

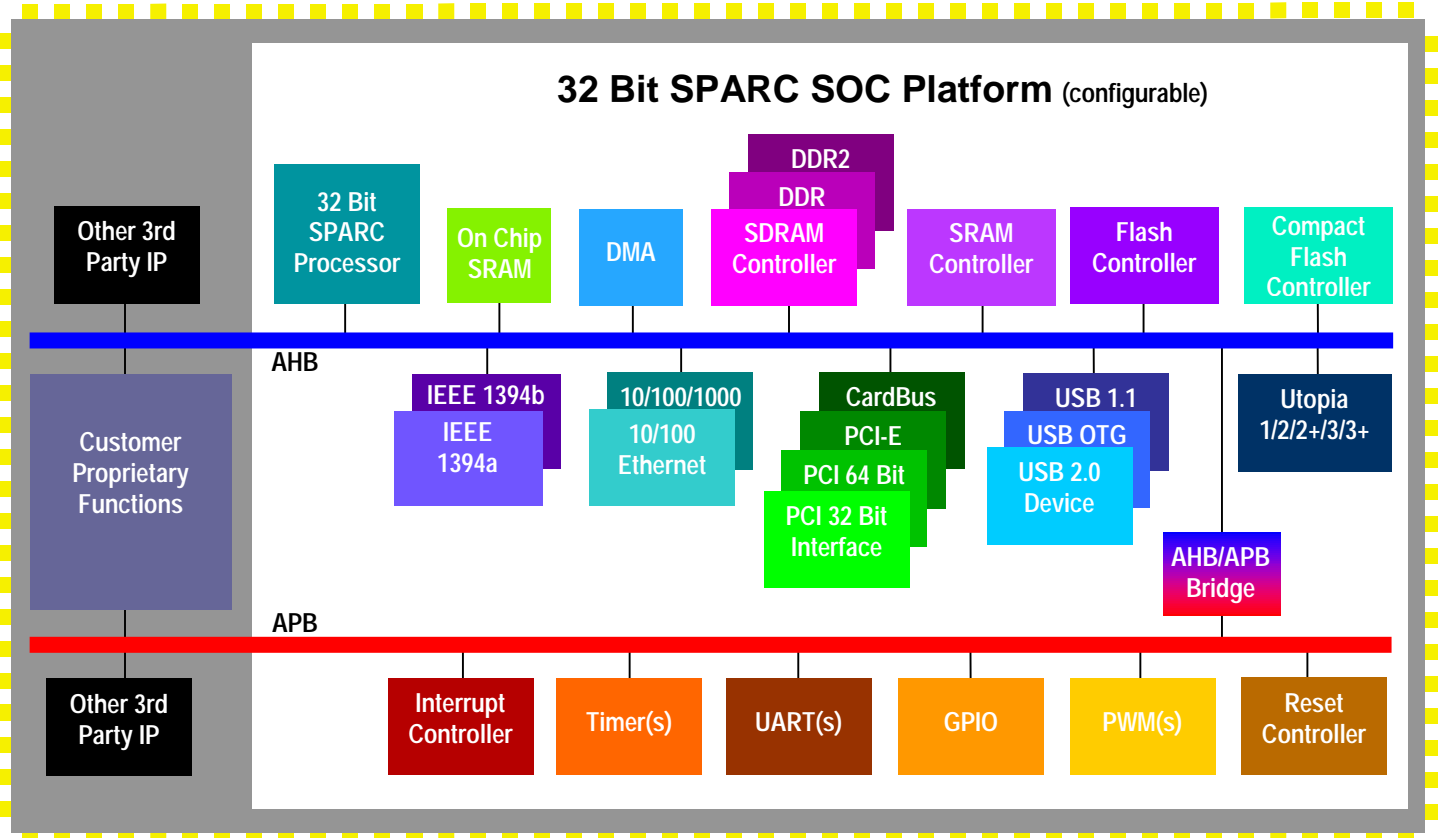


32 Bit SPARC SOC Platform

The 32 Bit SPARC SOC Platform is a configurable 32 bit SPARC SOC platform with several popular peripherals and system functions. It provides a 32 bit SPARC processor SOC to which designers may add their proprietary hardware, and other third party IP of their choice. This 32 bit SPARC processor SOC is assembled and ready to go, thus saving SOC designers countless hours to get their SOC to tapeout and running in the lab. The 32 Bit SPARC SOC Platform is available as a synthesizable Verilog model from Aurora VLSI, Inc. Contact CustomerService@auroravlsi.com.

32 Bit SPARC SOC Platform features and components include:

- AMBA Bus system- AHB Bus(es), APB Bus(es), arbiters, decoders
- Popular peripherals- RAM controllers, Ethernet, PCI, USB, 1394a, UARTs, PWMs, PIOs
- Popular system functions- DMA, embedded SRAM, interrupt controller, timers
- User specifies:
 - AMBA Buses- type and number
 - Peripherals to include- type and number
 - System functions to include- type and number
 - Peripheral and system function connectivity to the AMBA buses
- Services available to integrate 3rd party IP, and users' proprietary hardware





SPARC Processor Core

- 32 bit SPARC processor- small, low power
- Separate instruction and data caches
- Cache sizes are configurable from 256 bytes to 16K bytes each
- SPARC reference MMU
- TLB- 32 or 64 entries (configurable)
- IEEE754-1985 floating point (optional)

User Selectable Components

- DRAM Controller
 - SDRAM Controller
 - DDR Controller
 - DDR2 Controller
 - Combined Memory Controller
- SRAM Controller
 - SRAM Controller
 - Combined Memory Controller
- Flash Controller
 - Flash Controller- NAND and NOR
 - Combined Memory Controller
- Compact Flash Controller
- XD Controller
- On Chip SRAM
- DMA Engine- 1 to 8 channels
- Ethernet
 - Ethernet 10/100
 - Ethernet 10/100/1000
- PCI
 - 32 bit PCI
 - 64 bit PCI
 - 32 bit PCI and CardBus
 - PCI Express
- USB
 - USB 1.1 Device
 - USB 2.0 Device
 - USB 2.0 On The Go (OTG)
- IEEE 1394
 - IEEE1394a
 - IEEE 1394a + OHCI 1.1
 - IEEE 1394b
 - IEEE 1394b + OHCI 1.2
- Utopia
- Timers/Counters
 - 32 bit Timer
 - 64 bit Timer
 - Watchdog Timer
 - Free running counter
 - Event counter
 - Other popular configurations
- Interrupt Controller
- UARTs
- SPI
- PWMs
- GPIOs
- Reset Controller