

Blantons PCIe AER and DDR EDAC Checks

PCIe Device Inventory

Device	PCIe BDF
Broadcom BCM78914 Switch ASIC (Tomahawk6)	0000:01:00.0
Broadcom BCM78914 Switch ASIC (Tomahawk6)	0000:02:00.0
ASPEED / BMC PCIe tree	AST1150 bridge: 0000:03:00.0 Graphics: 0000:04:00.0 IPMI: 0000:04:01.0
HPE FPGA multifunction device	FPGA FN0: 0000:05:00.0 FPGA FN1: 0000:05:00.1 FPGA FN2: 0000:05:00.2 FPGA FN3: 0000:05:00.3
Transcend NVMe PCIe SSD	0000:06:00.0
Intel I210 Gigabit Network Connection	0000:07:00.0

AER and EDAC Commands

Device	Read-only commands
PCIe AER	

Device	Read-only commands
Broadcom Tomahawk6 Endpoint: 0000:01:00.0 PCI ID: 14e4:f914 Root port: 0000:00:01.1	Endpoint AER <pre>cat /sys/bus/pci/devices/0000:01:00.0/aer_dev_correctable cat /sys/bus/pci/devices/0000:01:00.0/aer_dev_nonfatal cat /sys/bus/pci/devices/0000:01:00.0/aer_dev_fatal</pre> Upstream root-port AER <pre>cat /sys/bus/pci/devices/0000:00:01.1/aer_dev_correctable cat /sys/bus/pci/devices/0000:00:01.1/aer_dev_nonfatal cat /sys/bus/pci/devices/0000:00:01.1/aer_dev_fatal</pre>
Broadcom Tomahawk6 Endpoint: 0000:02:00.0 PCI ID: 14e4:f914 Root port: 0000:00:01.2	Endpoint AER <pre>cat /sys/bus/pci/devices/0000:02:00.0/aer_dev_correctable cat /sys/bus/pci/devices/0000:02:00.0/aer_dev_nonfatal cat /sys/bus/pci/devices/0000:02:00.0/aer_dev_fatal</pre> Upstream root-port AER <pre>cat /sys/bus/pci/devices/0000:00:01.2/aer_dev_correctable cat /sys/bus/pci/devices/0000:00:01.2/aer_dev_nonfatal cat /sys/bus/pci/devices/0000:00:01.2/aer_dev_fatal</pre>
HPE FPGA multifunction device 05:00.0: 1590:0180, UIO 05:00.1: 1590:0181, UIO 05:00.2: 1590:0182, SPI 05:00.3: 1590:0183, I2C Shared root port: 0000:00:01.5	Endpoint AER: not available Shared upstream root-port AER <pre>cat /sys/bus/pci/devices/0000:00:01.5/aer_dev_correctable cat /sys/bus/pci/devices/0000:00:01.5/aer_dev_nonfatal cat /sys/bus/pci/devices/0000:00:01.5/aer_dev_fatal</pre>
ASPEED / BMC PCIe tree AST1150 bridge: 0000:03:00.0 Graphics: 0000:04:00.0 IPMI: 0000:04:01.0 Root port: 0000:00:01.4	AST1150 bridge endpoint AER <pre>cat /sys/bus/pci/devices/0000:03:00.0/aer_dev_correctable cat /sys/bus/pci/devices/0000:03:00.0/aer_dev_nonfatal cat /sys/bus/pci/devices/0000:03:00.0/aer_dev_fatal</pre> Upstream root-port AER <pre>cat /sys/bus/pci/devices/0000:00:01.4/aer_dev_correctable cat /sys/bus/pci/devices/0000:00:01.4/aer_dev_nonfatal cat /sys/bus/pci/devices/0000:00:01.4/aer_dev_fatal</pre>
Transcend NVMe SSD Endpoint: 0000:06:00.0	Endpoint AER <pre>cat /sys/bus/pci/devices/0000:06:00.0/aer_dev_correctable cat /sys/bus/pci/devices/0000:06:00.0/aer_dev_nonfatal</pre>

Device	Read-only commands
PCI ID: 1d79:2267 Root port: 0000:00:02.1	cat /sys/bus/pci/devices/0000:06:00.0/aer_dev_fatal Upstream root-port AER cat /sys/bus/pci/devices/0000:00:02.1/aer_dev_correctable cat /sys/bus/pci/devices/0000:00:02.1/aer_dev_nonfatal cat /sys/bus/pci/devices/0000:00:02.1/aer_dev_fatal
Intel I210 Ethernet controller Endpoint: 0000:07:00.0 PCI ID: 8086:1533 Root port: 0000:00:02.4	Endpoint AER cat /sys/bus/pci/devices/0000:07:00.0/aer_dev_correctable cat /sys/bus/pci/devices/0000:07:00.0/aer_dev_nonfatal cat /sys/bus/pci/devices/0000:07:00.0/aer_dev_fatal Upstream root-port AER cat /sys/bus/pci/devices/0000:00:02.4/aer_dev_correctable cat /sys/bus/pci/devices/0000:00:02.4/aer_dev_nonfatal cat /sys/bus/pci/devices/0000:00:02.4/aer_dev_fatal
DDR EDAC	
Granular DDR ECC counters Controller: mc0 Physical memory: two 16 GB DDR5 SODIMMs Physical rank count: one rank per SODIMM	EDAC channel 0 (sysfs rank0) cat /sys/devices/system/edac/mc/mc0/rank0/dimm_ce_count cat /sys/devices/system/edac/mc/mc0/rank0/dimm_ue_count EDAC channel 1 (sysfs rank1) cat /sys/devices/system/edac/mc/mc0/rank1/dimm_ce_count cat /sys/devices/system/edac/mc/mc0/rank1/dimm_ue_count EDAC channel 2 (sysfs rank2) cat /sys/devices/system/edac/mc/mc0/rank2/dimm_ce_count cat /sys/devices/system/edac/mc/mc0/rank2/dimm_ue_count EDAC channel 3 (sysfs rank3) cat /sys/devices/system/edac/mc/mc0/rank3/dimm_ce_count cat /sys/devices/system/edac/mc/mc0/rank3/dimm_ue_count