

#### Avid Configuration Guidelines HP Z800 Dual Six-Core / Dual Quad-Core CPU Workstation Media Composer 6.0, Symphony 6.0, NewsCutter 10 and later

(To configure a Z800 for prior versions of Avid software see the earlier version Z800 guide posted on the Avid KB)

## 1.) HP Z800 AVID Qualified System Specification:

#### Z800 / AVID Qualified Operating System choices:

Microsoft<sup>®</sup> Windows 7 Professional 64-bit Edition with Service Pack 1

## Z800 Hardware Configuration

Supported CPU Choices

- 1.) Dual Intel® 6-Core Xeon® X5650 Processors @ 2.66GHz 12MB cache / 1333MHz memory
- 2.) Dual Intel® Quad-Core Xeon® X5570 Processors @ 2.93GHz 8MB cache / 1333MHz memory\*\*
- 3.) Dual Intel® Quad-Core Xeon® X5550 Processors @ 2.66GHz 8MB cache / 1333MHz memory\*\*

\*\* These processor selections have gone End-of-Life and are no longer available in new systems being purchased from H.P.

#### Video Card Choices

- 1.) NVIDIA Quadro 4000 2GB PCI-e video board (qualified with 6-core X5650 2.66Ghz processors)
- 2.) NVIDIA Quadro FX 3800 1GB PCI-e video board (qualified with 6-core X5650 2.66Ghz processors)
- 3.) NVIDIA Quadro FX 4800 1.5GB PCI-e video board (qualified with 4-core X5570 2.93Ghz and 4-core X5550 2.66Ghz processors)
- 320GB (minimum) SATA-II 3Gb/s 7200RPM System Disk Drive

 Standard AVID memory configuration: 6GB (6 x 1GB) DDR3 1333 ECC memory – (Requires six 1GB DIMMs, DIMM sizes cannot be mixed sizes)
 1GB memory modules must be installed in the following memory slots: CPU0-DIMM1, CPU0-DIMM3, CPU0-DIMM5 CPU1-DIMM1, CPU1-DIMM3, CPU1-DIMM5

#### **Optional 12GB memory configurations:**

1) Optional AVID memory configuration: 12GB (12 x 1GB) DDR3 1333 ECC memory – (Requires twelve 1GB DIMMs, DIMM sizes cannot be mixed sizes)

1GB memory modules must be installed in the following memory slots: CPU0-DIMM1, CPU0-DIMM2, CPU0-DIMM3, CPU0-DIMM4, CPU0-DIMM5, CPU0-DIMM6 CPU1-DIMM1, CPU1-DIMM2, CPU2-DIMM3, CPU3-DIMM4, CPU4-DIMM5, CPU5-DIMM6

 Optional AVID memory configuration: 12GB (6 x 2GB) DDR3 1333 ECC memory – (Requires six 2GB DIMMs, DIMM sizes cannot be mixed sizes)
 2GB memory modules must be installed in the following memory slots: CPU0-DIMM1, CPU0-DIMM3, CPU0-DIMM5 CPU1-DIMM1, CPU1-DIMM3, CPU1-DIMM5

#### Memory configuration constraints

 No other memory configurations are formally supported in AVID environments. Only the 6GB (6 x 1GB), and two 12GB configurations (12 x 1GB) and (6 x 2GB) configurations are supported. Memory configurations which mix and match memory module sizes and locations will result in a poor performing, non-optimal operating environment. 2.) Qualified Operating Systems for Avid Client Editing Applications, Hardware and Shared-Storage connectivity for the HP Z800 with Media Composer / Symphony 6.0, NewsCutter 10 or later:

- Supported: <u>Only</u> Microsoft® Windows 7 Professional 64-bit Edition with SP1 (SP1 required)
- Not Supported Microsoft® Windows XP 32-bit, 64-bit (any version)
- Not Supported Microsoft® Windows Vista 32-bit, 64-bit (any version)
- Not Supported Microsoft® Windows 7 any 32-bit version, or any version of Home, Ultimate or Enterprise editions.

### Note regarding Service packs:

As of this writing Service Pack 1 is the current Service Pack release for Win7. SP1 is <u>required</u> for Media Composer 6.0, Symphony 6.0 and NewsCutter 10. As future Service Packs are released Avid will evaluate and announce formal support when testing is completed.

## 3.) Qualified Hardware and shared storage supported:

	Qualified / Supported
Mojo DX	Yes
Nitris DX	Yes
3 <sup>rd</sup> Party Qualified Hardware	See release notes and Avid website for information regarding supported 3 <sup>rd</sup> party hardware (vendor qualified)
Unity ISIS System Infrastructure	ISIS 1.4 Infrastructure
Unity ISIS 1 Gbit Ethernet Client	ISIS 2.03 Client
Unity ISIS Hi-res (10 Gbit) client	Requires minimum ISIS 2.2 ISIS 7000 only
Unity MediaNet Infrastructure	MediaNet 4.2.4 Infrastructure
Unity MediaNet Fibre	MediaNet 5.1.2 Client
Unity MediaNet AECIFs	MediaNet 5.1.2 Client
1394 Adrenaline DNA	N/A Not Supported
1394 Mojo-SDI DNA	N/A Not Supported
1394 Mojo-Analog DNA	N/A Not Supported

### AVID qualified Hardware / Shared Storage

## AVID qualified HBA info

AVID qualified HBA	AVID Part Number	Slot Location	Function
Avid HIB, DX Interface HBA**	Active: 7030-30048-01 Active: 7030-20084-01	#1	Avid DX Hardware Interface HBA
	Passive: 7030-30021-01		
Qualified 3 <sup>rd</sup> party hardware interface (vendor qualified)	Not stocked by AVID	#1	See release notes and Avid website for information regarding supported 3 <sup>rd</sup> party hardware
Atto FC-41ES	7030-20004-01	#4	Shared Storage: Unity MediaNet Fibre
Intel PRO 1000 PT - ISIS	7030-20139-01	#4	Shared Storage: Unity ISIS Copper Gb-Ethernet
Intel PRO 1000 PF - ISIS	Not stocked by AVID	#4	Shared Storage: Unity ISIS Optical Gb-Ethernet
Myricom 10G-PCIE-8B-S Requires minimum ISIS 2.2 (ISIS 7000 only)	7030-30041-01	#4	Shared Storage: Unity ISIS 10Gb-Ethernet Requires minimum ISIS 2.2 (ISIS 7000 only)
Atto R380	7030-20166-01	#5	Local SAS Storage Support – Avid VideoRAID ST (5-bay) Xtore StudioRAID 5Ti (5-bay)
Atto UL5D	7030-20002-01	#5	Local u320 SCSI Storage – VideoRAID RTR & Legacy Avid u320 SCSI storage (The UL5D BIOS should be disabled)

\*\* <u>Avid DX Interface HBA Support Note: (See reference pictures on page 6 of this guide).</u>

All 3 versions of the DX interface HBA are supported with the Media Composer / Symphony 6.x and NewsCutter 10.x

- 1) Active DX interface HBA 7030-30048-01
- 2) Active DX interface HBA 7030-20084-01
- 3) Passive DX interface HBA 7030-30021-01

# 4.) Slot Configuration:

	Slot Configuration Information					
Slot #	Electrical	Mechanical				
1	x4 PCI-E Gen 2	x8	Avid HIB, DX Interface HBA Active: 7030-30048-01 & 7030-20084-01 Passive: 7030-30021-01			
			<u>OR</u>			
			Vendor Qualified 3 <sup>rd</sup> Party Hardware PCI-e Interface See release notes and Avid website for information regarding supported 3 <sup>rd</sup> party hardware			
2	x16 PCI-E Gen 2 (225Watts)	x16	Graphics Card: Quadro 4000** Quadro FX 3800** Quadro FX 4800 ***			
3	x4 PCI-E Gen 1	x8	Not Used			
4	x8 PCI-E Gen 2	x16	Shared Storage Controllers: Atto FC-41ES – MediaNet LAN Share Intel PRO 1000 PT – ISIS 5000 / 7000 Intel PRO 1000 PF – ISIS 5000 / 7000 Myricom 10G-PCIE-8B-S – ISIS 5000 / 7000			
5	x16 PCI-E Gen 2 (225Watts)	x16	Local Storage Controllers: Atto R380 – SAS Avid VideoRAID ST (5-bay) support Atto R380 – SAS Xtore StudioRAID 5Ti (5-bay) support Atto UL5D - Legacy u320 SCSI support <i>(The UL5D BIOS should be disabled)</i>			
6	PCI-E 32bit /33MHz	PCI 32/33	Secondary SAS Port (Embedded)			
7	x8 PCI-E Gen 2	x16	Optional if needed – Panasonic P2 PCI-E reader HBA, USB 3.0 HBA			
	Embedded Broadcom BCM5764 GbE NIC	PCI-E x1 Gen 1	<u>Not qualified</u> for Avid ISIS 5000 / 7000 Connectivity Qualified for Avid MediaNetwork AECIFs			

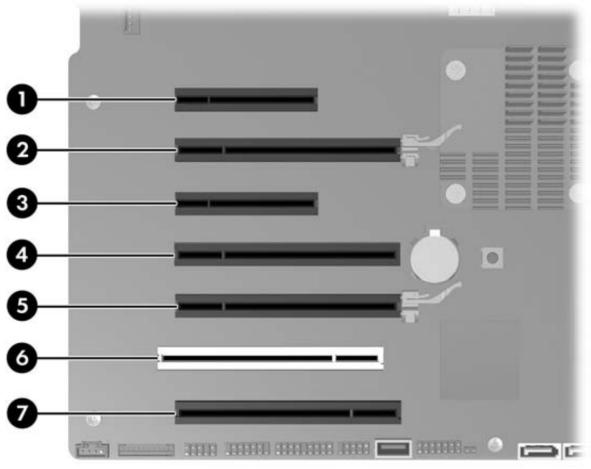
\*\* qualified only with 6-core X5650 2.66 GHz processors \*\*\* qualified only with 4-core X5570 2.93 GHz and 4-core X5550 2.66 GHz processors

## 6.) Utilization of the Z800 embedded (on-board) 1394 ports for Camera / Deck / Disk Drive support

Media Composer / Symphony 6.0 and NewsCutter 10 do not support Avid 1394 hardware such as Adrenaline and 1394 Mojo-SDI. This simplifies utilization of the Z800 embedded 1394 ports. The embedded 1394 ports can and should be used for all 1394 Camera / Deck / Disk Drive connectivity for all configurations running Media Composer / Symphony 6.0 and NewsCutter 10.

<u>Configuration</u>	Embedded 1394 utilization for Camera / Deck / Disk Drive support
Avid DX Hardware	Yes - Supports 1394 Deck / Camera / Disk Drive (1394 disk drives are recommended only for file transfers)
Software Only	Yes - Supports 1394 Deck / Camera / Disk Drive (1394 disk drives are recommended only for file transfers)
Vendor Qualified 3 <sup>rd</sup> Party PCIe Hardware	Yes - Supports 1394 Deck / Camera / Disk Drive However 3 <sup>rd</sup> party hardware and a 1394 Camera or Deck cannot be simultaneously connected. (1394 disk drives are recommended only for file transfers)

# HP Z800 Slot Layout



## 8.) Various Configuration Details:

## A.) D/X hardware configs -

All 3 versions of the DX interface HBA are supported with the Media Composer / Symphony 6.x and NewsCutter 10.x

- 1) Active DX interface HBA 7030-30048-01
- 2) Active DX interface HBA 7030-20084-01
- 3) Passive DX interface HBA 7030-30021-01

Active DX interface HBA 7030-30048-01

Active DX interface HBA 7030-20084-01



Passive DX interface HBA (7030-30021-01)



## B.) Qualified Avid system BIOS version(s): (As of this writing):

Failure to update the Z800 to an "Avid qualified BIOS" and set the BIOS settings per the instructions below may result in non-optimal operation of the AVID software and hardware.

#### Quad-Core CPU configurations:

- Minimum BIOS ver 1.06
- Also qualified ver 1.14, ver 1.17, ver 3.07, ver 3.12, ver 3.13, ver 3.15, ver 3.16, ver 3.19, ver 3.20, ver 3.21 (preferred)

### 6-Core CPU configurations:

- Mandatory Minimum BIOS ver 3.12
- Also qualified ver 3.13, ver 3.15, ver 3.16, ver 3.16, ver 3.19, ver 3.20, ver 3.21 (preferred)

Current Avid qualified Z800 BIOS information is maintained at the following Avid KB link:

http://avid.custkb.com/avid/app/selfservice/search.jsp?DocId=267609&Hilite=hp+bios

### C.) <u>Required system BIOS settings for AVID environments:</u>

#### Hyper-Threading Setting:

**Please Note:** CPU Hyper-threading should be enabled in all configurations per the chart below.

	Hyper-Threading Setting				
Software Version	Dual 6-core CPU Dual 4-core CPU				
Media Composer v6.x Symphony v6.x NewsCutter v10.x	Enabled (Mandatory)	Enabled (Mandatory)			

#### Z800 Required system BIOS changes:

- 1. Set CPU Processors Hyper-Threading Set per chart above
- 2. Set Memory Mode Interleave Enable
- 3. Set Runtime Power Management Disable
- 4. Set MWAIT-Aware OS Disable
- 5. Set Idle Power Savings Normal

#### Z800 Optional system BIOS change:

1. Set Intel Turbo Boost Technology\*\* - Disable

\*\* Only required if connecting USB audio I/O devices. This setting will eliminate any audio "motor-boating" or audio "popping" which may be experienced with USB audio I/O devices.

#### Set Z800 Required system BIOS changes:

- During boot up press F10 at the HP splash screen to invoke Set Up.
- Select the Advanced tab
- Select Processors. <Enter>
- Select Hyper-Threading
- Default setting is Disable
  - Set for Disable or Enable per Hyper-Threading chart above
- Select Chipset / Memory. <Enter>
- Select Memory Mode Interleave
- Default setting is Disable
  - Change this setting from Disable to Enable
- Hi F10 to save the Hyper-Threading and Memory Mode Interleave settings
- Select the Power tab
- Select OS Power Management <return>
- Select Runtime Power Management
- Default setting is Enable
  - Change this setting from Enable to Disable
- Select MWAIT-Aware OS
  - Default setting is Enable
    - Change this setting from Enable to Disable
- Select Idle Power Savings
  - Default setting is Extended
    - Change this setting from Extended to Normal
- Hi F10 to save the Runtime Power Management, MWAIT-Aware OS, and Idle Power Savings
- Press F10 twice to Save
- Save Changes and Exit
- System will Reboot

Set Z800 Optional system BIOS setting:

- Select the Power tab
- Select Hardware Power Management <Enter>
- Select Intel Turbo Boost Technology
- Default setting is Enable
  - Change this setting from Enable to Disable
- Press F10 twice to Save
- Save Changes and Exit

#### D.) Nvidia Qualified Driver:

#### Nvidia qualified drivers

AVID Software	Version(s)	Nvidia GPU	Nvidia Driver Required
Media Composer / Symphony	6.0 and later	Quadro 4000 Quadro FX 4800 Quadro FX 3800	275.89
NewsCutter	10.0 and later	Quadro 4000 Quadro FX 4800 Quadro FX 3800	275.89

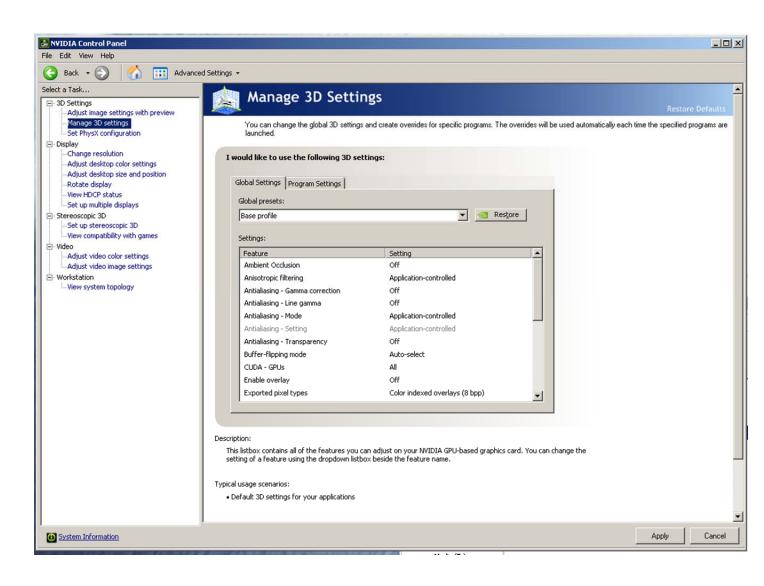
After installation of the AVID software the supported Nvidia driver can be found in the following directory: Program Files / Avid / Utilities / Nvidia

### Set optimized Nvidia driver settings for Avid editing environments:

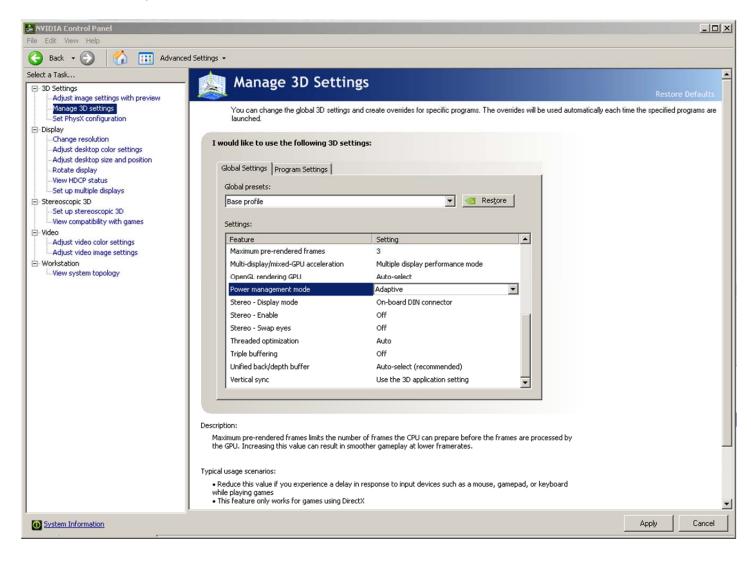
- 1. See picture below
- 2. Right-Click on the desktop and select Nvidia Control Panel
- 3. Select the "Desktop" menu selection in the control panel menu bar.
- 4. Enable "Desktop -> Video Editing Mode

NVIDIA Control Panel	
File Edit Desktop Help	
Bac   Enable Video Editing Mode	
Select a Ta - Add Desktop Context Menu	
-30 Settings     -Adjust image settings with preview     -Manage 30 settings     -Set Physix configuration     -Display     -Change resolution     -Adjust desktop color settings     -Rotate display     -View HDCP status	NVIDIA CONTROL PANEL
Adjust desktop size and position     Set up multiple displays     Stereoscopic 3D     Set up stereoscopic 3D     View compatibility with games     Ordeo     Adjust video color settings	WELCOME TO THE NVIDIA CONTROL PANEL Use the controls on the left to change NVIDIA hardware settings.
Adjust video image settings     Ovrkstation     View system topology     Set up Mosaic	Need more information? The NVIDIA website offers support, driver downloads and more. Click on the links below to launch these resources in a web browser.
	Download drivers and software
	Get technical support
	Join communities and forums
	Shop online
	Experience CUDA
	Visit nvidia.com
O System Information	

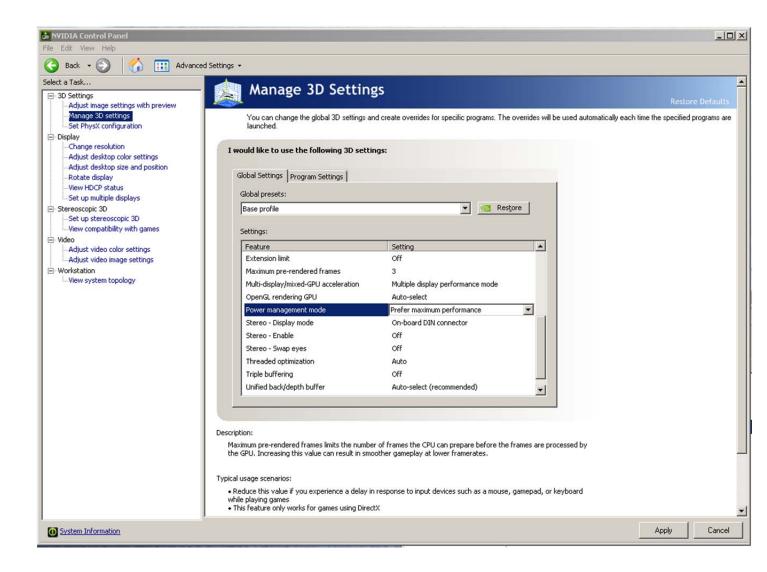
- 5. Select Manage 3D Settings
- 6. Select "Global Settings" Tab
- 7. Under the "Global Settings" tab select "Base Profile" as shown in the picture below:



8. Scroll down and locate the "Power Management Mode" feature. The default setting is "Adaptive" as shown in the picture below.



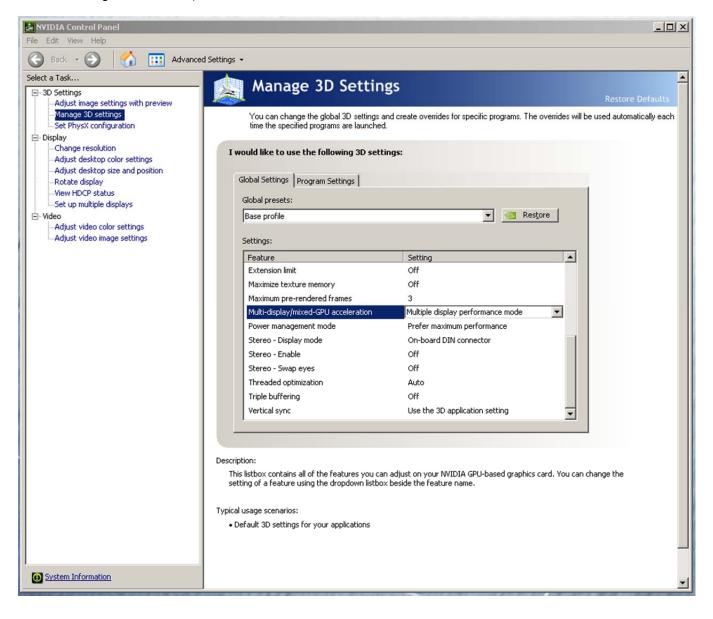
9. For the "Power management mode" feature, select "Prefer maximum performance" as shown in the picture below.



10. Depress the "Apply" button.

#### Make the following setting for "Multi-display/mixed-GPU acceleration"

- 11. Stay in the "Manage 3D Settings" and "Base Profile" area
- 12. Select "Global Settings" Tab
- 13. Scroll down and locate the "Multi-display/mixed-GPU acceleration" feature. See picture below. The setting should be set to "Multiple display performance mode". If not set properly, select Multiple display performance mode and depress the "Apply" button. (The other settings are "Single display performance mode" and "Compatibility performance mode". These settings are not recommended for Avid editing environments).



#### Make the following additional setting for "3D App-Video Editing"

- 14. Stay in the "Manage 3D Settings" area
- 15. Select "Global Settings" Tab
- 16. Under "Global Settings" tab select "3D App-Video Editing" setting as shown in picture below:

NVIDIA Control Panel				
File Edit View Help				
🕝 Back 🛛 🕥 🚮 🎹 Advanced Se	ttings 🕶			
Select a Task	📩 Manage 3D Settii			-
3D Settings     -Adjust image settings with preview     -Manage 3D settings     -Set Physic configuration     Display		s and create overrides for specific programs. The	e overrides will be used automatically e	Restore Defaults ach time the specified programs are
Change resolution Adjust desktop color settings	I would like to use the following 3D se	ttings:		
Adjust desktop size and position Rotate display View HDCP status	Global Settings Program Settings		1	
Set up multiple displays	Global presets:			
E-Stereoscopic 3D	3D App - Video Editing	💌 🙍 Rest	tore	
Set up stereoscopic 3D View compatibility with games	Settings:			
E- Video	Feature	Cathler		
Adjust video color settings Adjust video image settings	Ambient Occlusion	Off		
	Anisotropic filtering	Application-controlled		
	Antialiasing - Gamma correction	Off		
	Antialiasing - Líne gamma	Off		
	Antialiasing - Mode	Application-controlled		
	Antialiasing - Setting	Application-controlled		
	Antialiasing - Transparency	Off		
	Buffer-flipping mode	Auto-select		
	CUDA - GPUs	All		
	Enable overlay	Off		
	Exported pixel types	Color indexed overlays (8 bpp)	<u>_</u>	
	Description: This listbox contains all of the features you o setting of a feature using the dropdown listb Typical usage scenarios:	can adjust on your NVIDIA GPU-based graphics ( tox beside the feature name.	card. You can change the	
	Default 3D settings for your applications			×
System Information				Apply Cancel

- 17. Depress the "Apply" button
- 18. Nvidia driver optimization settings for Avid environments are complete.

#### E.) Nvidia Quadro GPU monitor connectivity:

The Nvidia Quadro 4000, Quadro FX 4800 and Quadro FX 3800 graphics card have a single DVI port and two Display-Port ports

(Important: Display-ports are not HDMI ports; at first glance they do look very similar to HDMI ports)

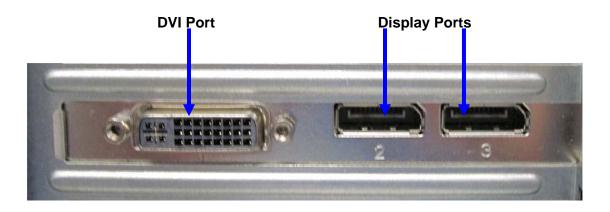
(Please Note: Only two of the three video ports can simultaneously be used. Connecting to all three video ports at the same time will result in non-functioning video output from the Nvidia GPU video card.)

The HP Z800 includes one Display-Port-to-DVI adapter. HP P/N 481409-001

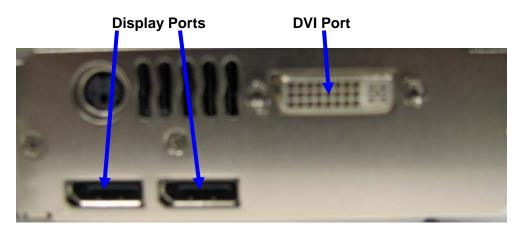
#### For dual monitor connectivity:

- Use the DVI port and one Display-Port (Display-Port connection can be native display-port to monitor via display-port connection, or use the display-port-to-DVI-adapter supplied with the system to connect to a native DVI monitor).
- 2. Or use two Display-Ports (Requires monitors with native display-port connections, two display-port to DVI adapters are not recommended when using dual display-port connections).

### Reference picture Quadro FX 3800 (similar to Quadro 4000)



### Reference picture Quadro FX 4800



## F.) Serial Port Deck Control:

## Serial Port Deck Control:

The HP Z800 workstation does have an embedded serial port. The embedded serial-port has been qualified by Avid and will maintain frame accuracy in Avid environments. Primary or secondary / additional serial port deck control can be established via two methods (both of which have been qualified by Avid and will maintain frame accuracy in Avid environments)

- 1. Addenda model **RS-USB / 4** direct USB-to-RS422 serial adapter. This is a simple device which connects directly from a USB port of the Z800 directly to the RS422 port of a deck. http://www.addenda.com/addenda-elect/products/rsUSB4.php
- 2. Combination of a Keyspan (Tripp-Lite) Model USA-19HS USB-to-serial-port adapter with Addenda Rosetta Stone model RS 2/8 RS232-to-RS422 converter

- Keyspan (Tripp-Lite) Model USA-19HS (AVID P/N 7080-20013-01) http://www.tripplite.com/en/products/model.cfm?txtSeriesID=518&EID=13384&txtModelID=3914

Addenda Rosetta Stone (or equivalent) model RS – 2/8 RS232-to-RS422 converter (AVID P/N 7070-00507-01)
 http://www.addenda.com/addenda-elect/products/rs28.php

To connect the Keyspan 19HS / Addenda RS -2/8 combination:

- Install the Keyspan 19HS driver before plugging the device into a Z800 USB port.
- Once the Keyspan 19HS driver is installed then plug the Keyspan 19HS into a Z800 USB port.
- The Keyspan 19HS will now show up in device driver.
- Using a serial cable, connect the 9-pin serial port of the Keyspan 19HS USB adapter to the port of the Addenda marked RS232 from PC
- Using a 2<sup>nd</sup> serial port cable connect the port of the Addenda marked "RS422 to VTR" to the deck control serial port of the deck.

**G.)** <u>ATTO UL5D issue:</u> When an ATTO UL5D PCI-E u320 SCSI controller is installed in slot #5, the UL5D BIOS must be disabled or the following warning may be reported during system boot: (Also the UL5D BIOS must be disabled for proper operation when connected to an AVID VideoRAID RTR u320 SCSI).

110 – Out of memory space for option ROMS.

The option ROM for the following device was unable to run due to memory constraints. If you choose to continue, one or more PCI devices may not work properly

- To disable the UL5D BIOS and eliminate the above warning, perform one of the following: A. AVID Knowledge Base article 273945,
  - http://avid.custkb.com/avid/app/selfservice/search.jsp?DocId=273945&Hilite=UL5D

Install Atto UL5D configuration tool and launch the software. Expand the Express PCI UL5D menu, and click on Channel. The <u>Boot Driver</u> has to be <u>disabled</u> on <u>both channels</u> of the UL5D. Configure the UL5D per this screenshot, and do this for both Channel 1 and Channel 2

ATTO Configuration Tool				908
File Help				
Device Listing	NVRAM PCI Info			
hosts     incalhost     incalhost     incolocity     incoloci	Common NVRAM Configuration	Controller ID:	7	1
ExpressPCI ULSD		Boot Driver:	Disabled 💌	_
Channel 2		Termination:	Auto	
		Selection Timeout (ms):	250 🛩	
		Fallback Sync Rate (MB/s)	40 (20) 💌	
		Reset Delay (seconds)	3	]
		QAS Enabled	Enabled	
	SCSI Target NVRAM Configuration	ø.		1
		Specified Target:	0 💌	
		LUNs:	0 To 7 💌	
		Allow Disconnect	Enabled	
		Tag Command Queuing:	Enabled	
		Sync Enabled for this ID:	Enabled	-
		Sync Offset:	127	
		Sync Rate (MB/s):	320 DT IU	
		Wide Transfera	Enabled	
	Load	. Save	Commit Restore	Defaults
ATTO Technology, Inc.	i M settings loaded.			

#### B. Or during system boot perform the following:

- 1. Reboot the system
- 2. Hit "Escape" to clear the HP splash screen
- 3. Hit Ctrl-Z when the following Atto UL5D BIOS message prompts
  - \*\* ATTO ExpressPCI ™ Version 2.10 \*\*
  - \*\*\*\*\* Press [Ctrl + Z] for Setup Utility \*\*\*\*\*
- 4. Select 1 Adapter menu
- 5. Select 2 Configure Both Adapter Channels
- 6. For ver 2.10 firmware
  - Select Host Adapter BIOS
  - Select "Disabled" using [Page Up] / [Page Down]
- 7. For ver 2.27 firmware
  - Select Boot Driver
  - Select "Disabled" using [Page Up] / [Page Down]
- 8. Press "ESC"
- 9. Press "ESC"
- 10. Select 4 Save Parameters and Exit

## H.) Supported external local SAS storage connectivity via embedded SAS controller ports:

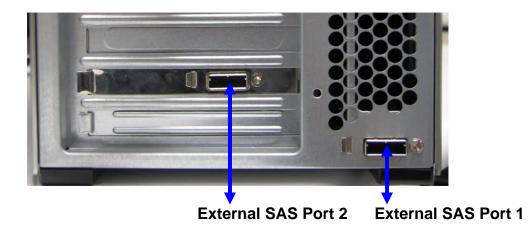
### Supported

- AVID VideoRAID SR (16-bay)
- Xtore StudioRAID 16Re (16-bay) / 5Te (5-bay) chassis

The Z800 can support:

- a. Up to two external AVID VideoRAID SR (16-bay) SAS local storage chassis
- b. Mix and match of up to two external Xtore StudioRAID 16Re (16-bay) / 5Te (5-bay) chassis

Simultaneous connectivity of AVID VideoRAID and Xtore chassis is not formally qualified or recommended.



# I.) O.S. setting recommendations for optimum performance with Avid Editing applications:

The following links provide O.S. setting suggestions for ensuring optimum performance when working with your Avid editing application with a Windows operating system.

- Optimizations for Video Editors - Windows 7

http://avid.custkb.com/avid/app/selfservice/search.jsp?DocId=390339

# J.) Set Windows "Visual Effects" for "best performance":

- 1. Right-Click on My Computer / Computer
- 2. Select Properties
- 3. The screen below will be displayed:

~	2.8 . 3 . 9 . 5.		
Control Pa + S	ystem and Secur > System	-	Search Con P
File Edit View Tools Help			
Control Panel Home	View basic information	about your computer	0
😵 Device Manager	Windows edition		
😗 Remote settings	Windows 7 Professional		$\bigcirc$
System protection	Copyright © 2009 Microso	ft Corporation. All rights reserved.	
😵 Advanced system settings	Get more features with a n	ew edition of Windows 7	
	System		
	Manufacturer:	Hewlett-Packard Company	
	Model:	HP Z800 Workstation	e e e e e e e e e e e e e e e e e e e
	Rating:	5,9 Windows Experience Index	
	Processor:	Intel(R) Xeon(R) CPU X5650 @ 2.67GHz 2.66 GHz (2 processors)	
	Installed memory (RAM):	6.00 GB	invent
	System type:	64-bit Operating System	
	Pen and Touch:	No Pen or Touch Input is available for this Display	
	Hewlett-Packard Company su	oport	
	Website:	Online support	
	Computer name, domain, and	workgroup settings	
	Computer name:	Z800-6core-Win7	🚱 Change settings
	Full computer name:	Z800-6core-Win7	
	Computer description:		
	Workgroup:	WORKGROUP	
See also	Windows activation		
Action Center	Windows is activated		ask for .
Windows Update	Product ID: 00371-OEM-89	92671-00008	genuine Microsoft
Performance Information and Tools			software Learn more online

4. On the left side of the screen above, locate and select "Advanced system settings"

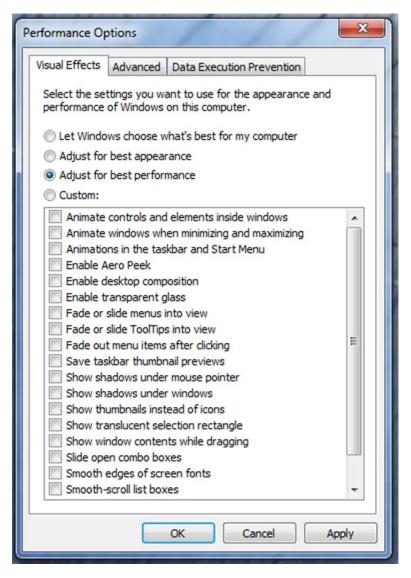
5. The System properties window will be displayed. (Picture below).

Computer Name	Hardware	Advanced	System Protectio	n Remote
You must be log	ged on as a	an Administra	tor to make most o	f these change
Performance				
Visual effects,	processor se	cheduling, m	emory usage, and	virtual memory
				Settings
User Profiles				
Desktop settin	igs related to	yourlogon		
				Settings
				Settings
Startup and Re	ecovery			Settings
		ure, and deb	ugging information	
		ure, and deb	ugging information	
		ure, and deb	ugging information	
		ure, and deb		Settings
		ure, and deb		
		ure, and deb		Settings
		ure, and deb	Environ	Settings

- 6. Under the "Advanced" tab depress the "Settings..." button for performance.
- 7. The "performance Options" window will be displayed. (Picture below).

formance Op	otions	1 11	8
isual Effects	Advanced	Data Execution Prevention	
		ant to use for the appearance an on this computer.	nd
Let Windo	ws choose w	hat's best for my computer	
O Adjust for	best appear	rance	
Adjust for	best perform	mance	
O Custom:			
Animate	controls and	l elements inside windows	
Animate	windows wh	en minimizing and maximizing	
		kbar and Start Menu	
C Enable A			
	lesktop comp		
	ransparent g	a sector and a s	
	slide menus i		
	slide ToolTip		=
		after clicking	-
	skbar thumbr		
		mouse pointer	
	adows under		
	umbnails inst		
		ection rectangle	
		ts while dragging	
	en combo bo:		
	edges of scr		
Smooth-	scroll list box	es	•
		OK Cancel	Apply
			UNHIA

8. Under the "Visual Effects" tab select the "Adjust for best performance" selection. (Picture below).



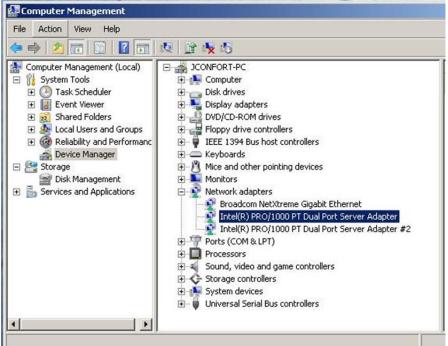
- 9. Depress the "Apply" button
- 10. Reboot Windows
- 11. Required Windows visual performance settings for Avid environments are now complete.

- K.) <u>Intel PRO 1000 PT for ISIS connectivity</u>: For proper operation and connectivity of the Intel PRO 1000 PT with ISIS the following are required:
  - 1. For the Intel PRO 1000 PT driver, under the performance settings, change the following parameters:
    - Receive Buffers to 1024
    - Transmit Buffers to 1024
  - 2. Disable the windows firewall.

Intel PRO 1000 PT Driver: The proper driver can be found in the ISIS software directory: Tools\_3rdParty / Drivers\_and\_Firmware

#### To set the Intel PRO 1000 PT Receive / Transmit buffers:

Go to device manager and select each instance of the device named Intel(R) PRO/1000 PT Dual Port Server Adapter which will be used for ISIS connectivity.



Select performance options and then select Properties.

-1-1

Advanced Adapter Settings Settings: Large Send Offload v2 (IPv4) Large Send Offload v2 (IPv6) Locally Administered Address Log Link State Event Performance Options Priority & VLAN Receive Side Scaling TCP/IP Offloading Options Performance Options Performance Options Configures the adapter to use settings that can improve adapter performance.	General Link Speed Adva	Driver Details Resource anced Power Management
Large Send Offload v2 (IPv4) Large Send Offload v2 (IPv4) Locally Administered Address Log Link State Event Performance Options Priority & VLAN Receive Side Scaling TCP/IP Offloading Options Performance Options Configures the adapter to use settings that can improve adapter		ngs
Performance Options Priority & VLAN Receive Side Scaling TCP/IP Offloading Options Performance Options Configures the adapter to use settings that can improve adapter	Large Send Offload v2 (IPv6) Locally Administered Address	Properties
Configures the adapter to use settings that can improve adapter	Performance Options Priority & VLAN Receive Side Scaling	×
	Performance Options	
		that can improve adapter 🖄

#### Set Receive Buffers to 1024

#### Set Transmit Buffers to 1024

erformance Options	×	Performance Options	<u>×</u>
Settings:	Value:	Settings:	Value:
Adaptive Inter-Frame Spacing Flow Control Interrupt Moderation Rate Receive Buffers Transmit Buffers	1024	Adaptive Inter-Frame Spacing Flow Control Interrupt Moderation Rate Receive Buffers Transmit Buffers	1024
	Use Default		Use Default
Receive Buffers		Transmit Buffers	
Sets the number of Receive Buffer copying data to memory. Increasing receive performance, but also con You might choose to increase the r you notice a significant decrease in traffic. If receive performance is no setting.	g this value can enhance sumes system memory. number of Receive Buffers if n the performance of received		ng this value can enhance so consumes system memory.
	OK Cancel		OK Cancel

Perform this for each instance of the device named "Intel(R) PRO/1000 PT Dual Port Server Adapter" which will be used for ISIS connectivity.

L.) Disable the windows firewall:

Navigate to Control Panel / Windows Firewall -- Select Turn Windows Firewall on or off



Select Turn off windows firewall in both network locations, OK to save

👷 Customize Settings	
😋 🕞 🗢 Windows Firewall - Customize Settings 🛛 👻 🔀 Search Control Panel	2
<b>Customize settings for each type of network</b> You can modify the firewall settings for each type of network location that you use.	
What are network locations?	
Home or work (private) network location settings	-
👩 🔿 Turn on Windows Firewall	
Block all incoming connections, including those in the list of allowed programs	
Notify me when Windows Firewall blocks a new program	
Turn off Windows Firewall (not recommended)	
Public network location settings	
📀 🔿 Turn on Windows Firewall	
Block all incoming connections, including those in the list of allowed programs	
Notify me when Windows Firewall blocks a new program	
Turn off Windows Firewall (not recommended)	
OK Cancel	

# **Revision Update**

Revision	Date	Name	Update
A	Oct 27 <sup>th</sup> , 2011	Joe Conforti	Initial public release of the Z800 configuration guide for support of Media Composer 6.0, Symphony 6.0 and NewsCutter 10