

AT91SAM9260B-CU

Data Sheet

ARM MCU, ARM Thumb, SAM9 Family AT91SAM92 Series Microcontrollers, ARM9, 32bit, 210 MHz, 32 KB

Manufacturers <u>Microchip Technology, Inc</u>

Package/Case LFBGA-217

Product Type Embedded Processors & Controllers

RoHS Green

Lifecycle



Images are for reference only

Please submit RFQ for AT91SAM9260B-CU or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The ARM®-based SAM9260 running up to 210 MHz embeds Full Speed USB host and device interfaces, a 10/100 Ethernet MAC and an image sensor interface, as well as standard peripherals such as a Multimedia Card Interface (MCI), I2S, USARTs, master/slave SPIs, 16-bit Timers, a TWI and four-channel 10-bit ADC. The external bus interface features controllers for SDRAM and static memories including NAND flash and CompactFlash. The SAM9260 is available in 217-ball LFBGA and 208-pin QFP packages.

Features

Core:

ARM926 ARM Thumb Processor running up to 210 MHz

8-Kbyte Data Cache, 8-Kbyte Instruction Cache

Memory Management Unit

Memories:

8 Kbytes of SRAM, single-cycle access

32 Kbytes of ROM embedding standard bootstrap

32-bit External Bus Interface (EBI) supporting SDRAM, LPSDRAM, Static Memory, Burst Flash, Glueless Connection to CompactFlash® and NAND Flash/SmartMedia® with 1-bit ECC

Peripherals:
Enhanced Clock Generator and Power Management Controller
On-chip Oscillator with Two PLLs
Very Slow Clock Operating Mode and Software Power Optimization Capabilities
Two Programmable External Clock Signals
System Timer Including Periodic Interrupt, Watchdog and Second Counter
Real-time Clock with Alarm Interrupt
Debug Unit, Two-wire UART and Support for Debug Communication Channel
Advanced Interrupt Controller with 8-level Priority, Individually Maskable Vectored Interrupt Sources, SpuriousInterrupt Protected
Seven External Interrupt Sources and One Fast Interrupt Source
Three 32-bit PIO Controllers with Up to 96 Programmable I/O Lines, Input Change Interrupt and Open-drain Capability on Each Line
25-channel Peripheral DMA Controller (PDC)
ITU-R BT. 601/656 Image Sensor Interface (ISI)
Ethernet MAC 10/100 Base-T:
Media Independent Interface (MII) or Reduced Media Independent Interface (RMII)
Integrated 28-byte FIFOs and Dedicated DMA Channels for Receive and Transmit
USB 2.0 Full Speed (12Mbits per second) Host Double Port:
Dual On-chip Transceivers (Single Port Only on 208-lead PQFP Package)
Integrated FIFOs and Dedicated DMA Channels
USB 2.0 Full Speed (12Mbits per second) Device Port:
On-chip Transceiver, 2-Kbyte Configurable Integrated FIFOs
Multimedia Card Interface (MCI):
Automatic Protocol Control and Fast Automatic Data Transfers
MMC and SD Memory Card-compliant, Supports Up to Two SD Memory Cards
Synchronous Serial Controller (SSC):
Independent Clock and Frame Sync Signals for Each Receiver and Transmitter
I2S Analog Interface Support, Time Division Multiplex Support
High-speed Continuous Data Stream Capabilities with 32-bit Data Transfer

Four Universal Synchronous/Asynchronous Receiver/Transmitters (USART):
Support for ISO7816 T0/T1 Smart Card
Hardware Handshaking
RS485 Support, IrDA® Up To 115 Kbps
Full Modem Control Lines on USART1
Two Master/Slave Serial Peripheral Interface (SPI):
8 to 16-bit Programmable Data Length
4 External Peripheral Chip Selects
Two 3-channel, 16-bit Timer/Counters (TC):
Three External Clock Inputs
Two Multi-purpose I/O Pins per Channel
Double PWM Generation, Capture/Waveform Mode, Up/Down Capability
Two-wire Interface (TWI):
Master Mode Support, All 2-wire Atmel EEPROMs Supported
IEEE® 1149.1 JTAG Boundary Scan on All Digital Pins
4-Channel 10-bit ADC
Power Supplies:
1.65V to 1.95V for VDDCORE, VDDOSC and VDDPLL
3.0V to 3.6V for VDDIOP (Peripheral I/Os) and for VDDIOM (Memory I/Os)
Packages:
208-pin Green PQFP
217-ball RoHS-compliant LFBGA





Related Products



ATSAMA5D36A-CU

Microchip Technology, Inc LFBGA-324



ATXMEGA128D3-AU

Microchip Technology, Inc TQFP-64



ATMEGA64M1-15AZ

Microchip Technology, Inc TQFP-32



ATTINY48-MU

Microchip Technology, Inc VQFN-32



ATMEGA32M1-AU

Microchip Technology, Inc TQFP-32



ATTINY2313V-10SU

Microchip Technology, Inc SOIC-20



ATMEGA16L-8PU

Microchip Technology, Inc PDIP-40



ATTINY4-TSHR

Microchip Technology, Inc SOT-23-6