

720 Processor May Not Respect Interrupt Shadow

Description

Under a highly specific and detailed set of internal timing conditions, a #DB exception may be presented during execution of an instruction that is in an interrupt shadow. In order for this erratum to occur, the other processor core in the compute-unit must be performing microcoded functions that are uncommon in usage.

Potential Effect on System

Under rare circumstances, a debug exception may occur in an interrupt shadow. Under common software use, this exception does not have a system effect. In the event that system software uses "STI, RET" instead of a single IRET instruction, or changes the stack segment simultaneously with the stack pointer (i.e. not using a flat segment for the stack), unpredictable system failure may result. AMD has not observed this erratum with any commercially available software.

Suggested Workaround

None.

Fix Planned

No fix planned