We build a new millennium technology...

eos (adc32A312)

Product Information

EFT/POS & PINPAD Appliance

Advanced 32bit EISC Microcontroller

Description

The eos (adc32A312) 32bit EISC micro controller is designed to provided a cost-effective and high performance micro controller solution for EFT/POS & Pinpad appliance and general application. The eos is built around an outstanding CPU core with 5 stage pipeline: the 32bit Advanced EISC processor designed by ADC.

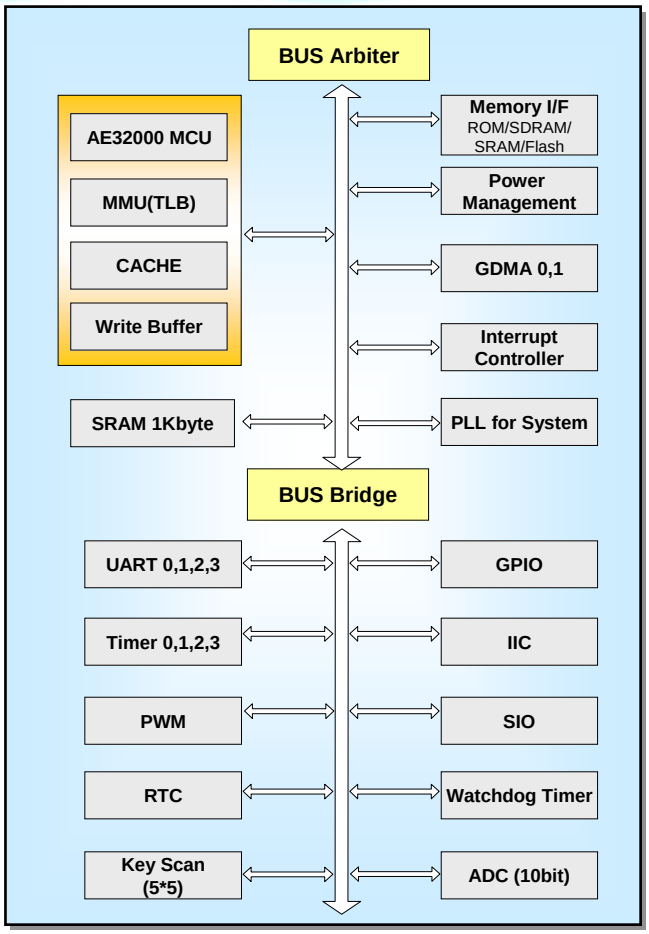
To reduce total system cost, the eos offers Harvard cache with MMU. Important functions include Nand Flash Memory Controller,4ch. UART, Key scan, 10bit ADC and SRAM for boot loader.

Features

Built in 32bit CPU, Cache and MMU (TLB)
- Maximum 50Mhz CPU Operation
- High Performance EISC Core AE32000
- 2 Way Set Associative Harvard Cache with 2Kbyte Instruction and 2Kbyte Data Cache
- Pseudo LRU (Least Recently Used) Replace Algorithm
- Write Through / Write Back Policy to maintain the coherence between main memory and cache memory
- Write Buffer with 4 Depths
- Support 64 entry, 4 way set associative MMU
- Support Correcting misalignment by hardware
- Support Little / Big Endian

Memory Management
- 32MByte Address Space per each bank
- Support 8 Memory banks and another memory bank for Debugging
- Supports External Wait Signal to Expand the bus cycle
- Supports Self-refresh mode in SRAM / SDRAM for Power down
- Supports Asymmetric / Symmetric Address of DRAM

Clock Power Management
- On-chip PLL makes the clock for operating MCU
- Clock can be fed selectively to each function block by software
- Support Power Down Mode
- Normal mode: Normal operation mode
- Slow mode: Low frequency clock without PLL



Advanced digital chips inc.

EISC
We build a new millennium technology...

eos (adc32A312)

Product Information

EFT/POS & PINPAD Appliance

Advanced 32bit EISC Microcontroller

Features

Peripheral functions
- On Chip Clock generator with PLL
- Flash memory controller (NAND Type)
- 1 Ch. General DMA
- 28 Ch. Priority Interrupt controllers with programmable priority set and rotation
- 10 External Interrupt
- 4 Ch. Timer
- Watch Dog Timer
- 4 Ch. UART with 16*8 bit FIFO (Optional IrDA 1ch)
- 64 GPIO (Peripheral Input Output)
- IIC Controller
- SIO (Synchronous IO)
- Real Time Clock
- PWM
- 25 Key Scan
- 10bit ADC (4Ch.)

Embedded PLL

Built in Boot SRAM (1Kbyte) for Boot Loader

Test Method
- Support JTAG Boundary Scan

Process
- 0.35㎛ CMOS VLSI
- 3.3 Volt Operation
- 144 Pin LQFP

Application Areas

EFT/POS Terminal, Pinpad Terminal, General Purpose MCU

Development Environment

- GNU Compiler
- TOOL : EISC Studio, GUI
- OS : Embedded Linux
- Support Command Line Compiler

For more information

Representative : SolutionWay Co., Ltd.
Tel : +82-31-605-3800 Fax : +82-31-605-3801
www.solutionway.com E-mail: ydlee@solutionway.com

adc
Advanced digital chips inc.