# **Digidesign Product Compatibility Documents**

Revised May 8, 2000

To view a compatibility document simply chose the product and click on the operating system you use.

## Pro Tools|24 MIX and MIXplus

Mac OS Windows NT

Pro Tools 24

Mac OS Windows NT

**Pro Tools III** 

**Mac OS** 

Digi 001

Mac OS

**Digi ToolBox XP** 

Mac OS Windows 98

All features and specifications are subject to change without notice. All trademarks are the property of their respective holders. © Copyright 1999 Digidesign, a division of Avid Technology, Inc.

## Pro Tools|24 MIX Systems for Power Macintosh Requirements

#### **Digidesign PCI Cards Supplied with System**

MIX Core

MIX Farm (with MIXplus only)

**Other Card Options** 

#### Digidesign Audio Interfaces (one required)

888|24 I/O

888 I/O

882|20 I/O

882 I/O

1622 I/O ADAT Bridge I/O

### **Digidesign Software Supplied with System**

Pro Tools 5.0

DAE 5.0 & DigiSystem INIT 5.0

TDM Mixer Plug-In 1.8

## **Optional Digidesign Software**

## **Optional Digidesign Hardware**

**AVoption** 

**ProControl** 

SMPTE Slave Driver (Discontinued)

Video Slave Driver

Universal Slave Driver

#### **Supported Optional Expansion Chassis**

#### **Third-Party MIDI Controllers & Interfaces**

**Third-Party Video Capture Cards** 

Third-Party Video Recorder/Players

### Supported CPU Models, Speeds & Requirements

Power Macintosh G4 (AGP graphics)

Power Macintosh G4 (PCI graphics)

Power Macintosh Blue & White G3

Power Macintosh Beige G3

Power Macintosh 9500 or 9600

## **Additional Computer Requirements**

- System Software: Mac OS v9.0 or v8.6
- Total System RAM:
  - Up to 32 tracks 128 MB minimum
  - 32-64 tracks 192 MB minimum
  - Pro Tools application & DAE "Preferred" memory allocations both set to 30 MB

(Additional RAM required for simultaneous use with

MIDI sequencers. Virtual memory is not supported)

- Monitor, color required, minimum resolution of 832 x 624
- Opcode OMS v2.3.8 or higher (supplied)
- Apple QuickTime v4.0 or higher (supplied)
- FWB Hard Disk ToolKit PE (HDT PE) v3.0.2 or higher (supplied)
- Hard Drive Minimum Requirements

#### **SCSI Accelerator Card Required**

**Maximum Performance Guidelines** 



3401-A Hillview Avenue Palo Alto, CA 94304 U.S.A Tel 650.842.7900 Fax 650.842.7999

**Product Information** United States 1.800.333.2137 North & South America 650.842.6602 (USA) Europe (England) 44.1753.658496 Asia(Japan) 81.3.3505.7963

# Other Digidesign PCI Card Options - Pro Tools|24 MIX for the Mac OS

- MIX Farm: Maximum of 7 MIX Farm or MIX Core cards supported. If adding MIX Farm card(s) to Pro Tools|24 systems, refer to Pro Tools|24 MIX System compatibility information.
- **DSP Farm\*:** DSP Farms with serial numbers lower than FG10501 may be used for Plug-In operation but do not support connection of an Audio Interface.
- MIX I/O: Maximum of 2 MIX I/O cards supported (Only 1 MIX I/O card supported with MIX systems that are upgraded Pro Tools|24 systems). Some MIX I/O cards may experience recognition problems in the 400 MHz Blue & White G3 or G4s with AGP Graphics. If so, please contact your local Digidesign office.
- d24: With MIX systems that are upgraded Pro Tools|24 systems some d24 cards may experience recognition problems in the 400 MHz Blue & White G3 or G4s with AGP Graphics. If so, please contact your local Digidesign office. d24 card not available for separate purchase.
- SampleCell II Plus
- SampleCell II\*
- SampleCell II TDM Module

# \*Incompatibility with older DSP Farms and SampleCell II Cards & The Blue & White G3 and G4

A rev "QC" or later of the AMCC chip is required for Blue & White G3 and G4 compatibility. This rev number appears on the AMCC chip following number "5933". Older versions can cause your computer to hang while booting or when launching Pro Tools or DigiTest. QC or higher chip is required for compatibility with the PCI 2.1 spec. Ways to identify these boards are in the grid below:

Board	S/N's Below	Manufactured Before	Board Rev Before
DSP Farm I	FF09226	7/9/97	Rev H
SampleCell II	HH02001	5/20/97	Rev D

If a customer has previously updated their board (or received a refurbished card), the serial number will remain the same, but the board rev will be updated (and the AMCC chip will have "QC" or later). Cards with the rev "Q" chip can be upgraded, please contact Digidesign directly to arrange this.

## **Optional Digidesign Software**

- Bruno/Reso v1.1
- **DINR v3.3:** HUM Removal-TDM is not supported on MIX Core and MIX Farm cards.
- DigiTranslator: Requires 128 MB RAM. Does not require Digidesign Hardware.
- **DirectConnect:** Pro Tools|24 MIX or Pro Tools|24 MIXplus systems running Pro Tools v5.0 or higher software required for compatibility.
- DPP-1 v1.6
- D-Fi v1.4
- D-fx v1.2
- D-Verb v1.7
- Focusrite d2 v1.5
- Focusrite d3 v1.3
- MachineControl v1.0.1: Use of MachineControl with Blue & White G3 & G4 requires a Stealth Port Modem-to-Serial port converter or the Keyspan USB-to-Serial port converter with driver v1.7.2 or higher available at: http://www.keyspan.com/products/usb/adapter/downloads/
- MasterList CD v2.2: Use of MasterList CD with Blue & White G3 & G4 requires SCSI Accelerator (due to lack of internal SCSI Bus). Supported SCSI Accelerators are the same as those supported with all Pro Tools|24 systems. MasterList CD requires DAE/DSI v5.0 to work with G4s.
- Maxim v1.2
- PostConform v2.0
- SampleCell Editor v2.1.1 (w/ SampleCell II Plus)
- SampleCell-TDM v1.1.1 (w/ TDM Module)
- **Sound Designer II v2.8.3:** Compatible with Pro Tools III systems/cards only <u>not</u> Pro Tools|24 or Pro Tools|24 MIX-based systems. Does not support the use of Sound Designer II Plug-Ins.
- SoundReplacer v1.1

## **AVoption Requirements**

**Please Note:** AVoption has compatibility requirements that are unique to it. If the information on this page contradicts information listed elsewhere in these Compatibility Documents, please adhere to the information listed on this page when using AVoption.

## **Digidesign PCI Cards Supplied with System**

AVBV Card Janus Card

## **Digidesign Software Supplied with System**

Pro Tools 5.0(AV)
DAE 5.0 & DigiSystem INIT 5.0
TDM Mixer Plug-In 1.8
DigiTranslator 1.0

## Required Hardware Components (not supplied)

- Pro Tools|24, Pro Tools|24 MIX or Pro Tools|24 MIXplus based system
- Universal Slave Driver (USD)
- ATTO ExpressPCI Dual Channel Ultra/WIDE HBA SCSI accelerator card (EPCI-DC). This is the **only** SCSI card currently qualified for use with AVoption. For additional compatibility information on this card please refer to the link in the next section (Supported CPU Models, Speeds & Requirements) of the computer you use.

## Supported CPU Models, Speeds & Requirements

Power Macintosh G4 (AGP graphics)\*
Power Macintosh G4 (PCI graphics)\*
Power Macintosh Blue & White G3\*

\*All of the above Computers require either the Pro Tools Expansion Chassis or a qualified Magma Expansion Chassis. Refer to the AVoption user guide for precise installation instructions and the "Expansion Chassis" section below for compatibility information.

## Power Macintosh 9500 or 9600

AVoption has been tested with Apple Macintosh 9500 CPU's with processor speeds as low as 150 MHz. The overall performance of your Pro Tools system will be greatly improved with higher-speed CPU's. For optimal responsiveness, we strongly recommend you use a CPU with at least 300 MHz clock speed with AVoption. With the 9500 and 9600 CPU, it is required that the ABVB and Janus boards be mounted inside the CPU, not in a chassis. Refer to the AVoption user guide for precise installation instructions.

**Note:** The Power Macintosh Beige G3 is not officially qualified with AVoption.

**RAM Requirements:** 192 MB - It is recommended that 60 MB be allocated to Pro Tools and 50 MB to DAE.

## **Expansion Chassis**

**Pro Tools Expansion Chassis or Magma 13-slot or 7-slot Chassis** 

Either the Pro Tools Expansion Chassis or the Magma 13-slot or 7-slot Expansion Chassis may be used with any of the qualified computers. The AVoption PCI cards (ABVB and Janus) may be installed in this chassis only when the CPU is a "Blue & White" G3 or G4. With 9500 and 9600 CPU's, the AVoption boards must be installed in the CPU's internal PCI slots. Refer to the AVoption user guide for precise installation instructions and the "Supported Optional Expansion Chassis" pages for compatibility information when used with <a href="Pro Tools|24 MIX">Pro Tools|24</a>.

**Important Cooling Issue:** If you install the AVoption PCI boards (ABVB and Janus) in either Magma chassis, you **must** install the additional cooling fan, (Digidesign part number MC201) in the chassis.

Note to G4 with AGP Graphics Owners: With G4s the CPU card placement order is different from that listed in the AVoption Guide. Cards must be placed with the SCSI accelerator card in the first PCI slot next to the AGP graphics card & the chassis host card in the second PCI slot.

## Bit3 (SBS)

Bit3 (SBS) chassis may be used with AVoption only in a configuration with 9500 or 9600 computers. AVoption's two PCI boards (ABVB and Janus) must never be installed in a Bit3 (SBS) chassis. They must be installed in a 9500 or 9600 computer's internal PCI slots when run in a configuration with the Bit3 (SBS) chassis. Refer to the AVoption user guide for precise installation instructions and the "Supported Optional Expansion Chassis" pages for compatibility information when used with Pro Tools|24 MIX or Pro Tools|24.

**WARNING:** If you run the AVoption boards (ABVB and Janus) in a Bit3 (SBS) chassis, you run the serious risk of damaging them.

## **Drive Compatibility**

**Audio Drives:** Refer to the <u>Pro Tools TDM Hard Drive Minimum Requirements</u> page

**Video Drives:** Avid rS drives, iS Pro drives, iS Plus drives or DigiDrives. At this time, the Avid MediaDock drive is not officially qualified for use with AVoption.

## **Additional Notes on Drive Configurations**

HFS, HFS+ and ADU2 individually initialized drive volumes should be mounted using FWB's Hard Disk Toolkit (HDT) version 3.02, which is provided with all Pro Tools systems. ADU2 striped volumes should be mounted using ADU2 2.1, ADU2 2.2 or ADU2. For drive striping ADU2 is required. ADU2 is included with every Avid hard drive. Alternately, ADU2 Lite 2.4, which can mount striped volumes, is supplied with AVoption.

**Third Party Video Capture Cards:** Pinnacle miroMotion DC30 Plus (with firmware v1.1.2) only. The DC30 plus appears to coexist with the ABVB/Janus cards in an AVoption-equipped Pro Tools system.

**Dual Screen Monitor Cards:** There are no dual-monitor graphics cards qualified for use with Pro Tools or AVoption at this time. There are also no configurations with two dedicated graphics cards qualified at this time.

## **Maximum Performance Guidelines**

Compatible Dual-Channel SCSI Accelerator card

- Total System RAM: 192MB recommended, 256 MB preferred
- Use one SCSI Channel for Pro Tools audio storage and the second SCSI channel for video storage.

**Note:** AVoption supports "plug and play" compatibility with many Avid systems. When "inheriting" a drive containing audio and video data from an Avid system, we recommend you connect this drive to the SCSI channel dedicated to video storage. There is no need to copy the audio data from such a drive to your dedicated audio drives, however we recommend that you not record any additional audio tracks onto this drive.

Virtually all the testing for AVoption was done with a baseline of 32 tracks of 24-bit/48k audio and one stream of AVR77 video data (record and/or playback). These test configurations generally included one drive for every 16 tracks of audio. One way to achieve higher track counts is to dedicate more drives to the audio tracks.

On a supported configuration, you should be able to easily achieve this performance baseline, even with a high degree of edit density on each track. The higher the edit density, the more heavily taxed will be the storage subsystem.

You may find much better results than this baseline, since Digidesign's performance tests re designed to stress the storage subsystem more heavily than the average "real world" usage. In several cases, our test group was able to continuous record or playback of 64 audio tracks and AVR77 picture simultaneously.

There are other possible steps that can be taken to maximize the performance of a Pro Tools system with AVoption consult the User Guide or Release Bulletin (available for download as a PDF here) for the latest information

# SMPTE Slave Driver (SSD) - Mac OS Requirements

SSD Setup software 1.31 or higher is required. **Download** 

Note: The SSD will not interface directly with Blue & White G3s and G4s because the SSD connects to CPUs via a serial port connection which is not present on these CPUs. When SSD is connected to systems using these computers, it is only officially qualified as a source of superclock, not as a MTC source.

## **Expansion Chassis Requirements - Pro Tools|24 MIX**

## 13-Slot

- · Digidesign Pro Tools Expansion Chassis
- Bit3 (SBS) model DD23
- Bit3 (SBS) models 240-2-2 & 240-2-201
- Magma model PCI-13-RX-400V (must have serial number PE01732 or greater)

Note: 13-Slot Chassis support a total of up to 10 Digidesign cards - this may include up to 7 MIX Core/Farm cards, 2 d24 or MIX I/O cards and any number of other Digidesign cards.

#### 7-Slot

- Bit3 (SBS) model DD22-1
- Bit3 (SBS) model 2101-00-2 (must use IBM PCI Bridge chip, with host card that starts with 20-101. Use of older units also requires modification by Bit 3 for Motorola 56301 compatibility)
- Magma model PCI-7-RX-300V (must have serial number PD01910 or higher)

For further information about these products, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

## **Expansion Chassis Requirements**

Customers should specify the following requirements when ordering. Any 7-slot chassis purchased prior to 10/98 will need HW upgrading. Please contact your chassis manufacturer for details.

- Chassis must have 3.3 volt power supply
- When used with G3 or G4 computers the Chassis is required to have PCI 2.1 compliant bridge chips
- Requires 2 or 4 ft Expansion Chassis cable 6 ft cables not supported
- AVoption Users: Please read the additional AVoption Requirements
- Bit3 (SBS) 7-Slot with Beige G3 requires that the G3 uses Apple's "Silk" ROM. The "Silk" ROM shipped in late 1998 beige G3 computers with the following model numbers:

#### Desktops:

- 266 MHz M6503LL/A
- 300 MHz M7104LL/A

#### Mini Towers:

- 300 MHz M7246LL/A
- 333 MHz M7106LL/A

Customers with early-mid 1998 G3 machines wishing to use a Pro Tools|24 MIX system and Bit3 (SBS) 7-slot Expansion Chassis should contact Digidesign for upgrade information.

For more information about expansion chassis setup and card order configurations please <u>download the Expanded Systems</u> <u>Guide PDF.</u>

## **Digidesign Card Requirements**

- DSP Farm cards: must be Rev H or higher (serial number FF09226 or higher) for compatibility with Expansion Chassis.
- SampleCell II cards: must be Rev D or higher (serial number HH02001 or higher) for compatibility with Expansion Chassis.

Customers with older cards should contact their local Digidesign office.

#### Pro Tools|24 MIX System Configurations for Power Macintosh

Computer	Internal Core System Support	Pro Tools Expansion Chassis	BIT3 (SBS) 7- or 13-Slot Support	Magma 7- or 13-Slot Chassis Support
G4 with AGP Graphics	YES	YES	YES	YES
G4 with PCI Graphics	YES	YES	YES	YES
Blue & White G3	YES	YES	YES	YES
Beige G3 - 333/300/266/233 MHz (Tower/Desktop)	YES	YES	YES	YES
9600 - 350/300/233/200 MHz	YES	YES	YES	YES
9500 - (150 MHz or higher for more than 32 tracks)	YES	YES	YES	YES

## Exceptions that effect all the above Computers except the 9500 & 9600:

**Optional SCSI accelerator bundle (by Apple):** For maximum track count, this configuration requires use of a qualified SCSI Accelerator card. Optional SCSI Accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate.

- When using HDT 2.5.3 or earlier with a qualified ATTO SCSI Accelerator, Firmware v1.1.1 is required.
- For Blue & White G3 and G4 computers, HDT 3.0.2 is required along with ATTO SCSI Accelerator, Firmware v1.3.5 or higher. Please contact ATTO for the latest information.

**Radius VideoVision not supported:** Radius VideoVision is incompatible with the optional video card included with some Beige G3 Power Macintoshes. Please contact Radius for the latest information.

**Further Exceptions Apply:** Please refer to the "Supported CPU Models, Speeds & Requirements" list back on the <u>Pro Tools|24 MIX Systems for Power Macintosh Requirements</u> page for your chosen computer.

## **Third-Party MIDI Hardware**

## **Third-Party MIDI Control Surfaces**

- CM AUTOmation MotorMix
- Mackie HUI Controller: For further information about this product, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.
- JL Cooper CS-10 series (MIDI model) and MCS-3800: For further information about this product, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.
- Peavey PC-1600

## **Third-Party USB MIDI Interfaces**

Digidesign recommends using a serial MIDI Interface. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Alternatively USB MIDI Interfaces have been tested and are similarly compatible.

# **Third-Party Video Capture Cards**

The following third-party video capture cards have been qualified for use with Pro Tools 5.0 on G4 Power Macintoshes

- Aurora Fuse (firmware v1.8.1)
  Pinnacle miroMotion DC30 Plus (firmware v1.1.2)

# **Third-Party Video Recorder/Players**

- Rorke VMOD: Requires Digidesign's MachineControl option.
- Doremi V-1: Requires Digidesign's MachineControl option.

For further information about these products, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

# Power Macintosh G4 (AGP Graphics) - Pro Tools|24 Requirements

## G4 (AGP Graphics) Processors of all speeds supported

See Apple's tech archive for more info on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://til.info.apple.com/techinfo.nsf/artnum/n58418

- Mac OS 9.0, 9.0.2 or 9.0.4 required
- FWB Hard Disk ToolKit v3.0.2 required
- External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; required for Pro Tools Installation.

Imation SuperDisk driver v3.2 is available at: http://www.superdisk.com/sc/sc\_dl.html

NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html

Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb\_enabler.html

Apple's revised USB support allows for booting from a USB drive, therefore you should <u>not</u> boot up your system with an authorization disk inserted in the USB Drive.

• SCSI Accelerator: For maximum track count, the G4 requires the use of a qualified SCSI Accelerator card. Optional SCSI Accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI accelerators are qualified with the G4s listed at the top of this page:

ATTO ExpressPCI SCSI accelerator EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA) only, with the following requirements:

- Firmware v1.4.4 f1
- ExpressPro-Tools v2.x.x Synch Rate must be set to 20 (10)
- ATTO ExpressPro-Tools system INIT must be removed from the Extensions Folder

ATTO files mentioned above are available at: <a href="http://www.attotech.com/software/">http://www.attotech.com/software/</a>

• MIDI: Digidesign recommends using a serial MIDI Interface. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port for G4 - AGP Video (Sawtooth) and Griffin gPort II installed in the modem port (thereby not using a PCI slot). Alternatively USB MIDI Interfaces have been tested and are similarly compatible.

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: http://www.geethree.com/download.html

• **Dual Monitor Display Card:** Digidesign has found only one configuration and card that appears to reliably achieve full Pro Tools performance when two monitors are desired. The card is called the Jeronimo 2000 by Appian. For information on installation, which must be followed very closely, and to download the required Mac driver for this card click here:

## http://www.digidesign.com/serv/ftpmaps/appian.html

- **DSP Farm and SampleCell II Support:** The PCI Matchmaker chip on a DSP Farm must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.
- **d24 Support:** Some d24 cards may experience recognition problems in the 400 MHz Blue & White G3 or G4s with AGP Graphics. If so, please contact your local Digidesign office.

# Power Macintosh G4 (PCI Graphics) - Pro Tools | 24 Requirements

## G4 (PCI Graphics) Processors of all speeds supported

See Apple's tech archive for more info on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://til.info.apple.com/techinfo.nsf/artnum/n58418

- Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required
- Power Mac G4 ROM 1.8.1 Update required
   Available from Apple at: <a href="http://asu.info.apple.com/swupdates.nsf/artnum/n11533">http://asu.info.apple.com/swupdates.nsf/artnum/n11533</a>
- FWB Hard Disk ToolKit v3.0.2 required
- External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; required for Pro Tools Installation.

Imation SuperDisk driver v3.2 is available at: <a href="http://www.superdisk.com/sc/sc\_dl.html">http://www.superdisk.com/sc/sc\_dl.html</a>

NewerTechnology uDrive latest driver v1.0 is available at: <a href="http://www.newertech.com/software/drivers/index.html">http://www.newertech.com/software/drivers/index.html</a>

Pace USB floppy enabler v2.0 is available at: <a href="http://www.paceap.com/usb\_enabler.html">http://www.paceap.com/usb\_enabler.html</a>

Apple's revised USB support allows for booting from a USB drive, therefore you should <u>not</u> boot up your system with an authorization disk inserted in the USB Drive.

• SCSI Accelerator: For maximum track count, the G4 requires the use of a qualified SCSI Accelerator card. Optional SCSI Accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI accelerators are qualified with the G4s listed at the top of this page:

ATTO ExpressPCI SCSI accelerator EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA) only, with the following requirements:

- Firmware v1.4.4 f1
- ExpressPro-Tools v2.x.x Synch Rate must be set to 20 (10)
- ATTO ExpressPro-Tools system INIT must be removed from the Extensions Folder

ATTO files mentioned above are available at: http://www.attotech.com/software/

• **MIDI:** Digidesign recommends using a serial MIDI Interface. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port and Griffin gPort installed in the modem port (thereby not using a PCI slot). Alternatively USB MIDI Interfaces have been tested and are similarly compatible.

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: <a href="http://www.geethree.com/download.html">http://www.geethree.com/download.html</a>

• **DSP Farm and SampleCell II Support:** The PCI Matchmaker chip on a DSP Farm must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.

# Power Macintosh Blue & White G3 - Pro Tools|24 Requirements

## Blue & White G3 Processors of all speeds supported

- Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required
- G3 Firmware Update 1.1 required
  Available from Apple at: <a href="http://asu.info.apple.com/swupdates.nsf/artnum/n11361">http://asu.info.apple.com/swupdates.nsf/artnum/n11361</a>
- FWB Hard Disk ToolKit v3.0.2 required
- External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; required for Pro Tools Installation.

Imation SuperDisk driver v3.2 is available at: http://www.superdisk.com/sc/sc\_dl.html

NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html

Pace USB floppy enabler v2.0 is available at: <a href="http://www.paceap.com/usb\_enabler.html">http://www.paceap.com/usb\_enabler.html</a>

Apple's revised USB support allows for booting from a USB drive, therefore you should <u>not</u> boot up your system with an authorization disk inserted in the USB Drive.

• SCSI Accelerator: For maximum track count, the Blue & white G3 requires the use of a qualified SCSI Accelerator card. Optional SCSI Accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI accelerators are qualified for use with Blue & White G3s:

ATTO ExpressPCI SCSI accelerator EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA) only, with the following requirements:

- Firmware v1.3.5 or higher
- ExpressPro-Tools v2.x.x Synch Rate must be set to 20 (10)
- ATTO ExpressPro-Tools system INIT must be removed from the Extensions Folder

ATTO files mentioned above are available at: http://www.attotech.com/software/

— OR —

Adaptec Power Domain SCSI Accelerator cards including:

- 2940UW
- 3940UW

with the following requirements:

- Firmware v4.1
- PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the Control Panel

Adaptec files mentioned above are available at: <a href="http://www.adaptec.com/support/files/drivers.html#mac">http://www.adaptec.com/support/files/drivers.html#mac</a>

• **MIDI:** Digidesign recommends using a serial MIDI Interface. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port and Griffin gPort installed in the modem port (thereby not using a PCI slot). Alternatively USB MIDI Interfaces have been tested and are similarly compatible.

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: http://www.geethree.com/download.html

- **DSP Farm and SampleCell II Support:** The PCI Matchmaker chip on a DSP Farm must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.
- **d24 Support:** Some d24 cards may experience recognition problems in the 400 MHz Blue & White G3 or G4s with AGP Graphics. If so, please contact your local Digidesign office.

# Power Macintosh Beige G3 - Pro Tools | 24 Requirements

## Beige G3 Processors of all speeds supported

- Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required
- SCSI Accelerator: For maximum track count, the G3 requires the use of a qualified SCSI Accelerator card. Optional SCSI Accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI accelerators are qualified for use with Beige G3s:

ATTO ExpressPCI SCSI accelerator cards including:

- PSC (ExpressPCI Single Channel Ultra/WIDE HBA)
- EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA)

with the following requirements:

- Firmware v1.1.1 or higher
- ExpressPro-Tools v2.x.x Synch Rate must be set to 20 (10)
- ATTO ExpressPro-Tools system INIT must be removed from the Extensions Folder

ATTO files mentioned above are available at: http://www.attotech.com/software/

— OR —

Adaptec Power Domain SCSI Accelerator cards including:

- 2940UW
- 2940U2W
- 3940UW

with the following requirements:

- Firmware v3.0 (or Firmware v1.1 for the 2940U2W)
- Adaptec PowerDomain Control v3.0 with Ultra-mode disabled in the Control Panel

Note: you may also use Firmware v4.1, but this requires PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the Control Panel.

Adaptec files mentioned above are available at: <a href="http://www.adaptec.com/support/files/drivers.html#mac">http://www.adaptec.com/support/files/drivers.html#mac</a>

• Radius VideoVision: Radius VideoVision is incompatible with the optional video card included with some G3 Power Macintoshes. Please contact Radius for the latest information.

# Power Macintosh 9500 & 9600 - Pro Tools | 24 Requirements

Power Macintosh 9600 Processors 200 MHz or higher speed supported

Power Macintosh 9500 Processors of all speeds supported

- Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required (Mac OS 9.0 compatibility with 9500s expected soon)
- SCSI Accelerator: For maximum track count, the Power Macintoshes requires the use of a qualified SCSI Accelerator card. Optional SCSI Accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI accelerators are qualified for use with Power Macintosh 9500s & 9600s:

ATTO ExpressPCI SCSI accelerator cards including:

- PSC (ExpressPCI Single Channel Ultra/WIDE HBA)
- EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA)

with the following requirements:

- Firmware v1.1.1 or higher
- ExpressPro-Tools v2.x.x Synch Rate must be set to 20 (10)
- ATTO ExpressPro-Tools system INIT must be removed from the Extensions Folder

ATTO files mentioned above are available at: <a href="http://www.attotech.com/software/">http://www.attotech.com/software/</a>

— OR —

Adaptec Power Domain SCSI Accelerator cards including:

- 2940UW
- 2940U2W
- 3940UW

with the following requirements:

- Firmware v3.0 (or Firmware v1.1 for the 2940U2W)
- Adaptec PowerDomain Control v3.0 with Ultra-mode disabled in the Control Panel

Note: you may also use Firmware v4.1, but this requires PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the Control Panel.

Adaptec files mentioned above are available at: http://www.adaptec.com/support/files/drivers.html#mac

• Expansion Chassis: Bit3 (SBS) 7-Slot Expansion Chassis must use IBM PCI Bridge chip, (model numbers starting with 2101).

# **Mac OS Requirements**

The required Macintosh Operating System depends on which Power Macintosh you use with Pro Tools, as follows:

Power Macintosh	Mac OS 9.0	Mac OS 8.6
G4 (AGP graphics)	YES	NO
G4 (PCI graphics)	YES	YES
Blue & White G3	YES	YES
Beige G3	YES	YES
9600	YES	YES
9500	NO	YES

## Mac OS v9.0 & v8.6 Settings & Requirements

- Mac OS Base Extension set (and Digi System extensions)
- Set default cache (in the Memory Control Panel) to "Custom, 512k"
- Set Energy Saver Control Panel to "Never"
- When using Digidesign Output Drivers, turn off Platinum Sounds in the Appearance Control Panel
- In Appearance Control Panel, disable "Smooth All Fonts On Screen" and change system font to other than "Charcoal"
- Firmware v1.1 required for Blue & White G3 computers running OS 8.6. Available from Apple at: <a href="http://asu.info.apple.com/swupdates.nsf/artnum/n11533">http://asu.info.apple.com/swupdates.nsf/artnum/n11533</a>
- Norton Utilities v4.0 is required in order to ensure compatibility with HFS+

**Special Notes for OS 9.0 users:** Pro Tools 5.0 and DAE/DSI 5.0 or higher is required with Mac OS 9.0.

## **Pro Tools TDM Hard Drive Minimum Requirements**

To provide full 64 track, 24 bit, 48 kHz performance a TDM Pro Tools system must include at least two hard drives, minimum, three recommended. For 64 track sessions that have substantial edit densities (such as one edit every third of a second across 64 voices) or large amounts of crossfades, up to four drives may be required, allocated with 16 tracks per drive and two drives per SCSI channel. Additionally, these drives must meet the following requirements:

## **Minimum Drive Requirements**

- SCSI interface: Wide single-ended or low-voltage differential (LVD)
- Disk drive rotational speed: 7200 RPM or faster
- Buffer Size: 512K or larger
- Mac OS file system: HFS or HFS+
- Windows NT file system: Fat 16, NTFS or HFS (with MacOpener v4.1)
- Drives must be dedicated for audio (internal or external)

Hard Drive Families from the following Manufacturers are recommended:

Manufacturers	Drive Families
Digidesign	DigiDrive*
Avid	rS, iS Plus, iS Pro
Seagate	Cheetah, Barracuda
IBM	Ultrastar
Western Digital	Enterprise

<sup>\*</sup> First generation DigiDrives are not supported in LVD mode

## **Drive Space Required**

- Mono, 16-bit, 44.1 kHz audio requires approximately 5 MB/minute disk space
- Mono, 24-bit, 44.1 kHz audio requires approximately 7.5 MB/minute disk space

#### Notes

- The Mac OS has a single file size limit (including audio files) of 2048MB. This equates to about 4.5 hours at 24-bit, 44.1 kHz
- High Speed Drives require manufacturer-approved enclosure to ensure correct heat dissipation, required for sustained drive reliability
- Pro Tools III Disk I/O: Wide drives require cable adapter, such as Avid PN 0070-00469-01 (12" 50-pin female Centronics to 68-pin male high-density)

## **Qualified SCSI Accelerator Cards**

For maximum track count, use of a qualified SCSI Accelerator cards is required. Optional SCSI Accelerator cards bundled (by Apple) with some G3 and G4 computers are not compatible due to lack of support for external drives.

Depending on your computer certain ATTO Express PCI and Adaptec Power Domain cards are qualified for use with Pro Tools, refer to your computer's "SCSI Accelerator" section for details at the following links:

**G4 with AGP Graphics** 

G4 with PCI Graphics

Blue & White G3

Beige G3

9500/9600

SCSI Accelerators are not required for Pro Tools III Systems.

Note: Adaptec 2940UW and 3940UW cards with G4s are unsuitable for full Pro Tools performance. Due to PCI bus related issues the Adaptec 2940UW and 3940UW SCSI accelerator cards are unable to provide full Pro Tools performance. Additionally, Adaptec has discontinued these cards, and as a result there will be no future engineering support from Adaptec on these cards. On the other hand, newer Adaptec cards are currently in Digidesign test and so far these cards have been performing fine - stay tuned.

# Maximum Performance Guidelines for Pro Tools|24 MIX and MIXplus Systems On Mac OS

32–64 track performance with Pro Tools|24 MIX and MIXplus systems requires the following configuration:

- Compatible SCSI Accelerator card
- Total System RAM: 192MB minimum, 256 MB preferred
- Two Pro Tools-qualified hard drives, minimum, three recommended

When using QuickTime movies with Pro Tools|24 MIX systems, for reliable performance of 16 or more audio tracks, audio drives should be connected to a compatible SCSI accelerator, with video drives connected to the Macintosh internal (preferred) or external bus.

With 9600 and 9500 Power Macintoshes the following configurations also yield up to 32 track performance. (G3 computers do not include a Fast SCSI bus or separate internal and external SCSI busses):

- Use of a combination of Pro Tools-qualified hard drives connected to the CPU's internal and external SCSI busses. Digidesign recommends that internally mounted drives are installed according to the drive manufacturer's guidelines.
- Use of two or more qualified hard drives connected to the CPU's internal Fast SCSI Bus.

## Pro Tools|24 MIX Systems for Windows NT Requirements

## **Digidesign PCI Cards Supplied with System**

MIX Core

MIX Farm (with MIXplus only)

**Other Card Options** 

#### Digidesign Audio Interfaces (one required)

888|24 I/O

888 I/O

882|20 I/O

882 I/O

1622 I/O

ADAT Bridge I/O

## **Digidesign Software Supplied with System**

Pro Tools 5.0 for Windows NT

#### **Optional Digidesign Software**

## **Optional Digidesign Hardware**

**ProControl** 

Universal Slave Driver

Video Slave Driver

SMPTE Slave Driver (via a MIDI interface only - Discontinued)

#### **Supported Optional Expansion Chassis**

#### **Third-Party MIDI Controllers & Interfaces**

**Third-Party Video Recorder/Players** 

## **Supported CPU Speeds & Requirements**

IBM IntelliStation M Pro - model 6889

This Computer is qualified to provide up to 64 track performance and full Pro Tools functionality.

#### **Minimum Computer Specification Guidelines**

CPUs adhering to the Minimum Computer Specifications Guidelines may be able to provide up to 64 track performance, however they cannot be guaranteed to do so at this time

#### **Additional Computer Requirements**

- System Software: Windows NT Workstation v4.0 SP5
- Total System RAM: 192 MB minimum for 32 tracks, 256 MB for 64 tracks
- Monitor, color required, minimum resolution of 1024 x 768
- · Hard Drive Minimum Requirements

#### **SCSI Host Adapter Required**

- Adaptec 2940UW PCI card with BIOS 1.3x or higher\*
- Adaptec 3940UW PCI card with BIOS 1.3x or higher\*
- Integrated Adaptec AIC-78xx chip sets with BIOS 1.3x or higher

\*PCI card BIOS available on the Pro Tools CD-ROM

**Maximum Performance Guidelines** 

# digidesign\* A division of **Avid**

3401-A Hillview Avenue Palo Alto, CA 94304 U.S.A Tel 650.842.7900 Fax 650.842.7999 Product Information United States 1.800.333.2137 North & South America 650.842.6602 (USA) Europe (England) 44.1753.658496 Asia(Japan) 81.3.3505.7963

# Other Digidesign PCI Card Options - Pro Tools|24 MIX for Windows NT

- MIX Farm: Maximum of 5 MIX Farm or MIX Core cards supported
- **DSP Farm:** compatibility requires DSP Farms with serial number FG 10501 or higher with Pro Tools NT. There is no upgrade path for cards that begin with serial numbers "FF" or lower.
- MIX I/O: Maximum of 2 MIX I/O cards supported (Only 1 MIX I/O card supported with MIX systems that are upgraded Pro Tools|24 systems).
- d24: d24 card not available for separate purchase.
- **SampleCell II Plus:** SampleCell Editor installer currently requires Windows NT Service Pack 3. The Pro Tools 5.0 CD ROM includes an updater that works with Windows NT Service pack 3 or higher.
- SampleCell II TDM Module

# **Optional Digidesign Software**

- Bruno/Reso v1.1
- DINR v3.3: HUM Removal-TDM is not supported on Windows NT-based Pro Tools|24 Systems
- DPP-1 v1.6
- D-Fi v1.4
- D-fx v1.2
- D-Verb v1.7
- Focusrite d2 v1.5
- Focusrite d3 v1.3
- MachineControl v1.0.1
- Maxim v1.2
- SampleCell Editor 2.1.3 (w/SampleCell II Plus)
- SampleCell-TDM 1.2.1 (w/ TDM Module)
- SoundReplacer 1.1

# **Expanded System Requirements - Pro Tools** | 24 for Windows NT

## 13-Slot

- Bit3 (SBS) model DD23
- Bit3 (SBS) models 240-2-2 & 240-2-201

Note: Chassis support a total of up to 10 Digidesign cards - this may include up to 7 MIX Core/Farm cards, 2 d24 or MIX I/O cards and any number of other Digidesign cards.

For further information about these products, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

## **Expansion Chassis Requirements**

- · Chassis must have 3.3 volt power supply
- Chassis PCI bridge chips must be compliant with the PCI v2.1 specification
- Requires 2 or 4 ft Expansion Chassis cable 6 ft cables not supported

For more information about expansion chassis setup and card order configurations please download the Expanded Systems Guide PDF.

## **Digidesign Card Requirements**

- MIX Core cards: CPU requires a SCSI boot drive and disabling of any active IDE drivers with Pro Tools|24 MIX systems playing back more than 32 tracks of audio.
- **DSP Farm cards:** must have serial number FG 10501 or higher for compatibility with Expansion Chassis.
- **SampleCell II cards:** must be Rev D or higher (serial number HH02001 or higher) for compatibility with Expansion Chassis.

# **Third-Party MIDI Hardware**

## **Third-Party MIDI Control Surfaces**

- CM AUTOmation MotorMix
- Mackie HUI Controller: For further information about this product, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.
- JL Cooper CS-10 series (MIDI model) and MCS-3800: For further information about this product, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.
- Peavey PC-1600

## **Third-Party MIDI Interfaces**

- MidiMan Winman 4x4/s
- **Opcode 64x:** Although this MIDI Interface is supported please note that Opcode ships it with beta drivers.
- MidiMan Winman 4x4/s

# **IBM IntelliStation M Pro - Pro Tools Requirements**

IBM IntelliStation M Pro - Model 6889 (81u recommended)

**Supported Processors (uniprocessor machines only)** 

- Intel Pentium III 450, 500, or 550 MHz.
- Intel Pentium II 233, 266, 300, 350, 400, or 450 MHz.

Windows NT Workstation with Service Pack 5 required

Boot Drive: SCSI recommend for 32 tracks or higher

## **Display Cards:**

- Matrox Millennium G400 with 16MB RAM and Windows NT 4.0 driver
- Matrox Millennium G200 with 8MB RAM and Windows NT 4.0 driver Version 4.07

Integrated System Audio: Integrated Crystal Audio sound driver should be removed

**Expansion Chassis:** The M Pro supports use with compatible third party 13-slot Expansion Chassis. With a 13-slot chassis up to 7 Pro Tools|24 MIX cards and 3 Pro Tools|24 cards = 10 Digidesign cards total are supported.

Compatibility with video capture cards currently not qualified by Digidesign

# Minimum Computer Specification Guidelines for Pro Tools|24 Systems and Windows NT

Digidesign recognizes that some customers will want to build their own computer for use with Pro Tools. To help increase the potential for success, we are providing the following known system requirements. However customers should be very aware that:

- Digidesign can not provide full customer support as to the potential loss of performance for such systems. If a loss in performance is encountered Digidesign will assist customers by verifying the components of the system, to look for incompatibilities. If it is determined that the problem is inherent to a system component, a substitution to a different component may be necessary. Digidesign can not guarantee that all performance issues on these computers will be solved; however incorporating components from this compatibility document can help customers avoid problems.
- Systems adhering to this specification are in no way certified by Digidesign to provide full Pro Tools functionality or track performance. While they may be able operate perfectly well and provide up to 64 tracks performance, they cannot be guaranteed to do so.
- It is impossible for this list to comprehensively cover all possible options. We are providing details of known requirements and known failures based on our experience to date.

## **Supported Processors (uniprocessor machines only)**

- Intel Pentium III 450, 500, or 550 MHz.
- Intel Pentium II 233, 266, 300, 350, 400, or 450 MHz.

#### **Motherboard Guidelines:**

- Intel 440LX or 440BX chipsets only
- PCI slot w/3.3 V/2 A power supply for each MIX Farm or MIX Core card. Presence of 3.3 volt power indicated with yellow LED on MIX Core and MIX Farm cards (Pro Tools|24 MIX Systems only)
- ATX form factor (Single-processor machines only)
- 2 adjactent PCI slots (required for Pro Tools Systems utilizing 2 PCI cards)

## **Suggested Motherboards:**

- Intel SE440BX "Seattle" or Intel SE440BX-2 "Seattle 2" Recommended
- Dell Dimension XPS T: Dell Dimension must be configured with components listed on this Compatibility Document. Windows NT equipped Dimensions are available as part of the Small Business Line of Dell PCs.

**BIOS:** Phoenix (recommend - used on Intel Motherboards) or Award. BIOS must have multiple PCI bridge chip support enabled (x levels) and PCI parity disabled

System RAM: 192 MB minimum for 32 tracks, 256 MB for 64 tracks

**Boot Drive:** SCSI drive recommend for 32 tracks or higher performance

**System Software:** Windows NT Workstation v4.0 with Service Pack 4. Double-byte of character versions of NT are not supported i.e. Japanese NT, Chinese NT, Arabic NT etc.

## Display card:

• Recommended: Matrox Millennium 2, Matrox Millennium G200, Matrox Millenium G400, Diamond Viper 550, Diamond Viper 330, ATI Rage Pro, ATI Xpert or nVidea TNT based cards

- Minimum: AGP card by ATI, Matrox, STB, nVidea, or Diamond
- Duel port video cards are currently not supported

System Audio: Multimedia Sound Cards must be deactivated

**Storage:** Qualified SCSI disk drive(s) (refer to "Pro Tools Qualified Drives" Document) with Fat 16 or NTFS file system

**Monitor:** Color required; 14" minimum; 17" or larger recommended at 800 x 600 (minimum) or 1024x768 (recommended)

## **SCSI Host Adapter:**

- Adaptec 2940UW PCI card with BIOS 1.3x or higher\*
- Adaptec 3940UW PCI card with BIOS 1.3x or higher\*

## **Known Issues - Computers & Components**

**Computers:** Many computer manufactures fabricate proprietary non-ATX style motherboards that utilize daughter cards for their expansion slots, for example:

**Dell Optiplex:** We have seen poor performance with Pro Tools Sessions

exceeding 32 tracks

**Compag DeskPro:** Currently known to not boot properly with Digidesign cards

installed

#### **Motherboard:**

**ASUS:** Currently not supported (does not provide required power to PCI slots)

**Video card:** Currently the following cards are known to be incompatible with Digidesign cards also installed:

**3DFx Voodoo Series:** Voodoo Banshee, Voodoo3 Series and ATI Rage 128 Users of Phoenix BIOS may upgrade to the latest BIOS version, available form Phoenix, to resolve compatibility issues with these cards.

<sup>\*</sup>PCI card BIOS available on the Pro Tools CD-ROM

# Windows NT Workstation v4.0 with Service Pack 5

To ensure correct operation the supplied Install-O-Rator CD-ROM will walk you through the required OS and BIOS settings.

## **Additional OS Notes**

- Double-byte character versions of NT are not supported ie. Japanese NT, Chinese NT, Arabic NT etc.
- Service Pack 4 or 5 may be required for Y2K compliance. Please contact Microsoft Corporation for further information.

# Maximum Performance Guidelines for Pro Tools|24 MIX and MIXplus Systems On Windows NT

32–64 track performance with Pro Tools|24 MIX and MIXplus systems requires the following configuration:

- IBM IntelliStation M Pro Model 6889
- Total System RAM: 192 MB minimum for 32 tracks, 256 MB for 64 tracks
- Two Pro Tools-qualified hard drives connected to a qualified Host Adapter

The following configurations with the IntelliStation's built in SCSI port also yield up to 32 track performance:

- Use of a combination of qualified hard drives connected to the CPU's internal and external SCSI busses. Digidesign recommends that internally mounted drives are installed according to the drive manufacturer's guidelines.
- Use of two or more qualified hard drives connected to the CPU's internal Fast SCSI Bus

<sup>\*</sup> Systems adhering to the Minimum Computer Requirements are currently qualified for 32 track performance. While they may be able to provide 32-64 track performance, they cannot be guaranteed to do so at this time.

## Pro Tools|24 Systems for Power Macintosh Requirements

#### Digidesign PCI Cards Supplied with System

d24 audio card

**DSP Farm** 

**Other Card Options** 

## **Digidesign Audio Interfaces (one required)**

888|24 I/O

888 I/O

882|20 I/O

882 I/O

1622 I/O

ADAT Bridge I/O

## **Digidesign Software Supplied with System**

Pro Tools 5.0

DAE 5.0 & DigiSystem INIT 5.0

TDM Mixer Plug-In 1.8

#### **Optional Digidesign Software**

#### **Optional Digidesign Hardware**

**AVoption** 

Pro Tools 24 Expansion Kit (see this link for details)

**ProControl** 

SMPTE Slave Driver (Discontinued)

Video Slave Driver

Universal Slave Driver

## **Supported Optional Expansion Chassis**

**Third-Party MIDI Controllers & Interfaces** 

**Third-Party Video Capture Cards** 

**Third-Party Video Recorder/Players** 

# digidesign'



3401-A Hillview Avenue Palo Alto, CA 94304 U.S.A Tel 650.842.7900 Fax 650.842.7999 Product Information
United States 1.800.333.2137
North & South America 650.842.6602 (USA)
Europe (England) 44.1753.658496
Asia(Japan) 81.3.3505.7963

#### Supported CPU Models, Speeds & Requirements

Power Macintosh G4 (AGP graphics)

Power Macintosh G4 (PCI graphics)

Power Macintosh Blue & White G3

Power Macintosh Beige G3

Power Macintosh 9500 or 9600

#### **Additional Computer Requirements**

- System Software: Mac OS v9.0 or v8.6
- Total System RAM:
  - Up to 32 tracks 128 MB minimum
  - 32 64 tracks 192 MB minimum (systems upgraded with a MIX Farm)
  - Pro Tools application & DAE "Preferred" memory allocations both set to 30 MB

(Additional RAM required for simultaneous use with

MIDI sequencers. Virtual memory is not supported)

- Monitor, color required, minimum resolution of 832 x 624
- Opcode OMS v2.3.8 or higher (supplied)
- Apple QuickTime v4.0 or higher (supplied)
- FWB Hard Disk ToolKit PE (HDT PE) v3.0.2 or higher (supplied)
- Hard Drive Minimum Requirements

#### **SCSI Accelerator Card Required**

**Maximum Performance Guidelines** 

**Note:** Some d24 cards may experience recognition problems in the 400 MHz Blue & White G3 or G4s with AGP Graphics. If so, please contact your local Digidesign office.

# Other Digidesign PCI Card Options - Pro Tools|24 for the Mac OS

- MIX Farm: Maximum of 7 MIX Farm or MIX Core cards supported. If adding MIX Farm card(s) to Pro Tools|24 systems, you must refer to the Pro Tools|24 MIX System compatibility information.
- **DSP Farm\***: DSP Farms with serial numbers lower than FG10501 may be used for Plug-In operation but do not support connection of an Audio Interface.
- SampleCell II Plus
- SampleCell II\*
- SampleCell II TDM Module

# \*Incompatibility with older DSP Farms and SampleCell II Cards & The Blue & White G3 and G4

A rev "QC" or later of the AMCC chip is required for Blue & White G3 and G4 compatibility. This rev number appears on the AMCC chip following number "5933". Older versions can cause your computer to hang while booting or when launching Pro Tools or DigiTest. QC or higher chip is required for compatibility with the PCI 2.1 spec. Ways to identify these boards are in the grid below:

Board	S/N's Below	Manufactured Before	Board Rev Before
DSP Farm I	FF09226	7/9/97	Rev H
SampleCell II	HH02001	5/20/97	Rev D

If a customer has previously updated their board (or received a refurbished card), the serial number will remain the same, but the board rev will be updated (and the AMCC chip will have "QC" or later). Cards with the rev "Q" chip can be upgraded, please contact Digidesign directly to arrange this.

## **Expansion Chassis Information - Pro Tools|24**

### 13-Slot

- · Digidesign Pro Tools Expansion Chassis
- Bit3 (SBS) model DD23
- Bit3 (SBS) models 240-2-2 & 240-2-201
- Magma model PCI-13-RX-400V (must have serial number PE01732 or greater)

Note: 13-Slot Chassis support a total of up to 10 Digidesign cards - this may include up to 7 MIX Core/Farm cards, 2 d24 or MIX I/O cards and any number of other Digidesign cards.

#### 7-Slot

- Bit3 (SBS) model DD22-1
- Bit3 (SBS) model 2101-00-2 (must use IBM PCI Bridge chip, with host card that starts with 20-101. Use of older units also requires modification by Bit 3 for Motorola 56301 compatibility.)
- Magma model PCI-7-RX-300V (must have serial number PD01910 or higher)

For further information about these products, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

### **Expansion Chassis Requirements**

Customers should specify the following requirements when ordering:

- Requires 2 or 4 ft Expansion Chassis cable 6 ft cables not supported
- When used with G3 or G4 computers the Chassis is required to have PCI 2.1 compliant bridge chips
- AVoption Users: Please read the additional <u>AVoption Requirements</u>

For more information about expansion chassis setup and card order configurations please <u>download the Expanded Systems</u> Guide PDF.

### **Digidesign Card Requirements**

- DSP Farm cards: must be Rev H or higher (serial number FF09226 or higher) for compatibility with Expansion Chassis.
- SampleCell II cards: must be Rev D or higher (serial number HH02001 or higher) for compatibility with Expansion Chassis.

Customers with older cards should contact their local Digidesign office.

### Pro Tools|24 System Configurations for Power Macintosh

Computer	Internal Core System Support Up to 32 tracks	Pro Tools Expansion Chassis Up to 32 tracks + more slots for DSP Farms, SampleCell IIs	BIT3 (SBS) 7- or 13-Slot Support Up to 32 tracks + more slots for DSP Farm, SampleCell IIs	Chassis Support	Supports Pro Tools 24 Exp. Kit Up to 64 tracks	Pro Tools Expansion Chassis Up to 32 tracks + more slots for DSP Farms, SampleCell IIs	BIT3 (SBS) 7- or 13-Slot Support UP to 64 tracks + more slots for DSP Farm, SampleCell IIs	Pro Tools Expansion Chassis & Magma 7- or 13-Slot Chassis Support  Up to 64 tracks + more slots for DSP Farms, SampleCell lls
G4 with AGP Graphics	YES	YES	13-Slot Only	YES	NO	YES	13-Slot Only	YES
G4 with PCI Graphics	YES	YES	YES	YES	YES Requires supported Chassis	YES	YES note: 7-Slot Chassis require PCI 2.1 Compliant Bridge Chips	YES
Blue & White G3	YES	YES	YES	YES	YES Requires supported Chassis	YES	YES note: 7-Slot Chassis require PCI 2.1 Compliant Bridge Chips	YES
Beige G3 - 333/300/266/233 MHz (Tower/Desktop)	YES	YES	YES	YES	YES Requires supported Chassis	YES	YES note: 7-Slot Chassis require PCI 2.1 Compliant Bridge Chips	YES
9600 - 350/300/233/200 MHz	YES	YES	YES	YES	YES	YES	13-Slot Only	YES

### Exceptions that effect all the above Computers except the 9500 & 9600:

**Optional SCSI accelerator bundle (by Apple):** For maximum track count, this configuration requires use of a qualified SCSI Accelerator card. Optional SCSI Accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate.

- When using HDT 2.5.3 or earlier with a qualified ATTO SCSI Accelerator, Firmware v1.1.1 is required.
- For Blue & White G3 computers, HDT 3.0.2 is required along with ATTO SCSI Accelerator, Firmware v1.3.5 or higher. Please contact ATTO for the latest information.

**Radius VideoVision not supported:** Radius VideoVision is incompatible with the optional video card included with some Beige G3 Power Macintoshes. Please contact Radius for the latest information.

**Further Exceptions Apply:** Please refer to the "Supported CPU Models, Speeds & Requirements" list back on the <u>Pro</u> Tools|24 Systems for Power Macintosh Requirements page for your chosen computer.

# Maximum Performance Guidelines for Pro Tools|24 System on Mac OS

32–64 track performance with Pro Tools|24 requires the following configuration:

- Compatible SCSI Accelerator card
- Two Pro Tools-qualified hard drives, minimum, three recommended
- More than 32 tracks requires a Pro Tools|24 Expansion Kit (which is supported but no longer available)

— OR —

• Upgrading to a Pro Tools|24 MIX System by adding a MIX Farm card. If adding MIX Farm card(s) to Pro Tools|24 system, refer to the Pro Tools|24 MIX System compatibility information.

When using QuickTime movies with Pro Tools|24, for reliable performance of 16 or more audio tracks, audio drives should be connected to a compatible SCSI accelerator, with video drives connected to the Macintosh internal (preferred) or external bus.

With 9600 and 9500 Power Macintoshes the following configurations also yield up to 32 track performance. (G3 computers do not include a Fast SCSI bus or separate internal and external SCSI busses)

- Use of a combination of Pro Tools-qualified hard drives connected to the CPU's internal and external SCSI busses. Digidesign recommends that internally mounted drives are installed according to the drive manufacturer's guidelines.
- Use of two or more qualified hard drives connected to the CPU's internal Fast SCSI Bus.

### Pro Tools 24 Systems for Windows NT Requirements

### **Digidesign PCI Cards Supplied with System**

d24 Audio card

**DSP Farm** 

**Other Card Options** 

#### Digidesign Audio Interfaces (one required)

888|24 I/O

888 I/O

882|20 I/O

882 I/O

1622 I/O

ADAT Bridge I/O

### **Digidesign Software Supplied with System**

Pro Tools 5.0 for Windows NT

#### **Optional Digidesign Software**

### **Optional Digidesign Hardware**

**ProControl** 

Universal Slave Driver

Video Slave Driver

SMPTE Slave Driver (via a MIDI interface only - Discontinued)

#### **Supported Optional Expansion Chassis**

#### **Third-Party MIDI Controllers & Interfaces**

**Third-Party Video Recorder/Players** 



3401-A Hillview Avenue Palo Alto, CA 94304 U.S.A Tel 650.842.7900 Fax 650.842.7999 Product Information
United States 1.800.333.2137
North & South America 650.842.6602 (USA)
Europe (England) 44.1753.658496
Asia(Japan) 81.3.3505.7963

### **Supported CPU Speeds & Requirements**

IBM IntelliStation M Pro - model 6889

This Computer is qualified to provide up to 32 track performance and full Pro Tools functionality.

#### **Minimum Computer Specification Guidelines**

CPUs adhering to the Minimum Computer Specifications Guidelines may be able to provide up to 64 track performance, however they cannot be guaranteed to do so at this time

#### **Additional Computer Requirements**

- System Software: Windows NT Workstation v4.0 SP5
- Total System RAM: 192 MB minimum, 256 MB recommended
- Monitor, color required, minimum resolution of 1024 x 768
- Hard Drive Minimum Requirements

#### **SCSI Host Adapter Required**

- Adaptec 2940UW PCI card with BIOS 1.3x or higher\*
- Adaptec 3940UW PCI card with BIOS 1.3x or higher\*
- Integrated Adaptec AIC-78xx chip sets with BIOS 1.3x or higher

#### **Maximum Performance Guidelines**

For 32 track performance with Pro Tools|24 on Windows NT, use of two or more qualified hard drives connected to a qualified Host Adapter is required.

<sup>\*</sup>PCI card BIOS available on the Pro Tools CD-ROM

# Other Digidesign PCI Card Options - Pro Tools|24 for Windows NT

- MIX Farm: Maximum of 5 MIX Farm or MIX Core cards supported
- **DSP Farm:** compatibility requires DSP Farms with serial number FG 10501 or higher with Pro Tools NT. There is no upgrade path for cards that begin with serial numbers "FF" or lower.
- **SampleCell II Plus:** SampleCell Editor installer currently requires Windows NT Service Pack 3. The Pro Tools 5.0 CD ROM includes an updater that works with Windows NT Service pack 3 or higher.
- SampleCell II TDM Module

### **Pro Tools III PCI System for Power Macintosh**

### **Digidesign PCI Cards Supplied with System**

Disk I/O - PCI DSP Farm - PCI Other Card Options

### Digidesign Audio Interfaces (one required)

888|24 I/O\*

888 I/O

882|20 I/O\*

882 I/O

ADAT Bridge I/O\*

\* Digidesign ADAT Interface not supported with Pro Tools III systems that use 888|24 I/O or 882|20 I/O.

### **Digidesign Software Supplied with System**

Pro Tools 5.0

DAE 5.0 & DigiSystem INIT 5.0

TDM Mixer Plug-In 1.8

#### **Supported Optional Expansion Chassis**

#### **Third-Party MIDI Controllers & Interfaces**

#### **Third-Party Video Capture Cards**

Aurora Fuse (firmware v1.8.1) Pinnacle miroMotion DC30 Plus (firmware v1.1.2)

**Third-Party Video Recorder/Players** 

# digidesign\*

A division of **Avid** 

3401-A Hillview Avenue Palo Alto, CA 94304 U.S.A Tel 650.842.7900 Fax 650.842.7999 Product Information
United States 1.800.333.2137
North & South America 650.842.6602 (USA)
Europe (England) 44.1753.658496
Asia(Japan) 81.3.3505.7963

### Supported CPU Models, Speeds & Requirements

Power Macintosh G4 (AGP Graphics)

Power Macintosh G4 (PCI Graphics)

Power Macintosh Blue & White G3

Power Macintosh Beige G3

Power Macintosh 9500 or 9600

#### **Additional Computer Requirements**

- System Software: Mac OS v8.6 or v9.0
- Total System RAM: 128 MB minimum with Pro Tools application & DAE "Preferred" memory allocations both set to 30 MB

(Additional RAM required for simultaneous use with

- MIDI sequencers. Virtual memory is not supported)
- Monitor, color required, minimum resolution of 832 x 624
- Opcode OMS v2.3.8 or higher (supplied)
- Apple QuickTime v4.0 or higher (supplied)
- Hard Drive Minimum Requirements

#### **Optional Digidesign Software**

#### **Optional Digidesign Hardware**

ProControl

SMPTE Slave Driver (Discontinued)

Video Slave Driver

Universal Slave Driver

# Other Digidesign PCI Card Options - Pro Tools III

- **DSP Farm PCI\*:** DSP Farms with serial numbers lower than FG10501 may be used for Plug-In operation but do not support connection of an Audio Interface.
- SampleCell II Plus
- SampleCell II PCI\*
- SampleCell II TDM Module PCI

# \*Incompatibility with Disk I/O, older DSP Farms and SampleCell II Cards & The Blue & White G3 and G4

A rev "QC" or later of the AMCC chip is required for Blue & White G3 and G4 compatibility. This rev number appears on the AMCC chip following number "5933". Older versions can cause your computer to hang while booting or when launching Pro Tools or DigiTest. QC or higher chip is required for compatibility with the PCI 2.1 spec. Ways to identify these boards are in the grid below:

Board	S/N's Below	Manufactured Before	Board Rev Before
DSP Farm I - PCI	FF09226	7/9/97	Rev H
Disk I/O - PCI	FD06201	6/11/97	Rev D
SampleCell II - PCI	HH02001	5/20/97	Rev D

If a customer has previously updated their board (or received a refurbished card), the serial number will remain the same, but the board rev will be updated (and the AMCC chip will have "QC" or later). Cards with the rev "Q" chip can be upgraded, please contact Digidesign directly to arrange this.

# **Expansion Chassis Information - Pro Tools III**

- Bit3 (SBS) 7-Slot model 2101-00-2 (must use IBM PCI Bridge chip, with host card that starts with 20-101. Use of older units also requires modification by Bit 3 for Motorola 56301 compatibility.)
- Magma 7-Slot model PXB-7-RMD

For further information about these products, please contact your Digidesign dealer or local Digidesign office and ask for the Digidesign Development Partner Catalog.

### **Expansion Chassis Requirements**

- Requires 2 or 4 ft Expansion Chassis cable 6 ft cables not supported
- When used with G3 or G4 computers the Chassis is required to have PCI 2.1 compliant bridge chips

For more information about expansion chassis setup and card order configurations please download the Expanded Systems Guide PDF.

### **Digidesign Card Requirements**

- **DSP Farm cards:** must be Rev H or higher (serial number FF09226 or higher) for compatibility with Expansion Chassis.
- **SampleCell II cards:** must be Rev D or higher (serial number HH02001 or higher) for compatibility with Expansion Chassis.

Customers with older cards should contact their local Digidesign office.

# Power Macintosh G4 (AGP Graphics) - Pro Tools III Requirements

### G4 (AGP Graphics) Processors of all speeds supported

See Apple's tech archive for more info on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://til.info.apple.com/techinfo.nsf/artnum/n58418

- Mac OS 9.0, 9.0.2 or 9.0.4 required
- Power Mac G4 ROM 1.8.1 Update required
   Available from Apple at: <a href="http://asu.info.apple.com/swupdates.nsf/artnum/n11533">http://asu.info.apple.com/swupdates.nsf/artnum/n11533</a>
- FWB Hard Disk ToolKit v3.0.2 required
- External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; required for Pro Tools Installation.

Imation SuperDisk driver v3.2 is available at: <a href="http://www.superdisk.com/sc/sc\_dl.html">http://www.superdisk.com/sc/sc\_dl.html</a>

NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html

Pace USB floppy enabler v2.0 is available at: <a href="http://www.paceap.com/usb\_enabler.html">http://www.paceap.com/usb\_enabler.html</a>

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

• MIDI: Digidesign recommends using a serial MIDI Interface. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port for G4 - AGP Video (Sawtooth) and Griffin gPort II installed in the modem port (thereby not using a PCI slot). Alternatively USB MIDI Interfaces have been tested and are similarly compatible.

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: http://www.geethree.com/download.html

- **Dual Monitor Display Card:** Digidesign has found only one configuration and card that appears to reliably achieve full Pro Tools performance when two monitors are desired. The card is called the Jeronimo 2000 by Appian. For information on installation, which must be followed very closely, and to download the required Mac driver for this card click here: <a href="http://www.digidesign.com/serv/ftpmaps/appian.html">http://www.digidesign.com/serv/ftpmaps/appian.html</a>
- PCI Disk I/O, DSP Farm and SampleCell II Compatibility: The PCI Matchmaker chip on a Disk I/O or DSP Farm must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.

Note: Compatibility with video capture cards currently not qualified by Digidesign

Note: The following components have not been qualified for use with Pro Tools and the G4 with AGP graphics. These components are currently in Digidesign test:

Aurora Fuse & Pinnacle miroMotion DC30 Plus video capture cards

# Power Macintosh G4 (PCI Graphics) - Pro Tools III Requirements

### G4 (PCI Graphics) Processors of all speeds supported

See Apple's tech archive for more info on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://til.info.apple.com/techinfo.nsf/artnum/n58418

- Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required
- Power Mac G4 ROM 1.8.1 Update required
   Available from Apple at: <a href="http://asu.info.apple.com/swupdates.nsf/artnum/n11533">http://asu.info.apple.com/swupdates.nsf/artnum/n11533</a>
- FWB Hard Disk ToolKit v3.0.2 required
- External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; required for Pro Tools Installation.

Imation SuperDisk driver v3.2 is available at: <a href="http://www.superdisk.com/sc/sc\_dl.html">http://www.superdisk.com/sc/sc\_dl.html</a>

NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html

Pace USB floppy enabler v2.0 is available at: <a href="http://www.paceap.com/usb\_enabler.html">http://www.paceap.com/usb\_enabler.html</a>

Apple's revised USB support allows for booting from a USB drive, therefore you should <u>not</u> boot up your system with an authorization disk inserted in the USB Drive.

• **MIDI:** Digidesign recommends using a serial MIDI Interface. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port and Griffin gPort installed in the modem port (thereby not using a PCI slot). Alternatively USB MIDI Interfaces have been tested and are similarly compatible.

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: http://www.geethree.com/download.html

• PCI Disk I/O, DSP Farm and SampleCell II Compatibility: The PCI Matchmaker chip on a Disk I/O or DSP Farm must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.

Note: Compatibility with video capture cards currently not qualified by Digidesign

Note: The following components have not been qualified for use with Pro Tools and the G4 with PCI graphics. These components are currently in Digidesign test:

Aurora Fuse & Pinnacle miroMotion DC30 Plus video capture cards

# Power Macintosh Blue & White G3 - Pro Tools III Requirements

### Blue & White G3 Processors of all speeds supported

- Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required
- G3 Firmware Update 1.1 required
  Available from Apple at: <a href="http://asu.info.apple.com/swupdates.nsf/artnum/n11361">http://asu.info.apple.com/swupdates.nsf/artnum/n11361</a>
- External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; required for Pro Tools Installation.

Imation SuperDisk driver v3.2 is available at: http://www.superdisk.com/sc/sc\_dl.html

NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html

Pace USB floppy enabler v2.0 is available at: http://www.paceap.com/usb\_enabler.html

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

• MIDI: Digidesign recommends using a serial MIDI Interface. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port and Griffin gPort installed in the modem port (thereby not using a PCI slot). Alternatively USB MIDI Interfaces have been tested and are similarly compatible.

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: http://www.geethree.com/download.html

• PCI Disk I/O, DSP Farm and SampleCell II Compatibility: The PCI Matchmaker chip on a Disk I/O or DSP Farm must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.

# Power Macintosh Beige G3 - Pro Tools III Requirements

Beige G3 Processors of all speeds supported

• Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required

# Power Macintosh 9500 & 9600 - Pro Tools III Requirements

Power Macintosh 9600 Processors of all speeds supported

Power Macintosh 9500 Processors of all speeds supported

- Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required (Mac OS 9.0 qualification with 9500s expected soon)
- Expansion Chassis: The Power Macintosh 9500 & 9600 both support the use of compatible third party 7-slot Expansion Chassis. Bit3 (SBS) 7-Slot Expansion Chassis must use IBM PCI Bridge chip, (model numbers starting with 2101).

### Digi 001 With Pro Tools LE For Power Macintosh

**Digidesign Hardware Supplied with System** 

Digi 001 PCI Card

Digi 001 I/O Box

Digi 001 Cable

Digidesign Software Supplied with System

Pro Tools 5.0 LE

**Third-Party MIDI Controllers & Interfaces** 

**Third-Party Video Capture Cards** 

**Optional Digidesign Software** 

**Optional Digidesign Hardware** 

**SampleCell II Plus** 



3401-A Hillview Avenue Palo Alto, CA 94304 U.S.A Tel 650.842.7900 Fax 650.842.7999 Product Information
United States 1.800.333.2137
North & South America 650.842.6602 (USA)
Europe (England) 44.1753.658496
Asia(Japan) 81.3.3505.7963

#### Supported CPU Models, Speeds & Requirements

Highly Recommended:

Power Macintosh G4 (AGP graphics)

Power Macintosh G4 (PCI graphics)

Power Macintosh Blue & White G3

Also Supported:

Power Macintosh Beige G3 (Caution: performance issues)

Power Macintosh 9600 (200 MHz or higher)

#### **Additional Computer Requirements**

- System Software: Mac OS v9.0 & v8.6
- Total System RAM: 128 MB minimum,192 MB recommended (Additional RAM required for simultaneous use with MIDI sequencers. Virtual memory is not supported)
- · CD-ROM drive for software install
- Monitor, color required, minimum resolution of 832 x 624
- Opcode OMS v2.3.8 or higher (supplied)
- Apple QuickTime v4.0 or higher (supplied)
- Storage: Qualified ATA/IDE or SCSI disk drive(s)

# Optional Digidesign Software - Pro Tools LE (RTAS & AudioSuite)

- DigiTranslator: Requires 128 MB RAM. Does not require Digidesign Hardware.
- **DINR v3.3:** (AudioSuite)
- **D-Fi v1.4** (RTAS and AudioSuite)
- **D-fx v1.2** (AudioSuite)
- **D-Verb v1.7** (RTAS and AudioSuite)
- Focusrite d3 v1.3 (AudioSuite)
- Maxim v1.2 (RTAS and AudioSuite)
- MasterList CD v2.2: Use of MasterList CD with Blue & White G3 & G4 requires SCSI Accelerator (due to lack of internal SCSI Bus). Supported SCSI Accelerators are the same as those supported with all Pro Tools|24 systems.
- SampleCell Editor v2.1.1 (w/SampleCell II Plus)
- **Sound Designer II v2.8.3:** Compatible with Audiomedia III cards only; <u>not</u> compatible with Digi001. Does not support the use of Sound Designer II Plug-Ins.
- SoundReplacer v1.1 (AudioSuite)

**Note:** Although not required with Pro Tools LE installation, an external diskette drive may be required for some Plug-Ins installations when used with a Blue & White G3 or G4.

# SampleCell II with Digi 001

MIDI Ports and Audio I/O Cannot Be Used Simultaneously when Running SampleCell Loop Editor or Third-Party Software with Digi 001.

Digi 001's MIDI ports use a new extension of Digidesign's Direct I/O technology (MacDIOMIDIDriver) to allow MIDI communication to occur between software applications and Digi 001's MIDI ports. At this time, Direct I/O is also used for Digi 001's Output (Sound) Drivers. Output Drivers allow third-party

applications (and Digidesign's SampleCell Loop Editor) to use the Digi 001 I/O box for audio monitoring purposes. With the initial release of Digi 001, both the Digi 001 MIDI ports and Digi 001 Output Drivers cannot use Direct I/O simultaneously. This limitation is limited to third-party applications and the SampleCell Loop Editor- Pro Tools LE is unaffected by this problem.

To avoid this problem, customers wishing to use Digi 001's audio outputs with a Direct I/O compatible third party application should use an external MIDI interface instead of Digi 001's MIDI in/out connection. (This has the added benefit of satisfying the need for multiple MIDI in/out ports.) In order to use analog or digital I/O of Digi 001 with a third-party application, the user must disable the MIDI ports on Digi 001.

Please note that for full compatibility with Digi 001, the third-party sequencer applications will need to be updated. We are actively working with our digital audio sequencer developer partners to complete these updates. Please contact the respective third party sequencer manufacturer for release information.

# Power Macintosh G4 (AGP Graphics) - Digi 001 Requirements

### G4 (AGP Graphics) Processors of all speeds supported

See Apple's tech archive for more info on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://til.info.apple.com/techinfo.nsf/artnum/n58418

- Mac OS 9.0, 9.0.2 or 9.0.4 required
- External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools LE installation, an external diskette drive may be required for some Plug-Ins installations.

Imation SuperDisk driver v3.2 is available at: <a href="http://www.superdisk.com/sc/SC\_dl.html">http://www.superdisk.com/sc/SC\_dl.html</a>

NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html

Pace USB floppy enabler v2.0 is available at: <a href="http://www.paceap.com/usb\_enabler.html">http://www.paceap.com/usb\_enabler.html</a>

Apple's revised USB support allows for booting from a USB drive, therefore you should <u>not</u> boot up your system with an authorization disk inserted in the USB Drive.

• SCSI Accelerator NOT required: Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE hard drive, use of a SCSI accelerator with a SCSI drive can increase some performance aspects of your Digi 001 system: for more information refer to the <a href="Audio Storage Requirements">Audio Storage Requirements</a> page. Optional SCSI Accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI accelerators are qualified with the G4s listed at the top of this page:

ATTO ExpressPCI SCSI accelerator EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA) only, with the following requirements:

- Firmware v1.4.4 f1
- ExpressPro-Tools v2.x.x Synch Rate must be set to 20 (10)
- ATTO ExpressPro-Tools system INIT must be removed from the Extensions Folder

ATTO files mentioned above are available at: http://www.attotech.com/software/

• MIDI: Digidesign recommends using a serial MIDI Interface. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port for G4 - AGP Video (Sawtooth) and Griffin gPort II installed in the modem port (thereby not using a PCI slot). Alternatively USB MIDI Interfaces have been tested and are similarly compatible.

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: <a href="http://www.geethree.com/download.html">http://www.geethree.com/download.html</a>

• **Dual Monitor Display Card:** Digidesign has found only one configuration and card that appears to reliably achieve full Pro Tools performance when two monitors are desired. The card is called the Jeronimo 2000 by Appian. For information on installation, which must be followed very

closely, and to download the required Mac driver for this card click here: http://www.digidesign.com/serv/ftpmaps/appian.html

• SampleCell II Support: The PCI Matchmaker chip on a SampleCell card must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.

Note: The following components have not been qualified for use with Pro Tools and the G4 with AGP graphics. These components are currently in Digidesign test:

• Aurora Fuse & Pinnacle miroMotion DC30 Plus video capture cards

# Power Macintosh G4 (PCI Graphics) - Digi 001 Requirements

### G4 (PCI Graphics) Processors of all speeds supported

See Apple's tech archive for more info on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://til.info.apple.com/techinfo.nsf/artnum/n58418

- Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required
- Power Mac G4 ROM 1.8.1 Update required
   Available from Apple at: http://asu.info.apple.com/swupdates.nsf/artnum/n11533
- MIDI: Digidesign recommends using a serial MIDI Interface. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port and Griffin gPort installed in the modem port (thereby not using a PCI slot). Alternatively USB MIDI Interfaces have been tested and are similarly compatible.

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: http://www.geethree.com/download.html

- SampleCell II Support: The PCI Matchmaker chip on a SampleCell card must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.
- External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools LE installation, an external diskette drive may be required for some Plug-Ins installations.

Imation SuperDisk driver v3.2 is available at: <a href="http://www.superdisk.com/sc/SC\_dl.html">http://www.superdisk.com/sc/SC\_dl.html</a>

NewerTechnology uDrive latest driver v1.0 is available at: <a href="http://www.newertech.com/software/drivers/index.html">http://www.newertech.com/software/drivers/index.html</a>

Pace USB floppy enabler v2.0 is available at: <a href="http://www.paceap.com/usb\_enabler.html">http://www.paceap.com/usb\_enabler.html</a>

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

• SCSI Accelerator NOT required: Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE hard drive, use of a SCSI accelerator with a SCSI drive can increase some performance aspects of your Digi 001 system: for more information refer to the <a href="Audio Storage Requirements">Audio Storage Requirements</a> page. Optional SCSI Accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI accelerators are qualified with the G4s listed at the top of this page:

ATTO ExpressPCI SCSI accelerator EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA) only, with the following requirements:

- Firmware v1.4.4 f1
- ExpressPro-Tools v2.x.x Synch Rate must be set to 20 (10)
- ATTO ExpressPro-Tools system INIT must be removed from the Extensions Folder

ATTO files mentioned above are available at: <a href="http://www.attotech.com/software/">http://www.attotech.com/software/</a>

Note: The following components have not been qualified for use with Pro Tools and the G4 with PCI graphics. These components are currently in Digidesign test:

• Aurora Fuse & Pinnacle miroMotion DC30 Plus video capture cards

# Power Macintosh Blue & White G3 - Digi 001 Requirements

Blue & White G3 Processors of all speeds supported

- Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required
- G3 Firmware Update 1.1 required
  Available from Apple at: <a href="http://asu.info.apple.com/swupdates.nsf/artnum/n11361">http://asu.info.apple.com/swupdates.nsf/artnum/n11361</a>
- **MIDI:** Digidesign recommends using a serial MIDI Interface. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port and Griffin gPort installed in the modem port (thereby not using a PCI slot). Alternatively USB MIDI Interfaces have been tested and are similarly compatible.

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: <a href="http://www.geethree.com/download.html">http://www.geethree.com/download.html</a>

• External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools LE installation, an external diskette drive may be required for some Plug-Ins installations.

Imation SuperDisk driver v3.2 is available at: <a href="http://www.superdisk.com/sc/sc\_dl.html">http://www.superdisk.com/sc/sc\_dl.html</a>

NewerTechnology uDrive latest driver v1.0 is available at: <a href="http://www.newertech.com/software/drivers/index.html">http://www.newertech.com/software/drivers/index.html</a>

Pace USB floppy enabler v2.0 is available at: <a href="http://www.paceap.com/usb\_enabler.html">http://www.paceap.com/usb\_enabler.html</a>

Apple's revised USB support allows for booting from a USB drive, therefore you should <u>not</u> boot up your system with an authorization disk inserted in the USB Drive.

• SCSI Accelerator NOT required: Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE hard drive, use of a SCSI accelerator with a SCSI drive can increase some performance aspects of your Digi 001 system: for more information refer to the <a href="Audio Storage Requirements">Audio Storage Requirements</a> page. Optional SCSI Accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI accelerators are qualified for use with Blue & White G3s:

ATTO ExpressPCI SCSI accelerator EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA) only, with the following requirements:

- Firmware v1.3.5 or higher
- ExpressPro-Tools v2.x.x Synch Rate must be set to 20 (10)
- ATTO ExpressPro-Tools system INIT must be removed from the Extensions Folder

ATTO files mentioned above are available at: http://www.attotech.com/software/

— OR —

Adaptec Power Domain SCSI Accelerator cards including:

- 2940UW
- 2940U2W
- 3940UW

### with the following requirements:

- Firmware v4.1 (or Firmware v1.1 for the 2940U2W)
  PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the Control Panel

Adaptec files mentioned above are available at: <a href="http://www.adaptec.com/support/files/drivers.html#mac">http://www.adaptec.com/support/files/drivers.html#mac</a>

# Power Macintosh Beige G3 - Digi 001 Performance Issues & Requirements

During the development of the Pro Tools LE, Digidesign tested the Apple "beige" G3 line (all speeds) with Digi 001. During testing we encountered random occurrences of a particular software error with our DAE (Digidesign Audio Engine) and the beige G3 line. The error, "DAE -6045" would pop-up inexplicably during normal operation of Pro Tools LE. While this error is non-fatal, it will stop playback or record of a Pro Tools LE system. Digidesign engineering spent weeks trying to find the cause of this error without a successful fix.

There is some good news - to continue through the error simply click OK. We suggest saving the session and rebooting the computer to completely clear the error. Although all other aspects of Digi 001 and beige G3 configuration function satisfactory, the repetitive nature of this error caused us concern here at Digidesign. This explains why Digidesign is not formally supporting beige G3 configurations with 001 (we still support beige G3's with Audiomedia III cards and TDM systems). We did not make this decision lightly due to the large installed base of beige G3 customers. However, here at Digidesign, we believe in shipping solid systems that our customers can count on. If after reading this notice you still wish to use a beige G3 with Digi 001, here's what results we have found with our internal and external beta testing:

Best Case: all day, all night - no errors
Typical: 2 or 3 errors in an eight hour day
Worst Case: 6 or 8 errors in an eight hour day

### Other Digi 001 Beige G3 Requirements

- Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required
- SCSI Accelerator NOT required: Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE hard drive, use of a SCSI accelerator with a SCSI drive can increase some performance aspects of your Digi 001 system: for more information refer to the <a href="Audio Storage Requirements">Audio Storage Requirements</a> page. Optional SCSI Accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI accelerators are qualified for use with Beige G3s:

ATTO ExpressPCI SCSI accelerator cards including:

- PSC (ExpressPCI Single Channel Ultra/WIDE HBA)
- EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA)

with the following requirements:

- Firmware v1.1.1 or higher
- ExpressPro-Tools v2.x.x Synch Rate must be set to 20 (10)
- ATTO ExpressPro-Tools system INIT must be removed from the Extensions Folder

ATTO files mentioned above are available at: http://www.attotech.com/software/

— OR —

Adaptec Power Domain SCSI Accelerator cards including:

• 2940UW

- 2940U2W
- 3940UW

with the following requirements:

- Firmware v3.0 (or Firmware v1.1 for the 2940U2W)
- Adaptec PowerDomain Control v3.0 with Ultra-mode disabled in the Control Panel

Note: you may also use Firmware v4.1, but this requires PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the Control Panel.

Adaptec files mentioned above are available at: http://www.adaptec.com/support/files/drivers.html#mac

# **Pro Tools LE Audio File Storage Requirements**

**IDE/ATA:** Full 24 track, 24 bit, 48 KHz performance from just one IDE/ATA audio drive is supported.

**SCSI:** Using a SCSI drive and SCSI accelerator will, in general, provide the same performance as an IDE/ATA drive, with the exception that IDE/ATA drives may take a couple seconds to start recording 24 tracks.

### Requirements for both IDE/ATA or SCSI drives:

- Minimum speed of 7200 RPM & average seek time of less than 10.0 ms
- HFS or HFS+ file system
- For 24 tracks, drives must be dedicated for audio (internal or external)
- Boot drives may be used for audio tracks, however performance/track count may vary

### Digi ToolBox XP with Pro Tools LE For Power Macintosh

Digidesign Hardware Supplied with System

Audiomedia III Card

**Digidesign Software Supplied with System** 

Pro Tools 5.0 LE

**Third-Party MIDI Controllers & Interfaces** 

**Third-Party Video Capture Cards** 

**Optional Digidesign Software** 

Optional Digidesign Hardware SampleCell II Plus



3401-A Hillview Avenue Palo Alto, CA 94304 U.S.A Tel 650.842.7900 Fax 650.842.7999 Product Information
United States 1.800.333.2137
North & South America 650.842.6602 (USA)
Europe (England) 44.1753.658496
Asia(Japan) 81.3.3505.7963

### Supported CPU Models, Speeds & Requirements

Highly Recommended:

Power Macintosh G4 (AGP graphics)

Power Macintosh G4 (PCI graphics)

Power Macintosh Blue & White G3

Also Supported:

Power Macintosh Beige G3

Power Macintosh 9600 (200 MHz or higher)

#### **Additional Computer Requirements**

- System Software: Mac OS v9.0 & v8.6
- Total System RAM: 128 MB minimum, 192 MB recommended (Additional RAM required for simultaneous use with MIDI sequencers. Virtual memory is not supported)
- · CD-ROM drive for software install
- Monitor, color required, minimum resolution of 832 x 624
- Opcode OMS v2.3.8 or higher (supplied)
- Apple QuickTime v4.0 or higher (supplied)
- Storage: Qualified ATA/IDE or SCSI disk drive(s)

## Audiomedia III Card for the Mac OS

Known Incompatibility with older Audiomedia III Cards & The Blue & White G3 and G4: A rev "QC" or later of the AMCC chip is required for Blue & White G3 and G4 compatibility. This rev number appears on the AMCC chip following number "5933". Older versions can cause your computer to hang while booting or when launching Pro Tools or DigiTest. This chip rev'd to QC on the Audiomedia III to allow for compatibility with PCs that did not allow you to disable PCI Burst Mode (it rev'd shortly thereafter to QE). Ways to identify these boards are in the grid below:

Board	S/N's Below	Manufactured Before	Board Rev Before
Audiomedia III	BK16376	3/18/97	Rev E

If a customer has previously updated their board (or received a refurbished card), the serial number will remain the same, but the board rev will be updated (and the AMCC chip will have "QC" or later). Cards with the rev "Q" chip can be upgraded, please contact Digidesign directly to arrange this.

# Power Macintosh G4 (AGP Graphics) - Digi ToolBox XP Requirements

### G4 (AGP Graphics) Processors of all speeds supported

See Apple's tech archive for more info on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://til.info.apple.com/techinfo.nsf/artnum/n58418

- Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required
- External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools LE installation, an external diskette drive may be required for some Plug-Ins installations.

Imation SuperDisk driver v3.2 is available at: http://www.superdisk.com/sc/sc\_dl.html

NewerTechnology uDrive latest driver v1.0 is available at: http://www.newertech.com/software/drivers/index.html

Pace USB floppy enabler v2.0 is available at: <a href="http://www.paceap.com/usb\_enabler.html">http://www.paceap.com/usb\_enabler.html</a>

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

• SCSI Accelerator NOT required: Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE hard drive, use of a SCSI accelerator with a SCSI drive can increase some performance aspects of your system: for more information refer to the <u>Audio Storage Requirements</u> page. Optional SCSI Accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI accelerators are qualified with the G4s listed at the top of this page:

ATTO ExpressPCI SCSI accelerator EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA) only, with the following requirements:

- Firmware v1.4.4 f1
- ExpressPro-Tools v2.x.x Synch Rate must be set to 20 (10)
- ATTO ExpressPro-Tools system INIT must be removed from the Extensions Folder

ATTO files mentioned above are available at: http://www.attotech.com/software/

• MIDI: Digidesign recommends using a serial MIDI Interface. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port for G4 - AGP Video (Sawtooth) and Griffin gPort II installed in the modem port (thereby not using a PCI slot). Alternatively USB MIDI Interfaces have been tested and are similarly compatible.

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: http://www.geethree.com/download.html

• Dual Monitor Display Card: Digidesign has found only one configuration and card that

appears to reliably achieve full Pro Tools performance when two monitors are desired. The card is called the Jeronimo 2000 by Appian. For information on installation, which must be followed very closely, and to download the required Mac driver for this card click here: <a href="http://www.digidesign.com/serv/ftpmaps/appian.html">http://www.digidesign.com/serv/ftpmaps/appian.html</a>

• SampleCell II Support: The PCI Matchmaker chip on a DSP Farm must be rev QC or QE (check the end of the line directly below "PCI Matchmaker" on the chip) to be compatible. Cards with rev Q chips can be upgraded.

Note: The following components have not been qualified for use with Pro Tools and the G4 with AGP graphics. These components are currently in Digidesign test:

• Aurora Fuse & Pinnacle miroMotion DC30 Plus video capture cards

# Power Macintosh G4 (PCI Graphics) - Digi ToolBox XP Requirements

### G4 (PCI Graphics) Processors of all speeds supported

See Apple's tech archive for more info on how to differentiate between AGP Graphics and PCI Graphics G4 models at: http://til.info.apple.com/techinfo.nsf/artnum/n58418

- Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required
- Power Mac G4 ROM 1.8.1 Update required
   Available from Apple at: http://asu.info.apple.com/swupdates.nsf/artnum/n11533
- MIDI: Digidesign recommends using a serial MIDI Interface. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port and Griffin gPort installed in the modem port (thereby not using a PCI slot). Alternatively USB MIDI Interfaces have been tested and are similarly compatible.

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: http://www.geethree.com/download.html

• External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools LE installation, an external diskette drive may be required for some Plug-Ins installations.

Imation SuperDisk driver v3.2 is available at: <a href="http://www.superdisk.com/sc/sc\_dl.html">http://www.superdisk.com/sc/sc\_dl.html</a>

NewerTechnology uDrive latest driver v1.0 is available at: <a href="http://www.newertech.com/software/drivers/index.html">http://www.newertech.com/software/drivers/index.html</a>

Pace USB floppy enabler v2.0 is available at: <a href="http://www.paceap.com/usb\_enabler.html">http://www.paceap.com/usb\_enabler.html</a>

Apple's revised USB support allows for booting from a USB drive, therefore you should <u>not</u> boot up your system with an authorization disk inserted in the USB Drive.

• SCSI Accelerator NOT required: Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE hard drive, use of a SCSI accelerator with a SCSI drive can increase some performance aspects of your system: for more information refer to the <u>Audio Storage Requirements</u> page. Optional SCSI Accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI accelerators are qualified with the G4s listed at the top of this page:

ATTO ExpressPCI SCSI accelerator EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA) only, with the following requirements:

- Firmware v1.4.4 f1
- ExpressPro-Tools v2.x.x Synch Rate must be set to 20 (10)
- ATTO ExpressPro-Tools system INIT must be removed from the Extensions Folder

ATTO files mentioned above are available at: <a href="http://www.attotech.com/software/">http://www.attotech.com/software/</a>

Note: The following components have not been qualified for use with Pro Tools and the G4 with PCI graphics. These components are currently in Digidesign test:

• Aurora Fuse & Pinnacle miroMotion DC30 Plus video capture cards

# Power Macintosh Blue & White G3 - Digi ToolBox XP Requirements

Blue & White G3 Processors of all speeds supported

- Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required
- G3 Firmware Update 1.1 required
  Available from Apple at: <a href="http://asu.info.apple.com/swupdates.nsf/artnum/n11361">http://asu.info.apple.com/swupdates.nsf/artnum/n11361</a>
- **MIDI:** Digidesign recommends using a serial MIDI Interface. Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter. Digidesign currently supports the GeeThree Stealth Port and Griffin gPort installed in the modem port (thereby not using a PCI slot). Alternatively USB MIDI Interfaces have been tested and are similarly compatible.

When using the GeeThree products with OS 9.0.4 the latest version of the Stealth Port extension (v1.0.3) is required. It is available here: http://www.geethree.com/download.html

• External Diskette Drive: Imation SuperDisk and NewerTechnology uDrive currently supported; although not required with Pro Tools LE installation, an external diskette drive may be required for some Plug-Ins installations.

Imation SuperDisk driver v3.2 is available at: <a href="http://www.superdisk.com/sc/sc\_dl.html">http://www.superdisk.com/sc/sc\_dl.html</a>

NewerTechnology uDrive latest driver v1.0 is available at: <a href="http://www.newertech.com/software/drivers/index.html">http://www.newertech.com/software/drivers/index.html</a>

Pace USB floppy enabler v2.0 is available at: <a href="http://www.paceap.com/usb\_enabler.html">http://www.paceap.com/usb\_enabler.html</a>

Apple's revised USB support allows for booting from a USB drive, therefore you should not boot up your system with an authorization disk inserted in the USB Drive.

• SCSI Accelerator NOT required: Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE hard drive, use of a SCSI accelerator with a SCSI drive can increase some performance aspects of your system: for more information refer to the <a href="Audio Storage Requirements">Audio Storage Requirements</a> page. Optional SCSI Accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI accelerators are qualified for use with Blue & White G3s:

ATTO ExpressPCI SCSI accelerator EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA) only, with the following requirements:

- Firmware v1.3.5 or higher
- ExpressPro-Tools v2.x.x Synch Rate must be set to 20 (10)
- ATTO ExpressPro-Tools system INIT must be removed from the Extensions Folder

ATTO files mentioned above are available at: <a href="http://www.attotech.com/software/">http://www.attotech.com/software/</a>

— OR —

Adaptec Power Domain SCSI Accelerator cards including:

• 2940UW

- 2940U2W
- 3940UW

with the following requirements:

- Firmware v4.1 (or Firmware v1.1 for the 2940U2W)
  PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the **Control Panel**

Adaptec files mentioned above are available at: <a href="http://www.adaptec.com/support/files/drivers.html#mac">http://www.adaptec.com/support/files/drivers.html#mac</a>

# Power Macintosh Beige G3 - Digi ToolBox XP Requirements

### Beige G3 Processors of all speeds supported

- Mac OS 9.0, 9.0.2, 9.0.4 or 8.6 required
- SCSI Accelerator NOT required: Although Pro Tools LE supports a full 24 tracks of record and playback on a dedicated ATA/IDE hard drive, use of a SCSI accelerator with a SCSI drive can increase some performance aspects of your system: for more information refer to the <a href="Audio Storage Requirements">Audio Storage Requirements</a> page. Optional SCSI Accelerator cards bundled (by Apple) with Power Macintosh computers are not compatible with this configuration due to the lack of NV RAM to store Pro Tools desired SCSI transfer rate. The following SCSI accelerators are qualified for use with Beige G3s:

ATTO ExpressPCI SCSI accelerator cards including:

- PSC (ExpressPCI Single Channel Ultra/WIDE HBA)
- EPCI-DC (ExpressPCI Dual Channel Ultra/WIDE HBA)

with the following requirements:

- Firmware v1.1.1 or higher
- ExpressPro-Tools v2.x.x Synch Rate must be set to 20 (10)
- ATTO ExpressPro-Tools system INIT must be removed from the Extensions Folder

ATTO files mentioned above are available at: http://www.attotech.com/software/

— OR —

Adaptec Power Domain SCSI Accelerator cards including:

- 2940UW
- 2940U2W
- 3940UW

with the following requirements:

- Firmware v3.0 (or Firmware v1.1 for the 2940U2W)
- Adaptec PowerDomain Control v3.0 with Ultra-mode disabled in the Control Panel

Note: you may also use Firmware v4.1, but this requires PowerDomain Control v5.1 with cards set to "Fast-SCSI:10" in the Control Panel.

Adaptec files mentioned above are available at: <a href="http://www.adaptec.com/support/files/drivers.html#mac">http://www.adaptec.com/support/files/drivers.html#mac</a>

### **Digi ToolBox XP for Windows 98**

### **Digidesign Hardware Supplied with System**

Audiomedia III Card

### **Software Supplied with System**

Sound Forge XP, by Sonic Foundry\* Acid Rock, by Sonic Foundry\* \*Available for a limited time, Pro Tools LE coming soon

#### g -----

### Supported CPU Models, Speeds & Requirements

ATX motherboard based on either Intel 440BX or 440LX chipsets with one of the following processors: Highly Recommended:

Pentium III Processor
Also Supported:

Pentium II Processor

### **Additional Computer Requirements**

- System Software: Windows 98, Second Edition
- Total System RAM: 128 MB minimum, 192 MB recommended

(Additional RAM required for simultaneous use with MIDI sequencers.)

- CD-ROM drive for software install
- Monitor, color required, minimum resolution of 1024 x 768
- Phoenix or Award BIOS (recommended)
- AGP Display Card (recommended)
- Storage: Dedicated ATA/IDE or SCSI disk drive(s) (recommended)



3401-A Hillview Avenue Palo Alto, CA 94304 U.S.A Tel 650.842.7900 Fax 650.842.7999 Product Information
United States 1.800.333.2137
North & South America 650.842.6602 (USA)
Europe (England) 44.1753.658496
Asia(Japan) 81.3.3505.7963

## **Audiomedia III Card for Windows 98**

### Known Incompatibility with older Audiomedia III Cards:

A rev "QC" or later of the AMCC chip is required for compatibility with some PCs. This rev number appears on the AMCC chip following number "5933". This chip rev'd to QC on the Audiomedia III to allow for compatibility with PCs that did not allow you to disable PCI Burst Mode (it rev'd shortly thereafter to QE). Ways to identify these boards are in the grid below:

Board	S/N's Below	Manufactured Before	Board Rev Before
Audiomedia III	BK16376	3/18/97	Rev E

If a customer has previously updated their board (or received a refurbished card), the serial number will remain the same, but the board rev will be updated (and the AMCC chip will have "QC" or later). Cards with the rev "Q" chip can be upgraded, please contact Digidesign directly to arrange this.