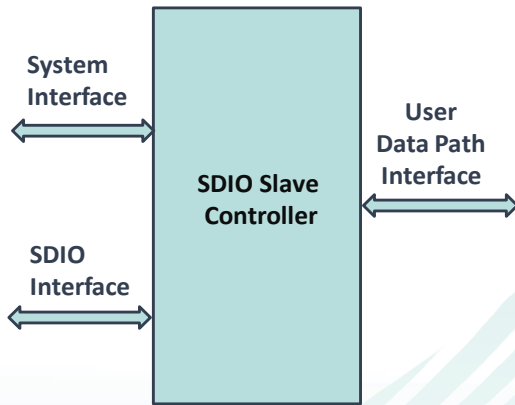


iW SDIO Slave Controller 3.0 IP



SDIO Slave controller facilitates the design of SDIO cards and reduces the development time. By using this IP core, customers no longer need to spend time on handling the SD bus protocol since such function is provided by the core.

Applications

- SOC design integration with SDIO card/device
- Used in Computer & Storage, Consumer, Industrial applications

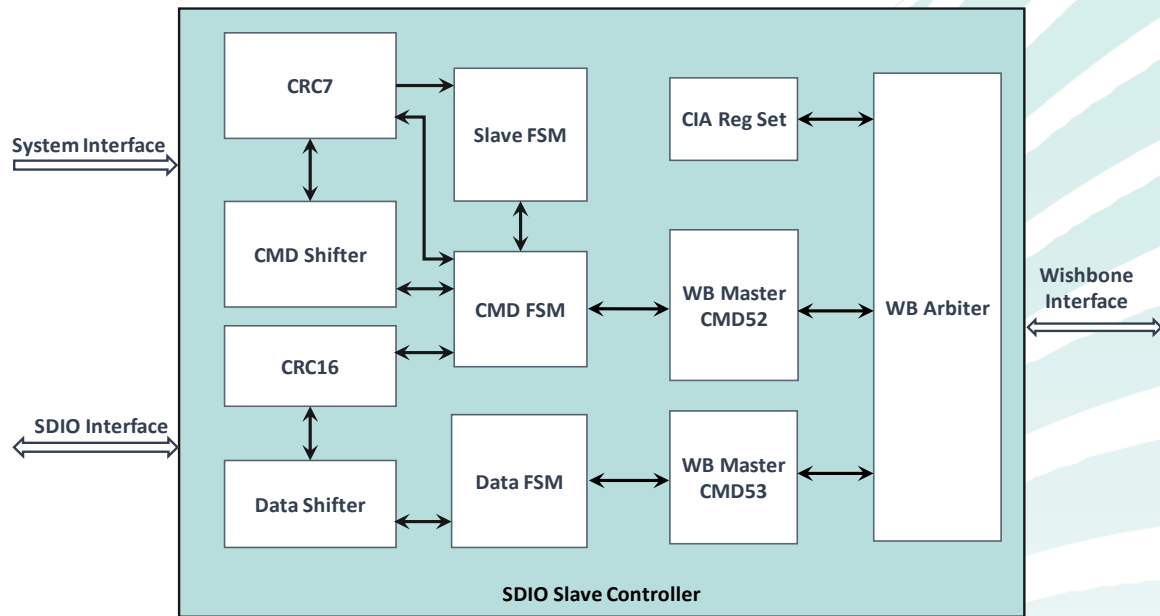
Highlights

- Compliant with SD Physical Specification Version 3.00 and SDIO Specification Version 3.00
- Controller handles SDIO bus protocol on the SDIO interface and provides simplified interface to user logic
- Controller handle all the housekeeping tasks by itself without user logic intervention.
- Supports multiple interfaces such as AXI, Avalon and Wishbone towards user side

Features

- Compliant with SD Physical Specification Version 3.00 and SDIO Specification Version 3.00.
- Supports 1-bit and 4bit SD modes.
- Supports SDIO Interrupt feature
 - Supports all mandatory SDIO Commands/Response types
 - SPI Mode : CMD0, CMD5, CMD52, CMD53, CMD59
- SD Mode: CMD0, CMD3, CMD5, CMD7, CMD52, CMD53
- CRC7 checking/generation for Command/Response
- CRC16 checking/generation for Data transfer
- Supports SDR12, SDR25, SDR50 and SDR104 Mode of operation
- Supports only 1.8V or 3.3V SDIO Voltage. SDIO voltage switching is not supported
- Data Transfer in Multi Byte and Multi Block mode using CMD53
- 8-bit Wishbone interface with constant burst, Wishbone Specification- B3, AXI4-Lite and Avalon interfaces are supported
- Function0 and Function1 supported

iW SDIO Slave Controller Block Diagram



Deliverables

- RTL source code or Netlist
- IP example design
- IP datasheet
- Integration Manual
- Simulation Environment
- Linux driver reference

Licensing Options

- Non-Transferable: Single Project/Product Netlist License – Single Site or Multi Site
- Non-Transferable: Multi Project /Product Netlist License – Single Site or Multi Site
- Non-Transferable: Single Project/Product RTL Source Code License – Single Site or Multi Site
- Non-Transferable: Multi Project/Product RTL Source Code License – Single Site or Multi Site

Technical Support

iWave provides comprehensive support during your system integration & validation.

- The Client may open a new support incident by emailing to a technical support engineer
- iWave's response time shall be within 24 hours of the initial call, with the details of the action plan to resolve
- Support assistance shall be delivered by telephone, email and/or remote assistance via a web meeting
- iWave shall provide remote debugging support irrespective of the time zone/ region

iWave Systems, a leading FPGA design house enhances your design productivity by providing an extensive suite of proven, optimized and easy-to-use FPGA IP Cores along with reference designs to complement and quicken your applications development. Our extensive suite of IP Cores covers all key markets and applications. Along with the rich set of FPGA IP cores, iWave offers custom FPGA designs tailored to meet the client specifications which includes RTL Design, Integration of iWave's or 3rd Party IP Cores on our FPGA SOMs with Carrier Card/ Custom Hardware/ Off-the-Shelf Evaluation Kits to provide end-to-end solutions targeting Low-Power, High-Performance and Optimized Designs

iW – SDIO Slave Controller 3.0 FPGA IP

The IP can be ordered online from the iWave Website <http://www.iwavesystems.com/product/sdio-slave-controller/>
Or from our Local Partners in your region <http://www.iwavesystems.com/about-us/business-partner.html>

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