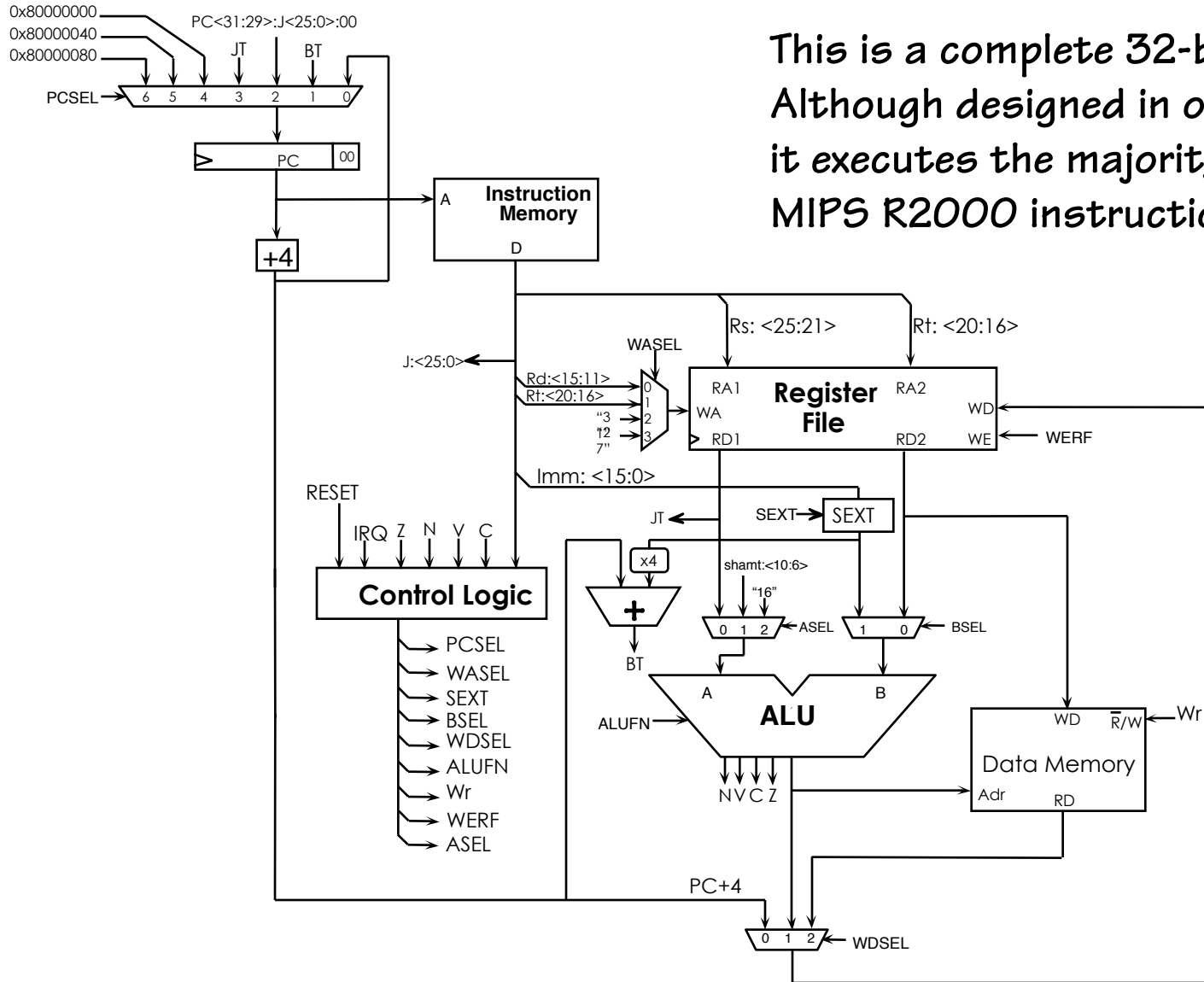


MIPS: Our Final Version

This is a complete 32-bit processor. Although designed in one class lecture, it executes the majority of the MIPS R2000 instruction set.



- Executes one instruction per clock
- All that's left is the control logic design

MIPS Control

The control unit can be implemented using a ROM

Instruction	R E S E T	I R Q	Z	N	V	C	P C S E L	S E X T	W A S E L	W D S E L	ALUFN				W R	W E R F	A S E L	B S E L
											Sub	Bool	Shft	Math				
X	1	X	X	X	X	X	4	0	0	0	0	00	0	0	0	0	0	0
X	0	1	X	X	X	X	6	0	3	0	0	00	0	0	0	0	0	0
add	0	0	X	X	X	X	0	0	0	1	0	00	0	1	0	1	0	0
sll																		
andi																		
lw																		
sw																		
beq																		
j																		
lui																		