6.0 DIGITAL Server 5000 Server-Specific Information

V3.11

This portion of the README file provides information specific to the DIGITAL Server 5000 series servers, models 5100, 5105, 5200, 5205 and 5210.

6.1 Server-Specific Contents

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Series

System Reference manual

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7.0 QUICK LAUNCH SOFTWARE

7.1 Minimum BIOS & System Configuration Utility (SCU) Levels

This version of Quick Launch requires the following minimum system software:

Model: 5100/5105 5200 5205 5210
Proc: Pentium Pro Pentium II Pentium II Pentium II

Proc: Pentium Pro Pentium II Pentium II Pentium II BIOS: 3.00 3.01.01 3.01.01 3.02

BIOS: 3.00 3.01.01 3.01.01 3.02 SCU: 3.00 3.00 3.00 3.00

BIOS and SCU updates are available on the Internet; refer to section 1.0.

7.2 Unattended Installation Stops for Answer to Question

The NT 4.0 installation installs the embedded driver for the network chip. The NT 4.0 install is successful and networking does come up; however, the install script stops to wait for an answer to a question in one dialog box.

8.0 OPERATING SYSTEMS

8.1 SCO

- 8.1.1 More on Installing SCO UNIX Products
- (1) Excessive floppy read errors:

If the diskette drive gets an abnormal amount of use, floppy read errors may occur. If this is the case, the diskette driver in OpenServer 5.x can be modified to enable FIFO. This will require an experienced UNIX person to apply the change.

(2) Network Interface Card (NIC) installation note:

The UNIX NIC installation program may not

automatically

recognize the product you are attempting to install. If this is the case, a manual configuration will be necessary. In this process, the user will need to

know

the "bus, device, and function" of the slot the NIC is installed in. These parameters usually start at 0 and range to some higher number. In the DIGITAL

Server

5000, these values may start at 1. This ranging disparity appears to have no adverse effect on the functionality of the NIC.

9.0 SERVER CONFIGURATION

9.1 Integrated Ethernet Controller (DIGITAL 2114X)

The NetWare and SCO Unix drivers for the integrated Ethernet controller (DIGITAL 2114X) default to the twisted-pair (RJ-45) connector.

To configure the ThinWire (BNC) or Thickwire (AUI) media for NetWare ports, it is necessary to add the following keyword to the command line used to load the driver:

MEDIA=BNC or MEDIA=AUI

Examples:

LOAD DC21X4 SLOT=10001 MEDIA=BNC (for ThinWire connections)

LOAD DC21X4 SLOT=10001 MEDIA=AUI (for thickwire connections)

For NetWare, the media type will need to be specified when the driver is loaded.

For SCO Open Desktop, the driver space.c file will need to be modified to specify the media port.

In SCO OpenServer 5.x, the port can be switched to the AUI port or the BNC connector through the "netconfig" utility. Follow the example below:

- 1. Run "netconfig."
- 2. Press Tab and down arrow key to highlight "HW DIGITAL DC2114X PCI Ethernet and Fast Ethernet Controller." Then, press the space bar to mark the entry with "*".
- 3. Press Tab to go back to "Hardware," press Enter and down arrow to "Modify hardware configuration."
- 4. Press Tab four times to "Advance options" in the upper-right corner of the screen.
- 5. The default media setting is SROM_default. If desired, you can modify this setting by pressing the down arrow key until your desired port is highlighted.
- 6. Exit the utility gracefully. The kernel will rebuild. On the next boot, the hardware display will read as follows:

For BNC: type=dc2114x/BNC addr=xxxxxxxx

For AUI: type=dc2114x/AUI addr=xxxxxxxx

9.2 Graphics Resolution - SCO

In order to increase the graphics resolution to a maximum of 1024x768, 256 color, you must have "root" privileges. Then, use either 'mkdev graphics' or 'scoadmin video' and follow these selections:

Modify

Scroll to "Number 9 Gxe 64."

Select OK.

Scroll to the correct monitor specification, i.e.: Other 15 inch

Select the resolution and frequency specification based on your monitors scan and refresh rates. Consult your documentation if necessary.

9.3 Updating the BIOS with Video Option Card Installed

When updating the BIOS, you must remove any video option cards and enable the onboard VGA. In the rare event that you may need to use the recovery diskette, the system will require that the onboard VGA be used in this mode.

9.4 PCI Bus Parity Function

The Parity function can be enabled or disabled through the SCU. The default setting is enabled. This function needs to be set to "disabled" for PCI cards that do not implement the PCI parity function.

9.5 Processor Compatibility

At this time, the DIGITAL Server 5100 and 5105 use only two production steppings of the Pentium Pro processors; therefore, there are no known issues about mixing Pentium Pro processors in a multiprocessor environment.

The DIGITAL Server 5200 uses a C0 stepping Pentium II processor. The DIGITAL Server 5205 uses either a C0 or C1 stepping 300 MHz processor. If you add an additional processor, or if you upgrade your server to a new model,

make sure

you use the same stepping on the processors. See Paragraph 4.6.

9.6 Acoustics Declared Values

DIGITAL Server 5100

Acoustics - declared values per ISO 9296 and ISO 7779:

Level

from

LwAd, B LpAm, dBA (bystander positions)

Sound Power Level Sound Pressure

Product Idle Operate Idle Operate

FR-B50/1/2/3WW-AA
(DISKLESS) 5.6 5.6 37 37

FR-B50/1/2/3WW-AA + 3XPCWVR-AY 5.8 5.9 40 4

[Current values for specific configurations are available

Digital representatives. 1 B = 10 dBA.]

10.0 OPTIONS

10.1 Ultra-SCSI Configuration

In order for the "hot swap" disk drives to operate at Ultra-SCSI speeds, it is necessary to have a SCSI Bus Expander installed within the server chassis. A single Expander (FR-PCSBR-AA) is required when running all seven drives as a single bus. In order to operate the disks in a split-bus configuration, a dual Expander kit (FR-PCSBR-AB) is required.

10.2 Corrections to the DIGITAL Server 5100/5200 Series System Reference manual

Chapter 11 states that wide Ultra SCSI drives are configured at the factory for Ultra SCSI data transfers for both SCSI

and

RAID devices. Wide Ultra SCSI drives are configured for

WIDE

data transfers only unless a SCSI Bus Expander was ordered. Each SCSI bus requires a SCSI Bus Expander installed to

achieve

Ultra SCSI data transfer rates. SCSI Bus Expanders must be ordered separately.