Avid Support
Mac CheatSheet, Ver 1.8.1

Covers up to: Media Composer 3.1 // Xpress Pro 5.8// Symphony 3.1

The attached document has been created by Avid Customer Support it's written with the knowledge we have gained working with our customers contacting the Avid Customer Support team. It is intended to help properly configure and troubleshoot Mac editing systems - both PowerPC and Intel-based. Included are some tips and tricks to maximize performance and stability of your system. Follow the tips in the document and the initial installation and configuration will be very simple.

 We want this to be a "living doc", updated and changed as Apple and Avid products evolve. Please use the feedback button below to let us know what you think. If you are less than 100% satisfied with the document you will be presented with a form to send comments or corrections. Use a made up email address if anonymity is desired. You can also contact me directly: bradley_benkle@avid.com

Current Version Notes:
3.1 is ONLY supported on Leopard 10.5.5. Tiger is NOT supported with this release. Support for Tiger will come in a later release.
3.0.5 now supports the Mojo, Mojo SDI, and Adrenaline on both Mac OS Leopard and Mac OS Tiger

Apple OSX /QuickTime Compatibility:
Apple designed its operating system to include the majority of hardware interface protocols. This approach has pros and cons. The benefit is that most devices are plug-n-play on the Mac. The disadvantage is that the version of the Mac OS has a much larger effect on the hardware-related applications, namely, your Media Composer. Likewise, QuickTime and its codecs are foundational to the Avid editors. Changes to the QuickTime version can have significant effects on the performance and stability of the Avid editing application.

Use the following table to determine the correct version of Mac OS & QuickTime compatible with the version of Media Composer, Symphony or Xpress Pro you are running.

Editor Version	Mac OS	QuickTime
3.1	**10.5.5**	**7.5.5**
3.0.5	10.5.5/10.4.11	7.5.5(Leopard Only) 7.4.5
3.0	10.5.3	7.4.5
3.0.1*	10.4.11	7.4.5
x.8.x	10.4.11	7.3
x.7.7	10.4.10	7.2
x.7.6	10.4.10	7.2
X.7.5	10.4.10	7.2
X.7.2 and X.7.3	10.4.9	7.1.3 & 7.1.6
X.2.7	10.4.8	7.1.3
X.6.4 and X.6.6	10.4.8	7.1.3
X.2.6, X.6.1, X.6.2, X.6.3	10.4.7	7.1.3
X.5.3	10.4.7	7.1
X.5, X.5.1, X.5.2	10.4.6	7.1
X.8.5	10.4.6	7.0.3
X.8.2 / X.8.4	10.4.3	7.0.3
X.8.1	10.4.2	7.0.3

X.8.0	10.4.2	7.0
X.6.5	10.3.8 & 10.3.9	6.5.1
X.6	10.3.4 & 10.3.5	6.5.1

OS X: Leopard Information:

We offer full support of OSX Leopard with version 3.0 and DX Hardware.
3.0.5 Supports Legacy Hardware such as Mojo, Mojo SDI, and Adrenaline with Mac OSX Leopard as well as Mac OSX Tiger.

Minimum system requirements X.8.3 and below:
* Mac computer with an Intel, PowerPC G5, or PowerPC G4 (867MHz or faster) processor
* 512MB of memory
* DVD drive for installation
* 9GB of available disk space
* Some features require a compatible Internet service provider; fees may apply.
* Some features require Apple's .Mac service; fees apply.

Minimum system requirements 3.0.5
* Intel dual, dual core 2.66 GHz Xeon
* Intel Core 2 Duo 2.33 GHz (laptops)
* 2GB of RAM
   * Note 1: If working with complex sequences, (multiple effects/streams) or compressed HD resolutions 4 GB of RAM is recommended.
* NVidia GeForce family
   * Note 1: Full Screen play feature requires a minimum of 128MB of graphics memory
* 40GB minimum hard disk drive
   * Note 1: Any media drives need to be 7200RPM or greater
DVD capable drive required for product installation

Keyspan Serial Adapters for 10.5.x and 3.0 is the 19HS/driver version is 2.4
http://keyspan.com/products/usa19hs/homepage.spml

Qualified Mac Notebooks for MediaComposer 3.0

Apple MacBook Pro (Intel)	Mojo DX	Mojo OR Mojo SDI
MacBook Pro: 2.5 GHz Core 2 Duo Proc. 15" & 17" Display*	√	√
MacBook Pro: 2.4 GHz Core 2 Duo Proc. 15" & 17" Display*	√	√
MacBook Pro: 2.16GHz Core Duo Proc. 17" Display	√	√

MacBook Pro: 2.33 GHz Core 2 Duo Proc. 17" Display	√	√
MacBook Pro: 2.16GHz Core Duo Proc. 15" Display	√	√
MacBook Pro: 2.33 GHz Core 2 Duo Proc. 15" Display	√	√

* http://www.avid.com/resources/qualified/MediaComposer-Qualified-Apple-Workstations.pdf

Qualified Mac Notebooks for Media Composer 2.8.x & Xpress Pro 5.8.x

Apple MacBook Pro (Intel)		Mojo OR Mojo SDI
2.2 / 2.4 Ghz Intel Core 2 Duo processor	15" or 17" Display	√
2.33 GHz, Intel Core 2 Duo processor	15" or 17" Display	√
2.16 GHz, Intel Core Duo processor	15" or 17" Display	√
Apple PowerBook (PowerPC)		
1.67 GHz G4 17" notebook		√
1.67 GHz G4 15 " notebook		√

* http://www.avid.com/resources/qualified/MediaComposer-Qualified-Apple-Workstations.pdf

IMPORTANT NOTES ABOUT MAC NOTEBOOK SYSTEMS:

1) Notebook systems may not deliver the performance required to support some resolutions. In particular, Apple PowerBook systems do not support HD.

2) This list of Supported Laptops HAS been tested & approved for Use with Mojo/Mojo SDI.

3) This list of Supported Laptops has NOT been approved for use with Shared Storage, **including**:
- Unity MediaNet Ethernet (including LANShare)
- Unity MediaNet FibreChannel
- Unity ISIS

Mojo DX requires Media Composer 3.0 and above
DNxHD capture is not supported on Mojo DX on laptops
Nitris DX is not supported on laptops

4

Qualified Workstations for 3.0.5:

Workstaitons	Mojo DX, Nitris DX	Mojo, Mojo SDI, Adrenaline	Unity (Fibre, Ethernet, ISIS)	Notes
		Mac Pro		
Dual Quad-Core 3.0 or 3.2 GHz "Harpertown" (Early 2008)	√	√	√	-NVIDIA GeForce 8800GT- Requires 3.0 SW- Symphony Nitris DX is only supported on this workstation!
Dual Quad-Core 3GHz or Higher	√	√	√	-Support for NVIDIA GeForce 7300 GT 256 Graphics Card
Dual Dual-Core 2.66GHz or Higher	√	√	√	-Support for NVIDIA GeForce 7300 GT 256 Graphics Card **-** DNxHD capture not supported on Mojo DX
		iMac (Intel)		
iMac 2.33 GHz or Lower Core Duo Intel Proc. 24" Display	X	Mojo Only	X	- Support for NVIDIA GeForce 7600 GT 256MB or NVIDIA GeForce 7300 GT 128MB graphics card
		Power Mac G5		
Quad-core 2.3GHz & 2.5GHz PowerPC	X	√	√	Configuration

* Note: the iMac 2.33 GHz 24" is 3.0 software only and Mojo DNA only!
** Note: PowerPC Quad-Core is 3.0 software and Mojo, Mojo SDI, and Adrenaline Only!

Qualified Mac Workstations for Media Composer 2.8.3 & Xpress Pro 5.8.3 and Below:

	Mojo or Mojo SDI	Unity Support (Fibre, Ethernet, ISIS)	Notes
Apple Mac Pro (Intel)			
MacPro Dual Quad-Core (**UP TO**) 3 GHz Intel processor	√	**Fibre, Ethernet, ISIS**	**NVIDIA GeForce 7300 GT 256MB** graphics card supported. *NOTE: This is the default graphics cards. Other optional cards have not been tested or qualified to date.*
Two Dual-Core 2.66GHz or higher	√	**Fibre, Ethernet, ISIS**	**NVIDIA GeForce 7300 GT 256MB** graphics card supported. *(see note above)*
Apple iMac (Intel)			
24" 2.33GHz Core 2 Duo or lower	Mojo Only	X	**Support for** NVIDIA GeForce *7600 GT 256MB* **or** *GeForce 7300 GT 128MB*
20" 2.16GHz Core 2 Duo or higher	Mojo Only	X	**Support for** *ATI Radeon X1600/256MB* **or** *ATI Radeon X1600/128MB*
17" 2.0GHz Core 2 Duo or higher	Mojo Only	X	**Support for** *ATI Radeon X1600/128MB graphics card*
Apple PowerMac (PowerPC)			
Quad-Core 2.5GHz G5	√	**Fibre, Ethernet, ISIS** Required for using **SCSI** storage: - Atto ExpressPCIe UL5D SCSI *(EPCI-UL5D-0R0)* Required for using **Fibre** storage: - Atto Celerity FC-42ES *(CTFC-42ES-000)*	Dual-Core G5 systems have PCI-e slots only (**NO legacy PCI-x slots**). - ADS Pyro PCI 64 FireWire PCIe Controller ***(*Part Number API-316)*
Dual-Core 2.3GHz G5	√	**Fibre, Ethernet, ISIS**	**Configuration details.**
Dual-Processor 2.0 **through** Dual-Processor 2.7GHz G5	√	**Fibre, Ethernet, ISIS**	**Configuration details.**

6

The location of the SCSI, FireWire or Fibre Channel cards can greatly affect performance and bus speed. Please make sure to have the storage card in the correct slot for better performance. Also note the information about the ***Expansion slot utility for MacPro systems, noted on Page 11***.

MacPro Dual Quad Core 3.0 or 3.2 GHz (Early 2008) "Harpertown"

Slot	Description
PCIe Slot 1, 2.0 16 Lane (Double-wide)	NVIDIA GeForce 8800GT
PCIe Slot 2, 2.0 16 Lane (x16 Graphics bus)	AVID Unity-MediaNet connectivity: Use Atto FC41-ES 4Gb single channel PCI-Express F/C adapter
PCIe Slot 3, 1.1 4 Lane	a) Option- ATTO UL5D PCI-Express u320 dual-channel SCSI controller Local storage b) Option- ATTO ExpressSAS R380 PCI-Express Raid controller c) Option- ATTO ExpressSAS H380 Host Adapter
PCIe Slot 4 1.1 4 Lane	a) Option- DX Interface Board (HIB) b) Option- Pyro PCI-E 1394 card for 1394 decks in Adrenaline and Mojo configurations

Mac Pro Two 3.0 GHz Dual Core Intel Xeon Processors or Two 2.66 GHz Dual Core Intel Xeon Processors
OR
Mac Pro Dual Quad Core 2.33 or 3.0 GHz Xeon GeForce 7300 GT Workstation

Slot	Description
PCIe Slot 1, 2.0 16 Lane (Double-wide)	NVIDIA GeForce 7300GT
PCIe Slot 2, 2.0 16 Lane (x16 Graphics bus)	ATTO FC41-ES 4GB single-channel PCIe F/C adapter - Provides Avid Unity MediaNetwork connectivity
PCIe Slot 3, 1.1 4 Lane	ATTO UL5D PCIe u320 dual-channel SCSI controller -Provides Avid VideoRAID RTR and Media Dock connectivity. ATTO ExpressSAS R380 PCIe RAID controller -Provides Avid VideoRAID ST/SR connectivity ATTO Ex[pressSAS H380 HBA -Provides Avid VideoRAID ST connectivity
PCIe Slot 4 1.1 4 Lane	PCIe Host Interface Board (HIB) - Provides Avid Nitris & Mojo DX connectivity

Legacy Hardware Configurations for every Mac Pro except Harpertown (Mojo, Mojo SDI, Adrenaline)

Slot	Description
PCIe Slot 1, 2.0 16 Lane (Double-wide)	NVIDIA GeForce 7300GT
PCIe Slot 2, 2.0 16 Lane (x16 Graphics bus)	Pyro PCI-E 1394 card for 1394 decks in Adrenaline and Mojo configurations
PCIe Slot 3, 1.1 4 Lane	a) Option- AVID Unity-MediaNet connectivity: Use Atto FC41-EL or Atto FC41-ES 4Gb single channel PCI-Express F/C adapter (Shared only)
PCIe Slot 4 1.1 4 Lane	a) Option- ATTO UL5D PCI-Express u320 dual-channel SCSI controller Local storage b) Option- ATTO ExpressSAS R380 PCI-Express Raid controller c) Option- ATTO ExpressSAS H380 Host Adapter

Mac Pro Harpertown (Intel Based)			
Local Storage (SCSI/SAS)	**Driver**	**Located in:**	**Firewire card:**
UL5D	4.20	Slot 3	Slot 4***
ATTO ExpressSAS H380	1.11	Slot 3	Slot 4
ATTO ExpressSAS R380	2.10	Slot 3	Slot 4
Shared Storage (Fibre Card)	**Driver**	**Located in:**	**Firewire card:**
FC41ES (Unity 5.0)	3.10	Slot 2	Slot 4 ***
FC41ES (Unity 4.X)	3.10	Slot 2	Slot 4 ***

Mac Pro Non-Harpertown Legacy Hardware (Intel Based)			
Local Storage (SCSI/SAS)	*Driver*	*Located in:*	*Firewire card:*
UL5D	4.20	Slot 4	Slot 2***
ATTO ExpressSAS H380	1.11	Slot 4	Slot 2
ATTO ExpressSAS R380	2.10	Slot 4	Slot 2
Shared Storage (Fibre Card)	*Driver*	*Located in:*	*Firewire card:*
FC41ES (Unity 5.0)	3.10	Slot 3	Slot 2 ***
FC41ES (Unity 4.X)	3.10	Slot 3	Slot 2 ***

Dual/Quad Core G5 (PowerPC Based) Came with Three (3) open PCI Express expansion slots: two four-lane slots and one eight-lane slot			
ATTO SCSI Cards (PCI-E)	*Driver*	*Located in:*	*Firewire card:*
UL5D	4.20	Slot 4	Slot 2 ***
ATTO Fibre Cards (PCI-E)	*Driver*	*Located in:*	*Firewire card:*
FC42ES	3.10	Slot 3	Slot 2 ***
FC41ES	3.10	Slot 3	Slot 2 ***
If running a Fibre Channel card ONLY, then the slot configuration remains the same (Slot 3 of the G5)			

Dual Processor G5 (PowerPC Based) Came with Three (3) open full-length PCI-X slots: one 133MHz, 64-bit slot and two 100MHz, 64-bit slot *NOTE: Support for the Single or Dual Processor 1.8GHz was for Xpress Pro ONLY.*				
ATTO SCSI Cards	*Firmware*	*Driver*	*Located in:*	*Firewire card:*
UL4D (PCI-X)	1.5.0	4.0	Slot 4	Slot 2 **
UL3D (PCI)	1.6.6f0	3.21	Slot 3	Slot 4 **
ATTO Fibre Cards	*Firmware*	*Driver*	*Located in:*	*Firewire card:*
FC41XS (PCI-X)	1.1.0	2.41	Slot 3	Slot 4 **
ATTO 3300 (PCI) **##**	2.4f0	2.40	Slot 3	Slot 4 **

NOTE:

'The ATTO 3300 and 3305 Fibre Channel boards are qualified for Avid Unity MediaNetwork **for versions PREVIOUS to 5.0**. These boards are designed for use in 100 MHz PCI-X bus slots. If they are installed in a133 MHz PCI-X slot, data corruption and data loss will result. Be sure to install the ATTO 3300 or 3305 Fibre Channel board in a PCI-X slot that runs at 100 MHz or less. For more information, see 'Avid Unity ATTO Fibre Channel Slot Requirements'.

FireWire card support for 2.8.X and 5.8.X and below:
** Supported PCI/PCI-X FireWire cards used in conjunction with SCSI/Fibre card:
    1) ADS PYRO PCI 64, part #API-300
    2) SIIG 1394 3-Port PCI i/e, part #NN-440012

*** Supported PCI-E FireWire cards used in conjunction with SCSI/Fibre card:
    1) ADS Pyro PCI 64 (Part Number API-316)

NOTE about Firmware and Drivers for ATTO SCSI/Fibre cards:

You can download the Driver and configuration utility for the ATTO Celerity FC42ES and FC41ES cards from Avid's KB:
http://avidtechnology.custhelp.com/cgi-bin/avidtechnology.cfg/php/enduser/std_adp.php?p_faqid=72396

It is possible to download them directly from ATTO Technology. They maintain an archive of all their drivers & flash files on their website, however they require customers to register (free) for the site to gain access to it: http://attotech.com/

- Once registered, under the Applications/Utilities/Firmware area, 'ExpressPCI Configuration Tool' is what is needed in order to update the firmware.
  - o Version 2.8 was the supported configuration tool for OS 10.3.
  - o Version 3.10 is supported for OS 10.4 & higher.
- You would also download the appropriate 'flash' file for your storage card, for use in the Config Tool.
- Their utilities can be found: http://attotech.com/software/app1.html

Dongle Support and New Dongle Manager:

The current method of updating dongles is changing. There is a new Dongle Manager that scans and updates your application key (dongle). The new Dongle Manager replaces the previous *DongleUpdater* and *DongleDumper* utilities. The Dongle Manager utility can be used for any dongle and can be downloaded from the following Tech Note:

(http://avidtechnology.custhelp.com/cgi-bin/avidtechnology.cfg/php/enduser/std_adp.php?p_faqid=73452)

Scanning displays the permissions currently on your dongle. This display tells you what software you are authorized to run and lists any additional options. Scanning also can give you the Avid System ID and Dongle Serial Number. You can also use the Dongle Manager to update the permissions on your dongle. Avid can send you a small dongle updater file via email that you use to run this Dongle Manager utility for a specific dongle or dongles.

To use the NEW Dongle Manager:
1. Plug your dongle into your editing system.
2. Download one of the following files:
 • (*Macintosh*) MacDongleManager.zip (runs on PowerPC and Intel Macintosh systems that have the latest x.7 Avid editing application installed)
 • (*Windows*) WinDongleManager.zip (runs on any Windows system with Avid software installed)
3. Unzip the file to the hard drive of your editing system.
4. Locate the dongle updater file that Avid emailed to you and save it to your system. This authorizes your dongle for specific upgrades. The updater file extension is .avd.
5. Double-click DongleManager.exe.The Dongle Manager utility starts.
6. Click the Update tab.
7. Click the Open button, navigate to the dongle updater file, and then click Open.
8. Click the Upgrade button. Your dongle is updated.
9. Click the Scan tab to view the results of your dongle scan.

Note: If an error message appears saying that no compatible dongle has been found, make sure you are using the dongle that matches the dongle updater file Avid sent you. The updater file works only on the dongle or dongles for which it was sent.

Dongle Compatibility

Dongle (application key) part numbers from Avid have identifiers on the end that indicate which version of the software they are compatible with. Avid dongles do not have the Avid part number label attached to the product, so you need to use the Model Number listed on the dongle to identify it. If you use an incorrect combination of software and dongle, you will receive a "No valid Dongle was found" error.

How do I know what versions of software require a dongle updater?
There is a basic matrix that shows when you will need to update your dongle available at the below link. This includes *all* products that Avid's In-Warranty Department has the ability to bless dongles for:
http://avidtechnology.custhelp.com/cgi-bin/avidtechnology.cfg/php/enduser/std_adp.php?p_faqid=71673

Special Upgrade Installation Instructions

The following procedure is required _only_ if you are upgrading from a Media Composer Adrenaline prior to version 1.8.2.

A change in the 1394 (FireWire) bus of the new Apple dual core Power Mac G5 systems requires an update to your Avid® editor application and Avid DNA (Adrenaline or Avid Mojo®) firmware. The new systems require Avid Media Composer Adrenaline v1.8.2 or later. You need your old non-dual core Power Mac to update the firmware on the Adrenaline or Avid Mojo.

If you attempt to attach an Adrenaline or Avid Mojo to your new dual core Power Mac G5 system _prior_ to following these steps, the system will not recognize the Adrenaline or Avid Mojo and you will not be able to run the Avid editor application.

To update the firmware on your Adrenaline:

1. On your old non-dual core Power Mac system with the Adrenaline attached, install the Avid Media Composer Adrenaline v1.8.2 or later application.
2. Follow the instructions to install the software. This software updates the Adrenaline or Avid Mojo firmware.
3. Start the Avid Media Composer application.
4. A message box opens informing you that you need to power cycle the Adrenaline and quit the application.
5. Shut down your Power Mac system and the Adrenaline.
6. Disconnect your Adrenaline.
7. Connect the Adrenaline to your new dual core Power Mac G5 system.
8. Install the new Avid Media Composer application on your new system.
9. Follow the instructions to install the software on your new dual core Power Mac G5 system. You can then run the Avid editor application with the updated Adrenaline.

Interlok Driver Install (Macintosh Only)*

In previous releases, the Macintosh version of the Avid editor automatically installed the InterLok drivers. These drivers are required for Avid ProTools®. The installer application for the current release of the editing application is not the same as the installer application used to create the InterLok installer. Therefore, you have to manually install the InterLok drivers. Whether you are using Avid ProTools or not, you need to install the drivers.

To manually install the InterLok drivers:

1. Browse the editing application DVDto access the InterLok installer. It is located in "Other Installers" (or 'Goodies') folder
2. Double-click the InterLok Extensions installer executable.
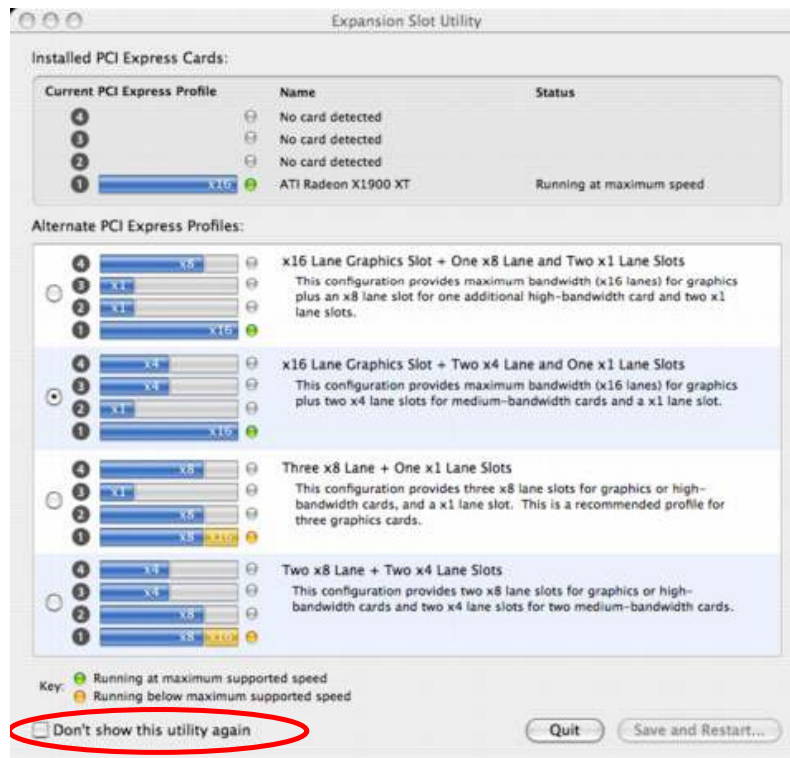3. When the InterLok Extensions Install window appears, click "Install".

*NOTE: ALTHOUGH THIS IS NOTED IN THE README, IT MIGHT BE INACCURATE.

The installer is not included in the Other Installers folder, and it's not necessary to run Media Composer / Xpress Pro. It is necessary if you want to preview the AudioSuite plugins included in the Goodies folder. Download the installer from www.llok.com.

Troubleshooting techniques

Expansion Slot Utility on Mac Pro

   With the Mac Pro systems, you have the ability to change (or re-assign) the speed of the PCI-E slots, with something called the **Expansion Slot Utility**. If you install a new hardware card, this utility should automatically come up for you. If it does not come up automatically, the Utility is located here: **MacHD\System\Library\CoreServices**

*NOTE: The check box in the lower left-hand corner (“Don’t show this utility again”) would prevent it from coming up automatically in the future. It is recommended that you leave this check box Unchecked, for future expansion.

*NOTE: On the new “Harpertown” Quad-Core the Expansion Slot Utility cannot change

This Utility is a good place to check if your PCI-E based Storage card is not performing as well as expected.

Avid recommends using the Second (2nd) option for standard installations. That option covers both a Single card and Dual card installations. For example, having an ATTO UL5D and a 41ES Fibre card installed, this would give equal bandwidth for both your card configuration. Both the UL5D and 41ES are 4X bandwidth cards.

* PLEASE REFER TO THE PCI-E CARD MANUFACTURER to verify the proper speeds of the cards you are trying to install.
More in-depth explaination of the slots and behavior on Mac Pro:

http://docs.info.apple.com/article.html?artnum=304122

Resetting the SMC (On MacPro Machines)
Unlike models of Power Mac G5 or Power Mac G4 computer, the Mac Pro computer does not have a PMU or Power Management Unity. This functionality has been replaced by the SMC:

Mac Pro: How to reset the System Management Controller (SMC):
http://docs.info.apple.com/article.html?artnum=304123

Resetting P-Ram (On machines previous to the MacPro)
　　　　Resetting the P-Ram (parameter ram) is a general troubleshooting step that can clear up strange system behaviors. Though not as useful as it used to be in OS9, it is still good to try if your system is behaving erratically at the OS level.
What exactly is the P-RAM? Click the following links for more info:
http://docs.info.apple.com/article.html?artnum=86194
http://docs.info.apple.com/article.html?artnum=2238

Reset the p-ram by holding Apple+Option+P+R (Apple says 2 or 3, I aim for 7 restarts).
1. Shut down the computer.
2. Locate the following keys on the keyboard: Command, Option, P, and R. You will need to hold these keys down simultaneously in step 4.
3. Turn on the computer.
4. Press and hold the Command-Option-P-R keys after the first Chime. You must press this key combination before the gray screen appears.
5. Hold the keys down until you hear the startup sound several times.
6. Release the keys & let it reboot.
7. Your computer's PRAM and the NVRAM are reset to the default values. The clock settings may be reset to a default date on some models.

Other than P-RAM, you can also try resetting the Open Firmware settings.
- Restart computer, hold down Apple+Option+O+F (O+F for Open Firmware)
- At the Open Firmware prompt, type: 'reset-nvram'. Press Return.
- Then type: 'reset-all'. Press Return.
- Machine will reboot

Disk permissions
　　　　These can be repaired if the system is acting up, or if there have been a lot of applications uninstalled or reinstalled recently. Once you open the Disk Utility (HD >Applications>Utilities>Disk Utility), you select your internal drive and the 'Repair Disk Permission' button becomes active. Click it and let it run. May take up to 10 minutes. Also, Apple recommends that you repair disk permissions BEFORE and AFTER any system or OS update.
(http://docs.info.apple.com/article.html?artnum=152059)

Run 'fsck' on your internal drive
> • boot into single user mode by restarting, and holding down: Apple+S.
> • Once booted in, you should have a black screen with white text, type the following:
>> **/sbin/fsck –y**
>
> • fsck goes through and checks file system consistency and interactively repairs the file system. • When finished, type 'reboot' and it will reboot.
> (http://docs.info.apple.com/article.html?artnum=106388)

System Preferences & Settings to check:
> *Appearance* – Disable 'Smooth Scrolling' (may not make much of a difference, but could help)
> *Dock* – you can turn 'Magnification' off if you want to. As well as 'Animate opening applications.
> *Security* – *File vault* – make sure it's off. Select 'Disable Automatic Log-in'
> *Energy Saver* – everything should be set to 'Never'
>> Also, under 'Options', set processor performance to 'Highest' NOT 'Automatic'
>> (http://docs.info.apple.com/article.html?artnum=86612)
>
> *Display* - matching resolution and refresh rates) also check that the resolution is native for flat panel(s)
> *Screensaver* – none. Can also disable any 'Hot Corners'
> *Accounts* – Fast user switching turned off.
> *Users* – make sure that they have only admin users.
> *Software Update* (and *Automatic Upate* for QuickTime) – Both should be turned off.
> *Sharing* – All options could be turned off.
> *Speech* – Could also be disabled.
> *Universal Access* – Both options set to 'Off.' Also, since OS X added the ability to create shortcut keys for almost any action or function, make sure that the Universal Access settings are not set to use any used keyboard shortcuts.
> *Login Items* (located under 'Accounts') – you should keep this list as clear as you can.
> *Dashboard/Expose* – for safety sake, set all options to the '-' listed at the bottom. Also, if you want to disable Dashboard entirely:
>> Launch Terminal and then enter the following commands.
>> To turn Dashboard off:
>>> **defaults write com.apple.dashboard mcx-disabled -boolean YES**
>>
>> To turn Dashboard on:
>>> **defaults write com.apple.dashboard mcx-disabled -boolean NO**
>>
>> You have to restart the Dock after making either change for it to take effect: **killall Dock**
>
> With thanks to:
> http://www.macosxhints.com/article.php?story=20050723123302403&lsrc=osxh)
>
> *Spotlight* - After installing or upgrading to OS X 10.4, Spotlight might be

automatically enabled on your media drives. For the best system performance, Avid recommends disabling Spotlight for your media drives.

To disable Spotlight:
    a. Go to System Preferences > Spotlight.
    b. Click Privacy.
    c. Select a disk on the desktop, click the + button to add to the list. (or drag & drop from the desktop)
    d. Repeat for every disk on the system. Do this for new disks are added too.
    (http://docs.info.apple.com/article.html?artnum=301533)

Time Machine –If enabled, within your system preferences disable the Time Machine to backup your media.

During the boot up

All the extensions that are marked as essential are put into cache files; which is used to speed startup. Throw out the following two (2) files and they should rebuild on restart. Those are found in:

/System/Library/**Extensions.kextcache** and **Extensions.kextcache**)

More info on those files and extensions within OS X:
    http://www.osxfaq.com/Tutorials/extensions_hell/index.ws

In some instances…
…physically pulling the Ethernet cable from the computer has also helped.

This falls into the category of, "Pull all the crap you can off the system". If you are chasing a weird behavior with no clear source, it's a good troubleshooting step to strip the system down to its most basic component parts: CPU, screen, keyboard & mouse. If there is a clear change in behavior without the peripherals attached, add them back in one-by-one and look for the error pattern to come back.

CHUD utility

This utility is used for disabling and re-enabling processors on your system. While it's not required for Adrenaline, it's a test that can be done to see if there's an underlying performance problem.

To download: http://developer.apple.com/tools/download/

Performing a Manual Uninstall

Since Media Composer 2.5, Avids on the Mac come with an "Avid Uninstaller" folder, located in the Applications folder. When that is run, there are some items that do not get pulled off (the DIO's being a few). If you want to do a complete, manual uninstall, remove the following items manually and re-install:

/Library/Receipts/

AvidApplications.pkg
Avid<EditorName>Uninstaller.pkg (either "Avid MediaComposer" or "Avid Xpress Pro")
AvidLibrary.pkg
AvidSystem.pkg
AvidLECodecs.pkg
AvidPECodecs.pkg
AvidDIORuntime.pkg
AvidCoreRuntime.pkg
/Library/Application Support/Avid   (May require you to reinstall ProTools)
/Applications/<EditorName>/ (either "Avid MediaComposer" or "Avid Xpress Pro")
/Applications/ExpressStripe
/Applications/Utilities
UpgradeDriver
Avid Storage Manager
/System/Library/extensions/
ATTOExpressRAID_Enabler.kext
ATTORAID_OS10.kext
Avid_SCSI_RBC.kext
Avid_SCSI.kext

.DS_Store files & You

"Under Macintosh OSX .DS_Store holds the information which controls the way a folder will be opened; i.e., the shape and size of the window, the position of the window on the desktop and whether file, folder or icon view has been selected. If you were to delete the .DS_Store the folder would revert to the system default next time it is opened and a new blank .DS_Store would appear (invisibly). "

(Taken from: http://filext.com/detaillist.php?extdetail=DS_STORE)

While these files should not affect the performance of your storage or Editor, having these files on your drives **WILL INCREASE THE OVERALL FILE COUNT**.

Mac OS X 10.4: How to prevent .DS_Store file creation over network connections
(http://docs.info.apple.com/article.html?artnum=301711)

This article contains advanced material intended only for those who are looking for information on .DS_Store files. If you do not already have an opinion on this matter, you can disregard this article.

To configure a Mac OS X user account so that .DS_Store files are not created when interacting with a remote file server using the Finder, follow the steps below.
Note: This will affect the user's interactions with SMB/CIFS, AFP, NFS, and WebDAV servers.
    1. Open the Terminal.
    2. Type:
        defaults write com.apple.desktopservices DSDontWriteNetworkStores true
    3. Press Return.
    4. Restart the computer.

If you want to prevent .DS_Store file creation for other users on the same computer, log in to each user account and perform the steps above—or distribute a copy of your newly modified **com.apple.desktopservices.plist** file to the ~/**Library**/**Preferences** folder of **EACH** other target users.

<div align="center">NOTES OF IMPORTANCE:</div>

- These steps will not work on OS 10.2 or earlier.
- These steps do not prevent the Finder from creating .DS_Store files on the local volume.
- Also, these steps do not prevent previously existing .DS_Store files from being copied to the remote file server. Please note that disabling the creation of .DS_Store files on *remote file servers* can cause unexpected behavior in the Finder. Click here for an example:
     http://docs.info.apple.com/article.html?artnum=107822).
- The behavior of an Apple system writing extra '._filename' files for some files, is 'normal'.
     "In some cases involving the Apple Double format, moving a file to a different file system will cause the prefix "._" to appear on a file name."

If you have a series of files, and you have deleted the .DS_Store files, then you can use the same procedure for deleting the .DS_Store files on those series of "._filename" files.
After deleting all of those, AND you turn off the writing of .DS_Store files, you should be okay. If the files you're working with are from another file system (computer) then it's possible that the "._" files will return.

(Taken from: Mac OS X: Apple Double Format Creates File Name With the Prefix '._'
       http://docs.info.apple.com/article.html?artnum=106510)
To temporarily delete .DS_Store files: use this temporary solution as often as needed.

Follow these steps to delete the .DS_Store file:
1) Open Terminal (/Applications/Utilities/).
2) Type: cd /Volumes/workspacename
3) Type ls –a
4) Type: rm .DS_Store
    Warning: *Be sure to type exactly when using the rm command. Misuse of this command may cause data loss. You may verify spacing by copying the line above into a text editor (such as TextEdit) before continuing.*
5) Press Return.

Also, through the terminal, you can:
1. Open Terminal (/Applications/Utilities/).
2. Make sure the affected window is visible in the Finder. If the desktop is affected, make sure that the /Users/<username>/Desktop folder is visible.
3. Type: cd
    Note: *There is a space following, so that it reads "cd ". You must type this space for the command to work. Do not press Return yet.*
4. Drag the affected folder into the Terminal window. This automatically completes the pathname for you.
5. Press Return.

6. Type: rm .DS_Store
    Warning: *Be sure to type exactly when using the rm command. Misuse of this command may cause data loss. You may verify spacing by copying the line above into a text editor (such as TextEdit) before continuing.*
7. Press Return.
    Note: *If Steps 6 and 7 do not work, type "sudo rm .DS_Store" instead. You will be prompted for your Admin user password when using sudo.*
8. Quit Terminal.
9. Close and open the affected window again.

Information & Links:

Avid Download Center: http://avid.com/support/downloadcenter/index.asp
Avid CPR site: http://avid.com/onlinesupport/downloadcpr.asp

Avid RAM Specs: http://avidtechnology.custhelp.com/cgi-bin/avidtechnology.cfg/php/enduser/std_adp.php?p_faqid=72256
Installing RAM in a G5 (manual): http://manuals.info.apple.com/en/Memory.pdf

MCA latest tech specs: http://www.avid.com/products/Media-Composer-Software/specs.asp
MCA latest sys requirements:
> http://www.avid.com/products/media-composer/systemrequirements.asp

Mac Pro (8-core): Memory and hard drive kit compatibility:
> http://docs.info.apple.com/article.html?artnum=305352

For best performance on Mac Pro, it is still recommended to install memory in the risers symmetrically:
> http://docs.info.apple.com/article.html?artnum=304492

Intel-based Mac Power On Self Test RAM error codes:
> http://docs.info.apple.com/article.html?artnum=303083

Information on the computers, and DIY (Do It Yourself) manuals to add components to them.
> http://www.apple.com/support/manuals/macpro_diy/
> http://manuals.info.apple.com/en/MacPro_MemoryRiserCard-DIY.pdf
> http://manuals.info.apple.com/en/MacPro_PCIeCard_DIY.pdf
> http://manuals.info.apple.com/en/MacPro_HardDriveCarrier_DIY.pdf
> http://manuals.info.apple.com/en/MacPro_OpticalDriveCarrier_DIY.pdf

G5 Dual Processor Info:
http://support.apple.com/specs/powermac/Power_Mac_G5_June_2004.html
G5 Dual Core Info: http://support.apple.com/specs/powermac/Power_Mac_G5_Late_2005.html
G5 specs: http://docs.info.apple.com/article.html?artnum=86790
G5 manual:
http://download.info.apple.com/Apple_Support_Area/Manuals/desktops/PowerMacG5SetupGuide.pdf

A handy reference for info on **EVERY** Mac ever made: http://www.everymac.com/systems/
Apple's page of Manuals: http://www.apple.com/support/manuals/powermac/
Apple's 101 area: http://www.apple.com/support/mac101/
> (for learning the basics, as well as your way around the Mac)

list of Security Updates from apple: (last updated on May 29, 2007)
> http://docs.info.apple.com/article.html?artnum=61798

 An introduction to reading Mac OS X crash reports:
    http://www.macfixit.com/article.php?story=20060309075929717

Avoiding and eliminating Kernel panics:
    http://www.macfixit.com/article.php?story=20060911080447777

Information on Anti-Virus softwares on Macintosh. (With thanks to MacFixit)
    http://www.macfixit.com/article.php?story=20060511065134478

Quicktime Links / Notes
- Adobe AfterEffects CS3 Currently requires QuickTime 7.1.5 and Apple OS 10.4.9.
    http://www.adobe.com/products/aftereffects/systemreqs/

- Adobe Photoshop CS3 currently requires QuickTime 7.1.5 and OS 10.4.8
    http://www.adobe.com/products/photoshop/photoshop/systemreqs/

Apple Quicktime Support page:
    http://www.apple.com/support/quicktime/

QT 7.5.5 (Mac Leopard): http://www.apple.com/support/downloads/quicktime755forleopard.html

-QT 7.4.5 (Mac Tiger):   http://www.apple.com/support/downloads/quicktime745fortiger.html

- QT 7.2 (Mac):   http://www.apple.com/support/downloads/quicktime72formac.html

- QT 7.1.6 (Mac): http://www.apple.com/support/downloads/quicktime716formac.html

- QT 6.5.2(Mac): http://www.apple.com/support/downloads/quicktime652formac.html

- CURRENT standalone installer for Mac & Win:
http://www.apple.com/quicktime/download/standalone.html
    (NOTE: It is **not** necessary to enter your email address to download the installer. Also,
    sometimes the most Current version is not always the correct Supported version for Use with
    an Avid.)

**A good site for older QuickTime installers (Windows-only). This site current lists versions 7.1.5 Back
to 2.0.3)
    http://www.oldversion.com/program.php?n=quicktime

How to Uninstall QuickTime?

"Oops, Automatic Updates was turned on and I upgraded my QuickTime by accident!
How do I go back???"

Unfortunately, this is easier said than done. QuickTime is a core part of OSX; as such, it can't be uninstalled directly. Instead, it is necessary to backrev the entire OS. Fortunately, this can be done **without deleting everything** on the system drive, by using Apple's process called "**Archive & Install**

Apple, on occasion, releases 'Reinstallers'. These are designed to backrev the version of QuickTime on OSX systems to an older version without changing the OS version. However, they are limited in their availability and application.

Mac Editors and Unity (Older Information)

OS X limitations listed from the unity 4.0 Release Notes:

"Mac OS X Clients
Issue: When you attempt to transfer a group of files from one Unity workspace to another workspace and the destination window is open, it is possible that all files will not be transferred and you are not notified.
Workaround: Make sure that the destination window is closed and you transfer the files to the destination icon

Issue: Mac OS X Ethernet clients cannot mount workspaces that have one or more spaces in the workspace name. You receive an erroneous error message that asks you to check User Name and Password.
Workaround: Create workspaces with no spaces in their names. If you need to separate two words in a workspace name, use an underscore (_) instead of a space.

Issue: The Administration Tool for Mac OS X clients has Optimize, Synchronize, Add/Remove Drives, and Move Workspace options disabled.
Workaround: Perform the Optimize, Synchronize, Add/Remove Drives, or Move Workspace operations from the File Manager, a Windows client, or a Mac OS 9 client.

Issue: If you copy media files from one MediaNetwork workspace to another, the media files are corrupted and cannot be used.
*Workaround***:** When you need to copy files from one workspace to another use Consolidate to copy files from within the Avid Composer Products software to copy files from one workspace to another. Alternatively, you can copy them to your desktop and then copy them to the other workspace.

Issue: If you click Cancel on the Authentication dialog box while you are installing the MAC OS X client software, you can still install the software but with incorrect permissions for many features to function correctly.

Workaround: If you install the software and it does not function correctly, uninstall the software and reinstall it. Do not click Cancel on the Authentication dialog box and make sure that you type the user name and password for an account with Administrator permissions.

Issue: Quicktime files on an OS9 client will not play on a Mac OS 10.2.6 and 10.3.2.
Workaround: This is a third party limitation, a QuickTime issue on OS9. The paths stored in the QT ref files are not compatible with OS X or Windows. If you export a QuickTime Movie with QT 5.x, it does not export flat movie files that will work on OS X or Windows.

Mac OS 9 clients cannot copy files larger than 2 GB to a MediaNetwork workspace. Windows clients can copy files larger than 2 GB to a MediaNetwork workspace, but that file and all the files that follow it alphabetically do not appear in the list of folder contents when viewed from a Macintosh client. This is not a problem for Mac OS X clients.

If the File Manager service is turned of or the File Manager system powers down for any reason such as a failover, maintenance, or a system crash, all Mac OS X clients must be rebooted to reconnect.

Mac OS X clients are slow when saving Projects or Bins to shared MediaNetwork workspaces.

///////////////////

Rendezvous Name
When you are installing a Mac OS X client, you also need to assign the client a Rendezvous Name. The Rendezvous Name appears in the Sharing window below the Computer Name. The Rendezvous Name can be the same or different from the Computer Name, but must be unique among all of the Windows and Macintosh clients. n The Computer Name and the Rendezvous Name cannot contain any spaces or apostrophes. The File Manager uses the Rendezvous Name in the same way it used the Windows 2000 Network Identification and the Mac OS 9 Computer Name to determine which clients are currently logged in.

Background Tasks
Mac OS X runs several background tasks daily, weekly, and monthly. The tasks clean up system databases and run between 3:15 A.M. and 5:30 A.M. If these background tasks are missed for a period of time, they can take several minutes to complete, they run at a higher system priority from Avid applications and utilities, and will affect the performance of all running applications while they are in progress. If you normally use your system during the time when the background tasks are running, consider changing the time when these tasks run. A utility, CronniX, allows you to easily change the time when the background tasks run. It is available from the following Web site: http://www.koch-schmidt.de/cronnix/

Mac OS X Auto-login
Avid recommends that you turn **OFF** the Mac OS X Autologin feature that takes you directly to a desktop when you boot the system rather than displaying a login window. Autologin prevents some necessary Avid files from initializing properly and this prevents the Connection Manager or the Fibre Manager from mounting workspaces on the desktop. For information about turning off Autologin, see your Apple documentation or Help.

Fibre Channel and Ethernet Client Software

Avid does not support running both the Fibre Channel client software and the Ethernet client software on the same Mac OS X client. The Fibre Manager can display up to 400 workspaces in the Connections window. DNS Server Mac OS X Ethernet clients need to connect to a network that has a domain name services (DNS) server so that they can properly identify servers and clients that are part of the network. If you do not plan on connecting the MediaNetwork workgroup to a network that contains a DNS server, Avid recommends that install and configure a DNS server on one of your PortServer systems. To install and configure the DNS server, see the Appendix in the File Manager Setup Guide.

MACOSX Unity Support in 3.0.5

Editing Application OS	ISIS Client Supported Version	ISIS Server Supported Version	MediaNetwork Client Supported Version	MediaNetwork Server Supported Version
Leopard 10.5.5 and Tiger 10.4.11	1.5, 1.5.1	1.4, 1.5, 1.5.1	5.1	4.1.6, 4.2.4, 5.0.1, 5.1