Pipeline:

count3	0	1	2	0	1	2	0	1	2	0	1	2	0	1	2	0	1	2
count12	0	1	2	3	4	5	6	7	8	9	10	11	0	1	2	3	4	5
in	1			2			3			4			5			6		
Multiplier1	1	1		1	1	3	3	1	1	3	3	5	5	3	3	5	5	
Multiplier2				2	2			2	2	4	4	2	2	4	4	6	6	4
Adder			1				2	1			3	2	1	4	3	2	5	4
out											1			2			3	

Controls:

	0	1	2	3	4	5	6	7	8	9	10	11	12	13
x1	1	0	0	0	0	0	0	0	0	0	0	0	1	0
x2	0	0	0	0	0	0	1	0	0	0	0	0	0	0
x3	0	0	0	1	0	0	0	0	0	0	0	0	0	0
x4	0	0	0	0	0	0	0	0	0	1	0	0	0	0
mult1_Xmux	1	1	0	0	1	1	0	0	1	1	0	0	1	1
mult2_Xmux	1	0	0	1	1	0	0	1	1	0	0	1	1	0
mult1_mux	1	1	0	0	0	0	1	1	0	0	0	0	1	1
mult2_mux	0	0	0	1	1	0	0	0	0	1	1	0	0	0
R1_mux	1	0	1	0	1	0	1	0	1	0	1	0	1	0
adder_mux2	1	X	0	1	X	0	1	X	0	1	X	0	1	X
adder_mux	0	1	0	0	1	0	0	1	0	0	1	0	0	1
out	0	0	1	0	0	1	0	0	1	0	0	1	0	0

0	1	2	0	1	2
6	7	8	9	10	11
7			8		
7	7	5	5	7	7
4	6	6	8	8	6
5	4	7	6	5	8
	4			5	