



## Preliminary Information

# VISA3000

High-Performance Video Processor  
32-bit EISC Microcontroller

### Description

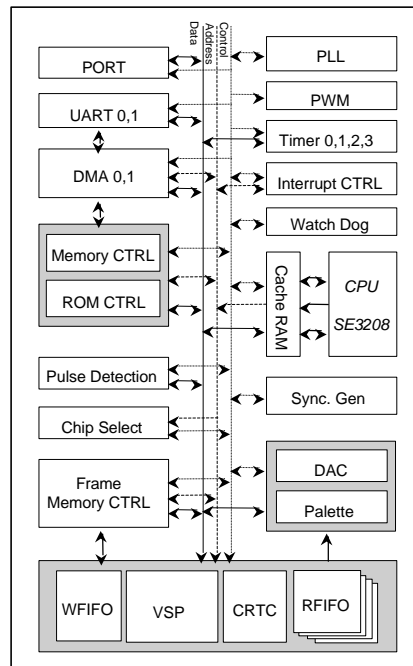
ADC's VISA3000 32bit EISC microcontroller is designed to provide a cost-effective and high performance micro controller solution for Video/Graphic processor. The VISA3000 integrated microprocessor combines a 32bit SEISC(SE3208) processor core with several peripheral functions such as timer, serial interface and etc. To speed program execution, the on-chip cache is provide one-cycle access to code and data.

VISA3000 supports video format for NTSC/PAL display monitor, it can be in local mode only for internal video image and remote mode for external video signal overlay. VISA3000 have four video pages and four internal buffer memory to display overlay images on the background.

SE3208 is the family in EISC series and is optimised for embedded application and the general purpose 32bit high-performance microprocessor. For all of this, SEISC makes code-density higher as taking the excellence of CISC and employs Simple Instruction Set to simplify H/W.

### Features

- ✓ Maximum 80Mhz Clock Frequency
- ✓ Built-in 32bit EISC CPU Core SE3208
- ✓ 4K byte 2 way set associative cache
- ✓ Supports NTSC/PAL Display Monitor
- ✓ Support Internal Video Display Mode(Local Mode) and External Video & Overlay Mode (Remote Mode)
- ✓ Support External Sync. Detection
- ✓ Maximum 1024 Pixel / Horizontal Line
- ✓ 24bit, 16bit, 8bit, 4bit Color Modes
- ✓ 3 operand(Source, Destination and Pattern)256 ROPs
- ✓ Support 4 Video Page, 4 Level Superimpose
- ✓ Display Control by LUT (Line Look Up Table)
- ✓ Horizontal Line Expanding up to 4 Times
- ✓ Maximum 8M bytes DRAM for Video Frame Memory
- ✓ Support SDRAM & EDO DRAM
- ✓ Support 16/32bit Memory Bus
- ✓ External Chip Selectors with Flexible Data Bus & Wait
- ✓ Includes direct write FIFO to enable fast burst mode write to frame buffer by the CPU
- ✓ Embedded Peripheral Functions
  - 2 DMA, 4 Timer, 2 UART, 2 Pulse Period Measurement
  - PWM, Interrupt Controller, Peripheral Input Output Ports
- ✓ Embedded RAMDAC and PLL
- ✓ Operating Voltage 3.3V(+/-10%)
- ✓ 208Pin LQFP Package



### Application Areas

Karaoke System, Game Machine, Video Editor, Photo Sticker Vending Machine, etc.

### For more information

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