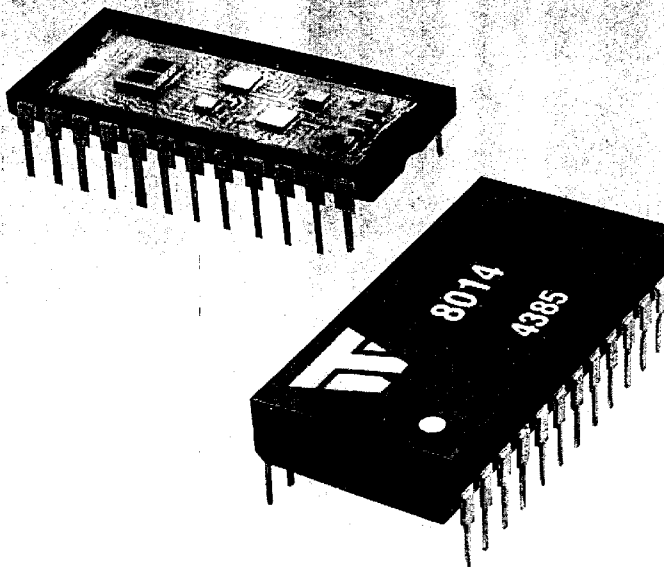


White Technology, Inc.

2K x 8 BIT PROGRAMMABLE EEPROM

8014 = Part # *Per WTE*

Memory, 16K (2Kx8) EEPROM, Model 8014



FEATURES

- -55 to 200° C Operation
- Rugged Thick Film Hybrid Construction
- Reprogrammable (to 150° C)
- 24 Pin Ceramic Package
- Internal Temperature Compensation
- Three State Output

DESCRIPTION

The White Technology, Inc. 8014 is a 16,384 bit EEPROM in a 2K by 8 bit/word format with "Three State" outputs. This PROM is available in the standard 0.600 inch wide 24-pin ceramic DIP.

The 8014 utilizes a synchronous design technique. This includes on-chip address latches and a separate output enable control which makes this device ideal for applications utilizing recent generation microprocessors. This design technique, combined with the use of EEPROM memory makes this ideal for systems that require frequent program updates or for system development.

The White Technology, Inc. 8014 2K by 8 bit

PROM is operationally similar to other 2K by 8 bit PROMs except that the 8014 device is reprogrammable at temperatures up to 150°C and can be read at temperatures through 200°C.

To program the 8014 present the address to the address lines, apply a logic level low on the chip enable pin (p18), present the data to the data lines, and apply a logic level low on the programming pin (p21).

Note: A 10ms delay is required between the applications of a logic level low on the programming pin (p21). See the Write/Read Cycles for complete timing for both programming and reading the 8014.

White Technology, Inc.

4246 EAST WOOD STREET • PHOENIX, ARIZONA 85040
TEL: 602-437-1520 • TWX: 910-951-4203

2K x 8 BIT PROGRAMMABLE EEPROM - 8014

ABSOLUTE MAXIMUM RATINGS

Supply Voltage: +7.0 Volts
Input/Output Voltage Applied: -1 Volt to +6 Volts
Storage Temperature Range: -55°C to +200°C
Operating Voltage Range: +4 Volts to +7 Volts
Programming Temperature Range: -55°C to +150°C
Reading Temperature Range: -55°C to +200°C

ELECTRICAL CHARACTERISTICS

$V_{CC} = 5.0V \pm 10\%$

PARAMETER	CONDITIONS	SYMBOL	MINIMUM	MAXIMUM	UNITS
Logical One Input Voltage		V_{IH}	2.4		V
Logical Zero Input Voltage		V_{IL}		0.8	V
Logical One Output Voltage	$I_{OH} = -2.0 \text{ mA}$	V_{OH}	2.4		V
Logical Zero Output Voltage	$I_{OL} = +4.8 \text{ mA}$	V_{OL}		0.4	V
Input Leakage	$0V \leq V_{IN} \leq V_{CC}$	I_L	-1.0	1.0	μA
Output Leakage	$0V \leq V_O \leq V_{CC}$ $\overline{G} = \text{HIGH}$	I_{OZ}	-1.0	1.0	μA
Power Supply Current		I_{CC}		35	mA
Programming Current		I_{CCP}		45	mA
Input Capacitance	$f = 1 \text{ MHz}$ $V_{IN} = V_{CC} \text{ or GND}$	C_{IN}		10	pF
Output Capacitance	$f = 1 \text{ MHz}$ $V_{IN} = V_{CC} \text{ or GND}$	C_{OUT}		12	pF

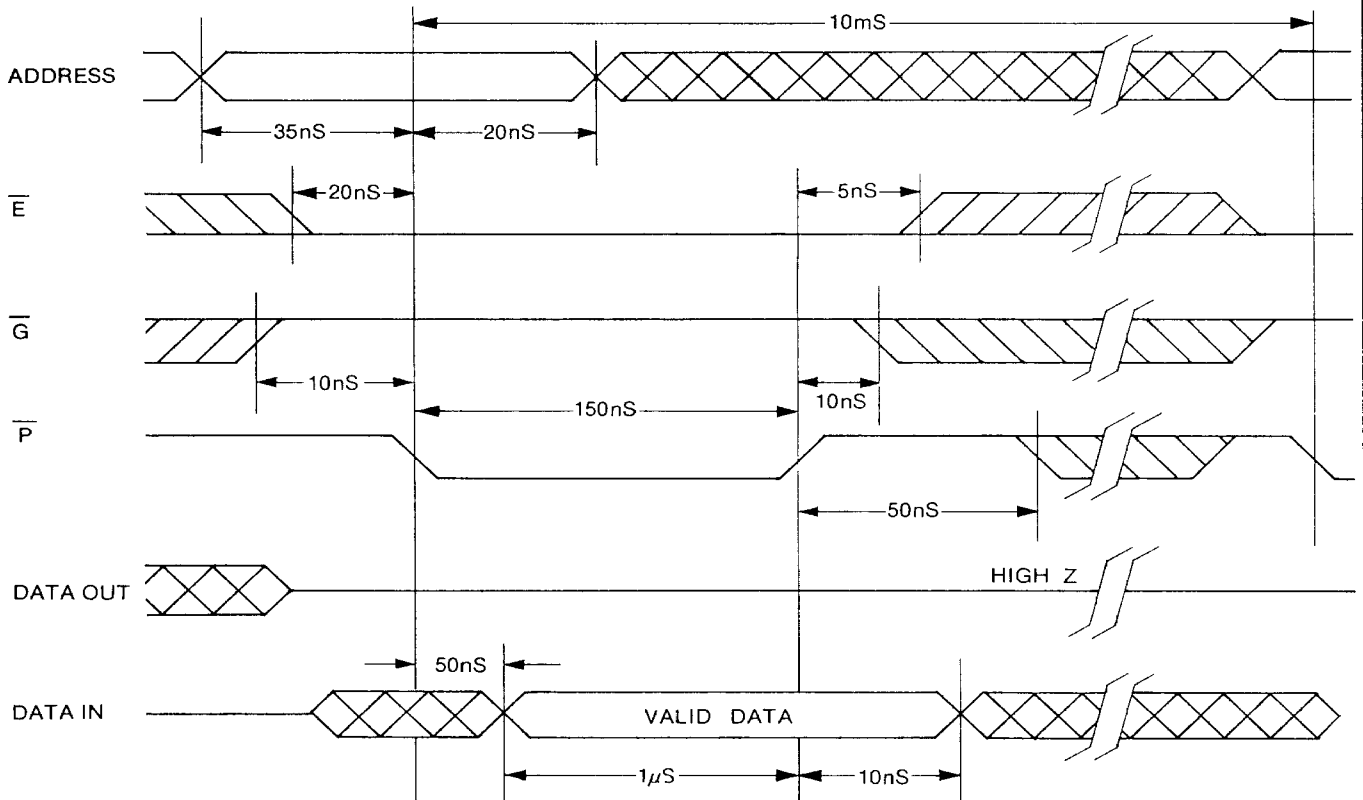
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Product Warranty: Complete Warranty statement available upon request.

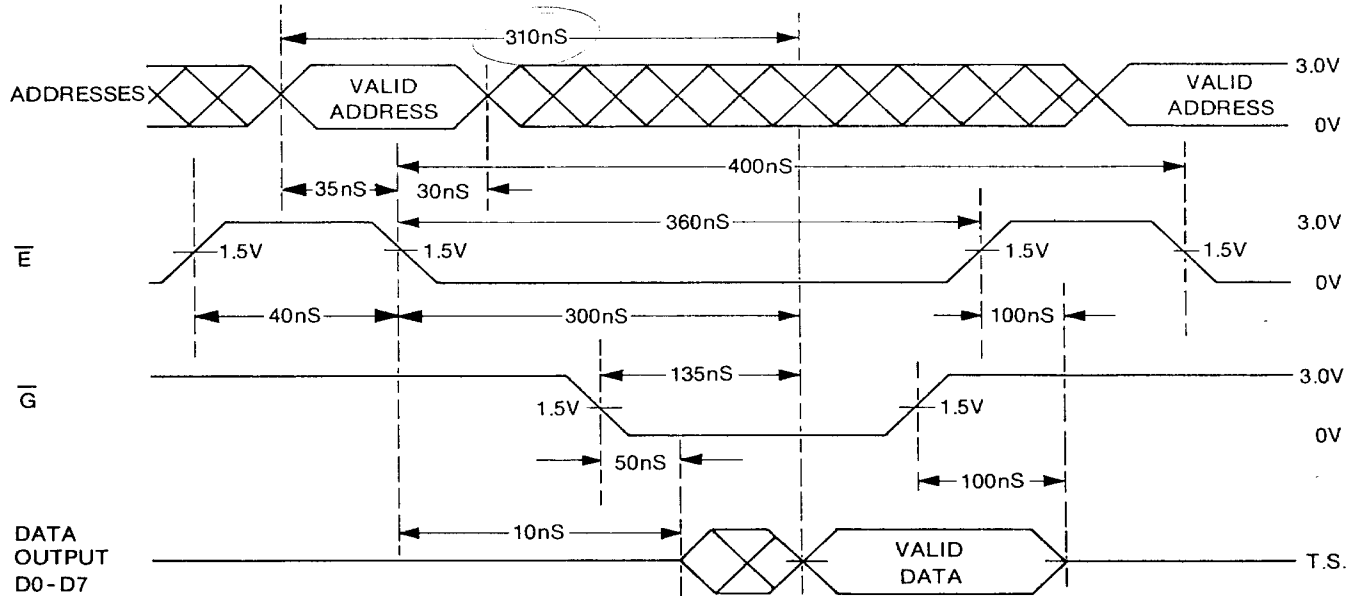
2K x 8 BIT PROGRAMMABLE EPROM - 8014

READ/WRITE CYCLES



WRITE CYCLE

Access time 100 nS



READ CYCLE

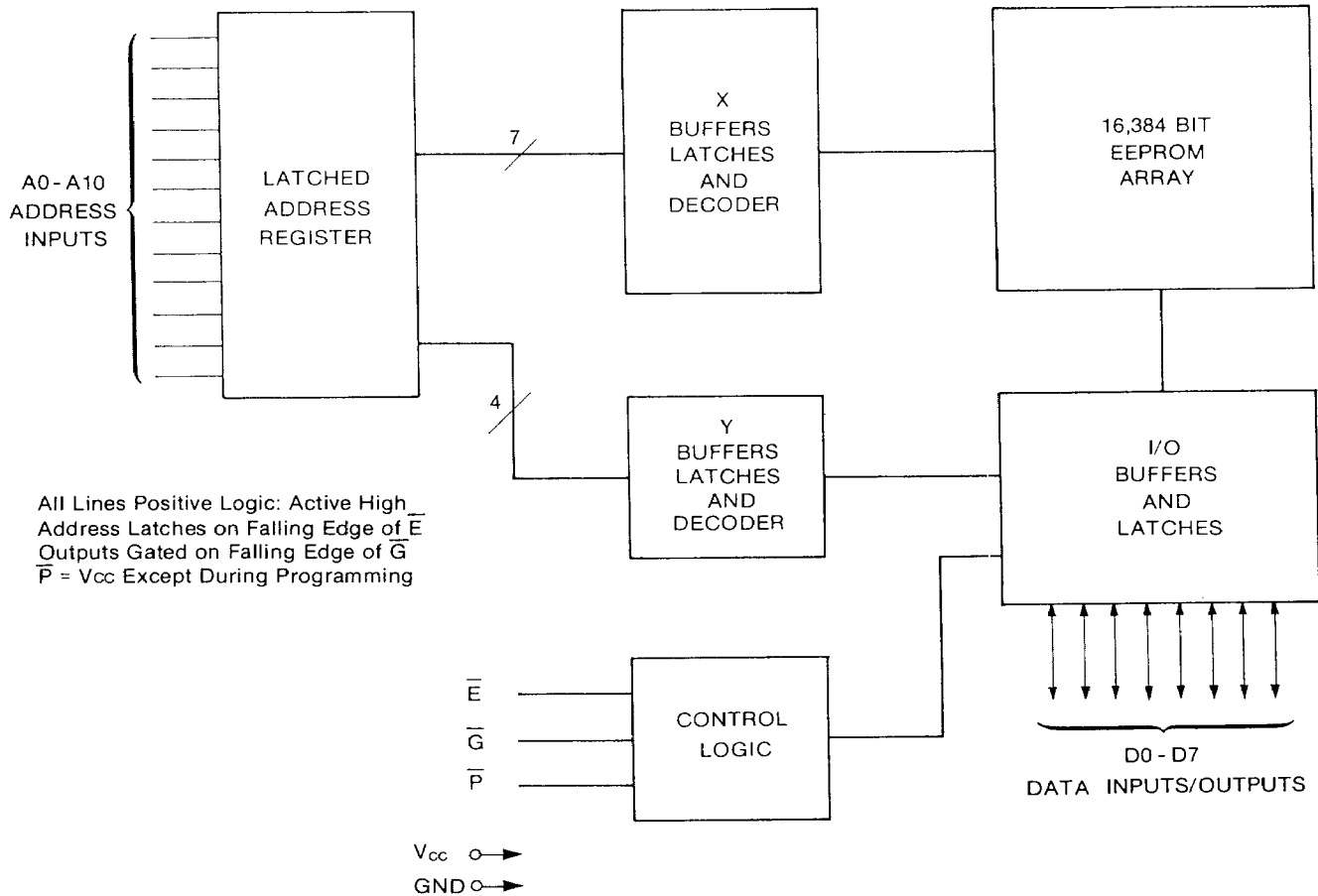
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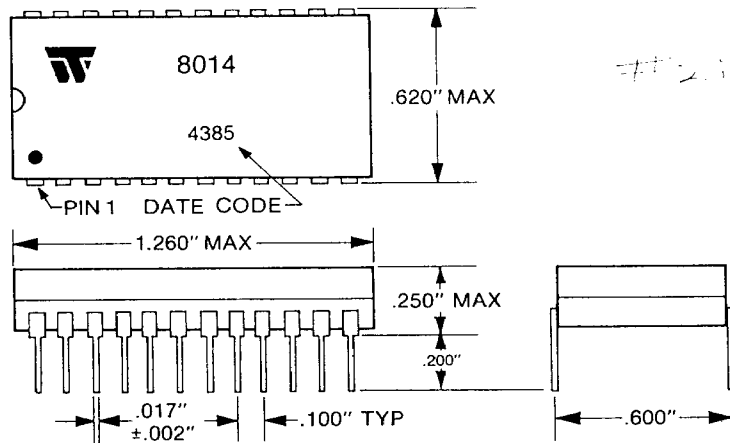
White Technology, Inc. reserves the right to change electrical or mechanical characteristics as specified herein.

2K x 8 BIT PROGRAMMABLE EEPROM - 8014

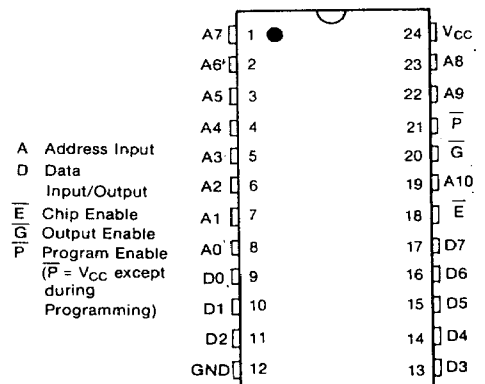
FUNCTIONAL DIAGRAM



CASE OUTLINE



PIN DIAGRAM



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