

Sheet1

\PH* PH | currInt<<2
 \PL* PL | currInt<<2

\decode (int != currInt) & (dIn[7:5] != 011) & !useK & !skip ? CurrInt = int, ~~~ unfetch
 (dIn[7:5] == 011) & !skip ? ~~~ test
 (dIn[7:5] == 011) & skip ? Skip = 0, ~~~ fetch
 (dIn[6:5] != 11) & skip & (dIn[3:0] == 1111) ? ~~~ skip2
 (dIn[6:5] != 11) & skip & ((dIn[1:0] == 11) | (dIn[3:2] == 11)) ? ~~~ skip1
 (dIn[6:5] != 11) & !skip & (dIn[3:0] == 1111) ? ~~~ mathZZ
 (dIn[6:5] != 11) & !skip & (dIn[1:0] == 11) ? ~~~ mathRZ
 (dIn[6:5] != 11) & !skip & (dIn[3:2] == 11) ? ~~~ mathZR
 (dIn[7:5] == 111) & (dIn[3:2] == 11) & !skip ? ~~~ jump
 (dIn[7:1] == 1110110) & skip ? ~~~ skip2
 (dIn[7:1] == 1110111) & skip ? Skip = 0, ~~~ fetch
 (dIn[7:2] == 111111) & skip ? ~~~ skip1
 (dIn[7:5] == 111) & skip & ((dIn[3:2] != 11) & dIn[1:0] == 11) ? ~~~ skip2
 (dIn[7:5] == 111) & skip & ((dIn[3:2] != 11) & dIn[1:0] != 11) ? ~~~ skip1
 (dIn[7:5] == 111) & !skip & ((dIn[3:2] != 11) & dIn[1:0] == 11) ? ~~~ mathZI
 (dIn[7:5] == 111) & !skip & ((dIn[3:2] != 11) & dIn[1:0] != 11) ? ~~~ mathRI

label	rA	rB	rW	dIn	dOut	wMem	aSel	bSel	logSel	Cin	sA7	A7	sA0	A0
fetch	PH*	PL*	PL*	Inst	?		0	0 B	B	1	0 x		0 x	
	x	PH*	PH*	?	?		0	0 B	B	1	0 x		0 x	
unfetch	PH*	PL*	PL*	?	?		0	-2 B	B	1	0 x		0 x	
skip2	PH*	PL*	PL*	?	?		0	0 B	B	1	0 x		0 x	
skip1	PH*	PL*	PL*	?	?		0	0 B	B	1	0 x		0 x	
test	K	K	K	?	?		0	0 B	^	cnd	0 x		0 x	

wIR wFL

```
1  0 !C ? ~~~ decode
0  0 ~~~ decode

0  0 ~~~ fetch

0  0 ~~~ skip1
0  0 skip = 0, ~~~ fetch

0  0 useK = IR[4], skip = cnd & !IR[4], ~~~ fetch
```