Avolites LTD Engineering Change Notice

ECN title	Sapphire BIOS setting for reliable Ethernet	
ECN Number	ECN-195	
Related Product(s)	All Sapphire up till SN	
Date / Author	25/10/2012	JB
Reasons for ECN	Ethernet drops over long period of time	
Parts required	USB keyboard	
Tools required	None	
Estimated time	5 Minutes	

Background:

Some power saving optimization settings of the onboard PCIe controller affects the Ethernet controllers in such a way that it fails on long term testing. This BIOS setting change disables the Power saving feature

- Connect a USB keyboard to the console.
- Power up the console and press [DELETE] to enter the BIOS
- In the BIOS select "Advanced", then select "South Bridge configuration" then "PCI Express config", then "PCI Express Port 1 config", set "ASPM" mode to "Disable"

- Repeat for Port 2:
  select "Advanced", then select "South Bridge configuration" then "PCI Express config", then "PCI Express Port 2 config", set "ASPM" mode to "Disable"

- Then press F10 to save and exit the BIOS
- Allow the console to boot properly and test Both Ethernet ports

This concludes the ECN.