Copland NuBus ReadMe

for

DDK Version 0.1

Prior to the DR1 release of Copland (ie. the 1.0 version of the DDK), developers creating Nubus products for Copland should read the current PCI documentation as both architectures have many parallels.

NuBus Specific Addendums to current PCI documentation

LOGICAL SLOT ADDRESSES

The logical slot addressing for a NuBus card can be determined by examining the "AAPL,address" property of a given card's RegEntryRef. NOTE: The logical slot address assignement for a NuBus card MAY NOT be equivalent to it physical address assignment. Always use "assigned-addresses" to obtain a NuBus card's physical address assignement.

PHYSICAL SLOT ADDRESSES

The physical slot addressing for a given NuBus card can be obtained by examing the "assigned-addresses" property of a given card's RegEntryRef. NOTE: The physical slot address assignment of a NuBus card MAY NOT be equivalent to it's logical address assignment. Always use "AAPL,address" to obtain a NuBus card's logical address assignment.

"AAPL,slot" PROPERTY

The property "AAPL,slot" is found attached to RegEntryRef's for NuBus cards. It is a 32bit unsigned value that contains the physical slot number into which

the NuBus card is installed. Valid value range is 0x9 through 0xE. The physical slot address assignment for a NuBus card can be computed using this value. The logical slot address assignment of a NuBus card cannot be computed using this value.

PLUGIN MATCHING NAME:

A plugin for a NuBus device contains a matching string that is used to associate the plugin with the device it is intended to drive. This matching string is found in the device plugin's "DriverDescription" structure of meta-data:

TheDriverDescription.driverType.nameInfoStr

The format for a given NuBus card's "nameInfoStr" is derived from the "boardId" value contained in the card's SlotROM. The "nameInfoStr" is a c-string of this format:

"AAPL,nubus-boardXXXX" / / Quotes (") not inclusive

Where XXXX is the 16bit "boardId" value of the card's SlotROM, represented in hexadecimal ASCII... Zero extended, lowercase hex numbers. E.g. a card whose SlotROM contained the "boardId" value of 0x3E0 would have a "nameInfoStr" value of:

"AAPL,nubus-board03e0"