. SECTION 3 .

REGISTERS

THREE-STATE BUFFER
↳ OUTPUTS b if $a = 1$
↳ OUTPUTS Z if $a = 0$
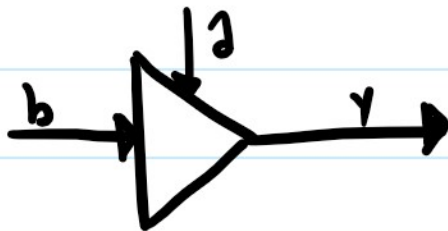
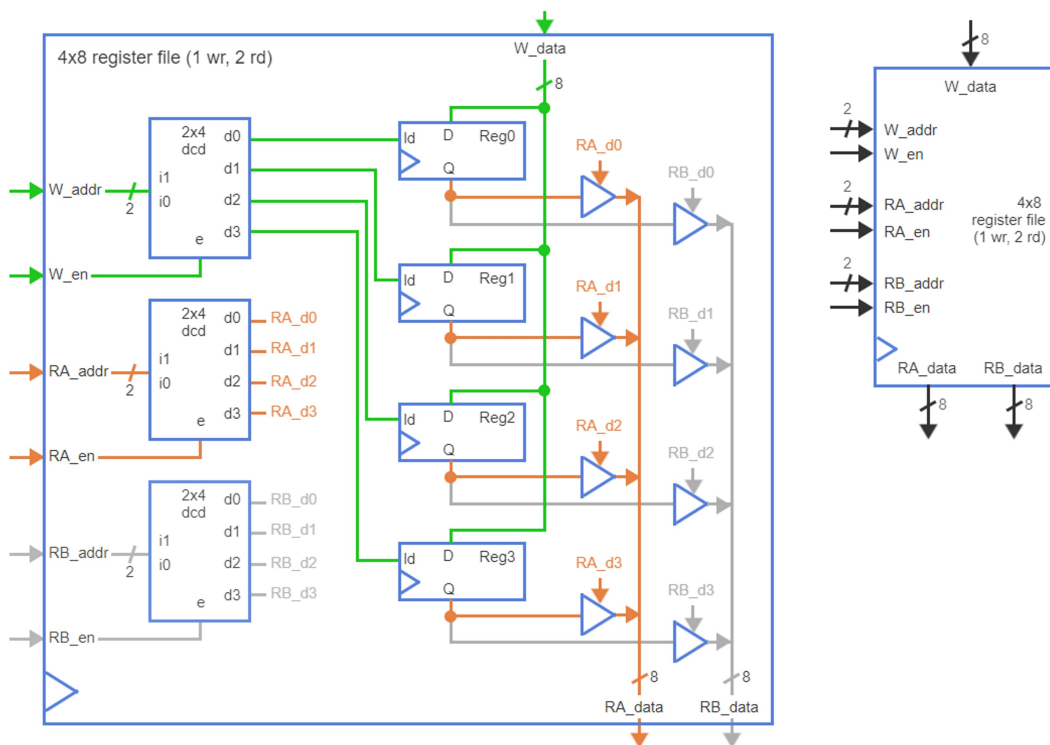| a	y
0	Z
1	b

HIGH IMPEDANCE
↳ Z
↳

Register File

- An N×M register file efficiently implements access to N M-bit registers.
- A 16×32 bit register can access 16 registers each with 32 bits of memory
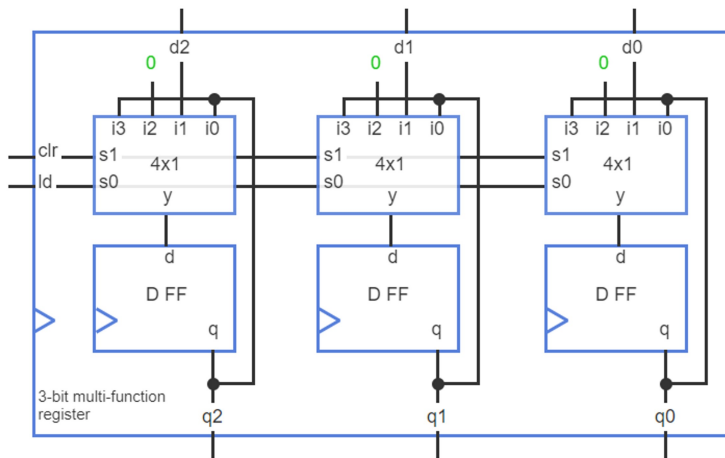- One register loaded at a time
- Write to a register
- Read from a register

Multifunction Registers

⌐ includes a clear function that loads only 0.

Function table

clr	ld	Register function
0	0	Maintain
0	1	Load
1	0	Clear
1	1	Maintain

Block symbol