

Table 2.5

Worst-case penalties due to RAW hazards in the TYP pipeline

	Leading Instruction Type (<i>i</i>)		
	ALU	Load	Branch
Trailing instruction types (<i>j</i>)	ALU, Load/Store, Br.	ALU, Load/Store, Br.	ALU, Load/Store, Br.
Hazard register	Int. register (Ri)	Int. register (Ri)	PC
Register write stage (<i>i</i>)	WB (stage 6)	WB (stage 6)	MEM (stage 5)
Register read stage (<i>j</i>)	RD (stage 3)	RD (stage 3)	IF (stage 1)
RAW distance or penalty	3 cycles	3 cycles	4 cycles

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