

POSEDGE announces Ultra Speed, High Performance, and Low Gate Count SD/SDIO/eMMC Host Controller IP

Sunnyvale, CA – March 09th, 2010 – **Posedge** has announced the availability of soft IP Core that performs SD/SDIO/eMMC Host controller functionality. The Posedge SD/SDIO/eMMC Host Controller Core is highly configurable and is compliant with SD Host 3.0, SDIO 3.0, and eMMC4.4 specification. The Host Controller Core supports three key interfaces namely SD, SDIO, and eMMC. The Core supports Programmed IO mode (PIO), Simple DMA (SDMA), and powerful scatter/ gather DMA (ADMA) for data transfer. Using the Posedge Universal SD/SDIO/eMMC Host Controller Core, the Host driver can access memory up to 2 TBytes. The Core is designed to operate at a maximum operating frequency of 208MHz to achieve throughput of 832Mbps, four times higher than the earlier generation SDIO Version 2.0.

SD is becoming the de-facto standard for consumer devices such as camera, mobile phones, and Mobile Internet Devices. Posedge Universal SD/SDIO/eMMC Host controller core offers complete silicon proven solution and provides a significant time-to-market advantage to customers. The IP comes with Standard Host controller device drivers to help accelerate the integration of the core and is interoperated with third-party vendor solutions.

“The SD/SDIO/eMMC core supports the latest version of the standard and highest data transfer rates there by enabling newer applications such as HD Video” said Surya Hotha, Director of Marketing & Business Development at Posedge. “The IP is designed for low power applications by using advanced features such as sleep clock (KHz range), SD clock gating, and wake up events for card insertion, card removal, and card interrupt.”

SD/SDIO/eMMC IP Core Key Features:

- ◆ SD 3.0
 - Supports all UHS1 modes – SDR50/SDR104/DDR50
 - Supports all slot types (Removable / Embedded Slot / Shared Bus Slot)
 - Supports Asynchronous interrupt and programmable clock generator
 - Supports SDSC/SDHC/SDXC/SDHS cards
- ◆ eMMC 4.4
 - Supports Regular and Alternate boot operation mode
 - Supports access to boot/RPMB/general purpose partition
 - Supports MMC plus and MMC mobile cards
 - Backward compatible to MMC3.31, MMC4.1, MMC4.2, and eMMC 4.3
- ◆ Configuration Options
 - Number of slots (1 or 2)
 - Buffer size (DPRAM/SPRAM, 512Bytes/1KBytes/2KBytes)

- System interface (AHB/APB)
- Data transfer (PIO/DMA/ADMA/Slave DMA)
- SD/eMMC bus width (1,4, 8 bit)

The SD/SDIO/eMMC IP core can be used in various applications including, but not limited to -

- ◆ Multimedia devices
- ◆ Smart phones/PDAs
- ◆ Cameras
- ◆ Other Portable Consumer devices

Posedge provides, as part of the IP licensing package, Verilog RTL code, self checking OVM based testbench and testcases, synthesis scripts, reference drivers, elaborate documentation with functional coverage results, and extensive customer support. Posedge also offers a suite of design services for customization and integration of the IP cores into customer's ICs or FPGAs for prototyping.

If you are interested in finding out more about the SD/SDIO/eMMC IP core, please download the datasheet from the following link:

http://www.posedge.com/datasheets/Posedge_SD_SDIO_MMC_Host_Datasheet.pdf

About Posedge Inc.



Posedge Inc. (www.posedge.com), headquartered in Sunnyvale, CA, USA, is leading supplier of Wired / Wireless Secure Networking Semiconductor Intellectual Property (“IP”) solutions for SOC/FPGA. Posedge’s highly differentiated product portfolio includes Multi-Gigabit Layer2+ Switch, 10Gbps Data Compression engine, 10 Gbps MACsec engine, TCP Offload Engine, IPSEC Protocol Processor, Multi-Gigabit Routing Processor in addition to SoC Solutions such as SD / SDIO / MMC, Flash and Bus Protocols. Posedge's solutions include hardware, software drivers, firmware, software stacks as applicable and the IP is augmented with leading-edge design and verification **Services** for customization.

Founded in 2006, Posedge has 60 employees in two design centers in Sunnyvale, CA, USA and Hyderabad, India. Posedge’s Semiconductor “IP” and designs services have been used by major semiconductor vendors and startups including: *AMD, AMCC, Broadcom, Maxim, TI* and others. For further information please visit <http://www.posedge.com>

Posedge

Sales Contact
Chakra Parvathaneni
408-393-3645

sales@posedge.com