

HITACHI MICROCOMPUTER TECHNICAL UPDATE

DATE	18 July 2001	No.	TN-SH7-343A/E
THEME	PCIC specifications notice		
CLASSIFICATION	<input type="checkbox"/> Spec change <input type="checkbox"/> Limitation on Use <input checked="" type="checkbox"/> Supplement of Documents		
PRODUCTNAME	HD6417751BP167, HD6417751BP167I, HD6417751F167, HD6417751F167I HD6417751VF133	Lot No.etc.	
REFERENCE DOCUMENTS	SH7751 Hardware Manual	Rev.	EffectiveDate Eternity
		1	From ALL

SH7751 PCIC has some specifications NOT compliant with PCI Local Bus Specification, Revision 2.1.

You have to take into consideration about following properties when you use SH7751 as PCI non-host devises (e.g. add-in card for PC).

(1) Although PCI2.1 says "all Base Address registers asking for I/O space may not request more than 256 bytes. ", the Base Address register in SH7751 PCIC requests 1 megabyte for I/O space.

There is a possibility that the PCI host devise considers SH7751 as the forbidden PCI devise in device configuration process.

(2) Although PCI2.1 says "the configuration command allows data to be accessed using any combination of bytes (including a byte, word, DWORD, or non-contiguous bytes). And the target is required to handle any combination of byte enables. ", SH7751 PCIC ignores byte enables and only allows DWORD data to be accessed when it receives configuration commands.

Then the configuration write access to SH7751 in byte or word access rewrites unexpected part of the data.