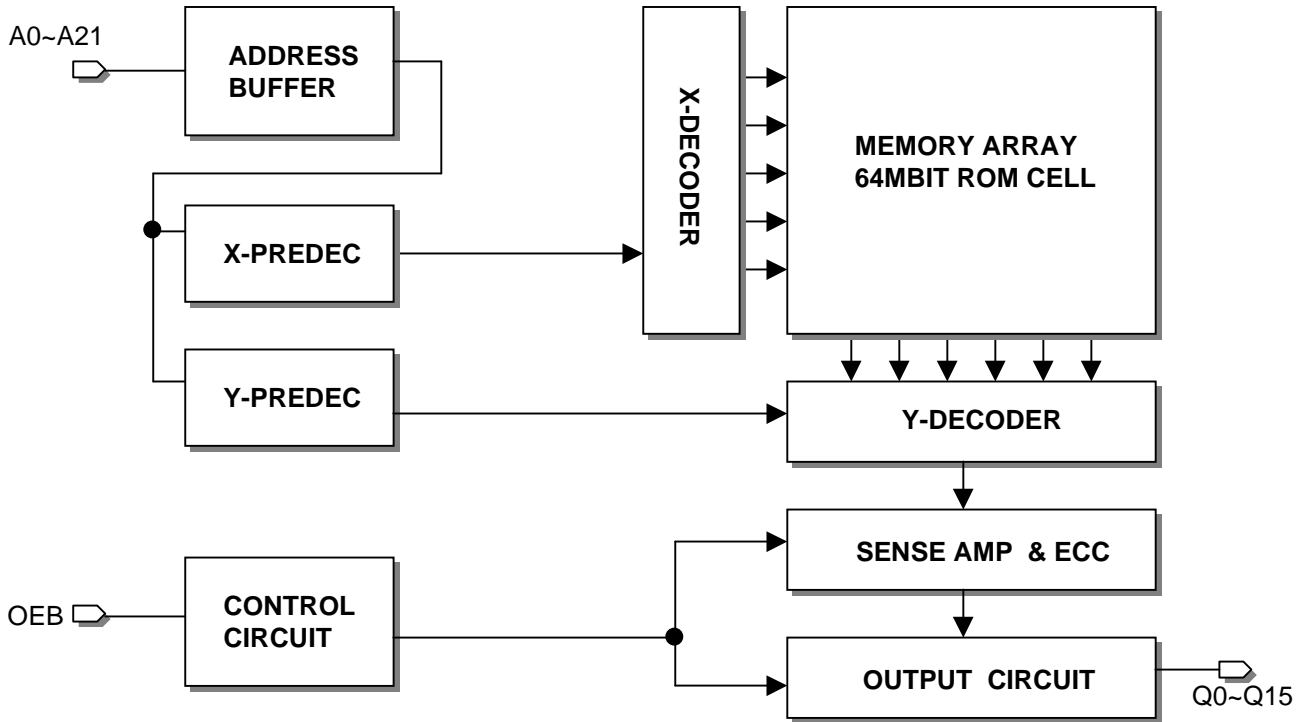
- * User selectable polarity
- OEB : OE/OEB

Pin Configuration



HY23C64100D

Block Diagram



□ Absolute Maximum Ratings

Symbol	Parameter	Rating	Unit
TA	Ambient Operating Temperature	-10 ~ 80	°C
TSTG	Storage Temperature	-65 ~ 150	°C
VCC	Supply Voltage to Ground Potential	-0.5 ~ 7.0	V
VOUT	Output Voltage	-0.5 ~ Vcc+0.5	V
VIN	Input Voltage	-0.5 ~ Vcc+0.5	V

Stress above those listed under “absolute maximum ratings” may cause permanent damage to the device. These are stress ratings only. Functional operation of this device at these or any other conditions above those indicated in the operational sections of this specification is not implied and exposure to absolute maximum rating conditions for extended periods may affect device reliability.

□ Recommended DC Operating Conditions(VCC=5.0±0.5V, TA=0~70°C)

Symbol	Parameter	Min	Typ	Max	Unit
Vcc	Supply Voltage	4.5	5.0	5.5	V
Vss	Supply Voltage	0	0	0	V
VIH	Input High Voltage	2.2		Vcc+0.3	V
VIL	Input Low Voltage	-0.3		0.8	V

□ DC Electrical Characteristics(VCC=5.0±0.5V, TA=0~70 °C)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
VOH	Output High Voltage	IOH=-0.4mA	2.4			V
VOL	Output Low Voltage	IOL=2.1mA			0.4	V
IIL	Input Leakage Current	VIN=0V to VCC			±10	uA
IOL	Output Leakage Current	VOUT=0V to VCC			±10	uA
ICC	Operating Supply Current (tRC=100ns)	OEB=VIL All Output Open			60	mA

□ Capacitance($T_A=25^\circ\text{C}$, $f=1.0\text{MHz}$)

Symbol	Parameter	Condition	Min	Max	Unit
C _I	Input Capacitance	V _{IN} = 0V		10	pF
C _O	Output Capacitance	V _{OUT} = 0V		10	pF

Capacitance is periodically sampled and not 100% tested

□ Function Table

OE/ $\overline{\text{OE}}$	Mode	Data	Power
H/L	Operating	DOUT	Active
L/H	Output Disable	High Z	

□ AC Characteristics($V_{CC}=5.0\pm 0.5\text{V}$, $T_A=0\sim 70^\circ\text{C}$)

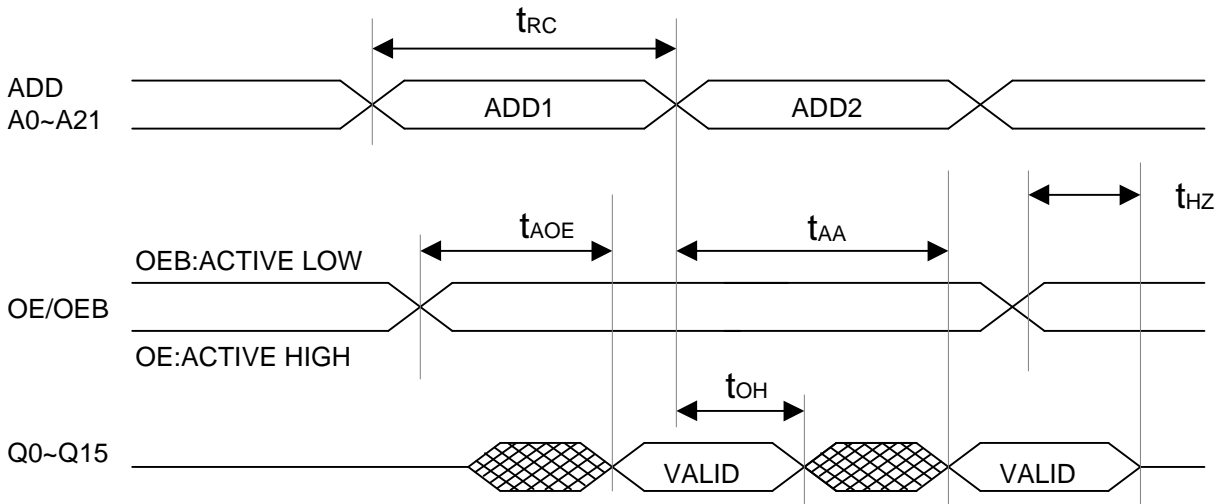
Symbol	Parameter	100ns		120ns		Unit
		Min	Max	Min	Max	
t _{RC}	Read cycle time	100		120		ns
t _{AA}	Address access time		100		120	ns
t _{AOE}	Output enable access time		50		60	ns
t _{OH}	Output hold time from address change	0		0		ns
t _{HZ}	Output or chip disable to output High-Z		20		20	ns
t _{LZ}	Output or chip Enable to output Low-Z	10		10		ns

□ AC Test Condition

- Input pulse level 0.4V to 2.4V
- Input rise and fall time 10ns
- Input and output timing level 0.8V to 2.0V
- Output load 1 TTL gate and CL=100pF

□ Timing Waveforms

READ



Package Dimension

Unit : mm

42DIP

