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ASTi

μ DACS Cold Start Procedure

Document: DOC-01-DACS-CSMD-1

Product Name: ASTi μ DACS

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Introduction

For clarity, this document refers to a slot on the μ DACS chassis where CompactFlash® media is inserted as a “CompactFlash drive”, and the removable media upon which software is installed as the “CompactFlash module”.

Overview

This document provides the user with instructions for correctly setting the μ DACS BIOS and installing the operating system. There are two main reasons for using this procedure:

1. Rebuilding a damaged CompactFlash module
2. Creating spare CompactFlash modules

The CompactFlash modules must be cold started before Model Builder and its supporting files can be installed.

Equipment Required

- ASTi μ DACS product and power supply
- Monitor and USB keyboard
- ASTi Cold Start CompactFlash
- ASTi CompactFlash module (the module to be cold started)
- Tweezers or needle-nose pliers

Initial Conditions

WARNING: Ensure the μ DACS is powered OFF prior to installing or removing any CompactFlash module.

Monitor, keyboard and power supply are connected to the μ DACS.

The CompactFlash module to be cold started is installed in the main CompactFlash drive on the front of the μ DACS chassis, logo label side up.

The Cold Start CompactFlash module is installed into the Cold Start CompactFlash drive on the bottom rear of the μ DACS chassis, logo label side down. (Refer to μ DACS installation diagram: ASSY-01-DACS-INMD-1)

Checking the BIOS Version

1. Power on the μ DACS system and observe the BIOS version reported at startup.
2. If the version displayed is “PCM-5823 BIOS V1.xx”, then the BIOS must be updated before completing this procedure.
3. Refer to ASTi’s “ μ DACS BIOS Update Procedure” (DOC-01-DACS-BUMD-1, Rev. A, June 2003) for instructions.
4. If the μ DACS BIOS does not need to be updated, continue with “Configuring the BIOS” in the next section of this document.

Configuring the BIOS

1. Immediately after system power-on or reboot, press the “DEL” key to enter BIOS Setup Menu.
2. Use the arrow keys, “ESC” and “Enter” to move between the sub-menus listed below.
3. Choose the “Load Setup Defaults” option.
 - a. Press the “Y” key followed by the “Enter” key to confirm changes.
4. Under the “Standard CMOS Settings” sub-menu, change or ensure the following settings:
 - a. **Drive:** Primary Master, **Type:** Auto, **Mode:** Auto
 - b. **Drive:** Primary Slave, **Type:** None, **Mode:** None
 - c. **Drive:** Secondary Master, **Type:** Auto, **Mode:** Auto
 - d. **Drive:** Secondary Slave, **Type:** None, **Mode:** None
 - e. **Halt On:** No Errors
5. Under the “BIOS Features Setup” sub-menu, change or ensure the following settings:
 - a. **Boot Sequence:** D,A,SCSI
6. Under the “Chipset Features Setup” sub-menu, change or ensure the following settings:
 - a. **16-Bit I/O Recovery (CLK):** 2
 - b. **8-Bit I/O Recovery (CLK):** 2
 - c. **USB Controller:** Enabled
 - d. **USB Legacy Support:** Enabled
 - e. **Onboard PCI LAN Chip 1:** Enabled
 - f. **Onboard PCI LAN Chip 2:** Enabled
 - g. **SDRAM Clock Ratio Div By:** 3

7. Under the “Power Management Setup” sub-menu, change or ensure the following settings:
 - a. **Power Management:** Disabled
8. Under the “PNP/PCI Configuration” sub-menu, change or ensure the following settings:
 - a. **Resources Controlled By:** Manual
 - b. **IRQ-10 Assigned To:** Legacy ISA
9. Under the “Integrated Peripherals” sub-menu, change or ensure the following settings:
 - a. **Video Memory Size:** 1.5M
 - b. **Flat Panel Status:** Disabled
10. Press “F10” to save settings. Press the “Y” key followed by the “Enter” key to confirm changes.

CompactFlash Formatting and DOS Installation

WARNING: *This will COMPLETELY ERASE the contents of your ASTi CompactFlash module.*

WARNING: *Ensure the μ DACS is powered OFF prior to installing or removing any CompactFlash module.*

1. If you have not already done so, insert the ASTi Cold Start CompactFlash module into the back of the chassis, logo label side down. (Refer to μ DACS installation diagram: ASSY-01-DACS-INMD-1)
2. Connect the power supply to the μ DACS system via the power jack on the back of the chassis, and turn it on via the switch on the front. The system will fully boot to the “c:\” prompt.
3. Type “installc”, press the Enter key, and follow the on-screen prompts.
4. Once finished, the system will display “Finished DOS installation. Please turn off your system and remove the Cold Start CompactFlash”.
5. Turn off the μ DACS system and carefully remove the Cold Start CompactFlash module using tweezers or needle-nose pliers.
6. Proceed to “ASTi μ DACS Software Installation” (DOC-01-DACS-INMD-1) for instructions on installing Model Builder and its supporting files.

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