



PCI-SIG ENGINEERING CHANGE NOTICE

TITLE:	Changing Class code for InfiniBand Adapter
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AFFECTED DOCUMENT:	PCI Local Bus Specification Revision 3.0
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Part I

1. Summary of the Functional Changes

This ECN updates the subclass ID description in the Class Code & Capability ID Specification.

Part II highlights the change.

2. Benefits as a Result of the Changes

The current definition of Class Code and subclass code for InfiniBand adapter as a serial bus controller is inadequate for the common usage of InfiniBand network.

Changing the InfiniBand Class Code to Network controller will better describe the device and will enable it to perform actions currently restricted to network controller such as network boot.

3. Assessment of the Impact

No impact to legacy hardware or software.

4. Analysis of the Hardware Implications

No impact on existing hardware design.

New InfiniBand adapters should use the new Class Code.

5. Analysis of the Software Implications

No impact on existing software.

Future software may use the new sub-class code.

6. Analysis of the C&I Test Implications

No impact on test design.

Part II

Detailed Description of the change

1.3. Base Class 02h

This base class is defined for all types of network controllers. Several sub-class values are defined. There are no register-level programming interfaces defined.

Base Class	Sub-Class	Interface	Meaning
02h	00h	00h	Ethernet controller
	01h	00h	Token Ring controller
	02h	00h	FDDI controller
	03h	00h	ATM controller
	04h	00h	ISDN controller
	05h	00h	WorldFip controller
	06h	xxh (see below)	PICMG 2.14 Multi Computing
	07h	00h	InfiniBand Controller
	80h	00h	Other network controller

1.13. Base Class 0Ch

This base class is defined for all types of serial bus controllers. Several sub-class values are defined. There are specific register-level programming interfaces defined for Universal Serial Bus controllers and IEEE 1394 controllers.

Base Class	Sub-Class	Interface	Meaning
0Ch	00h	00h	IEEE 1394 (FireWire)
		10h	IEEE 1394 following the 1394 OpenHCI specification
	01h	00h	ACCESS.bus
	02h	00h	SSA
	03h	00h	Universal Serial Bus (USB) following the Universal Host Controller Specification
		10h	Universal Serial Bus (USB) following the Open Host Controller Specification
		20h	USB2 host controller following the Intel Enhanced Host Controller Interface
		80h	Universal Serial Bus with no specific programming interface
		FEh	USB device (not host controller)
	04h	00h	Fibre Channel
	05h	00h	SMBus (System Management Bus)
	06h	00h	InfiniBand - This Sub class is deprecated. New InfiniBand adapters should use the Base Class and Sub-Class defined in section 1.3
	07h (see Note 1 below)	00h	IPMI SMIC Interface
		01h	IPMI Kybd Controller Style Interface
		02h	IPMI Block Transfer Interface
		00h	Other network controller
	08h (see Note 2 below)	00h	SERCOS Interface Standard (IEC 61491)
09h	00h	CANbus	