EISC

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AMAZON (VRenderZERO+)

Product Information
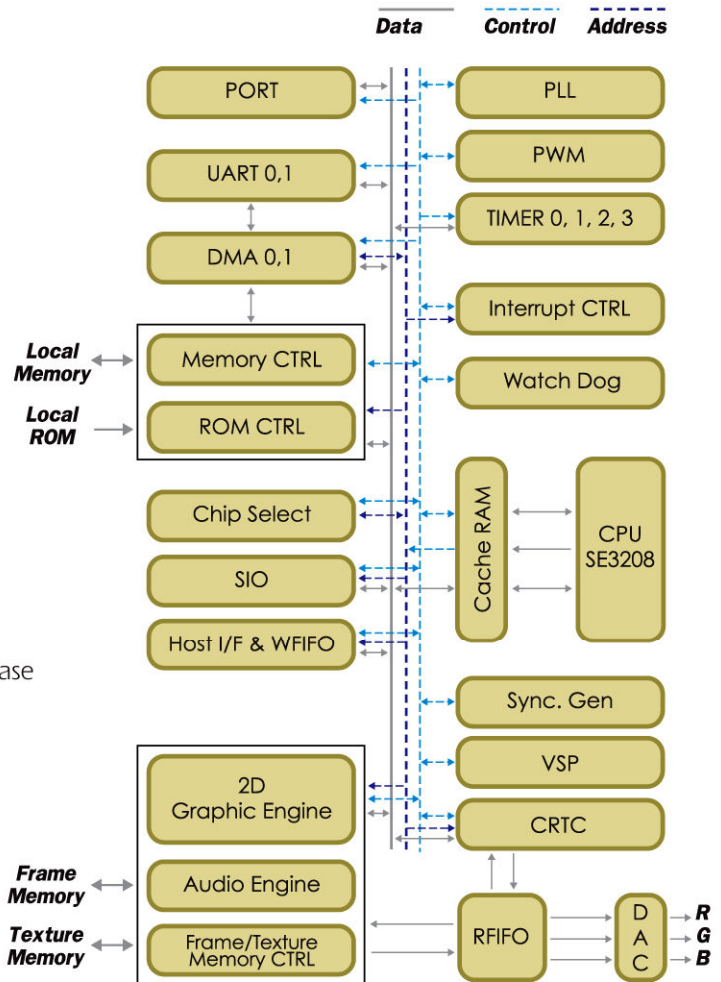
32bit EISC Microcontroller

Description

adc's Amazon(VRenderZERO+) 32bit EISC microcontroller is designed to a cost effective and high performance microcontroller solution as a Video/Graphics Accelerator. The Amazon(VRenderZERO+) integrated microprocessor combines a 32bit EISC (SE3208) processor core with several peripheral functions such as Timer, Serial Interface, etc. The On-chip Cache SRAM provides one-cycle access to code and data to speed program execution. Amazon(VRenderZERO+) supports video format for a NTSC/PAL display monitor. Amazon(VRenderZERO+) has a graphic engine based on 3D architecture.

SE3208 is a product in the EISC series and is optmized for embedded applications and for use as a general purpose 32bit high performance microprocessor. SE3208 possesses a higher code density displaying CISC level performance and employs a reduced instruction set to simplify hardware.

Features

- Maximum 40Mhz CPU Operation
- Built-in 32bit EISC CPU Core
- 4K byte Unified 2-Way Set Associative Cache
- Supports NTSC/PAL Display Monitor
- Supports Internal Video Display Mode
- Maximum 1024 Pixel / Horizontal Lines
- 16bit Color Mode
- 2D Accelerate based on 3D
  Supports Texture and Tile Map
  Supports Transparency, Alpha Blending
  Rotation / Zoom In-Out
- Rendering Performance
  690 Objects per sec. @ 80Mhz, 640X480 Resolution
  256X256 Texture Size
- Supports Two-light Pen Interface
- Supports Sound
  Output Format : 16bit, ~44.1Khz, Stereo PCM
  Concurrent 32 Channel Output
  Instrument Format (WaveTable)
  8bit : u-Law Compressed Format, 8bit : PCM, 16bit : PCM
  Envelope Control Consists of Attack, Decay, Sustain, and Release
  Panning, Channel Volume, Programmable Reverberation
- Maximum 8M bytes SDRAM for Video Frame Memory
- Maximum 8M bytes SDRAM for Texture Memory
- Supports SDRAM, 80Mhz Operation
- Embedded Peripheral Functions
  2 DMA, 4 Timer, 2 UART, WDT, Interrupt
  Controller, Peripheral Input Output Ports, etc.
- Embedded RAMDAC and PLL
- Operating Voltage 3.3V (+/- 10%)
- 208 Pin LQFP package

Application Areas

Arcade Game Machine, Entertainment Systems, Video Editor, Photo Sticker Vending Machine, Set Top Box, etc.

Available Documents
Data Book, User's Manual, Software Development Guide

For More Information Contact:

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