



Microprocesadores y Microcontroladores

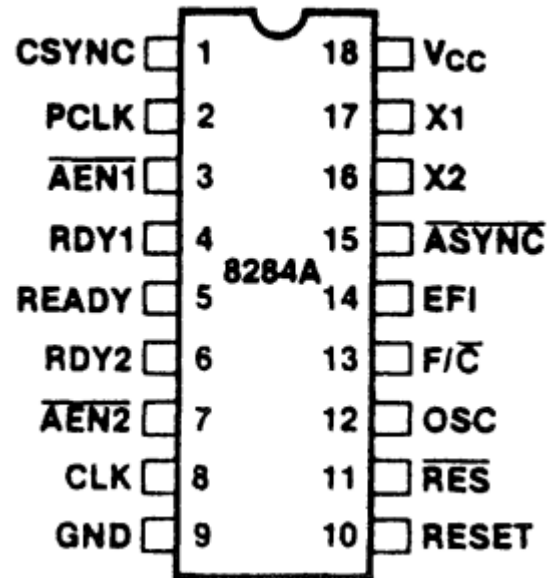
Microprocesador 80x86 – 16 bits

Generador de Reloj 8284

Demultiplexión de ductos

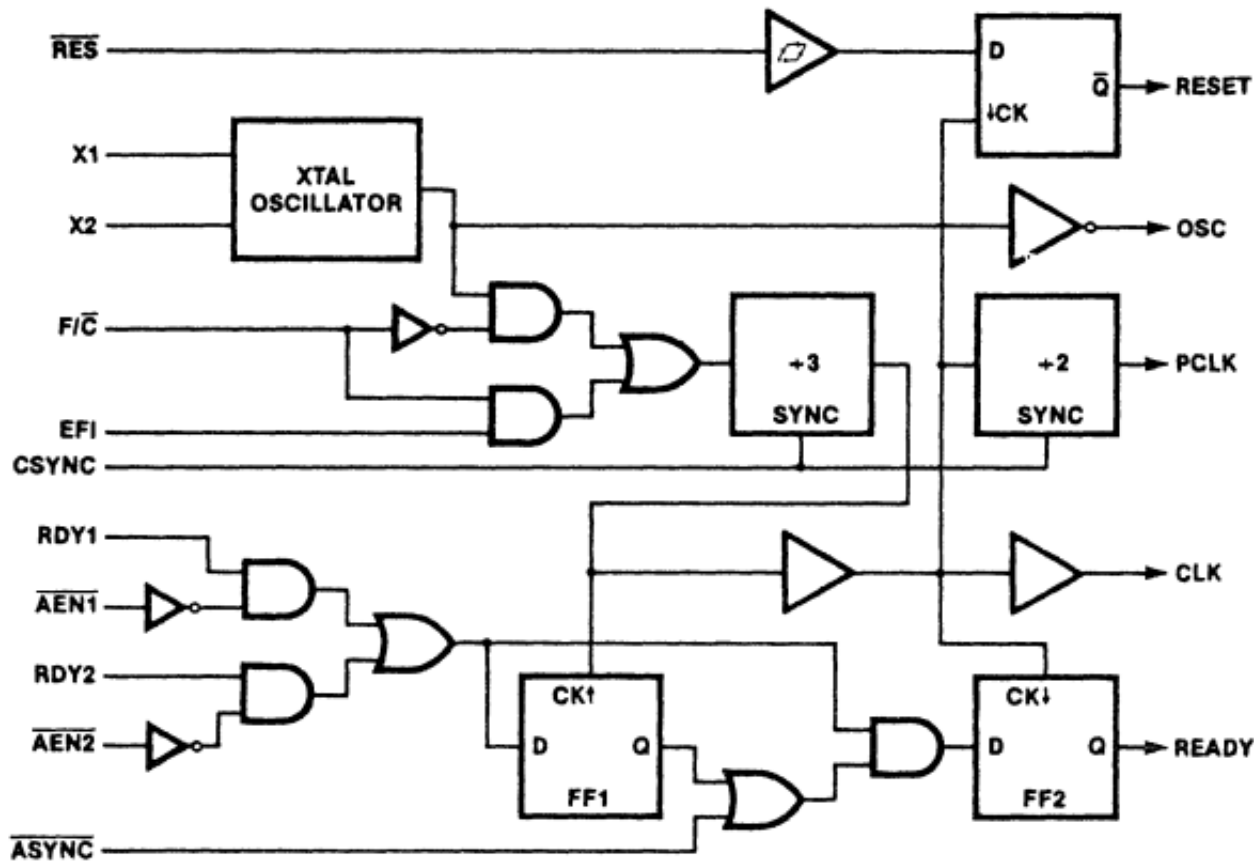
Generador de Reloj 8284A

- Terminales



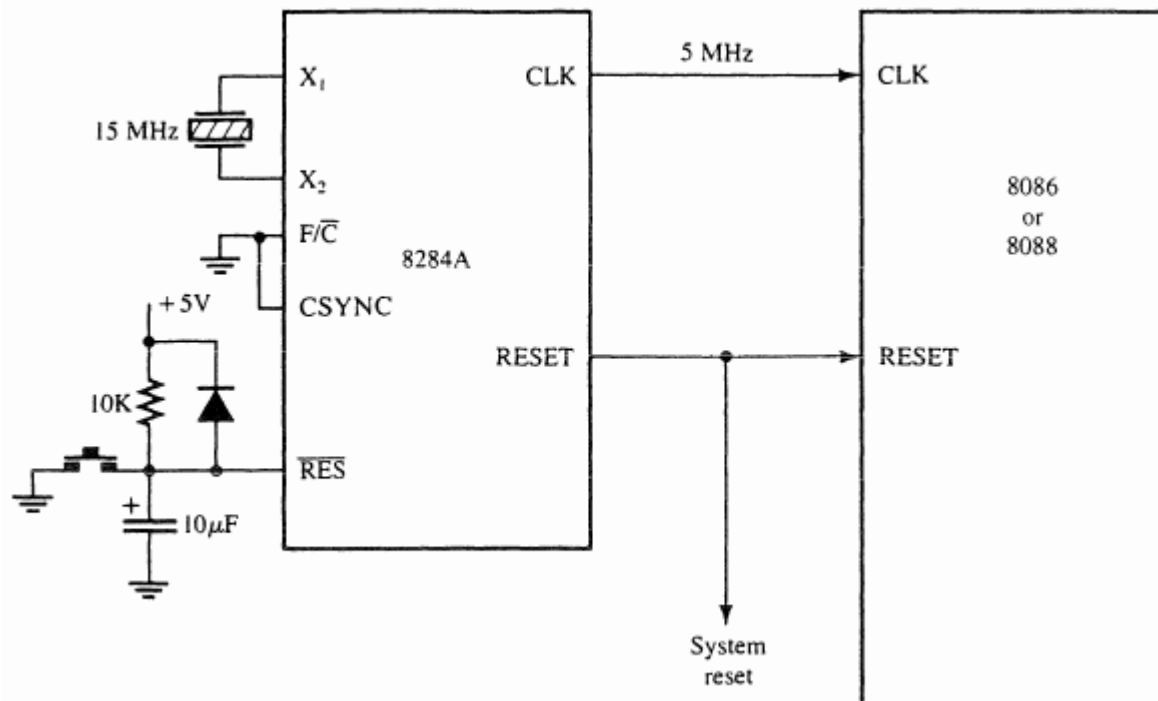
Generador de Reloj 8284A

- Diagrama de bloques interno

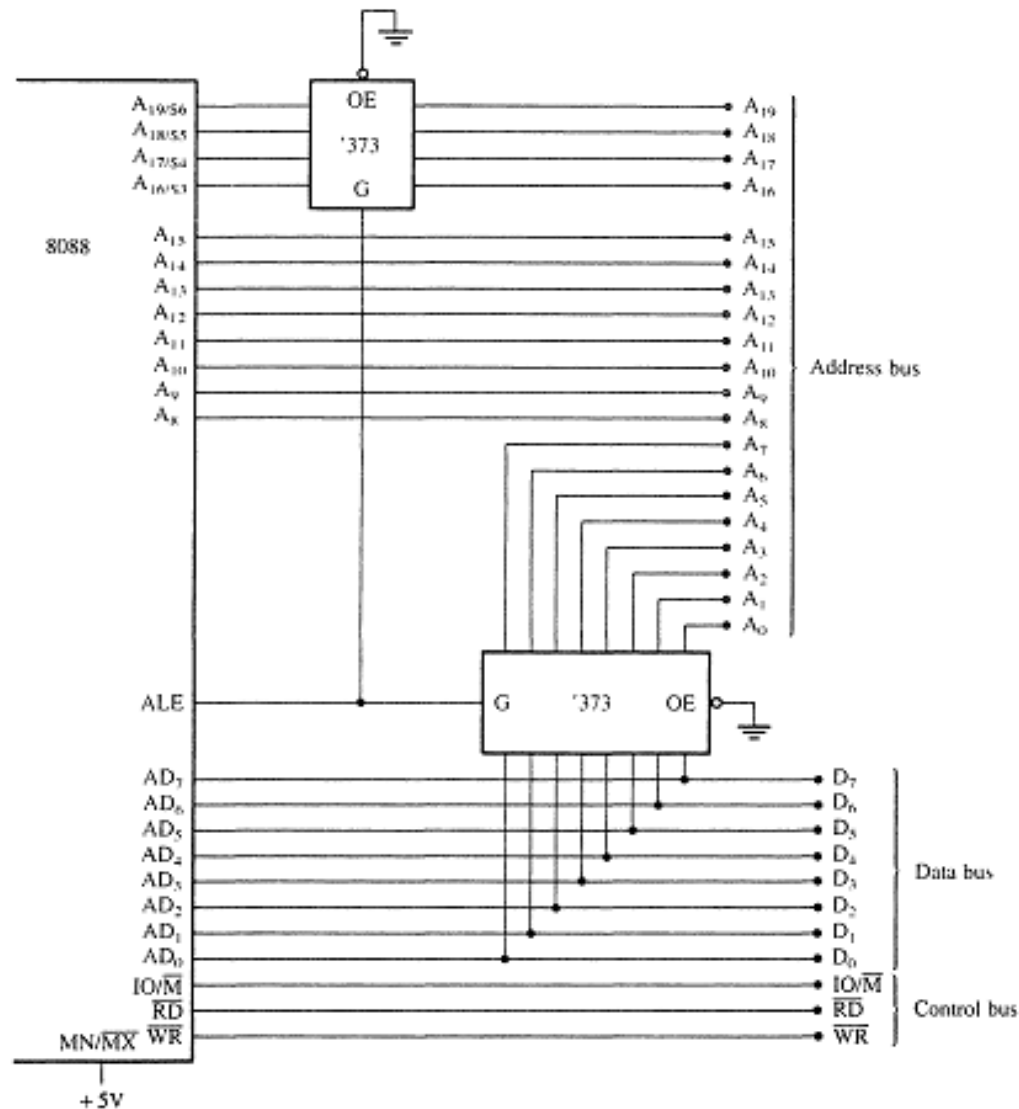


Generador de Reloj 8284A

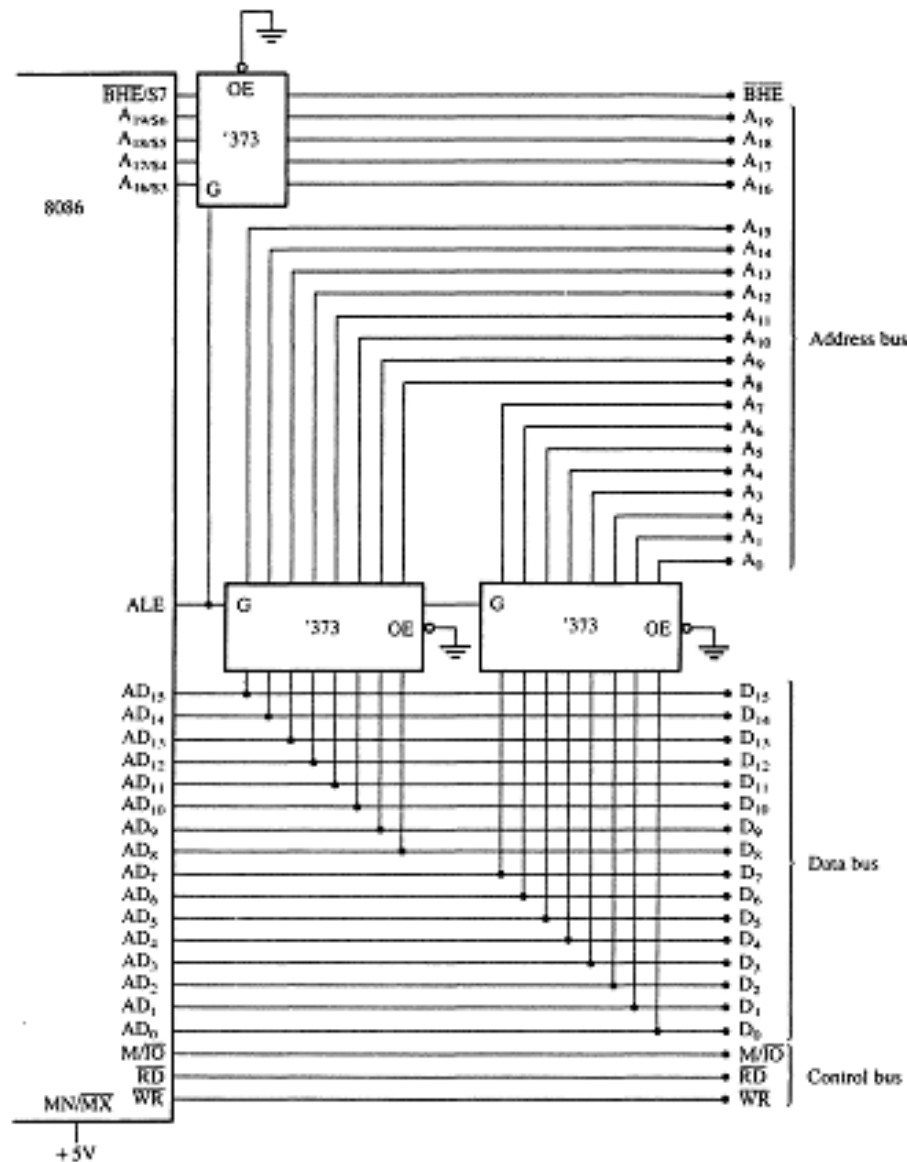
- Conexión con el microprocesador 8088



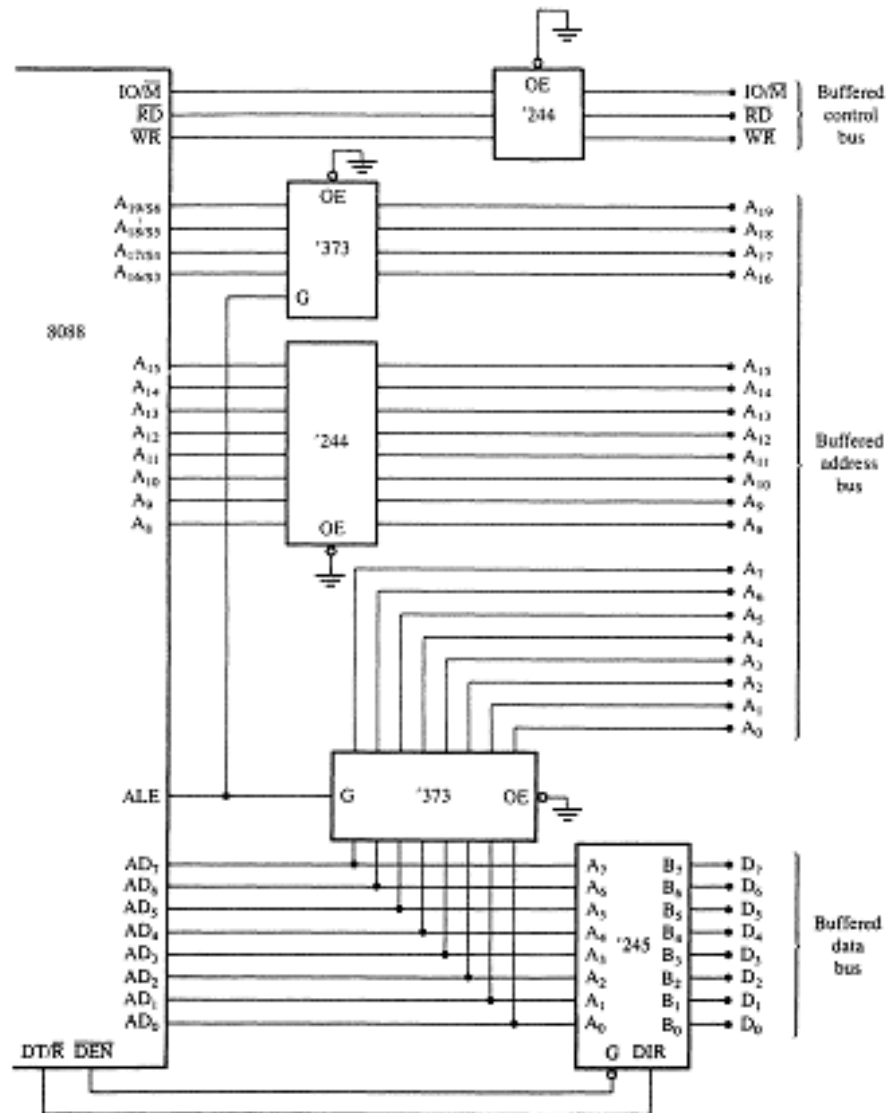
Demultiplexión de ductos (8088)



Demultiplexión de ductos (8086)

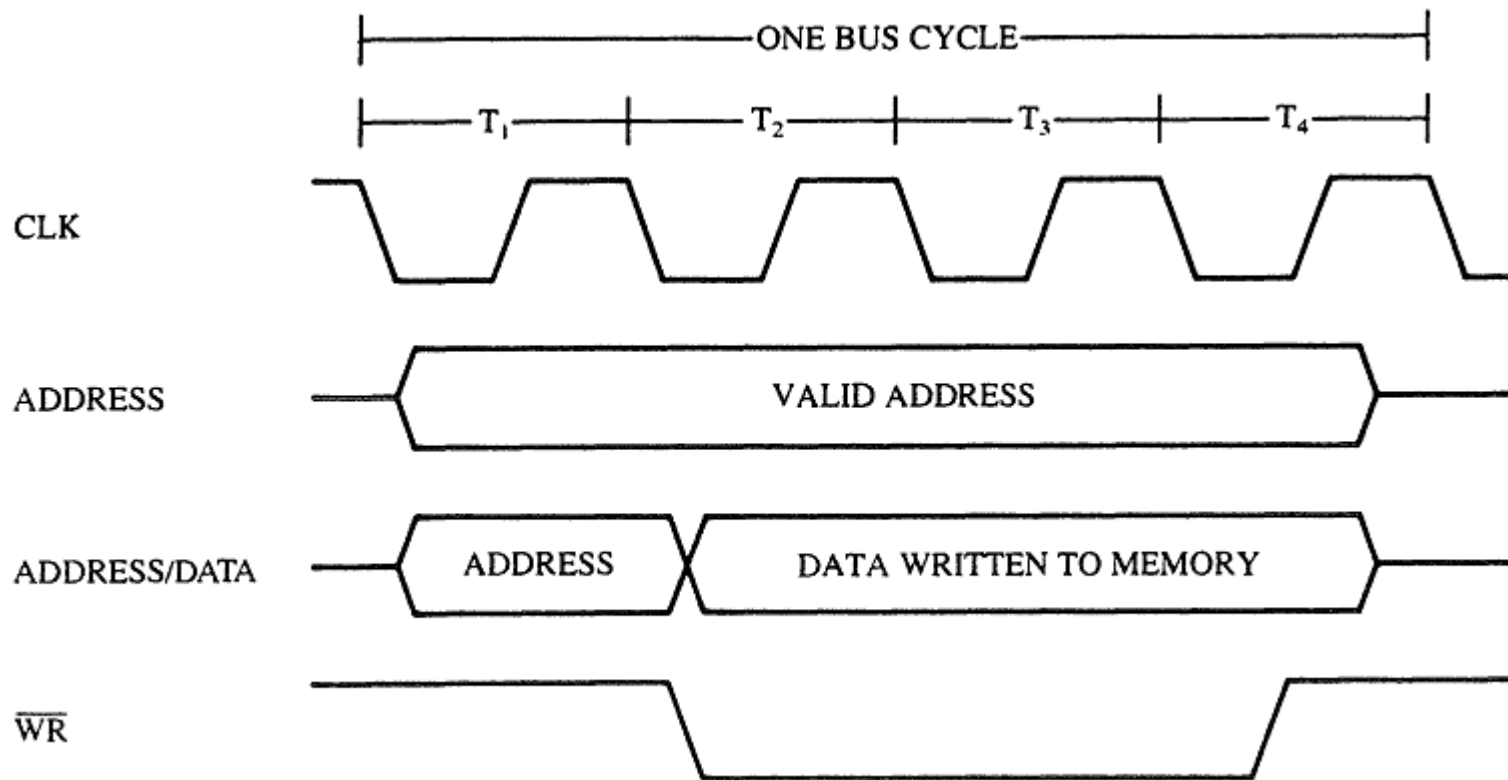


Ductos totalmente reforzados (8088)



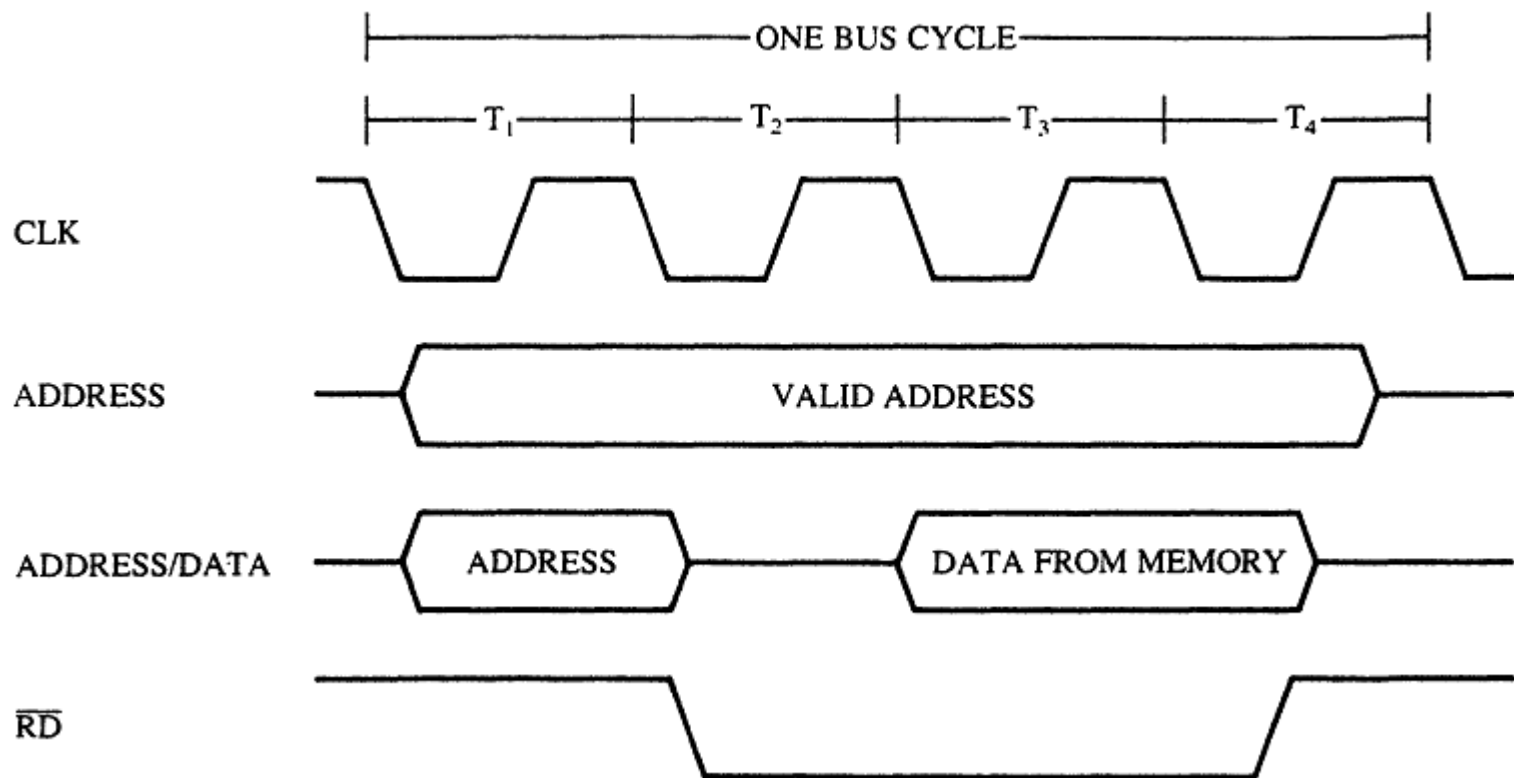
Temporización de ductos

Ciclo de escritura simplificado



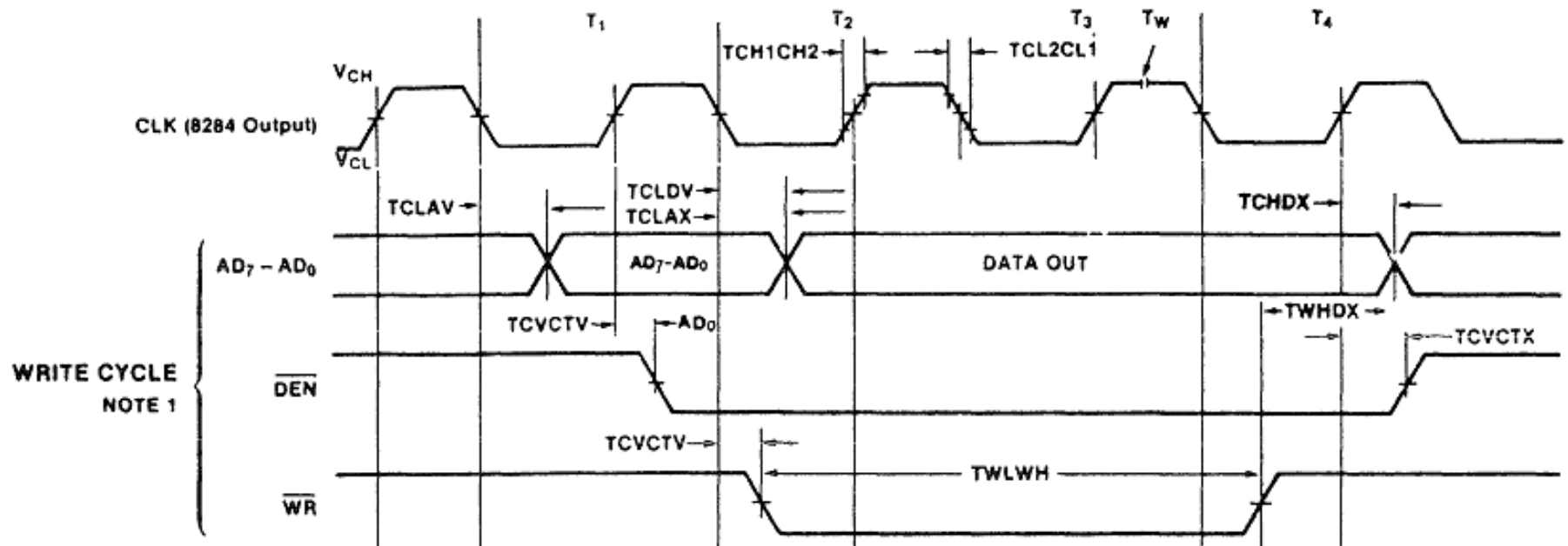
Temporización de ductos

Ciclo de lectura simplificado



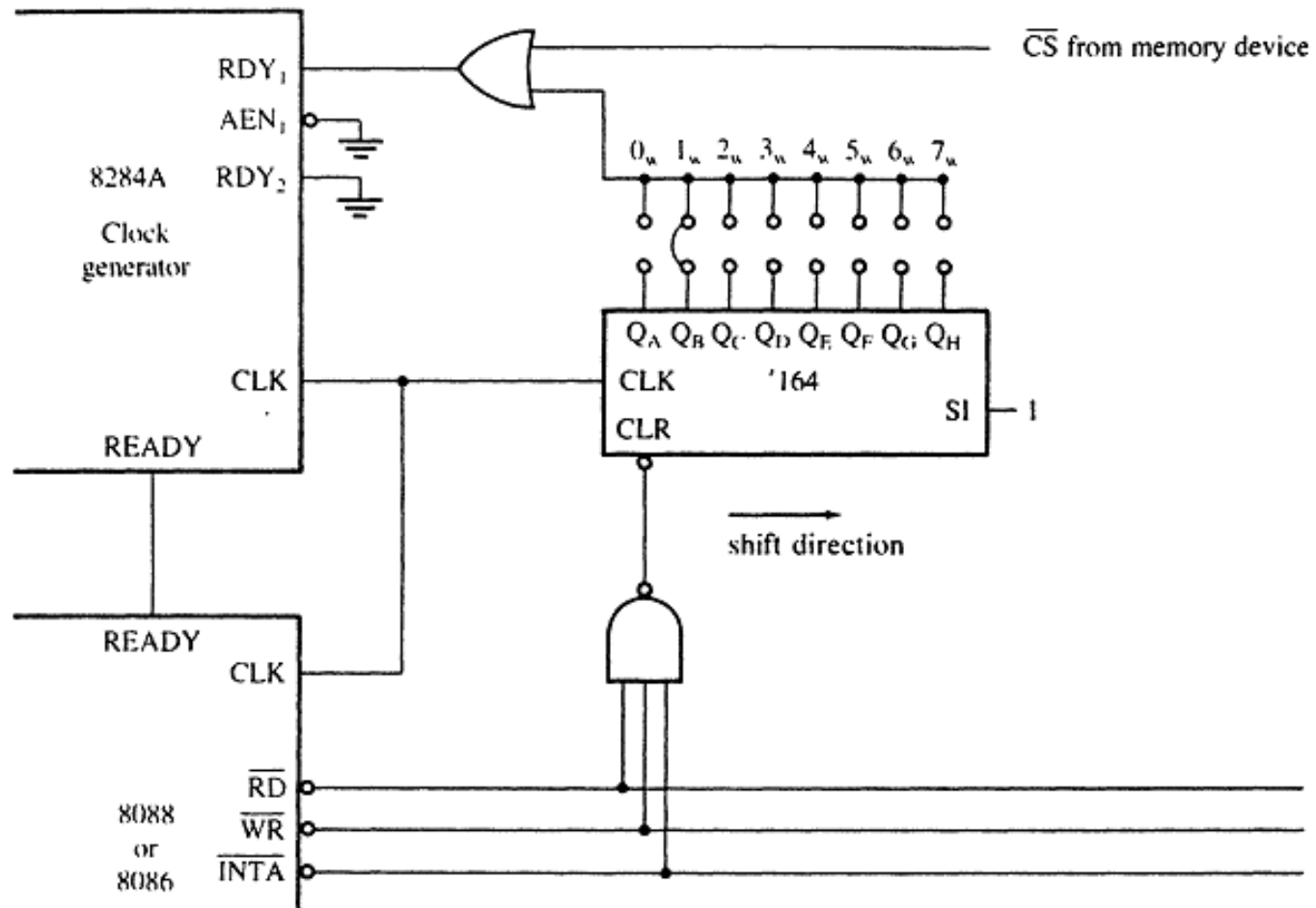
Temporización de ductos

Ciclo de escritura según especificaciones

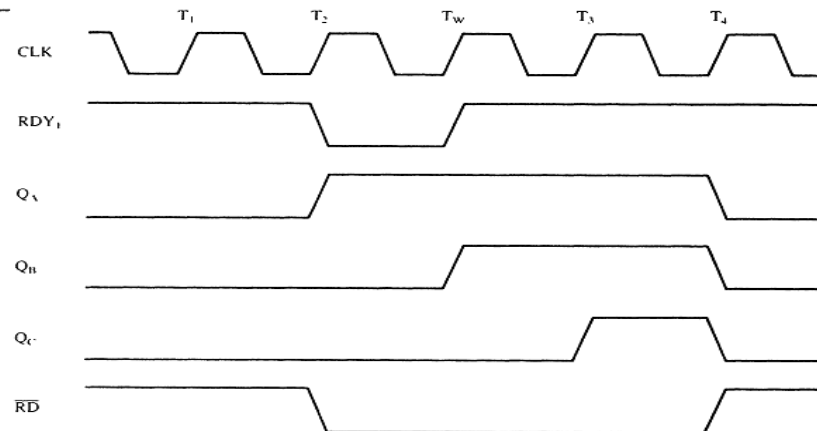
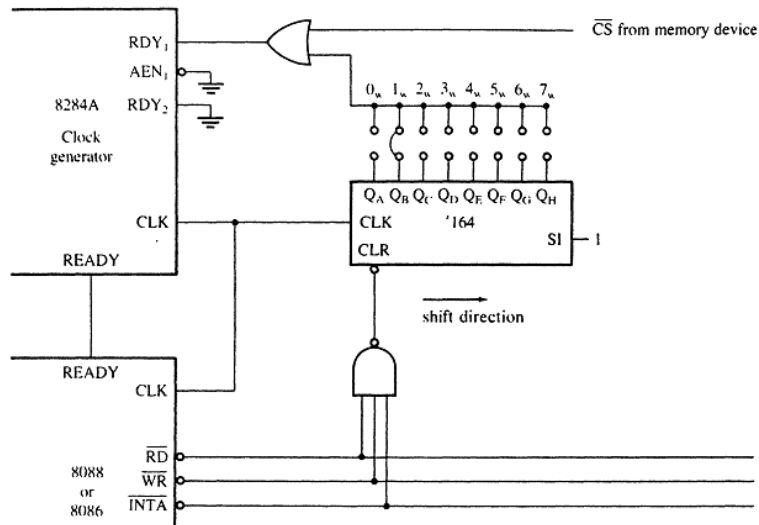


Temporización de ductos

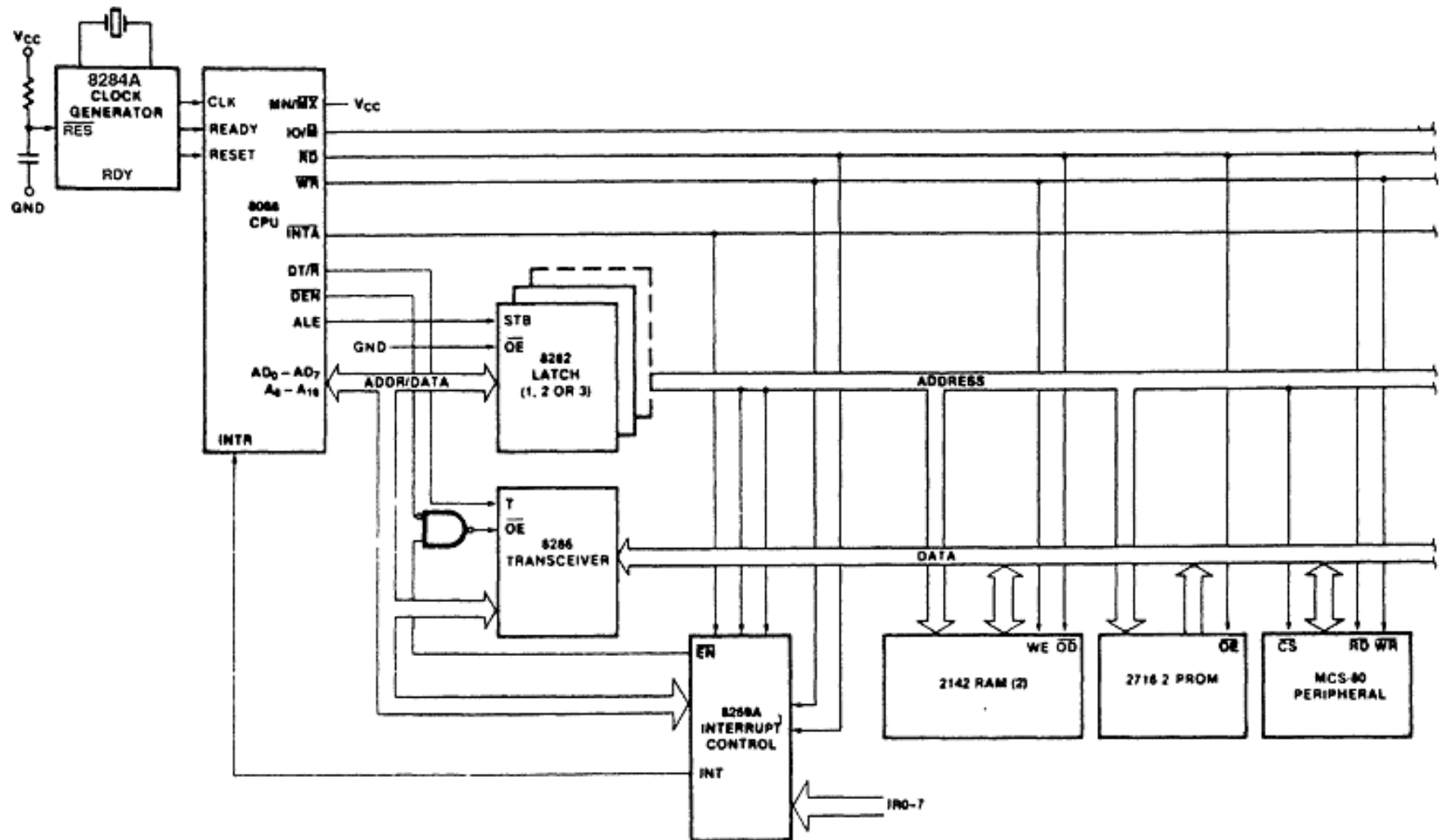
Circuito para generar ciclos de espera



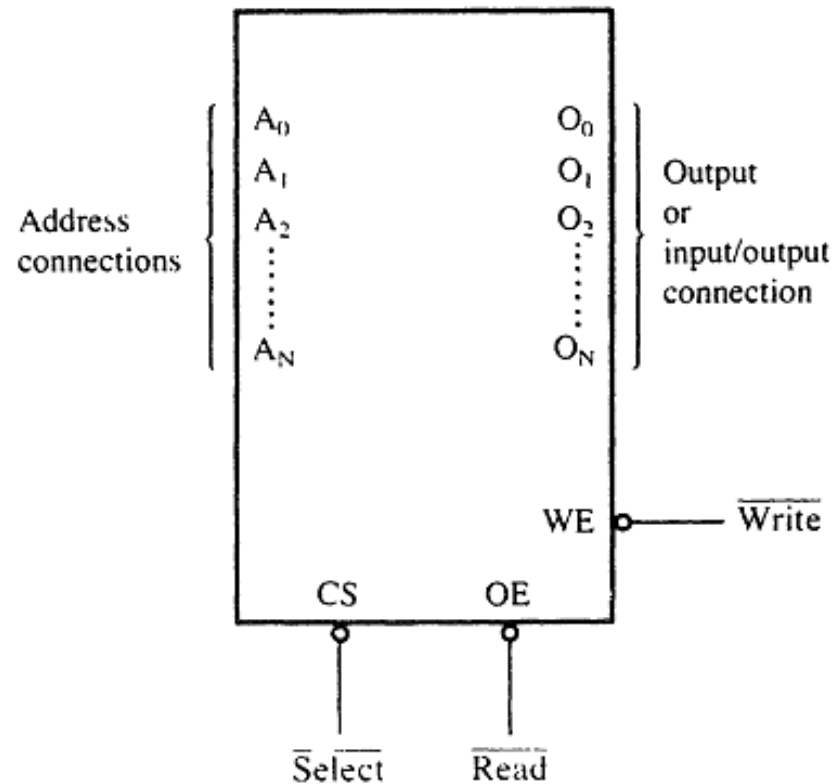
Circuito para generar ciclos de espera



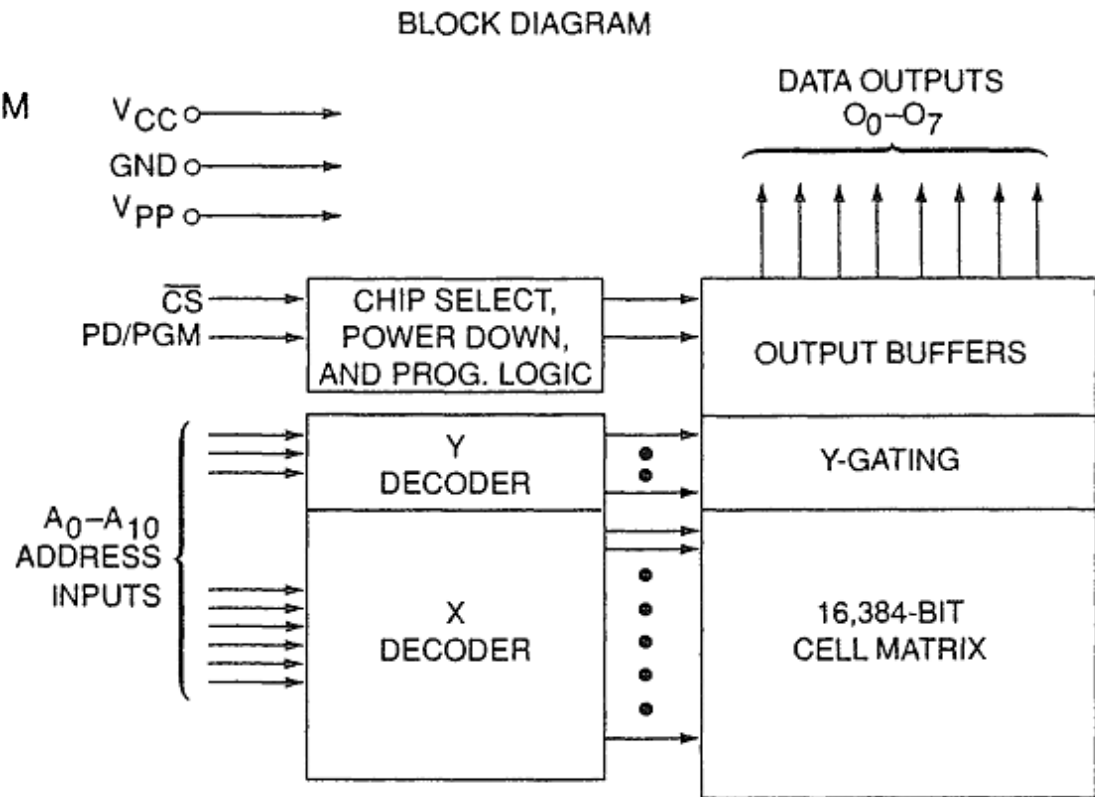
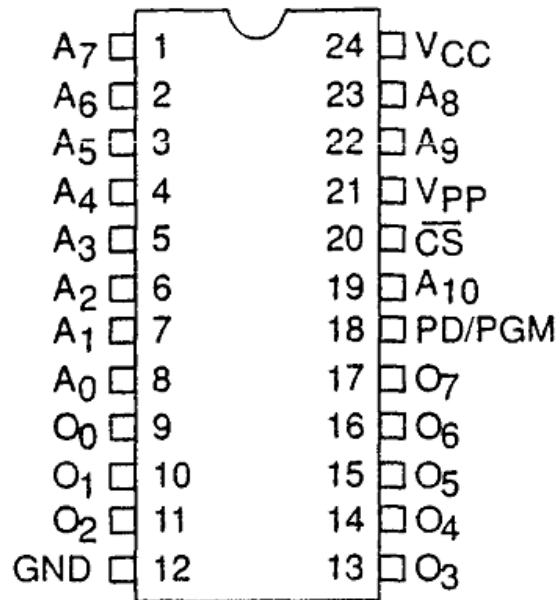
Sistema en modo mínimo



Interfaz a memoria



Memoria EPROM 2716 (2Kx8)



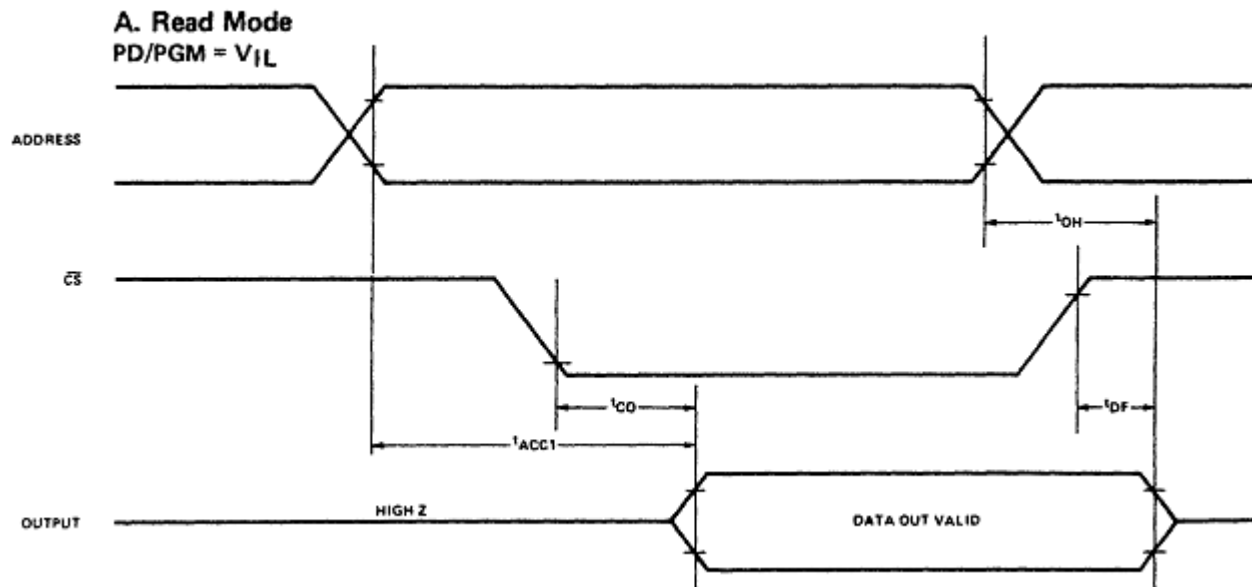
Memoria EPROM 2716 (2Kx8)

A.C. Characteristics

$T_A = 0^\circ\text{C}$ to 70°C , $V_{CC}^{[1]} = +5\text{V} \pm 5\%$, $V_{PP}^{[2]} = V_{CC} \pm 0.6\text{V}^{[3]}$

Symbol	Parameter	Limits			Unit	Test Conditions
		Min.	Typ. ^[4]	Max.		
t_{ACC1}	Address to Output Delay		250	450	ns	PD/PGM = $\overline{CS} = V_{IL}$
t_{ACC2}	PD/PGM to Output Delay		280	450	ns	$\overline{CS} = V_{IL}$
t_{CO}	Chip Select to Output Delay			120	ns	PD/PGM = V_{IL}
t_{PF}	PD/PGM to Output Float	0		100	ns	$\overline{CS} = V_{IL}$
t_{DF}	Chip Deselect to Output Float	0		100	ns	PD/PGM = V_{IL}
t_{OH}	Address to Output Hold	0			ns	PD/PGM = $\overline{CS} = V_{IL}$

WAVEFORMS



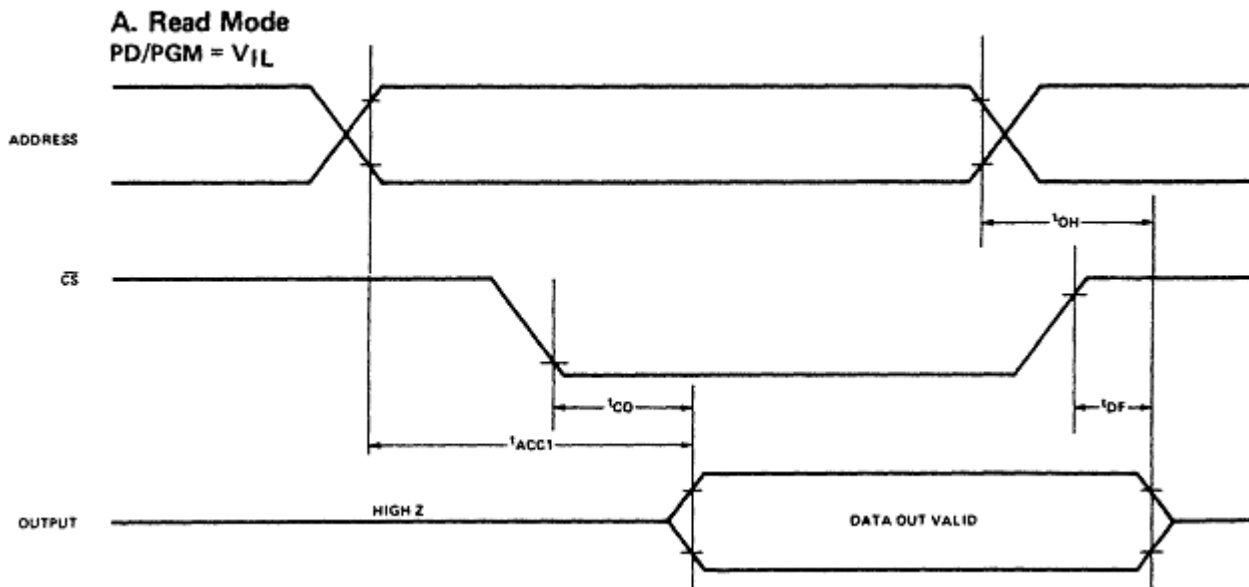
Memoria EPROM 2716 (2Kx8)

A.C. Characteristics

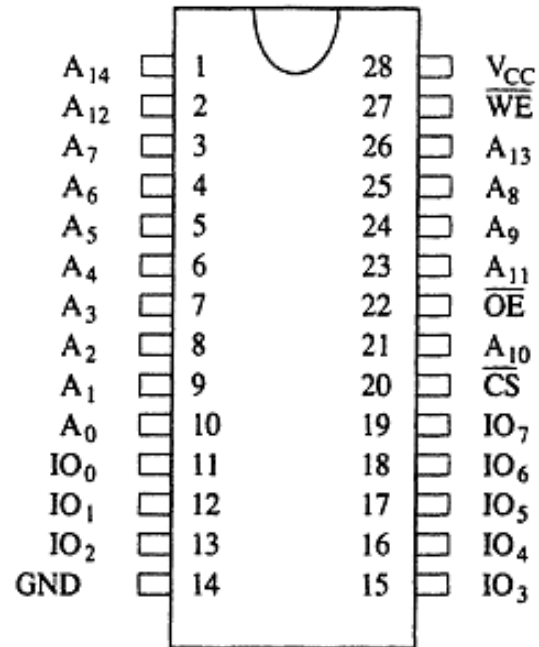
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t_{OH}	Address to Output Hold	0			ns	PD/PGM = $\overline{CS} = V_{IL}$

WAVEFORMS



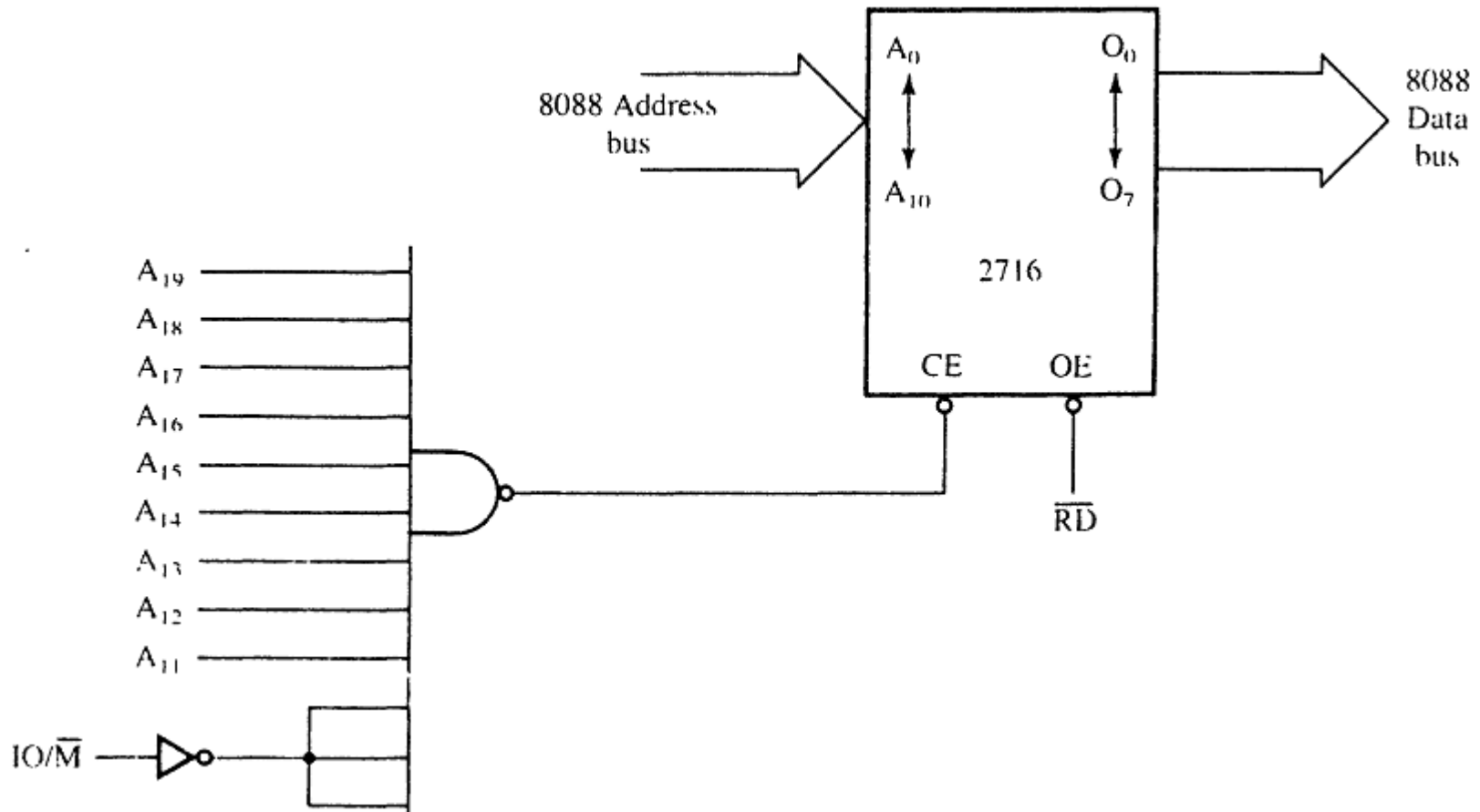
Memoria RAM 62256 (32Kx8)



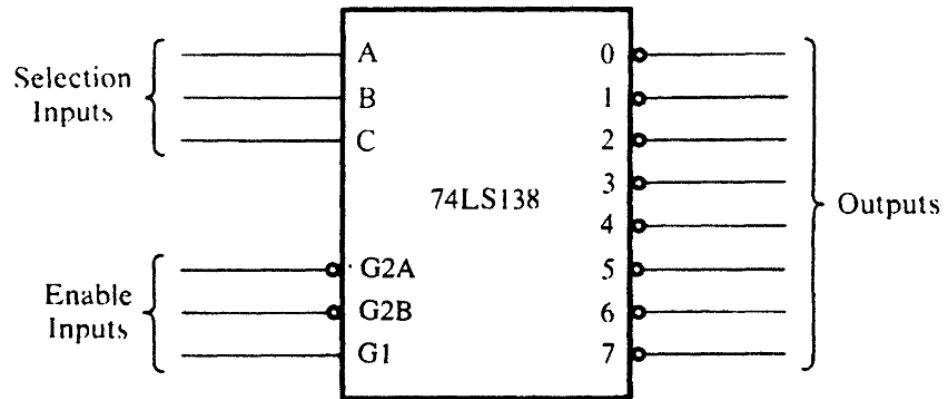
PIN FUNCTION

A ₀ - A ₁₄	Addresses
IO ₀ - IO ₇	Data connections
\overline{CS}	Chip select
\overline{OE}	Output enable
\overline{WE}	Write enable
V _{CC}	+5V Supply
GND	Ground

Decodificador de Memoria

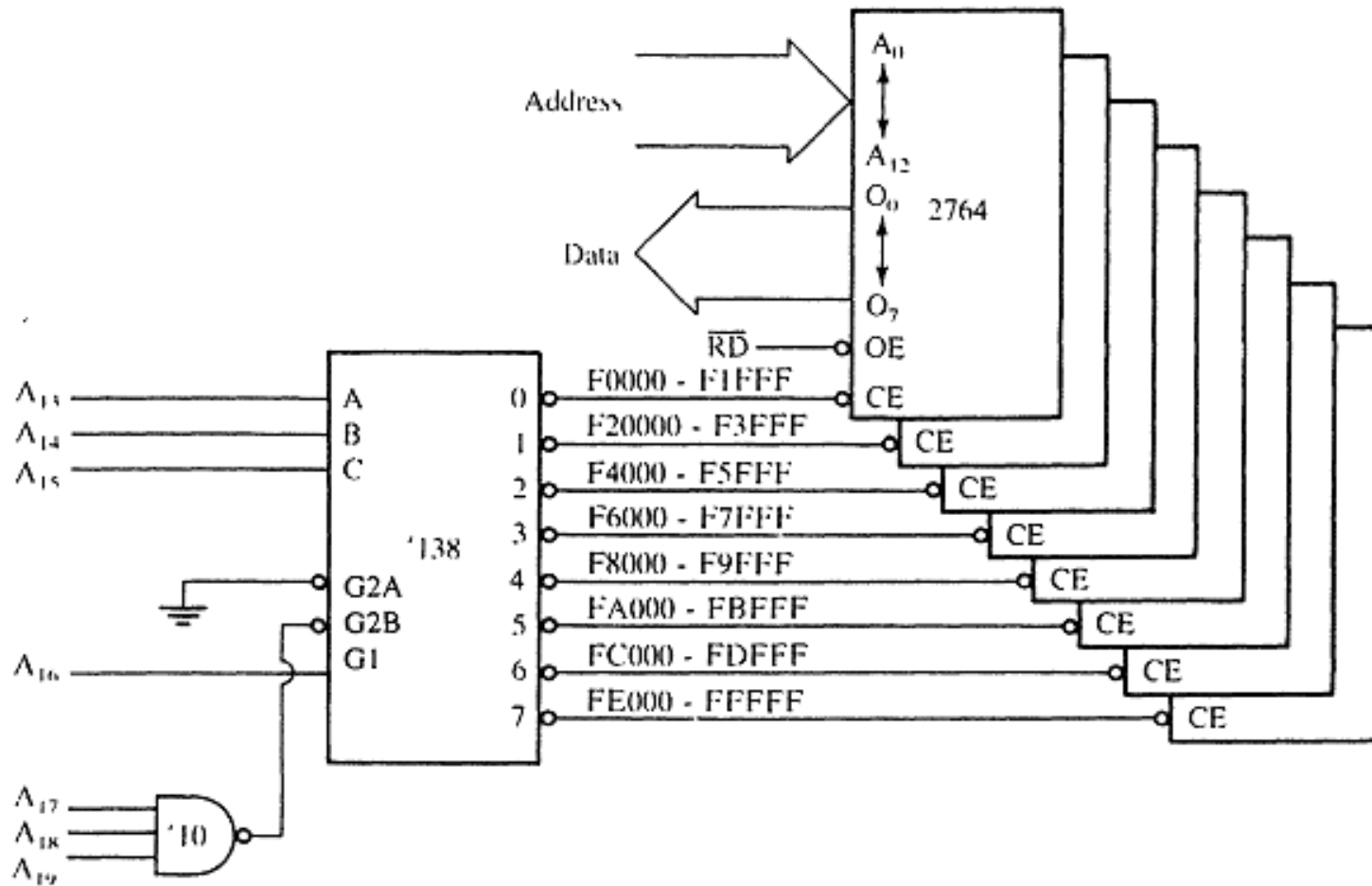


Decodificador de Memoria

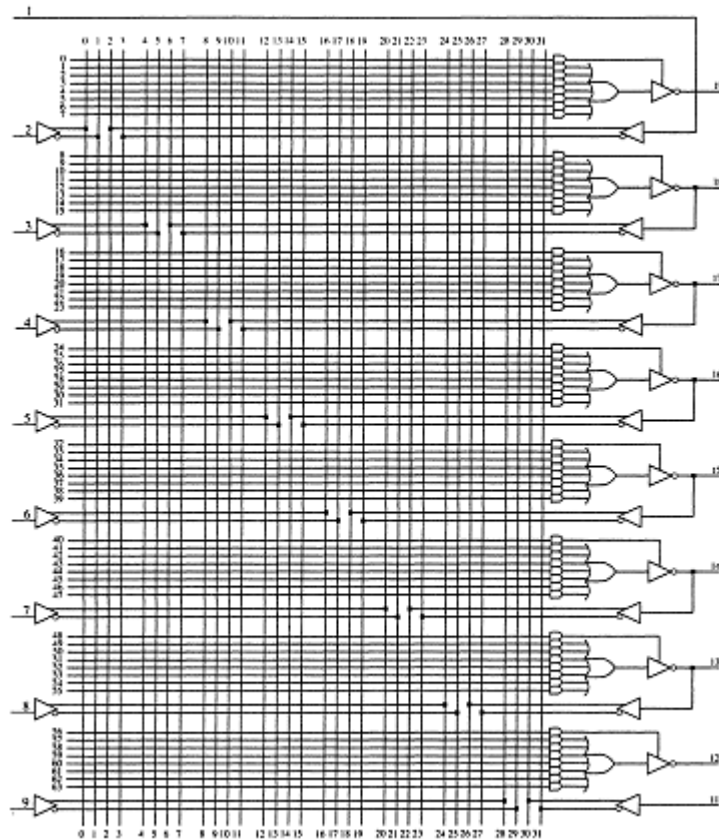


Inputs						Outputs							
Enable			Select										
$\overline{G2A}$	$\overline{G2B}$	G1	C	B	A	$\overline{0}$	$\overline{1}$	$\overline{2}$	$\overline{3}$	$\overline{4}$	$\overline{5}$	$\overline{6}$	$\overline{7}$
1	X	X	X	X	X	1	1	1	1	1	1	1	1
X	1	X	X	X	X	1	1	1	1	1	1	1	1
X	X	0	X	X	X	1	1	1	1	1	1	1	1
0	0	1	0	0	0	0	1	1	1	1	1	1	1
0	0	1	0	0	1	1	0	1	1	1	1	1	1
0	0	1	0	1	0	1	1	0	1	1	1	1	1
0	0	1	0	1	1	1	1	1	0	1	1	1	1
0	0	1	1	0	0	1	1	1	1	0	1	1	1
0	0	1	1	0	1	1	1	1	1	1	0	1	1
0	0	1	1	1	0	1	1	1	1	1	1	0	1
0	0	1	1	1	1	1	1	1	1	1	1	1	0

Decodificador de Memoria (múltiple)



Decodificador de Memoria (PLD)



```

TITLE      Address Decoder
PATTERN    Test 1
REVISION    A
AUTHOR      Barry E. Brey
COMPANY     BreyCo
DATE        6/6/96
CHIP        DECODER1 PAL16L8
    
```

```

;pins 1  2  3  4  5  6  7  8  9 10
      A19 A18 A17 A16 A15 A14 A13 NC NC GND

;pins 11 12 13 14 15 16 17 18 19 20
      NC 08 07 06 05 04 03 02 01 VCC
    
```

EQUATIONS

```

/O0 = A19 * A18 * A17 * A16 * /A15 * /A14 * /A13
/O02 = A19 * A18 * A17 * A16 * /A15 * /A14 * A13
/O03 = A19 * A18 * A17 * A16 * /A15 * A14 * /A13
/O04 = A19 * A18 * A17 * A16 * /A15 * /A14 * A13
/O05 = A19 * A18 * A17 * A16 * A15 * /A14 * /A13
/O06 = A19 * A18 * A17 * A16 * A15 * A14 * A13
/O07 = A19 * A18 * A17 * A16 * A15 * /A14 * /A13
/O08 = A19 * A18 * A17 * A16 * A15 * /A14 * A13
    
```

Decodificador de Memoria (múltiple PLD)

