1-bit ALU:

- Use mem.circ as starting point and build your 12 bit memory.
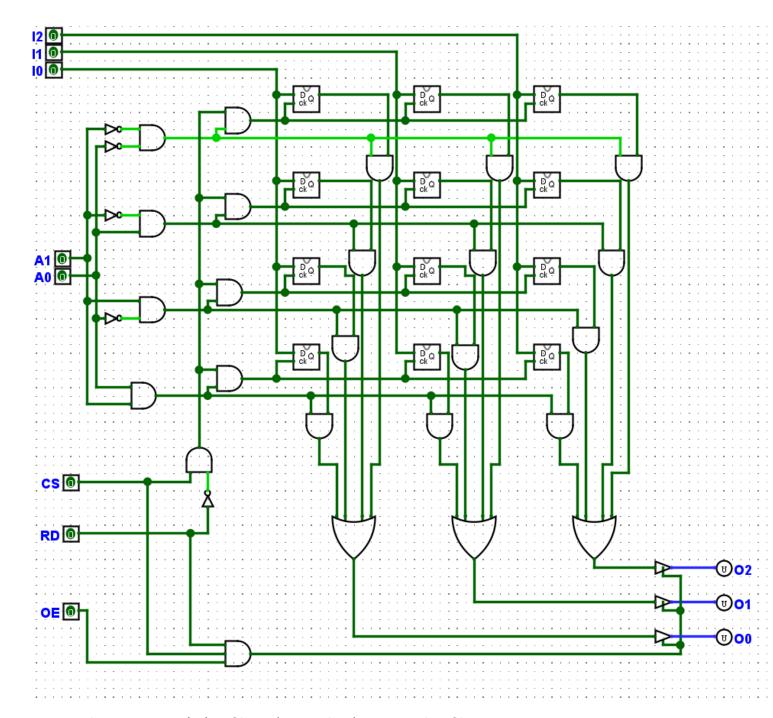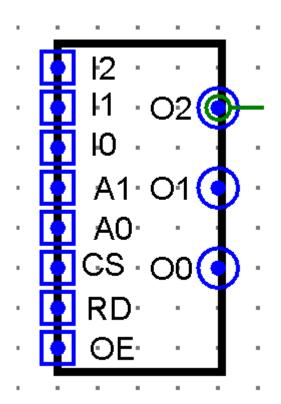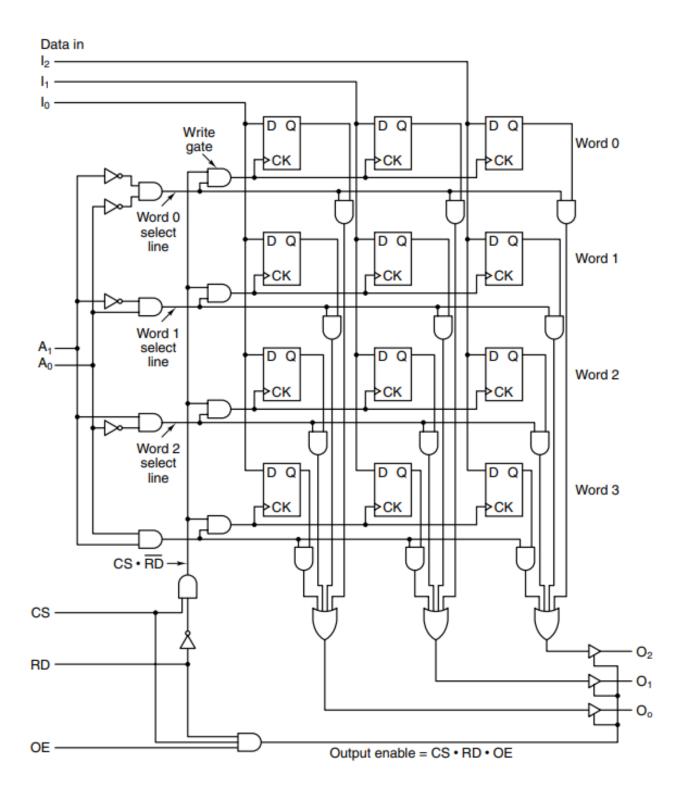- Utilize the provided images to construct your 12-bit memory within the **mem12** circuit.
- Attach screenshots of both your circuit and chip to this file.

- Submit your **Logisim** file (mem.circ) and this file.

I2

I1   O2

I0

A1 O1

A0

CS O0

RD

OE

Data in

I_2

I_1

I_0

Write gate

D Q
CK

D Q
CK

D Q
CK

Word 0

Word 0
select
line

D Q
CK

D Q
CK

D Q
CK

Word 1

Word 1
select
line

A_1

A_0

D Q
CK

D Q
CK

D Q
CK

Word 2

Word 2
select
line

D Q
CK

D Q
CK

D Q
CK

Word 3

$CS \cdot \overline{RD} \rightarrow$

CS

RD

O_2

O_1

O_0

OE

Output enable = $CS \cdot RD \cdot OE$

Controlled Buffer (60,640)

FPGA supported	Supported
Facing	→ East
Data Bits	1
Control Line Location	Right-Handed
Label	
Label Font	SansSerif Bold 16

O_2

O_1

O_0