M5622

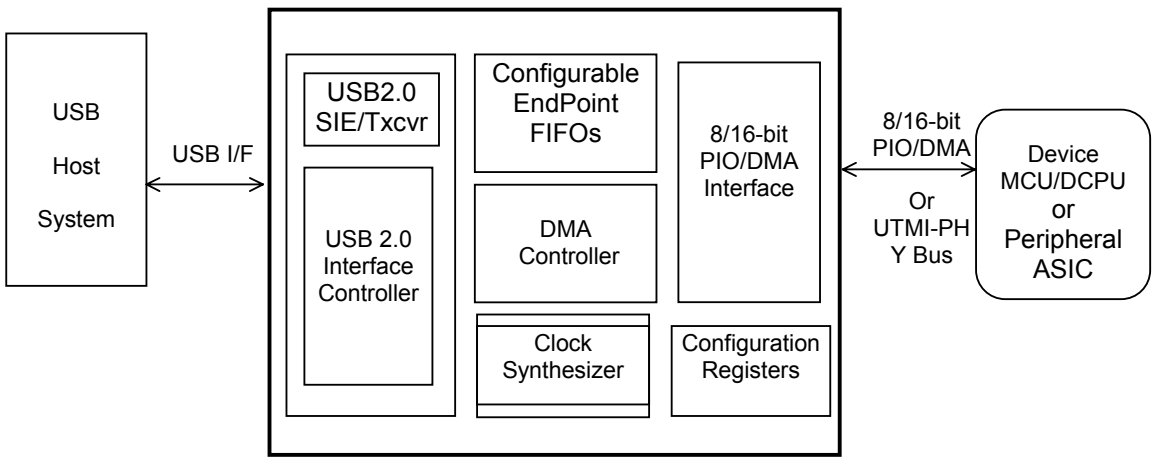
High-Speed USB2.0 Interface Controller

Preliminary Product Brief

FEATURES :

+ **USB Specification revision 2.0 Compliant**
+ **480/12 MHz High/Full-speed Operation** with on-chip USB transceiver, SIE & UBL
+ **Supports 4 User-Configurable Endpoints** for bulk, interrupt, control transfers to allow bulk-transfer-based device operation for scanner, printer, camera or multi-function-peripheral application
  - Endpoint 0 : 64-byte FIFO support for Control transfer
  - Endpoint A : 512-byte Ping-Pong buffers for Bulk-In transfer
  - Endpoint B : 512-byte Ping-Pong buffers for Bulk-Out transfer
  - Endpoint C : 8-byte FIFO support for Interrupt transfer or Supplementary Bulk-In Transfer Endpoint
+ **Built-in PIO/DMA-based Device Controller** with industry-standard 8/16-bit PIO/DMA & Multi-word DMA supported for standard MCU/DCPU operation
  - Built-in bi-directional DMA controller for mass data transfer with USB EndPoint A and EndPoint B
+ **Configurable Standalone UTMI-compliant USB2.0 PHY Operation Supported**
+ **Built-in Clock Synthesizer** for using low-cost 12Mhz crystal or external 12Mhz clock sources
+ **64-pin TQFP**

ALi's M5622 USB2.0 Interface controller provides a cost-effective solution for high-speed USB2.0 based application, such as scanner, printer, digital still camera or multi-function peripheral /communication /networking systems. With built-in USB2.0 transceiver and related high-speed circuitry, M5622 also integrates four user-configurable endpoints with bi-directional ping-pong buffers for maximized USB2.0 throughput operation. With extended design flexibility, M5622 can be configured as a PIO/DMA based device controller or as a UTMI-compliant USB2.0 standalone transceiver device. Through these highly flexible features and capabilities to work with embedded controller, external microcontroller or ISA-based Device CPU, M5622 is fully capable of achieving a most compact and yet cost-effective solution for varieties of high-speed-oriented peripheral system applications.



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