



Tech Info Library

NuBus '90: Macintosh Computers That Support It (6/94)

Revised: 6/30/94
Security: Everyone

NuBus '90: Macintosh Computers That Support It (6/94)

=====
Article Created: 30 June 1994

TOPIC -----

This article describes the 1990 proposal revision to the IEEE NuBus standard (IEEE Std. R1196-R-1990) commonly referred to as NuBus '90, what Macintosh computers support it, and facts surrounding the use of older cards in NuBus '90 equipped systems.

DISCUSSION -----

The NuBus implementation in the Quadra family and the Power Macintosh family is based on the NuBus '90 proposal. This proposal includes the following new signals:

- Support for block transfers at double the standard rate. The Macintosh Quadra family of computers allow double rate block transfers between NuBus cards but do not support double rate transfers to or from the main memory.
- A serial bus on the formerly reserved pins A2 and C2. The serial bus signals are bused and terminated, but the main circuit board does not drive them.
- Support for a cache-coherency protocol. Pins on the NuBus connector are assigned to those signals, but the Macintosh Quadra system doesn't support them.

In addition, the NuBus slots in the Quadra 900/950, and Power Macintosh computers also provide the following feature:

- Low current at +5V is available on the new STDBYPWR pin when main power is off and the AC cord is plugged in.

The eight lines that were previously connected to the -5.2V supply have been replaced by the above new features. Many older NuBus cards connect those lines together, the presence of such a card in Macintosh computers implementing the features of NuBus '90 will disable the new features. All other features of both

the old and new cards will operate normally.

Support Information Services

Copyright 1994, Apple Computer, Inc

Tech Info Library Article Number:15725