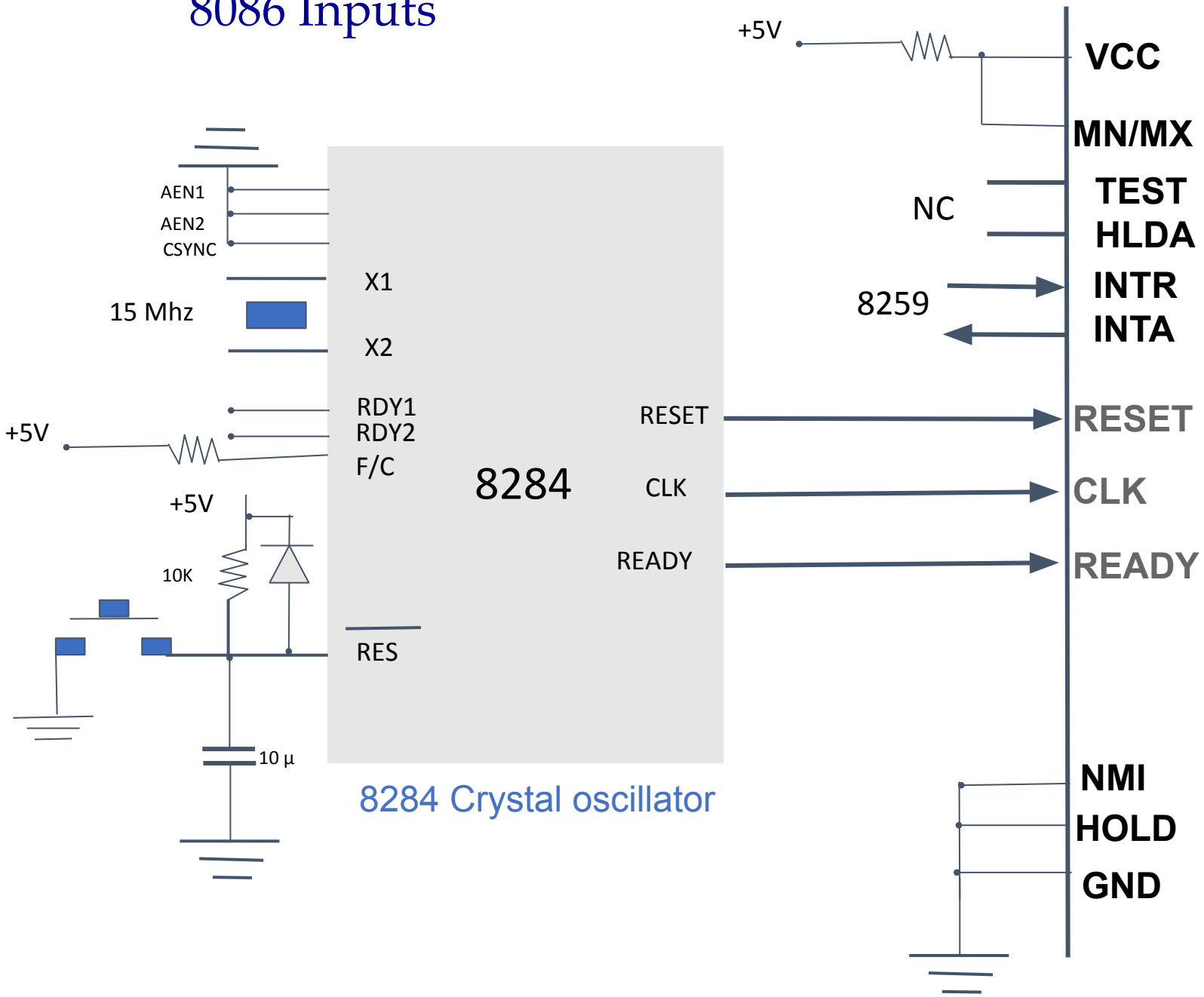
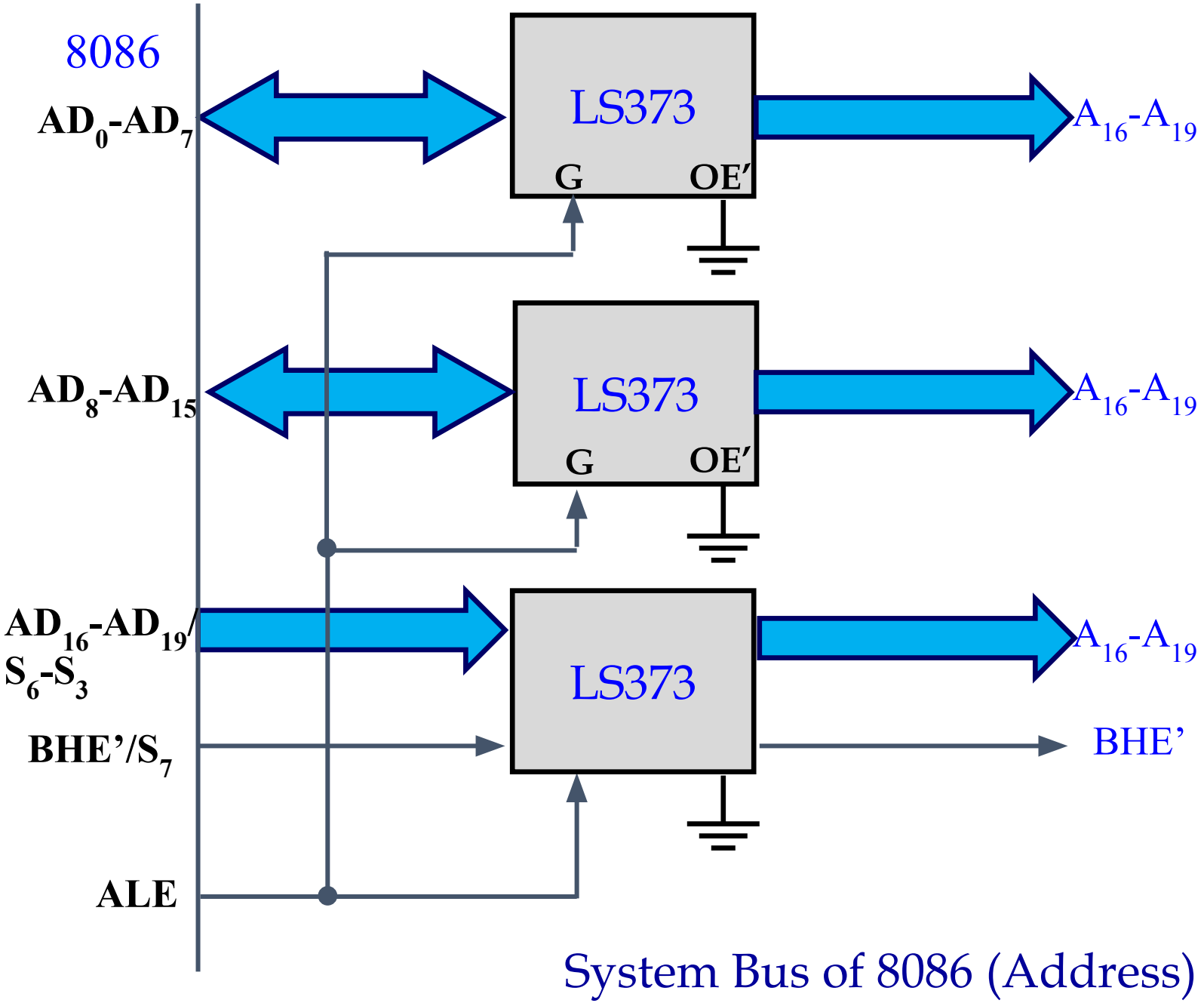
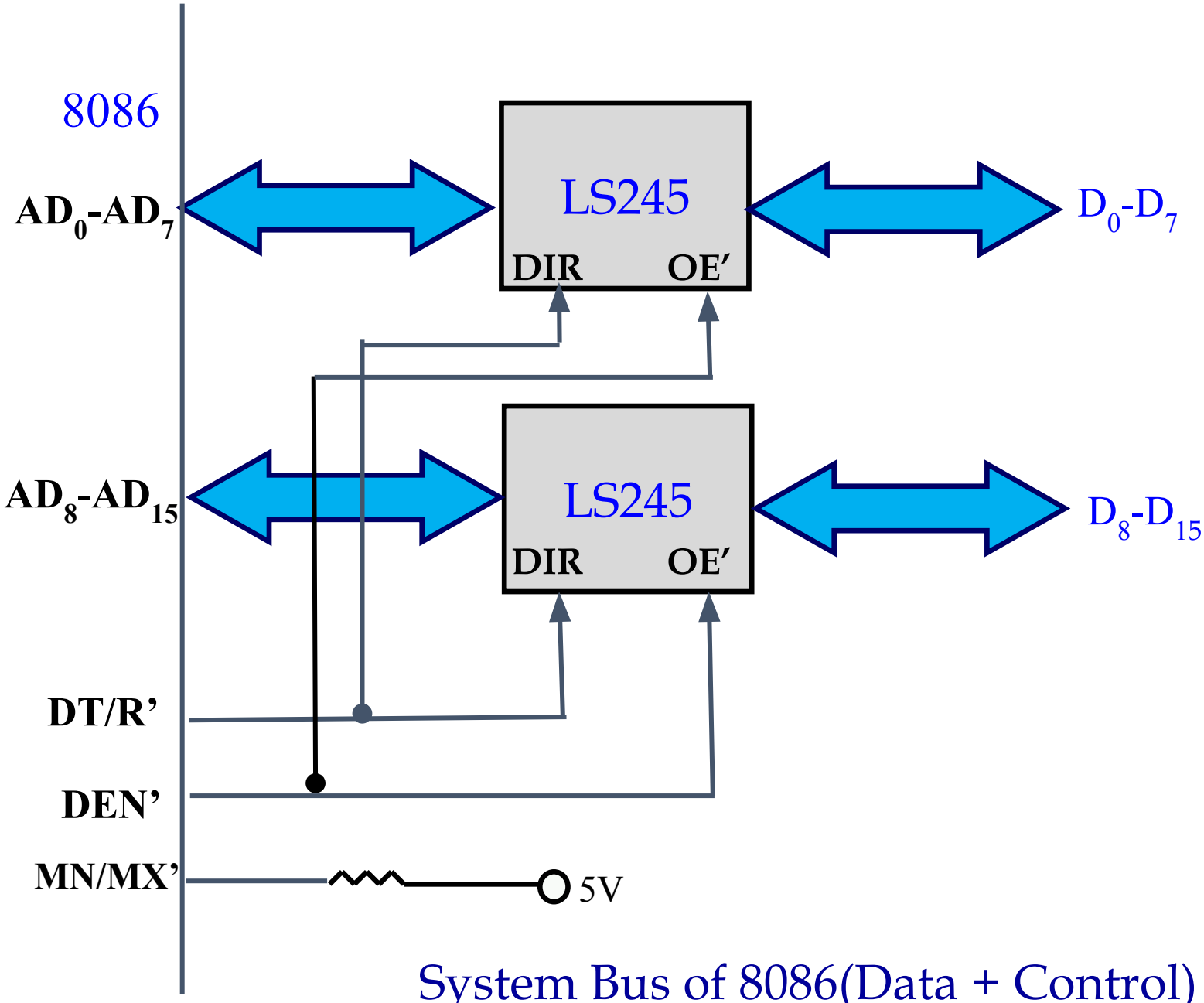
8086 Inputs



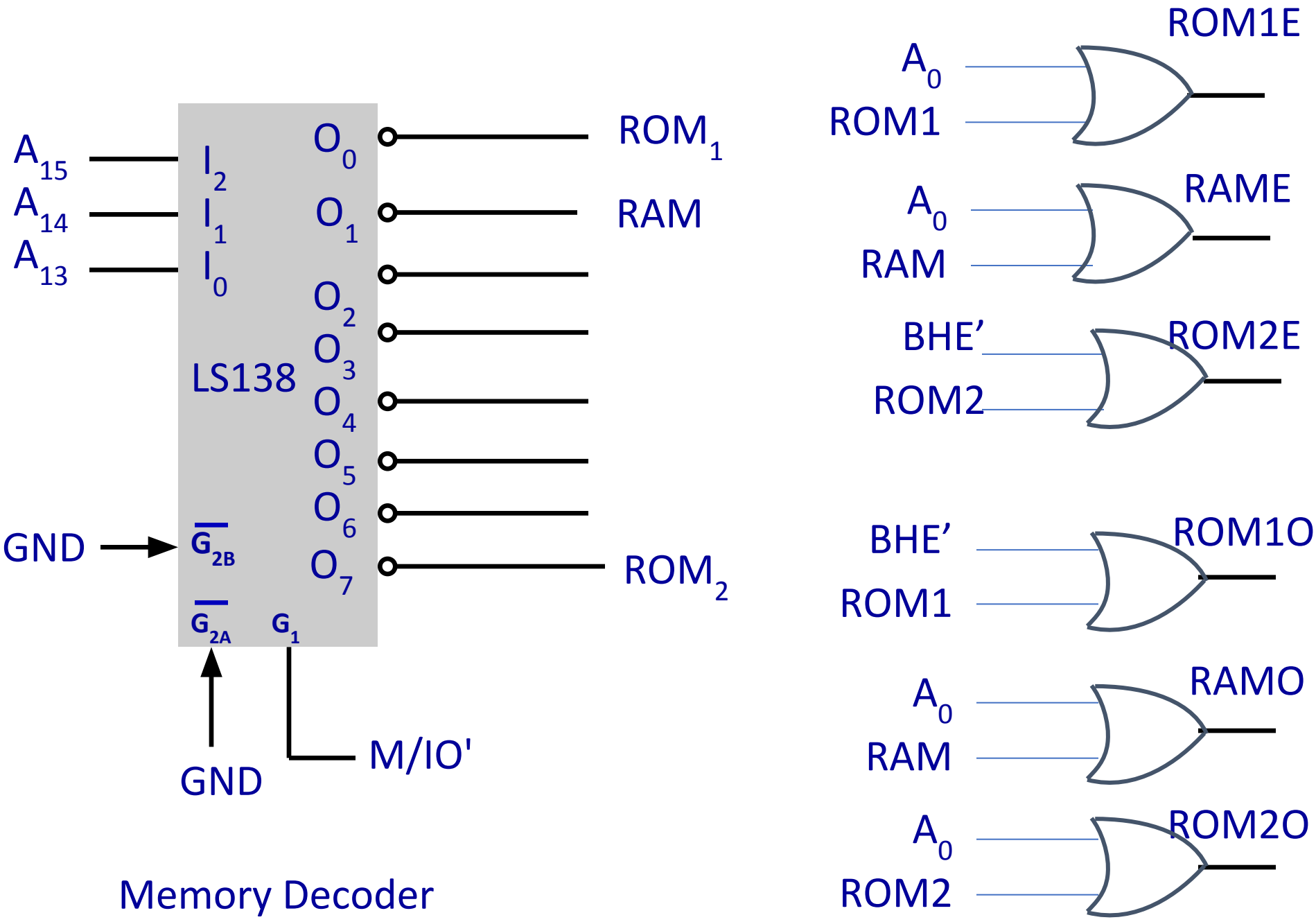
8284 Crystal oscillator

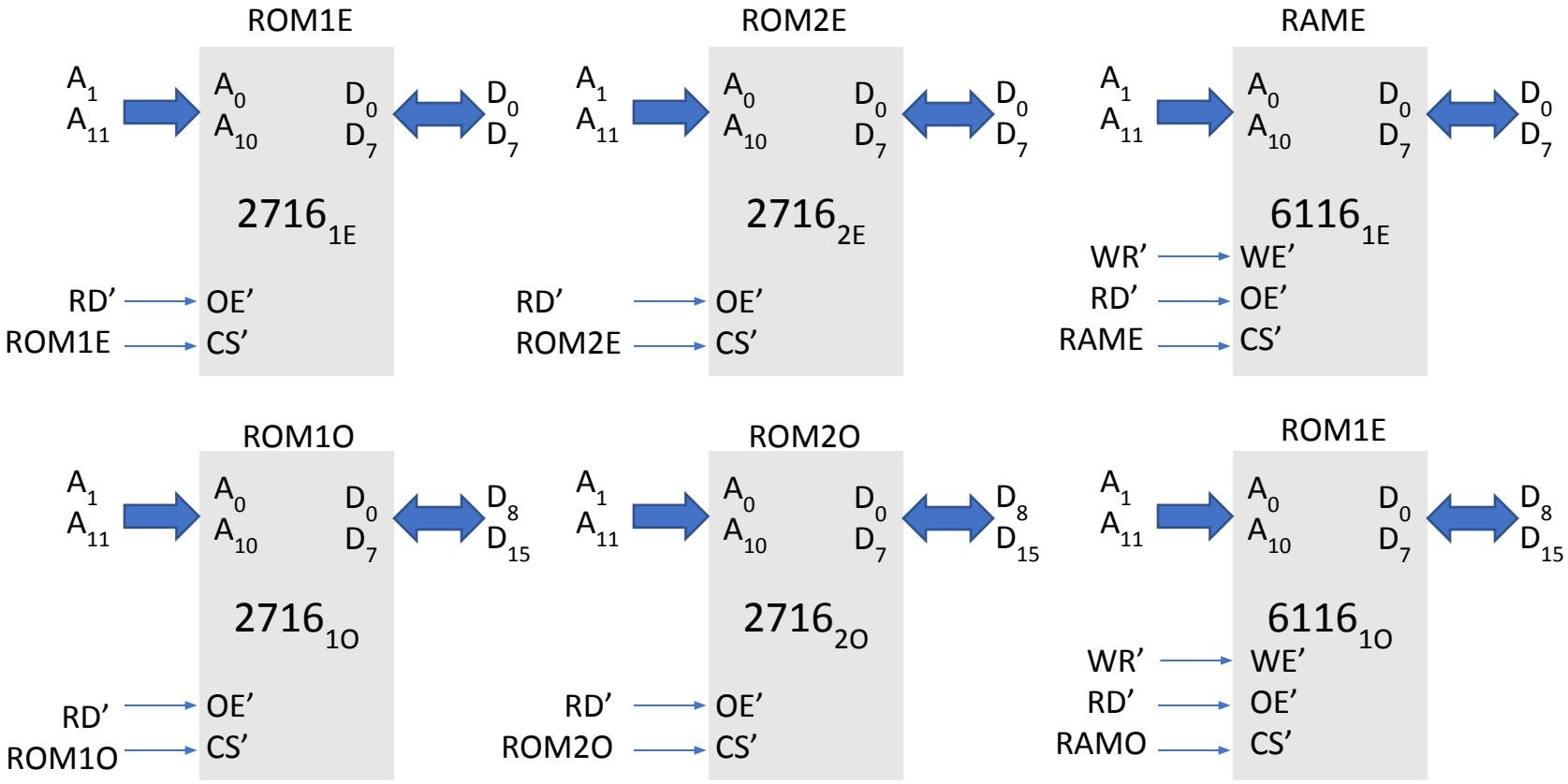


System Bus of 8086 (Address)

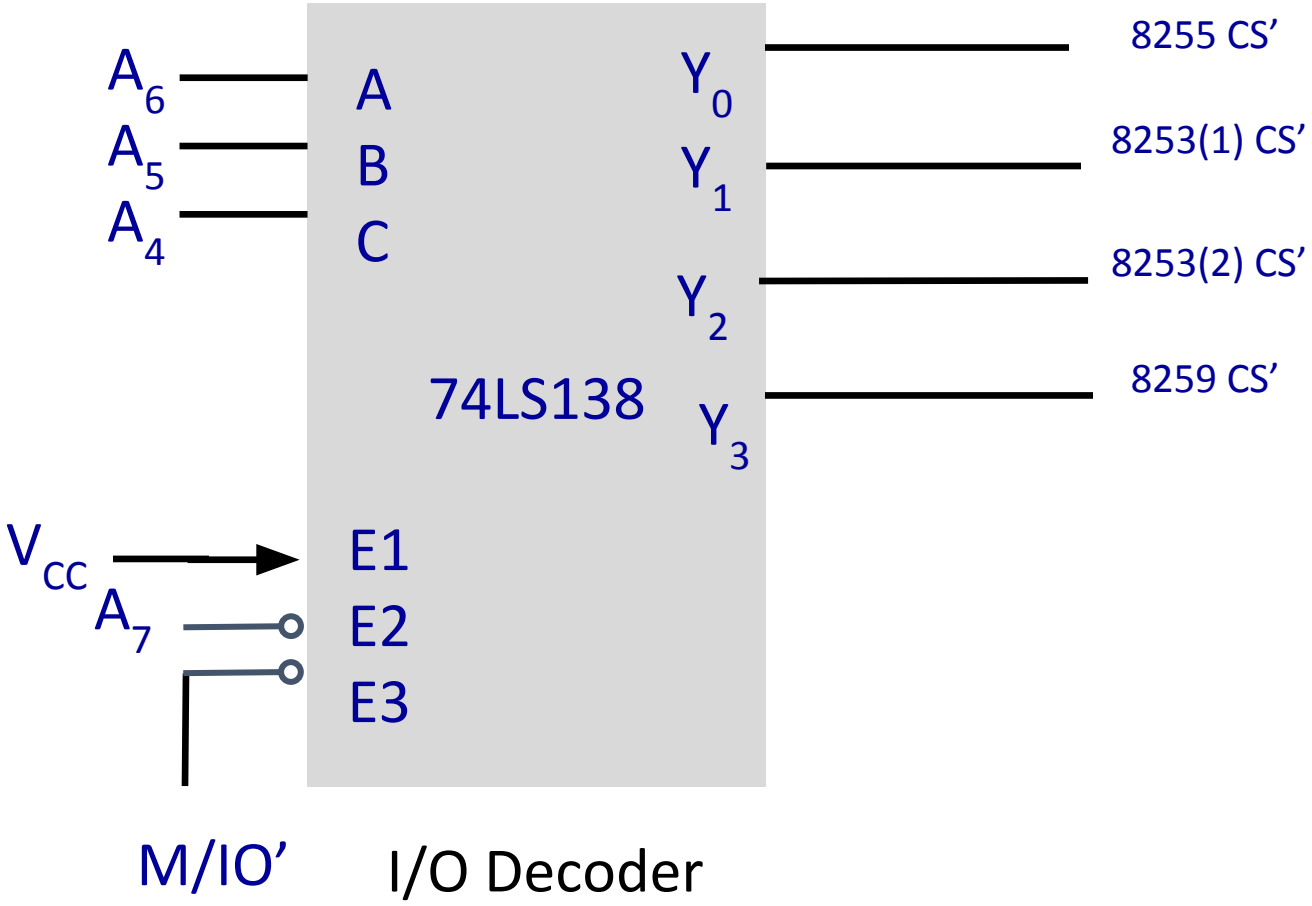


System Bus of 8086(Data + Control)

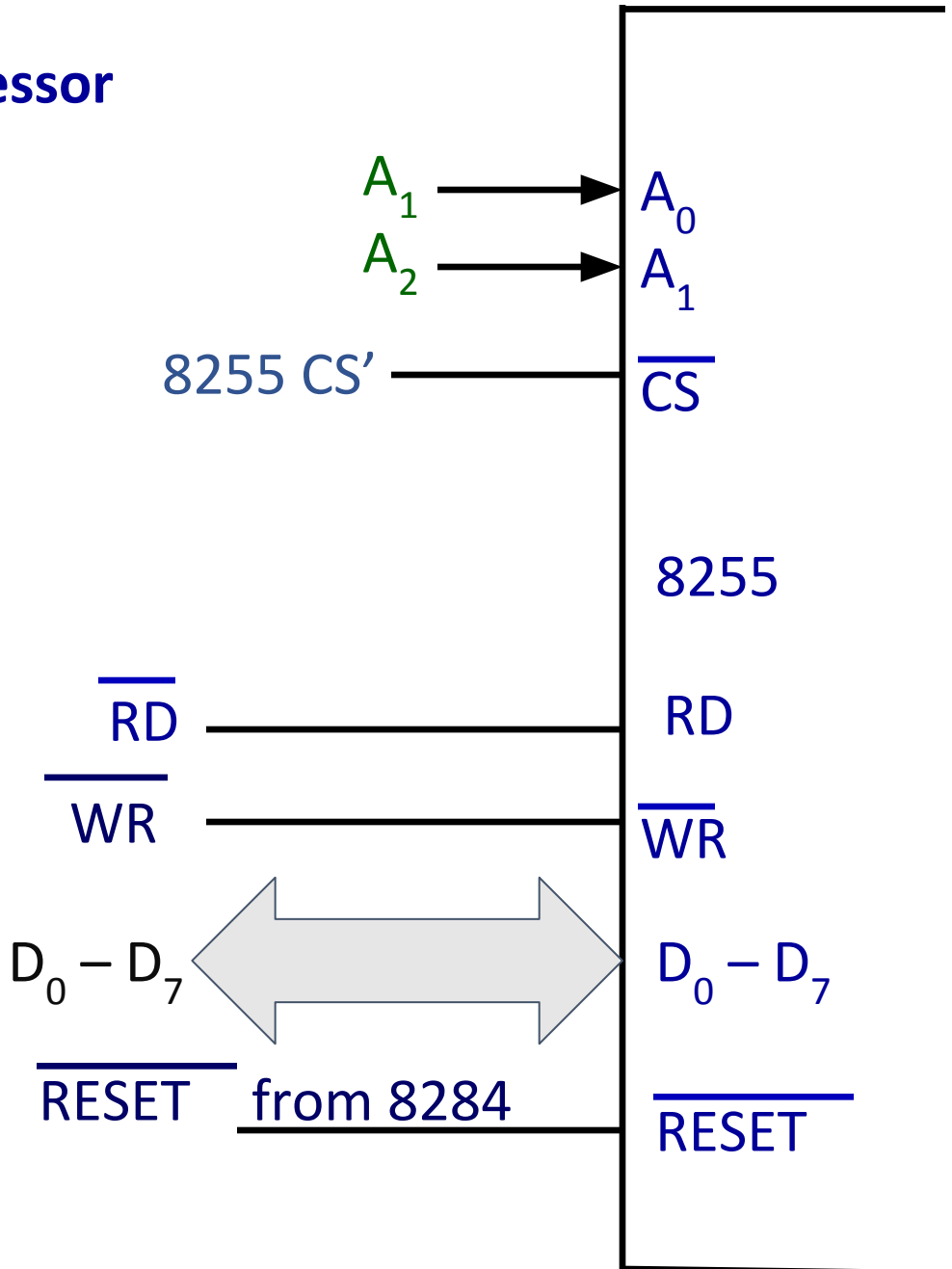

A15
A14
A13
I2
I1
I0
LS138
O0
O1
O2
O3
O4
O5
O6
O7
ROM1
RAM
ROM2
GND
G2B
G2A
G1
GND
M/IO'
Memory Decoder
ROM1E
A0
ROM1
RAME
A0
RAM
BHE'
ROM2E
ROM2
BHE'
ROM1O
ROM1
RAMO
A0
RAM
ROM2O
A0
ROM2



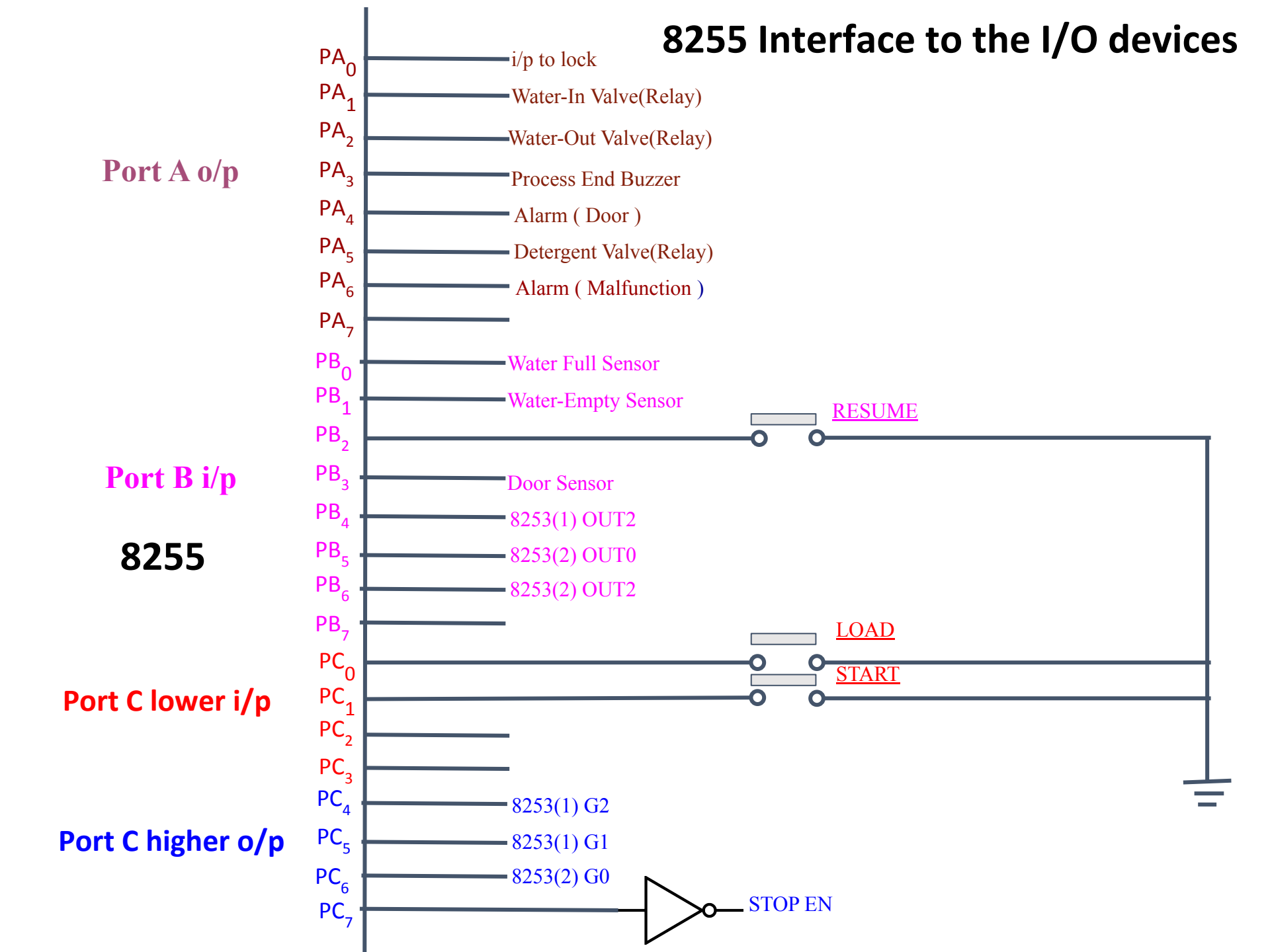
Memory Interfacing


A6
A5
A4
A
B
C
Y0
Y1
Y2
Y3
74LS138
8255 CS'
8253(1) CS'
8253(2) CS'
8259 CS'
VCC
A7
E1
E2
E3
M/IO'
I/O Decoder

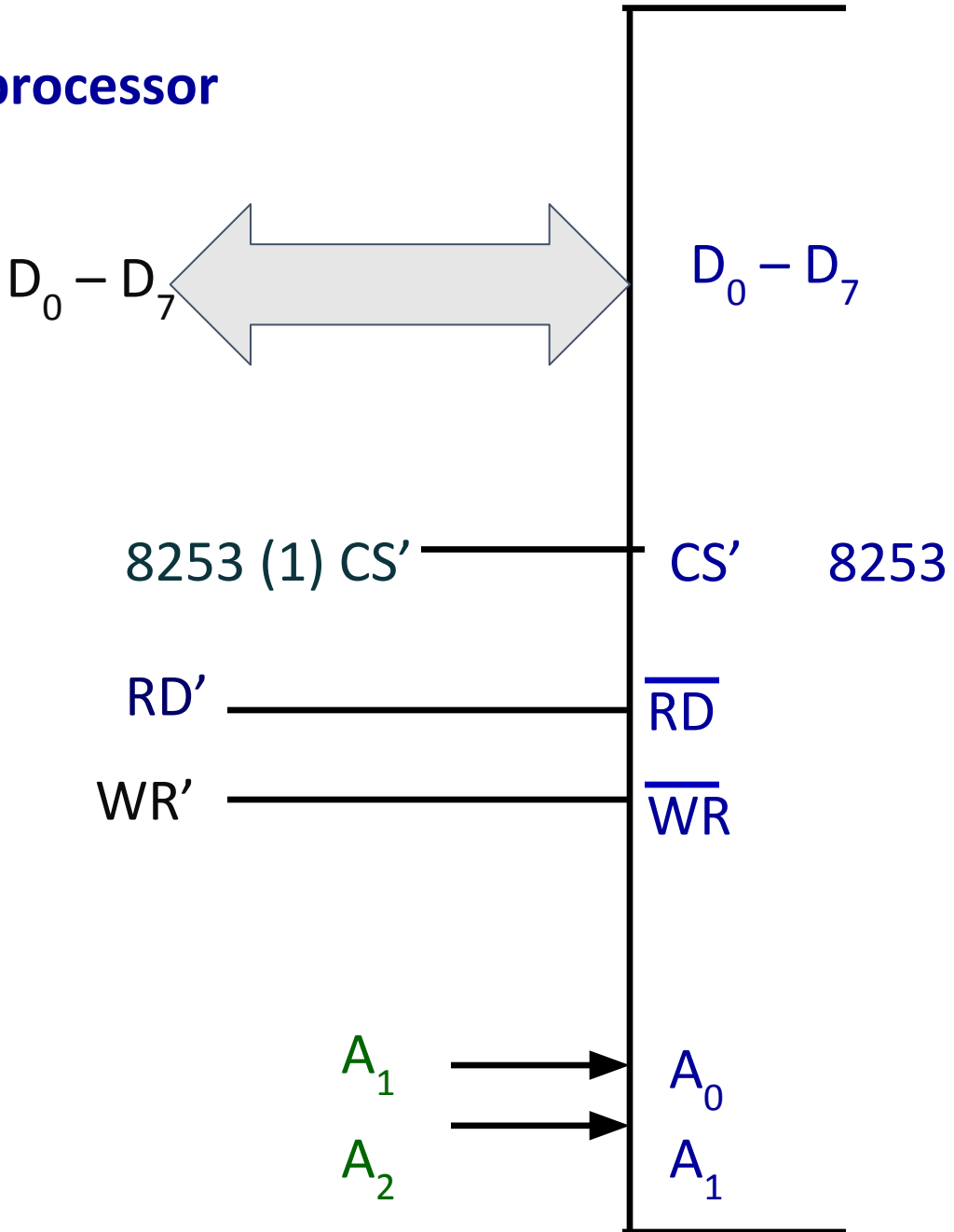
8255 Interface to the processor



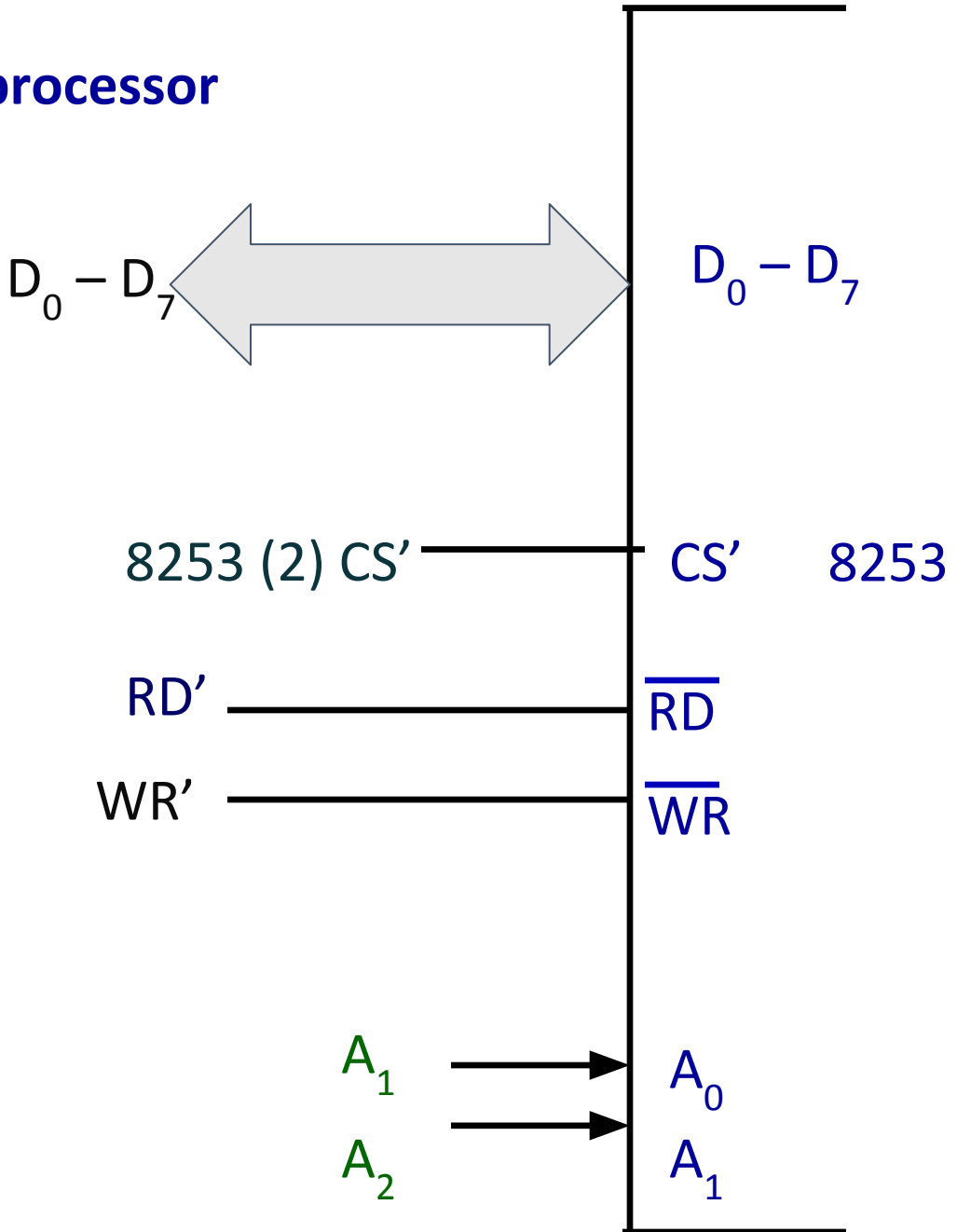
8255 Interface to the I/O devices

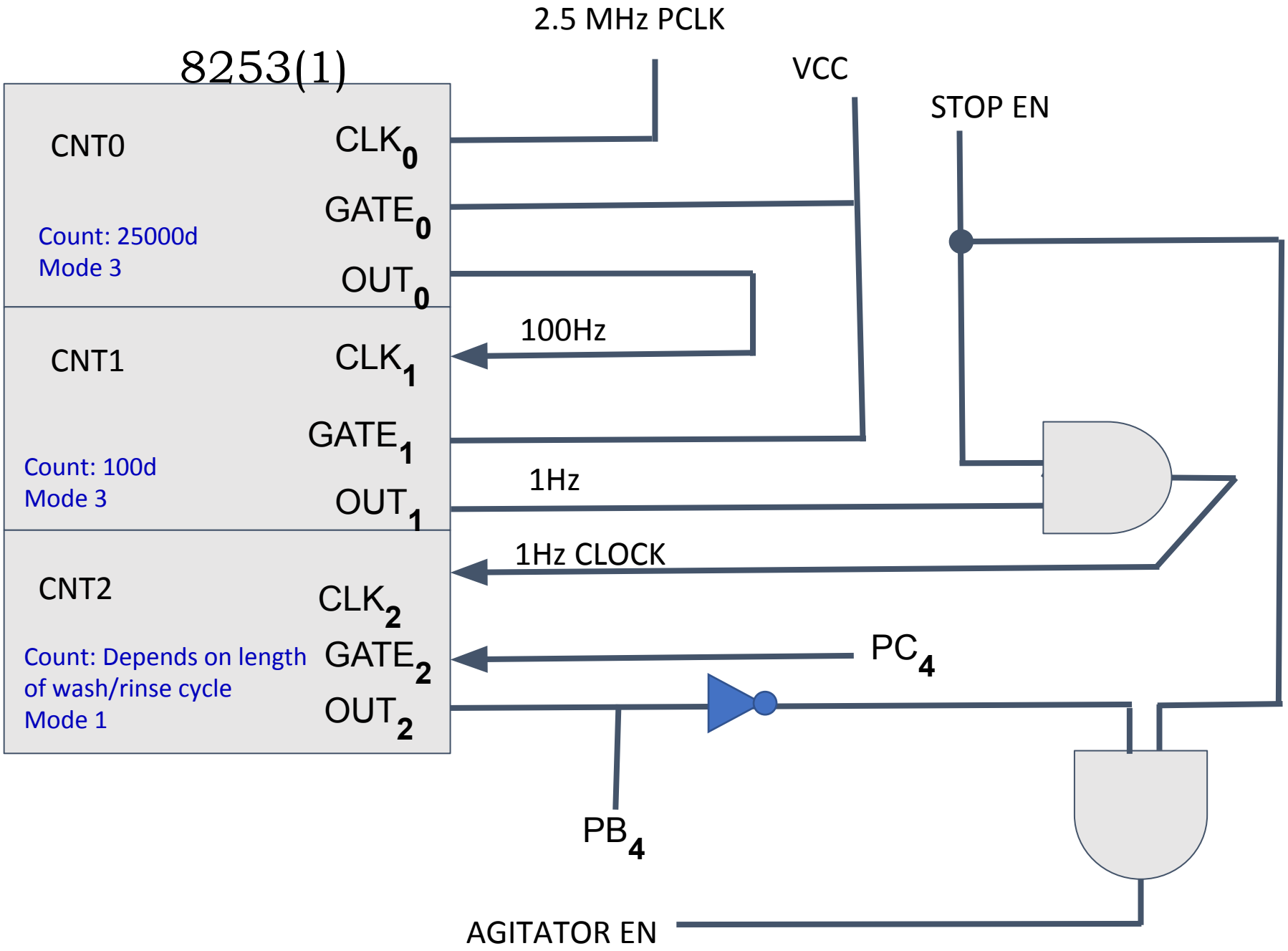


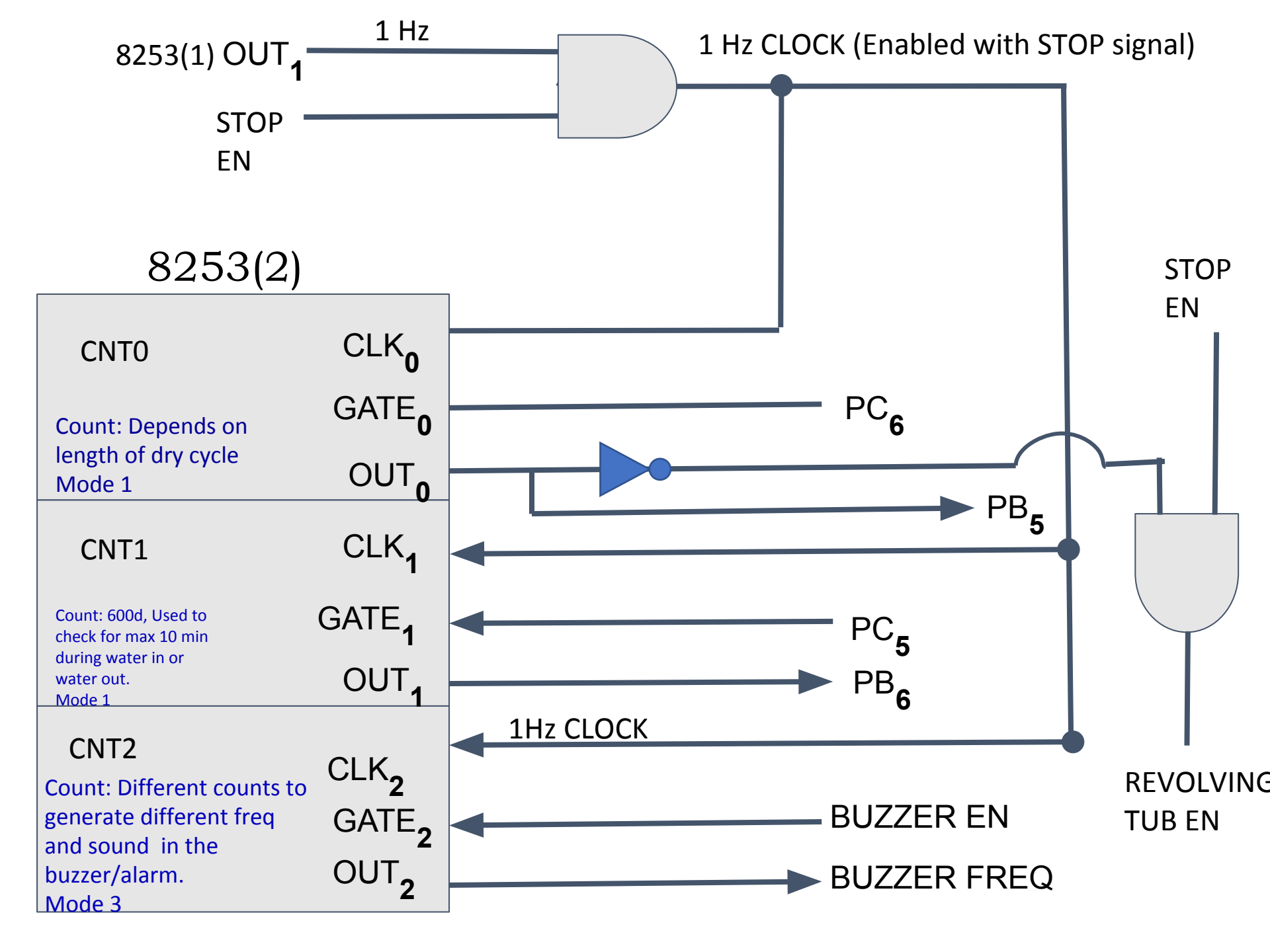
8253 (1) Interface to the processor

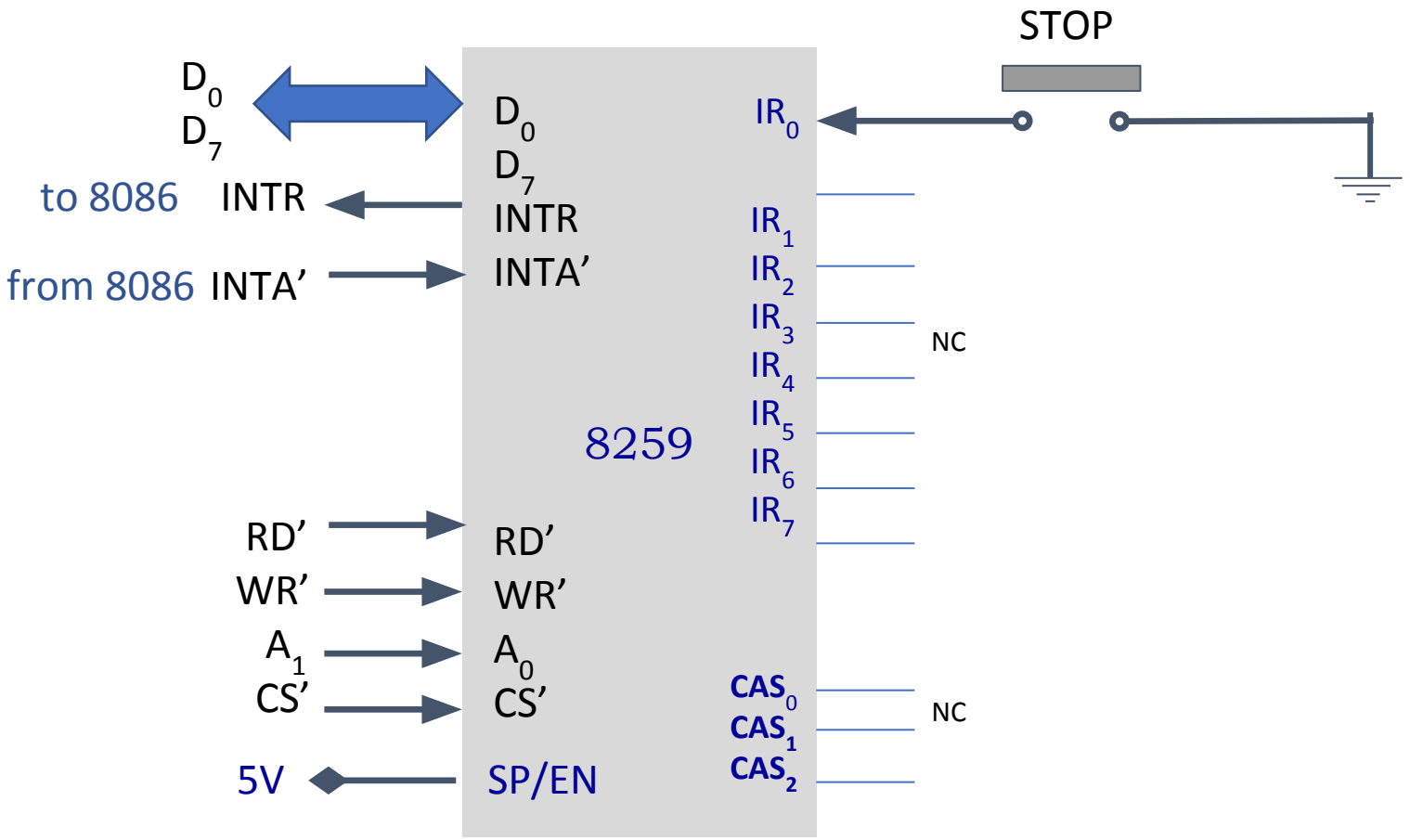


8253 (2) Interface to the processor

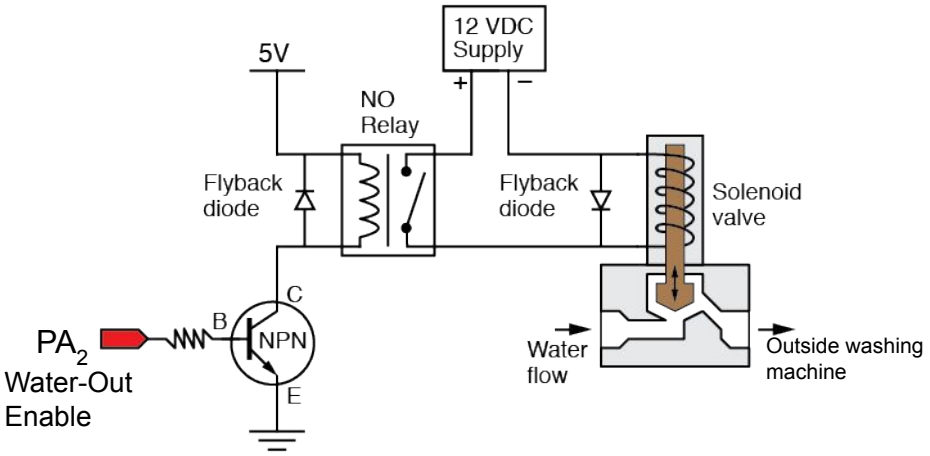



8253(1)
2.5 MHz PCLK
VCC
STOP EN
CNT0
CLK0
GATE0
OUT0
Count: 25000d
Mode 3
100Hz
CNT1
CLK1
GATE1
OUT1
Count: 100d
Mode 3
1Hz
1Hz CLOCK
CNT2
CLK2
GATE2
OUT2
Count: Depends on length of wash/rinse cycle
Mode 1
PC4
PB4
AGITATOR EN

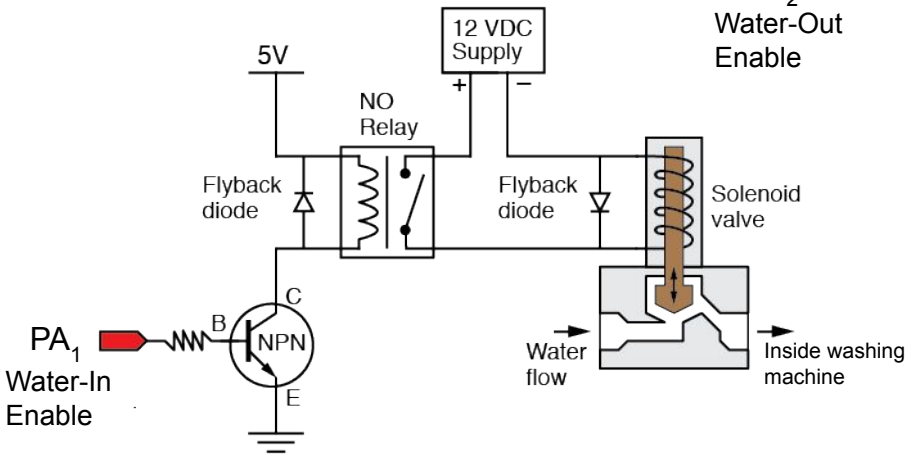

8253(1) OUT1
1 Hz
STOP
EN
1 Hz CLOCK (Enabled with STOP signal)
8253(2)
CNT0
CLK0
GATE0
OUT0
Count: Depends on length of dry cycle
Mode 1
PC6
PB5
CNT1
CLK1
GATE1
OUT1
Count: 600d, Used to check for max 10 min during water in or water out.
Mode 1
PC5
PB6
CNT2
CLK2
GATE2
OUT2
Count: Different counts to generate different freq and sound in the buzzer/alarm.
Mode 3
1Hz CLOCK
BUZZER EN
BUZZER FREQ
STOP
EN
REVOLVING
TUB EN


STOP
D0
D7
to 8086 INTR
from 8086 INTA'
RD'
WR'
A1
CS'
5V
D0
D7
INTR
INTA'
8259
RD'
WR'
A0
CS'
SP/EN
IR0
IR1
IR2
IR3
IR4
IR5
IR6
IR7
NC
CAS0
CAS1
CAS2
NC

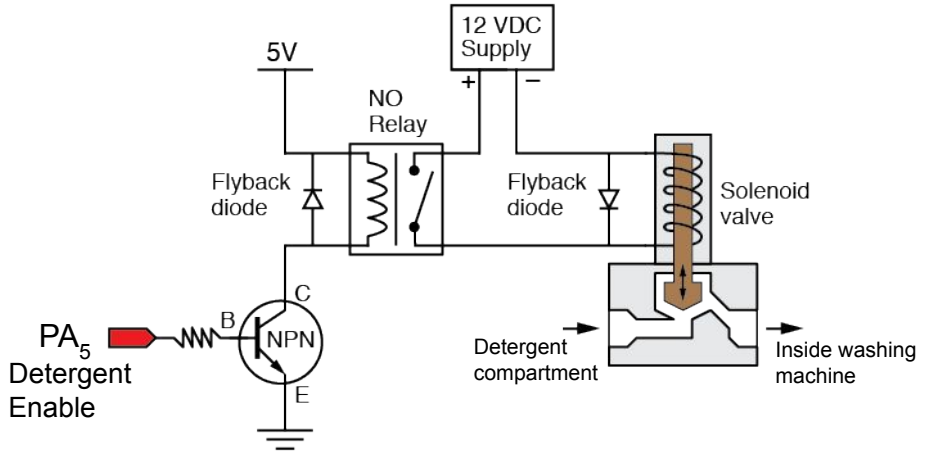
8259



Water Out Relay



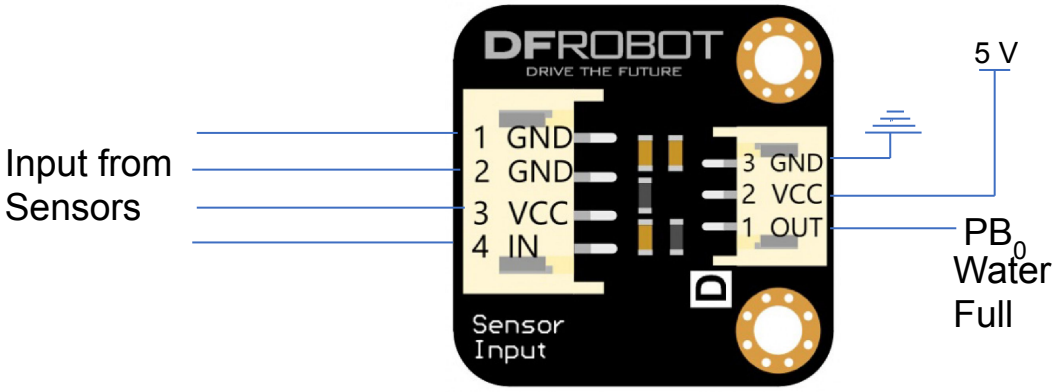
Water In Relay



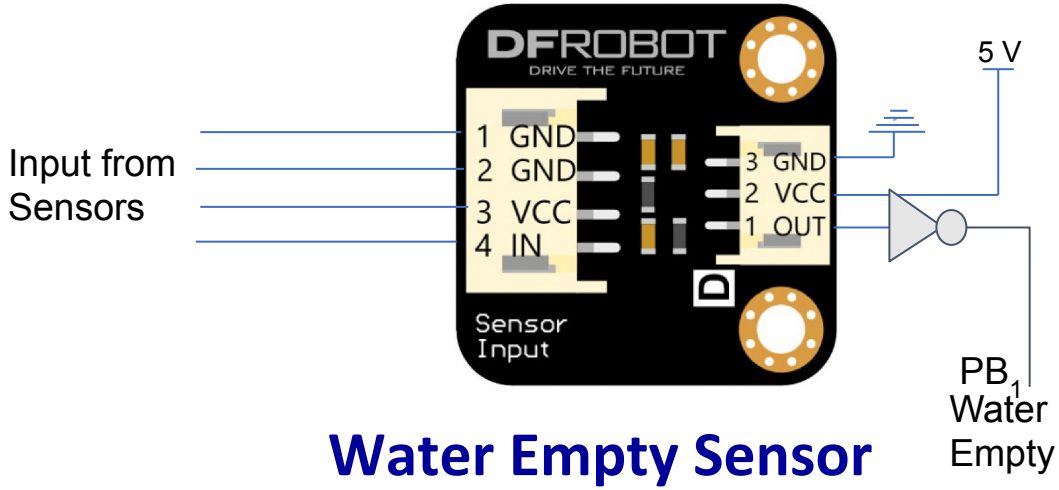
Detergent Relay

Water Sensor- FS IR02

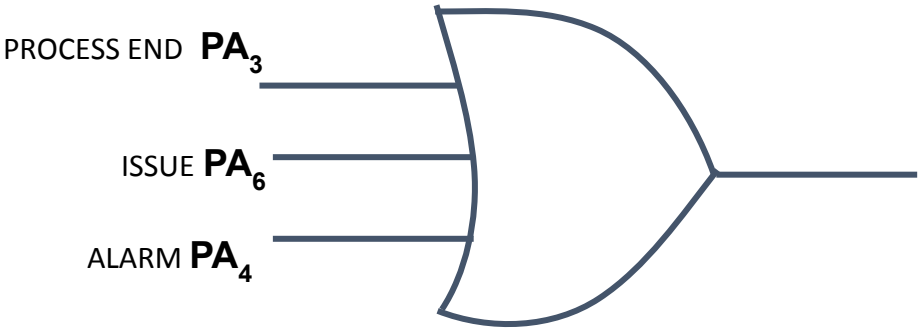
FS IR02 Converter Board

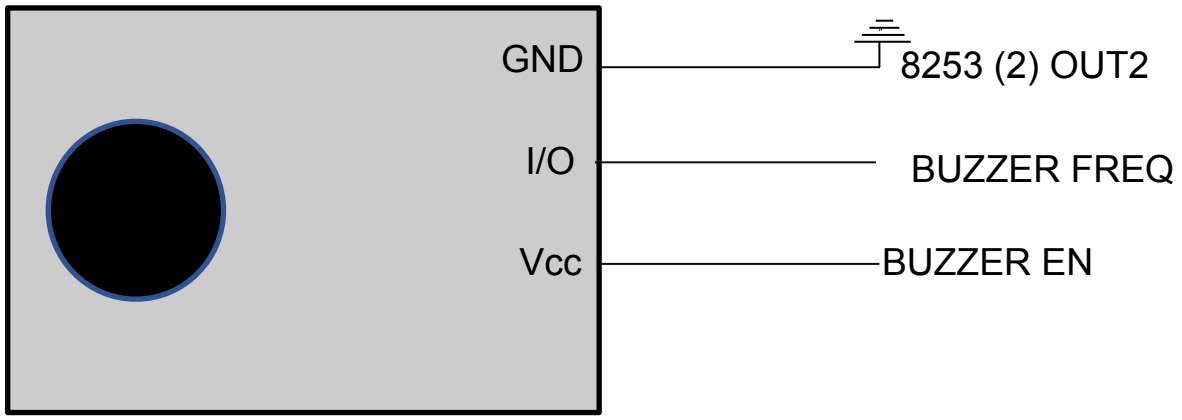


Water Full Sensor

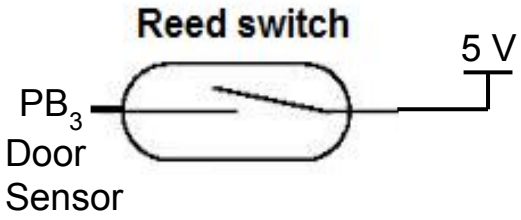


Water Empty Sensor





Buzzer- RKI 4706

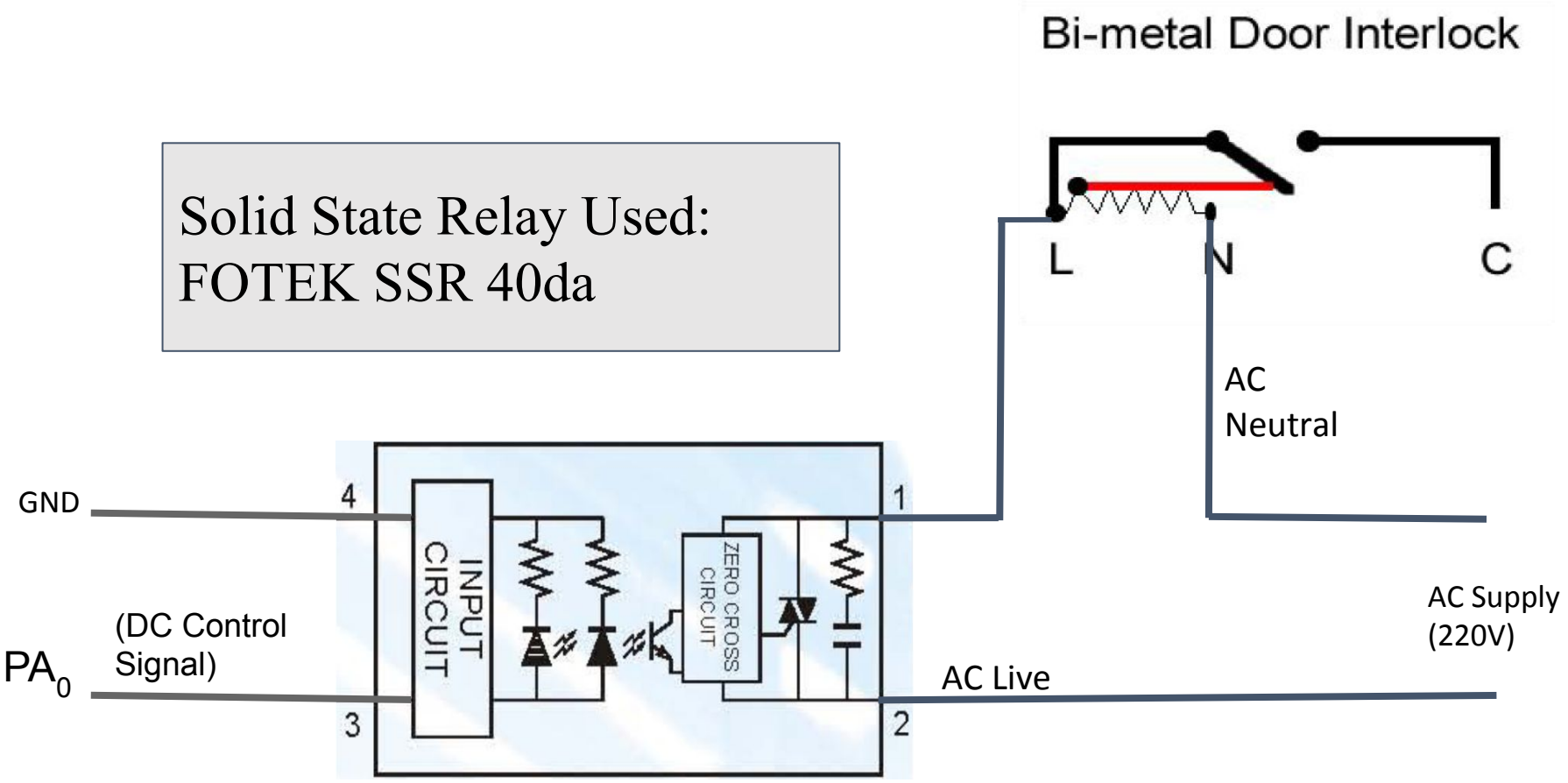


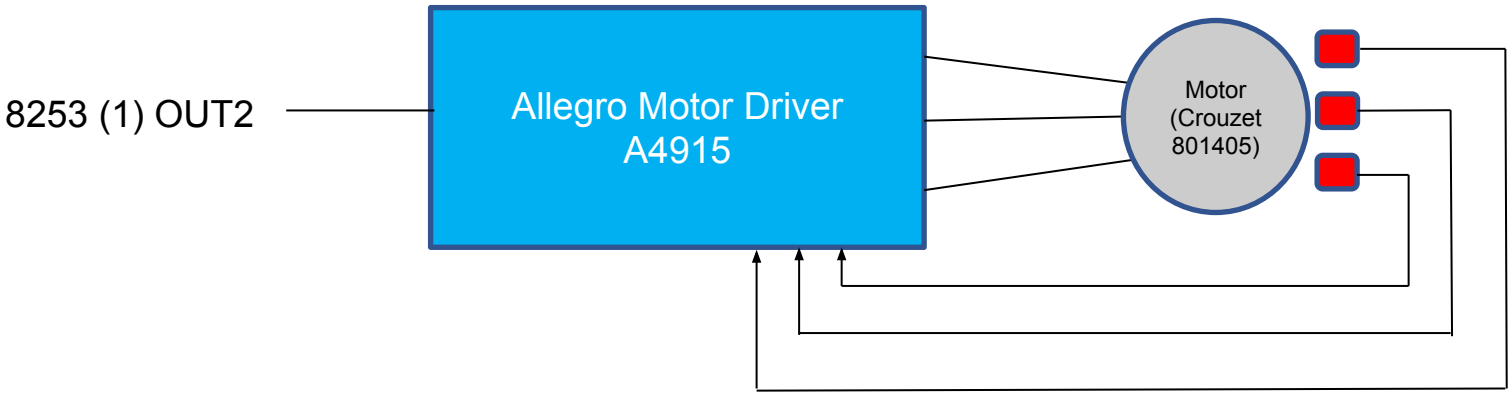
Door Sensor

Latch for Lock

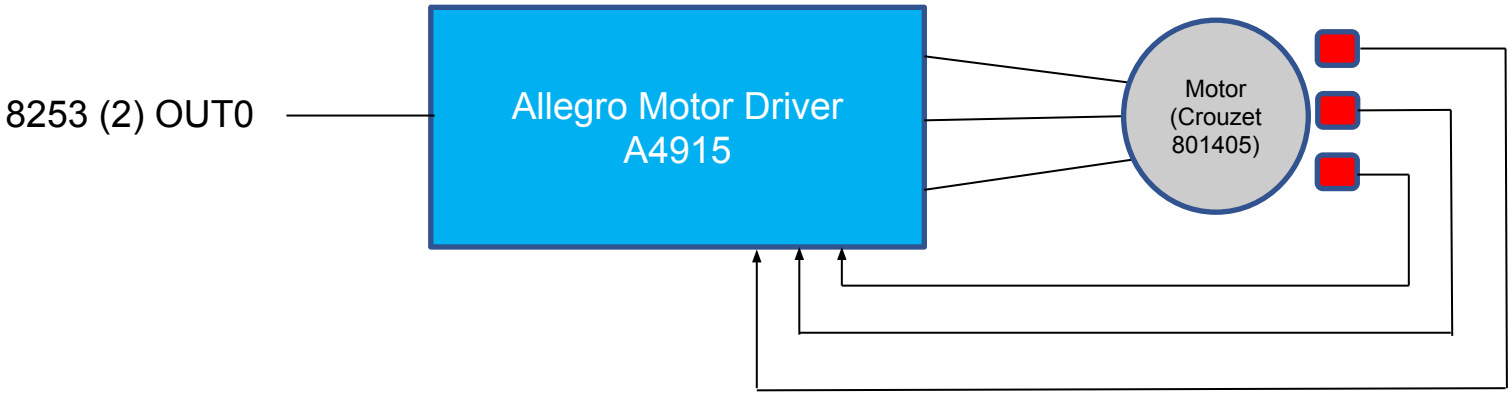
Bi-metal Door Interlock

Solid State Relay Used:
FOTEK SSR 40da





Agitator



Revolving Tub