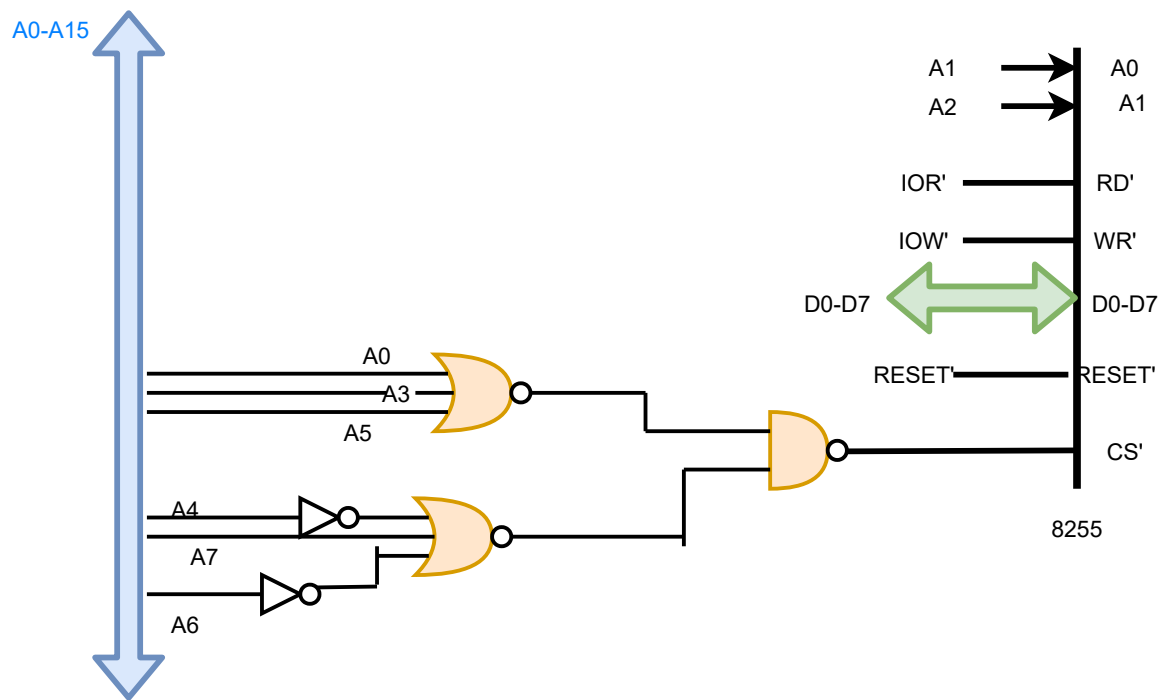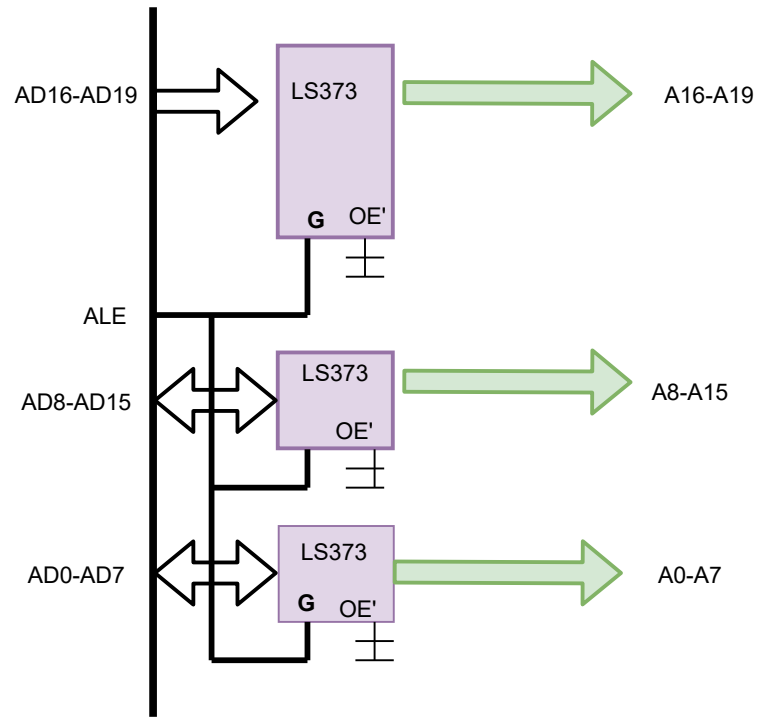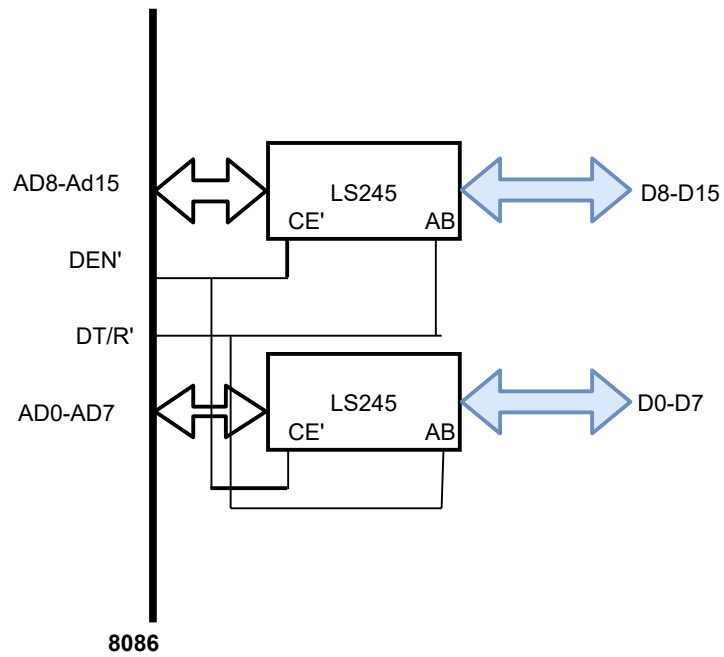# 8255 INTERFACING WITH 8086

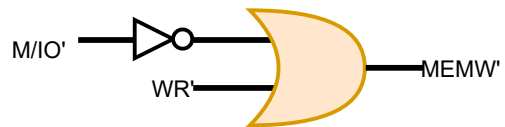A0-A15

A1 → A0
A2 → A1

IOR' —— RD'
IOW' —— WR'
D0-D7 ⟷ D0-D7
RESET' —— RESET'

A0
A3
A5

A4
A7
A6

CS'

8255

SYSTEM BUS OF 8086(ADDRESS)

AD16-AD19 → LS373 → A16-A19

G OE'

ALE

AD8-AD15 ↔ LS373 → A8-A15

OE'

AD0-AD7 ↔ LS373 → A0-A7

G OE'

SYSTEM BUS OF 8086(DATA BUS)

AD8-Ad15

DEN'

DT/R'

AD0-AD7

LS245
CE'   AB

D8-D15

LS245
CE'   AB

D0-D7

8086

M/IO' ——\
RD' ——/ IOR'

M/IO' ——\
WR' ——/ IOW'

M/IO' ——▷o——\
RD' ————/ MEMR'

M/IO' ——▷o——\
WR' ————/ MEMW'
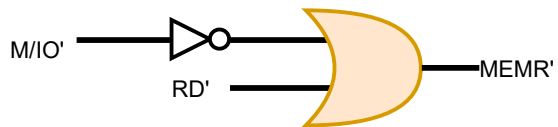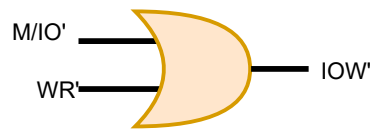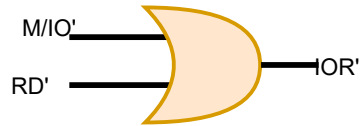
M/IO'	RD'	WR'	BUS CYCLE
1	0	1	MEMR'
1	1	0	MEMW'
0	0	1	IOR'
0	1	0	IOW'

8086 INPUTS

8086

5V — ⊏▥▯▥⊐ — **VCC**

MN/MX

HLDA

INTR

INTA

RESET — RESET

READY

CLK

NMI

HOLD

GND
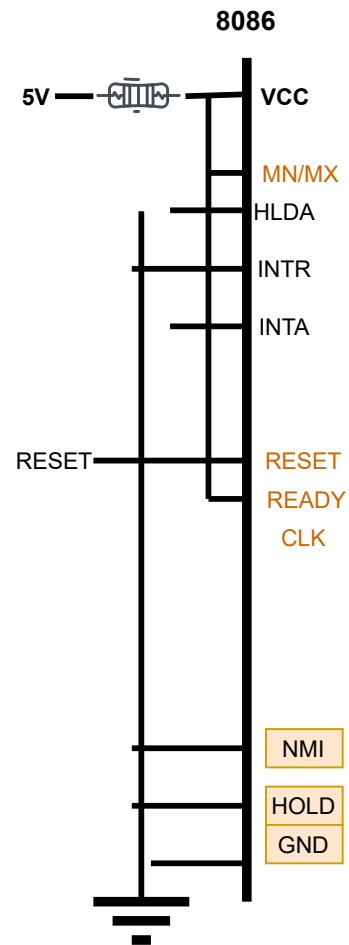
8255 INTERFACING WITH 8086
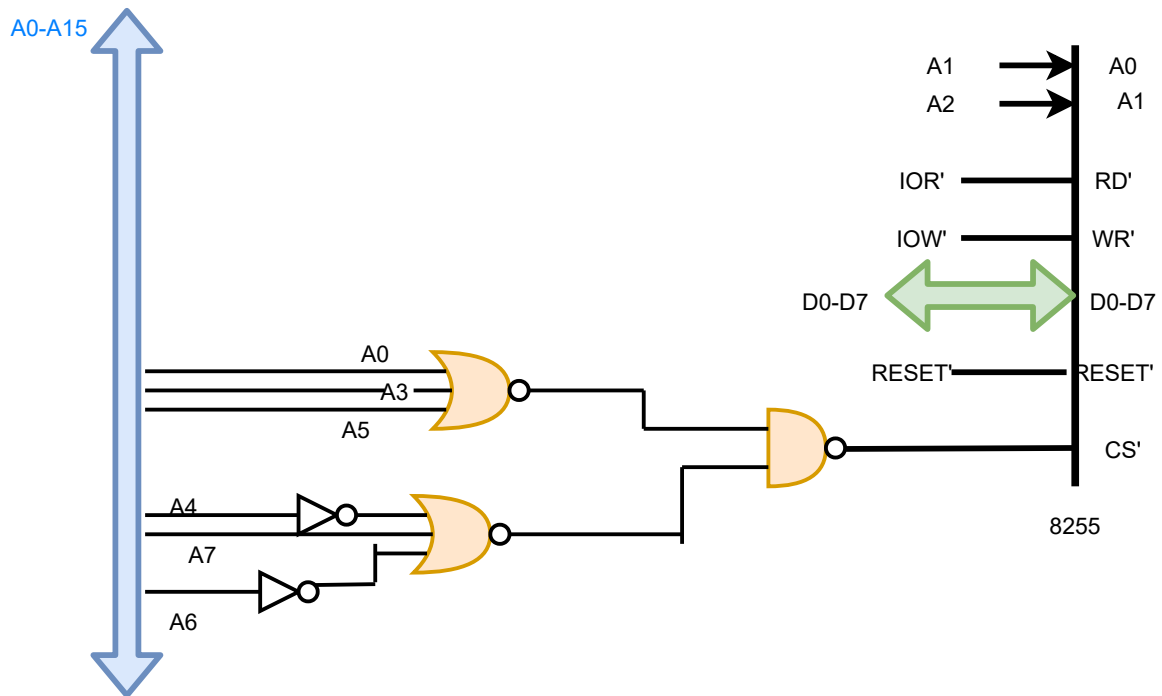
MEMORY DECODER

RAM INTERFACING

A1-A13

MEMWR' → WE'
MEMRD' → OE'
VCC → CS'
RAM10 → CE'

A0
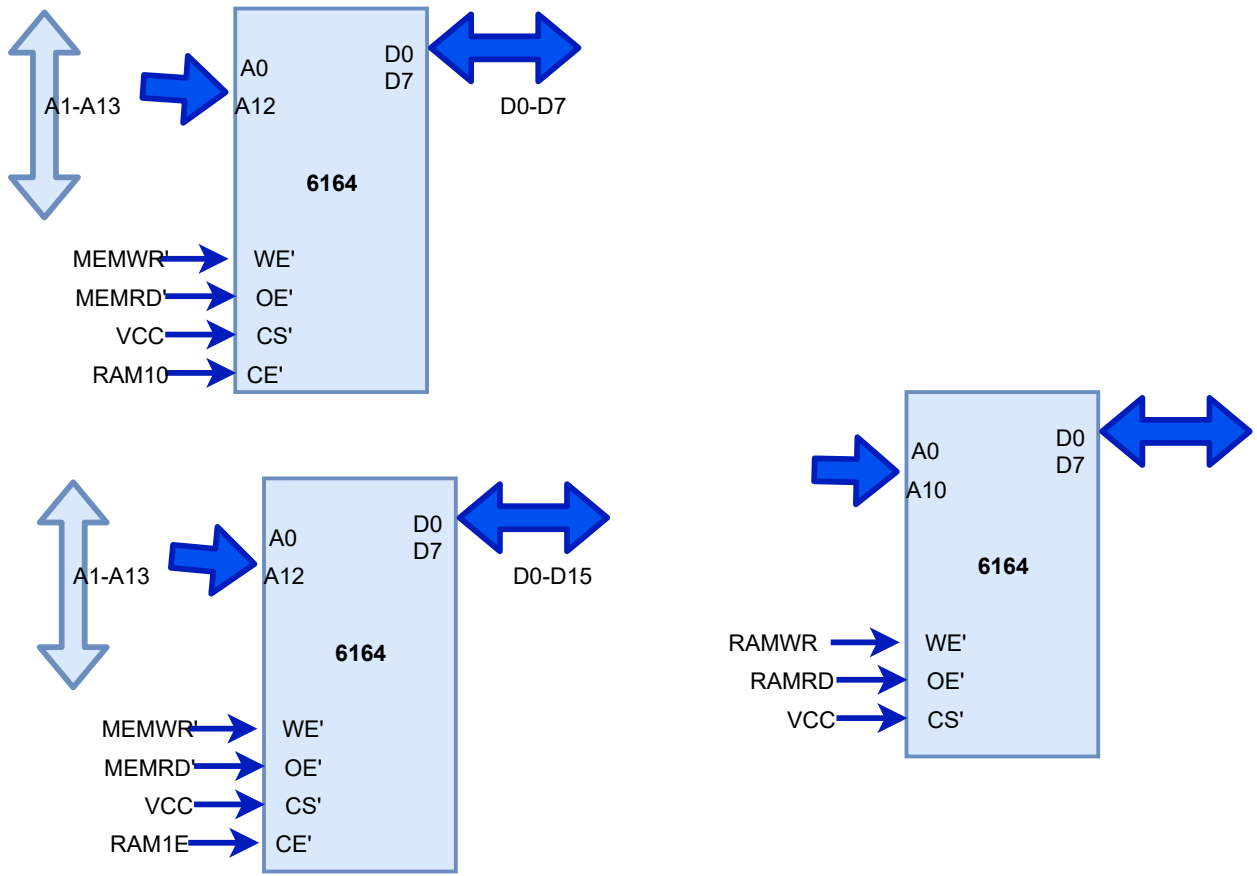A12

6164

D0
D7

D0-D7

A1-A13

MEMWR' → WE'
MEMRD' → OE'
VCC → CS'
RAM1E → CE'

A0
A12

6164

D0
D7

D0-D15

RAMWR → WE'
RAMRD → OE'
VCC → CS'

A0
A10

6164

D0
D7

ROM INTERFACING

A1		D0		D0
A11	→	D7	↔	D7
		2716(1E)		
RDL'	→	OE'		
ROM'1	→	CS'		

A1		D0		D8
A11	→	D7	↔	D15
		2716(10)		
RDH'	→	OE'		
ROM'1	→	CS'		