Pipeline program_1

	.data		Pipeline stages	Clock cycles
	V1, V2, V3, V4, V5, V6, V7			
	.text			
MAIN:	daddi R2,R0,64	6	F D E M W	5
	daddi R4,R0,1		F D E M W	1
LOOP:	l.d F1,v1(R3)	5*32+6*32	F D E M W	1
	l.d F2,v2(R3)		F D E M W	1
	l.d F3,v3(R3)		F D E M W	1
	l.d F4,v4(R3)		F D E M W	1
	bnez R5,ODD		F D E M W	1 + 1 se taken
EVEN:	dsllv R4,R4,R1	16*32	F D E M W	1
	mtc1 R4,F10		F D E M W	1
	cvt.d.l F10,F10		F D E M W	1
	mul.d F8,F1,F10		F D x x x x x x x x M W	8
	cvt.l.d F8,F8		F D s s s s s s s E M W	1
	mfc1 R4,F8		F s s s s s s s D E M W	1
	daddi R5,R0,1		F D E M W	1
	J RES		F D E M W	2 (taken)
ODD:	dmul R10,R4,R1	29*32	F D x x x x x x x x M W	8
	mtc1 R10,F10		F D s s s s s s s E M W	1
	cvt.d.l F10,F10		F s s s s s s s D E M W	

			Pipeline stages	Clock cycles
	cvt.d.l F10,F10		D E M W	
	div.d F8,F1,F10		F D d d d d d d d d d d d d d d d d d d d d M W	20
	l.d F4,v4(R3)		F D E M W	0
	cvt.l.d F4,F4		F D s E M W	0
	mfc1 R10,F4		F s D E M W	0
	dsrav R10,R10,R1		F D E M W	0
	mtc1 R10,F9		F D E M W	0
	cvt.d.l F9,F9		F D E M W	0
	daddi R5,R0,0		F D E M W	0
RES:	mul.d F5,F8,F2	51*64	F D s s s s s s s s s s s s x x x x x x x x M W	8
	add.d F5,F5,F3		F s s s s s s s s s s s s D s s s s s s a a a M W	3
	add.d F5,F5,F4		F s s s s s s s s D s s a a a M W	3

Pipeline program_1

Instruction	Pipeline stages	Clock cycles
add.d F5,F5,F4	D s s a a a M W	
s.d F5,v5(R3)	F s s D s s E M W	1
add.d F10,F9,F1	F s s D a a a M W	3
div.d F6,F5,F10	F D s s d d d d d d d d d d d d d d d d d d d d M W	20
s.d F6,v6(R3)	F s s D E s s s s s s s s s s s s s s s s s s s s s s M W	1
add.d F7,F2,F3	F D s s s s s s s s s s s s s s s s s s s s a a a M W	3
add.d F7,F2,F3	F D s s s s s s s s s s s s s s s s s s s s s a a a M W	
mul.d F7,F7,F6	F s s s s s s s s s s s s s s s s s s s s s D s s x x x x x x x x M W	8
s.d F7,v7(R3)	F s s D s s s s s s s s E M W	1
UPD: daddi R1,R1,1 4*64	F s s s s s s s s D E M W	1
daddi R3,R3,8	F D E M W	1
bne R1,R2,LOOP	F D E M W	1
HALT	F - - - -	1
Total **5318**		**5318**