Single Cycle Datapath

I-Type instruction classes

opcode	rs	rt	memory address offset
sw	$19	$17	22
	$s3	$s1	
101011	10110	10110	0000 0000 0001 0110

ALU control lines

ALU control lines	Function
0000	AND
0001	OR
0010	add
0110	subtract
0111	set on less than
1100	NOR