SH-4 RISC Microprocessor for Multimedia, Game Machine

Sumumu Narita Hitachi Ltd. Japan

Abstract

The SH-4 is a 2-issue superscalar 32-bit RISC microprocessor for SEGA's game machine, Dreamcast. In order to extend the floating-point performance, a graphic FPU and graphic-oriented instructions are provided. The performance is 360 VAX MIPS, 6.0M Polygons/sec, 1.4G FLOPS(peak with the new instructions) at 200MHz.

References

 Narita,S., et al., "A Low-power Single-chip Microprocessor with Multiple Page-size MMU for Nomadic Computing", Symp. VLSI circ. Digest of Technical Papers, pp.59-60, June, 1995.