

Instruction	Cycle	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L.D F0, 0(R1)		IF	IS	EX	M	WB	C														
MUL.D F4, F0, F2			IF	IS	S	E1	E2	E3	E4	E5	E6	WB	C								
S.D F4, 0(R1)				IF	IS	EX	S	S	S	S	S			C	Store has no memory stage because it writes memory during commit						
DADDIU R1, R1, #-8					IF	IS	E1	E2	WB					C							
BNE R1, R2, Loop						IF	IS	S	*						C						
L.D F0, 0(R1)							IF	IS	EX	M	WB						C				
MUL.D F4, F0, F2								IF	IS	S	E1	E2	E3	E4	E5	E6	WB	C			
S.D F4, 0(R1)									IF	IS	EX	S	S	S	S	S			C		
DADDIU R1, R1, #-8										IF	IS	E1	E2	WB						C	
BNE R1, R2, Loop											IF	IS	S	*							C

\* Branch outcome can be determined once both operands are available

Example assumes following latencies:  
 2 cycles for memory operations (1 EX, 1 MEM)  
 2 cycles for addition (DADDIU)  
 6 cycles for multiply (MUL.D)