

Control Unit

Knob & Switch Settings

A Addr:	B Addr:	ALU Op:	Switch Pos:	C Addr:	RW Addr:
00	00	00	1010	00	00101

Reset
PC: 1

Instruction Interpretation

+1

IR: 1000000100000101

Main Memory

View As:	Value:	RW
2	0: 1000000100000101	<input type="radio"/>
2	1: 1000000100100110	<input type="radio"/>
2	2: 1010000100100001	<input type="radio"/>
2	3: 1000001001000111	<input type="radio"/>
2	4: 1111111111111111	<input type="radio"/>
2	5: 00000000000001001	<input checked="" type="radio"/>
2	6: 00000000000000001	<input type="radio"/>
2	7: 00000000000000000	<input type="radio"/>
Auto	8: 0	<input type="radio"/>

Data Path

Register Bank

C Bus Address	A Bus Address	B Bus Address
R0: 9	R0	R0
R1: 0	R1	R1
R2: 0	R2	R2
R3: 0	R3	R3

Halt

Resume

Animation Speed: Medium

Number Base: +10

A Bus

B Bus

0

0

C Bus

9



9

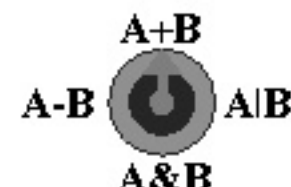
Main Memory Bus

Arithmetic and Logic Unit (ALU)

C: 0

- ☒ Zero
- ☐ Negative
- ☐ Unsigned Overflow
- ☐ Signed Overflow

ALU Operation



Machine/Assembly Language Instructions