

Emulex OCE11102

2-PORT IBM/EMULEX 10GB VIRTUAL FABRIC ADAPTER 49Y7952 OCE11102 HIGH

1. Low Profile
2. Pci Express 2.0 X8
3. IBM 49Y7952
4. ~50% faster in IOPS comparing to Intel X520
5. Converged Network Adapter (FCoE offloading, iSCSI offload, VIRT offloading)
6. Broadcom Emulex OneConnect OCE11102 (Chipset: BladeEngine 3 be3)

```
04:00.0 Ethernet controller: Emulex Corporation OneConnect 10Gb NIC (be3)
(rev 02)
04:00.1 Ethernet controller: Emulex Corporation OneConnect 10Gb NIC (be3)
(rev 02)
```

Issues

AMD-Vi

On AMD Ryzen with X570 chipset:

```
iommu ivhd0: AMD-Vi: Event logged [IOTLB_INV_TIMEOUT device=04:00.0
address=0x1001e0b00]
AMD-Vi: Completion-Wait loop timed out
AMD-Vi: Completion-Wait loop timed out
AMD-Vi: Completion-Wait loop timed out
```

Workaround:

1. add to kernel cmdline: iommu=soft
2. [PCI Passthrough: AMD-Vi: Completion-Wait loop timed out](#)

bond and bridge

There is issue where Emulex is a bond0 slave and bond0 is part of a bridge.

More here: [No DCHPOFFERS received](#)

Solution: upgrade to latest firmware.

Firmware

IBM

Latest published (from 2011): [Support CD Release for Emulex-based 10GbE v5.1.42 - IBM System x](#)

Broadcom

Please read user guide:

1. [Emulex® Drivers for Linux for OneConnect® Adapters - User Guide v 12.6](#)
2. <https://docs.broadcom.com/doc/12378876>Emulex® Drivers for Linux for OneConnect®

Adapters - User Guide v 11.2]]

Download firmware upgrade from:

1. [Broadcom](#) page. Look for OneConnect Flash ISO Image

<https://www.dell.com/support/home/pl-pl/drivers/driversdetails?driverid=1dhk6>

Issues

[Frame error with driver be2net & Emulex OneConnect 10Gb](#)

fw versions

1. 4.1.455.10 - on old i7 machine - bond and bridge works OK
2. 4.6.281.21 - on old i5 machine - bond and bridge works OK
3. 4.6.281.8 - on AMD Ryzne - bond and bridge broadcast issue present
4. 11.4.1186.4 - latest firmware - works OK

fw upgrade

```
ethtool -i enp37s0f0

driver: be2net
version: 5.15.30-2-pve
firmware-version: 4.6.281.8
expansion-rom-version:
bus-info: 0000:25:00.0
supports-statistics: yes
supports-test: yes
supports-eeprom-access: yes
supports-register-dump: no
supports-priv-flags: yes
```

Flashin firmware with ethtool. Note - process takes long time~

```
cp oc11-11.4.1186.4.ufi /lib/firmware/
```

```
ethtool --flash enp37s0f0 oc11-11.4.1186.4.ufi  
ethtool --flash enp37s0f1 oc11-11.4.1186.4.ufi
```

```
# ethtool -i enp37s0f0  
driver: be2net  
version: 5.15.30-2-pve  
firmware-version: 4.6.281.8 [11.4.1186.4]  
expansion-rom-version:  
bus-info: 0000:25:00.0  
supports-statistics: yes  
supports-test: yes  
supports-eeprom-access: yes  
supports-register-dump: no  
supports-priv-flags: yes
```

Apply new firmware - reboot the system.

From:

<https://niziak.spox.org/wiki/> - **niziak.spox.org**

Permanent link:

<https://niziak.spox.org/wiki/hw:server:10gbe>

Last update: **2022/10/27 21:12**

