

Chapter 02

Multicore and data-level optimization: OpenMP and SIMD

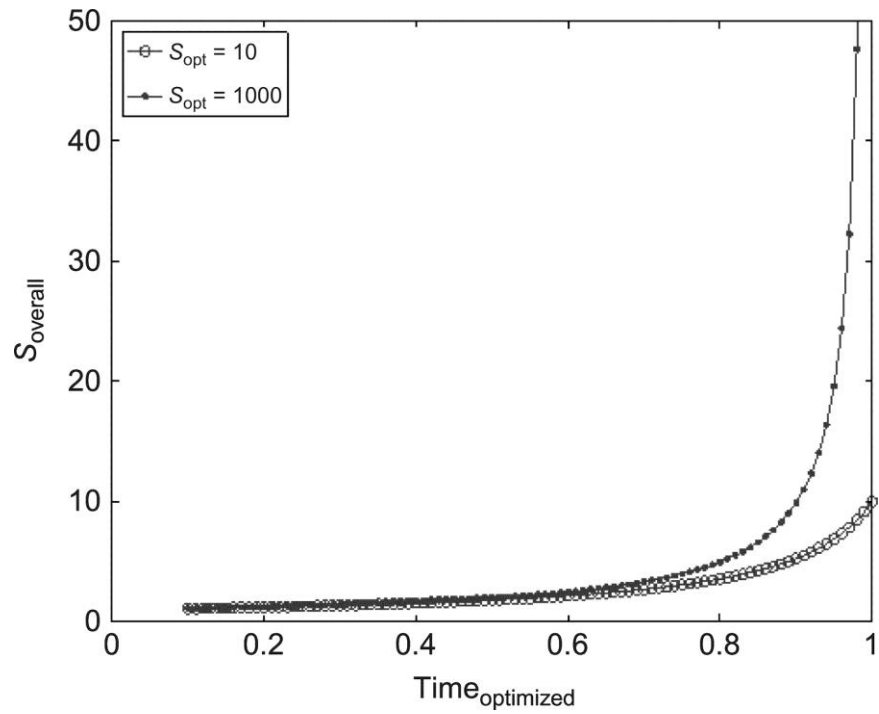


FIGURE 2.1 S_{overall} versus $\text{time}_{\text{optimized}}$ for $S_{\text{optimized}} = 10$ and 1000 .

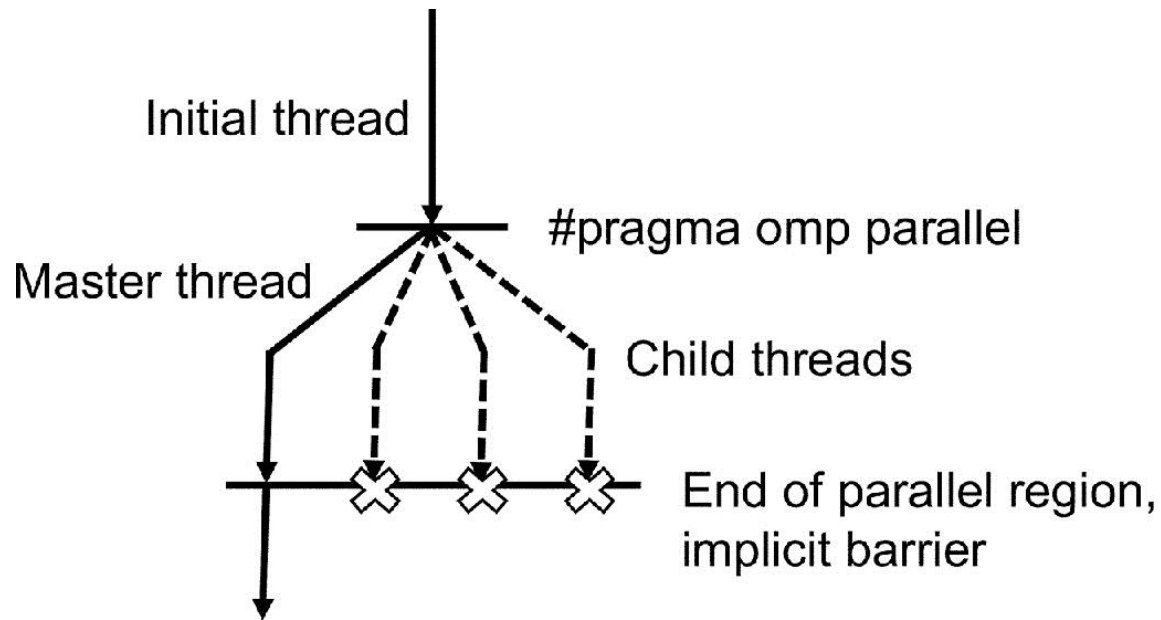


FIGURE 2.2 OpenMP thread creation. perf_event tracks performance counter events only within the master thread (solid line).

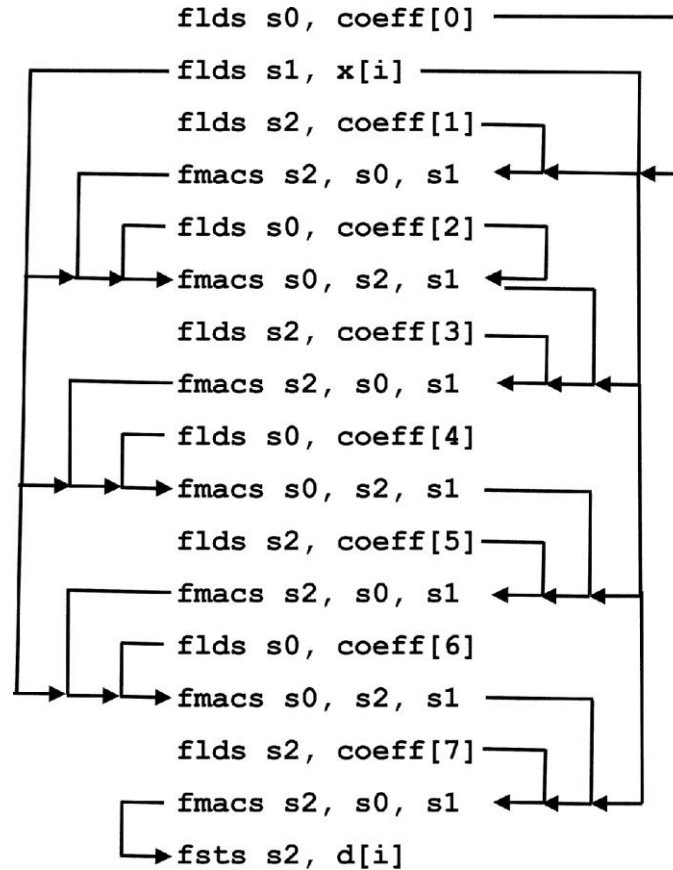


FIGURE 2.3 RAW dependencies in the Horner Kernel loop body.