

JMB38X Product Family

PCI Express to 1394a OHCI and Memory Card Host Controller

Overview

JMB38X is product family that includes 1394a OHCI and Memory Card Reader Host Controller. They are all 1-lane PCI Express to 1/2-port 1394a and 1/2-slot SD/MMC/MS/xD Memory Card Reader Host Controller. The table below shows the brief feature lists of JMB38X product family.

	JMB380	JMB381	JMB382	JMB383	JMB385
Host IF	PCIe	PCIe	PCIe	PCIe	PCIe
1394a IF	x1 Port	x2 Port	None	x1 Port	None
Card Reader	x1 Combo	None	x2 Combo	x2 Combo	X1 Combo
Package	QFN48	LQFP48	QFN64	QFN64	LQFP48
Co-layout	Co-layout				

"x1 Combo" means 1 set of "4-in-1 Combo Memory Card Reader Mechanism" supporting SD/MMC/MS/MS Duo/MS-HG (1/4/8-bit) & xD.

"x2 Combo" means 1 set of "4-in-1 Combo Memory Card Reader Mechanism" supporting SD/MMC/MS/MS Duo/MS-HG (1/4/8-bit) & xD and 1 set of "3-in-1 Combo Memory Card Reader Mechanism" supporting SD/MMC/MS/MS Duo/MS-HG (1/4/8-bit)".

Feature

Compliance

- Compliant with PCI Express Base Spec. Revision 1.1
- Compliant with 1394 Open Host Controller Interface (OHCI) Release 1.1
- Compliant with SD Spec. Part 1 Physical Layer Spec. Version 2.00
- Compliant with SD Spec. Part A2 SD Host Controller Standard Spec. Version 2.00
- Compliant with SD Spec. Part E1 SDIO Spec. Version 2.00
- Compliant with SD Spec. Part 2 File System Spec. Version 2.00
- Compliant with MultiMediaCard System Spec. Version 4.2
- Compliant with Memory Stick Standard Format Spec. Version 1.43-00
- Compliant with Memory Stick Standard Memory Stick PRO Format Spec. – without security spec. – Version 1.02-00
- Compliant with Memory Stick Pro-HG Duo Spec. Version 1.00
- Compliant with xD-Picture Card™ Card Spec. Version 1.20
- Compliant with xD-Picture Card™ Host Guideline Version 1.20
- Compliant with xD-Picture Card™ Format Spec. Version 1.11

Overall

- Integrated 1-Lane PCI Express PHY (2.5Gbps) and 2-port 1394a PHY (100/200/400Mbps)
- Integrated two PLL for both PCI Express bus and 1394a interface
- Output swing control and Automatic impedance calibration for both PCI Express and 1394a PHY
- Fabricated 0.18um/3.3V CMOS Standard Logic Process with single 3.3V power source
- Co-layout between JMB380, JMB381, JMB382, JMB383 and JMB385

PCI Express

- Supports 1-Lane 2.5Gbps PCI Express bus
- Internal native interface multiplexed to OHCI and Memory Card (SD/MMC/MS/xD)
- All registers of Memory Card accessible in unified memory space

1394a

- Supports 1394a PHY hub function between 2-port
- Supports Hot Plugging on 1394a port

Memory Card

- Supports 1 set of "4-in-1 Combo Card Reader" and 1 set of "3-in-1 Combo Card Reader"
- Programmable IO driving to adjust signal trace length
- Programmable pull high/low control for different memory card bus topology

Peripherals Components

- Supports External Serial EEPROM
- Supports PMOS Power Switch for power control of memory card

DOS Utility

- Provide Serial EEPROM DOS Update Utility
- Provide GUID Setting DOS Program Utility for Main BIOS

Product Information

Name	Description	
JMB380	PCI Express to 1-port 1394a + x1 Combo Card Reader	Host Controller
JMB381	PCI Express to 2-port 1394a	Host Controller
JMB382	PCI Express to x2 Combo Card Reader	Host Controller
JMB383	PCI Express to 1-port 1394a + x2 Combo Card Reader	Host Controller
JMB385	PCI Express to x1 Combo Card Reader	Host Controller

Supporting Document

1	Product Brief
2	Data Sheet
3	Hardware Design Guide
4	Application Schematic

Contact Information

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