Intel® SSE4 Instructions

Components

Video Accelerators– 2X faster **

14 instructions accelerate 4x4 SAD, Subpixel Filtering, and Search

Graphics Building Blocks

32 Common Graphics Primitives generalized for compiler auto-vectorization

Streaming Load

up to 9X faster***

access to device memory

Applications

- Video Authoring – up to 1.4X faster *
- Imaging and Graphics
- Portable Video Devices
- Video Search
- Off-chip Accelerators
- Gaming and Physics

Intel® SSE4 –Continuing a History of ISA Innovation

As demonstrated in Beijing IDF session BMAS005

** Gains of 2-3X on block SAD (Sum of Absolute Difference). As demonstrated in the and "SSE4 Motion Estimation" whitepaper

*** Compared to existing loads to WC memory, measured using 45nm Hi-k Intel dual core desktop processor 2.6, 1333 FSB, and software published in the "Increasing Memory Throughput With Intel SSE4 Streaming Load" Whitepaper