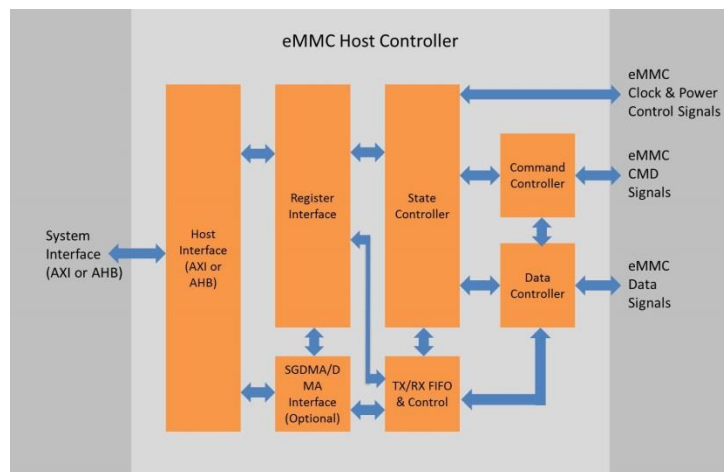


eMMC Host Controller

Overview

The SibridgeTech's eMMC Host Controller is embedded multi-media card host controller, compliant with JEDEC eMMC electrical standard v5.01 (JESD84-B50.1). It handles all the timing and protocol requirements for accessing standard eMMC devices and supports all the eMMC data and command processing in hardware along with CRC generation and checking. It supports connection to a single device and performs various operations like multi-block read, write and erase to reduce additional overhead. It also supports AMBA-AHB/AXI standard system bus interface for data transfer and configuration of the IP.



Features

- 32-bit AXI or AHB system bus interface
- Clock control interface for various operational modes
- Data transfer using DMA mode on Host Bus Master interface OR Host Bus Slave interface
- Configurable FIFO sizes
- eMMC 5.0 features:
 - Host clock rate supported from 0-200 MHz
 - Support for 1-bit, 4-bit and 8-bit interface
 - CRC7 for command and CRC16 for data integrity
 - 4KB Block support
 - Tuning for HS200 Mode
 - HS400 mode support for higher data transfer rate

- Support for RPMB
- Support for Boot mode
- Support for Bus testing and Bus tuning

Resource Utilization

Family	Logic	RAM	Performance	
			Protocol	System
SmartFusion2 IGLOO2	6210 LUTs	10 RAM64x18	108 MHz @ 8bit	97 MHz @ 32bit
RTG4	6260 LUTs	10 RAM64x18_RT	80 MHz @ 8bit	70 MHz @ 32bit
ProASIC3	14209 Core Cells	6 Block RAMs	55 MHz @ 8 bit	44 MHz @ 32bit

Related Products

- eMMC Host/Device Verification IP

For pricing, evaluation and additional information contact sales@sibridgetech.com