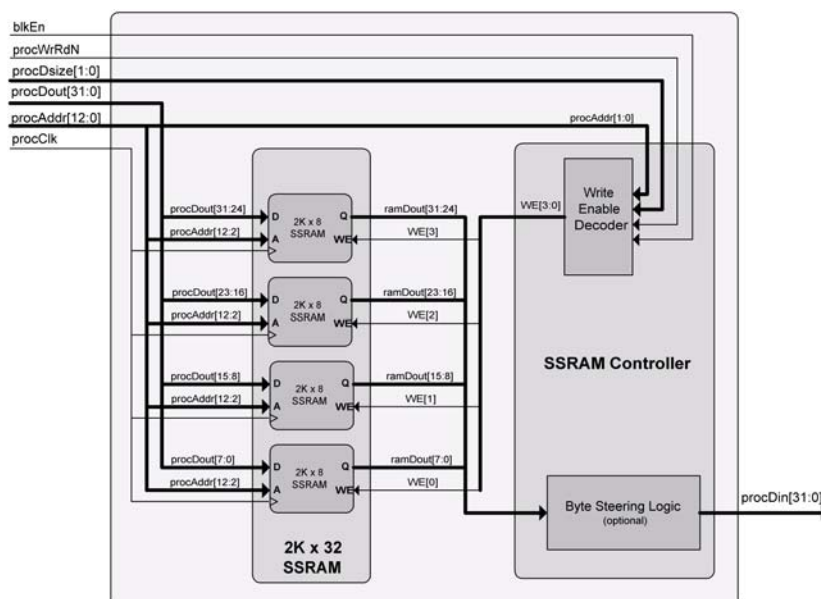


Features

- Byte, 16 bit half-word, or 32 bit word access
- ARM7TDMITM compatible
- Supports single cycle accesses
- Fully scalable
- Provides byte steering if necessary



General Description

The **SoC-IP1006** Internal SSRAM Controller provides a method of communicating with an integrated Synchronous Static Random Access Memory (SSRAM). The SSRAM array comes in byte, half-word (double byte), and word (four bytes) widths and various depths. The default configuration is two kilowords where each word is 32 bits wide (2K x 32). The memory interface allows word, half-word, or byte wide addressing.

If needed, the **SoC-IP1006** provides byte steering logic to organize the output of the SSRAM onto the system data bus, although this option is not necessary for ARM7TDMITM based systems such as the **PiP-EC Pre-Integrated IPTM**.

IP Package

The **SoC-IP1006** SSRAM Controller package includes fully tested and verified Verilog source and TCL simulation scripts. Comprehensive Verilog testbench and microprocessor Bus Functional Model are also available.