eV368 SuperSpeed Flash Memory Controller

The eV368 is a high performance flash memory controller for USB3 interface devices. The enhanced design includes a high-speed CPU, concurrent multi-bank flash access with hardware ECC capability. Power-On-Reset, LDO and PLL are integrated to reduce component costs and save PCB space. Major applications of EV368 are for USB3 pendrive.

Features

USB Interface

- Compliant to USB 3.0 Specification Rev. 1.0
- Compliant to USB Specification Rev. 2.0
- Mass Storage Class Bulk-Only Transport (BOT)

Flash Memory Interface

- Support SLC/MLC/TLC NAND flash
- Support 2K/4K/8KBytes Page Size
- Support Asynchronous Flash Interface, ONFI 2.0 and Toggle Mode
- Support Up to 16 CE pins
- 4 Flash Channels with Maximum 4-way Interleaving per Channel
- 2 Flash Channels with Maximum 8-way Interleaving per Channel
- Support Two-Plan Operation
- Static Wear Leveling
- On-the-fly-ECC: 6/8/12/13 per 512 bytes, 24/40/60 bit per 1K bytes
- Power-On Recovery

System

- USB-ZIP/USB-HDD Boot Up
- Support Auto-Run/Multiple LUN/Security
- Support Windows XP/Vista, Windonw7, MacOS, and Linux Kernel 2.4+
- Configurable Removable or Fixed Media Types
- Configurable USB Vendor/Product String
- Write Protect Switch
- Individual Ready/Busy LED indicator for USB2/3
- Embedded 1.2V LDO