

Instruction (latency)	Dispatch (issue Q)	Issue	Register fetch	Exec start	Exec complete	CDB	Retire (T1)	Retire (T2)
X1(2)	1(1)	2	3	4	5	6	7	
X2(2)	1(2)	4	5	6	7	8	9	
X3(4)	2(3)	4	5	6	9	10	11	
X4(2)	2(4)	6	7	10	11	12	13	
X5(1,20)	9(3)	10	11	12*	12	13		
X6(1)	9(4)	11	12	13	13	14		
Y1(2)	15(1)	16	17	18	19	20		21
Y2(3)	15(2)	18	19	20	22	23		24
Y3(2)	16(3)	21	22	23	24	25		26
Y4(2)	16(4)	23	24	25	26	27		28
Y5(3)	24(3)	25	26	27	29	30		31
Y6(1)	24(4)	28	29	30	30	31		32
X5(1,20)	32(3)	33	34	35	35	36	37	
X6(1)	32(3)	34	35	36	36	37	38	