1.测试环境

测试固件：

RP0085_disable_arp_85320010.ncsi.img

RP0085-1FF9_disable_arp_85320010.ncsi.img

测试平台：NF5280M6，BMC4.19.06，BIOS6.00.02

测试系统：centos7.7，内核：3.10.0-1062.el7.x86_64

测试驱动：txgbe-1.3.4

MD5sum：

f520f18924900cfebcbd19cad8f3e2d1 RP0085_disable_arp_85320010.ncsi.img

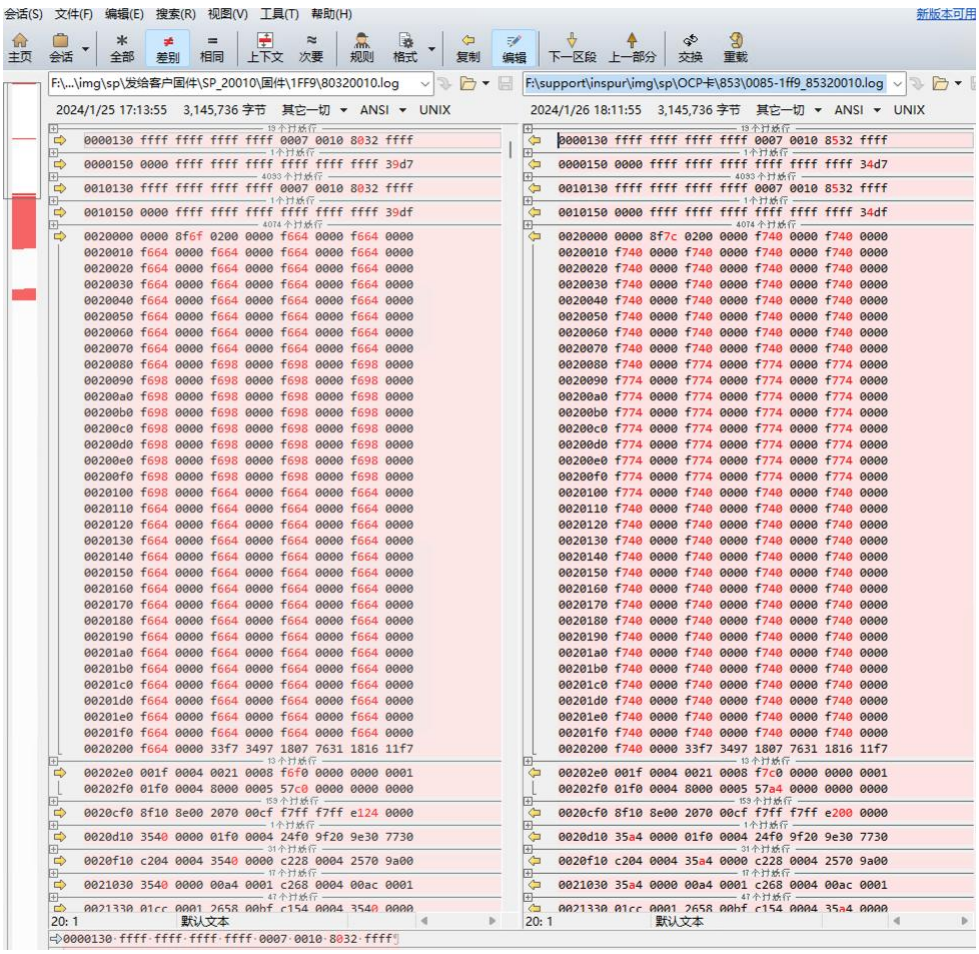
bac9078ba6b75377554bfa26609b77ea RP0085-1FF9_disable_arp_85320010.ncsi.img

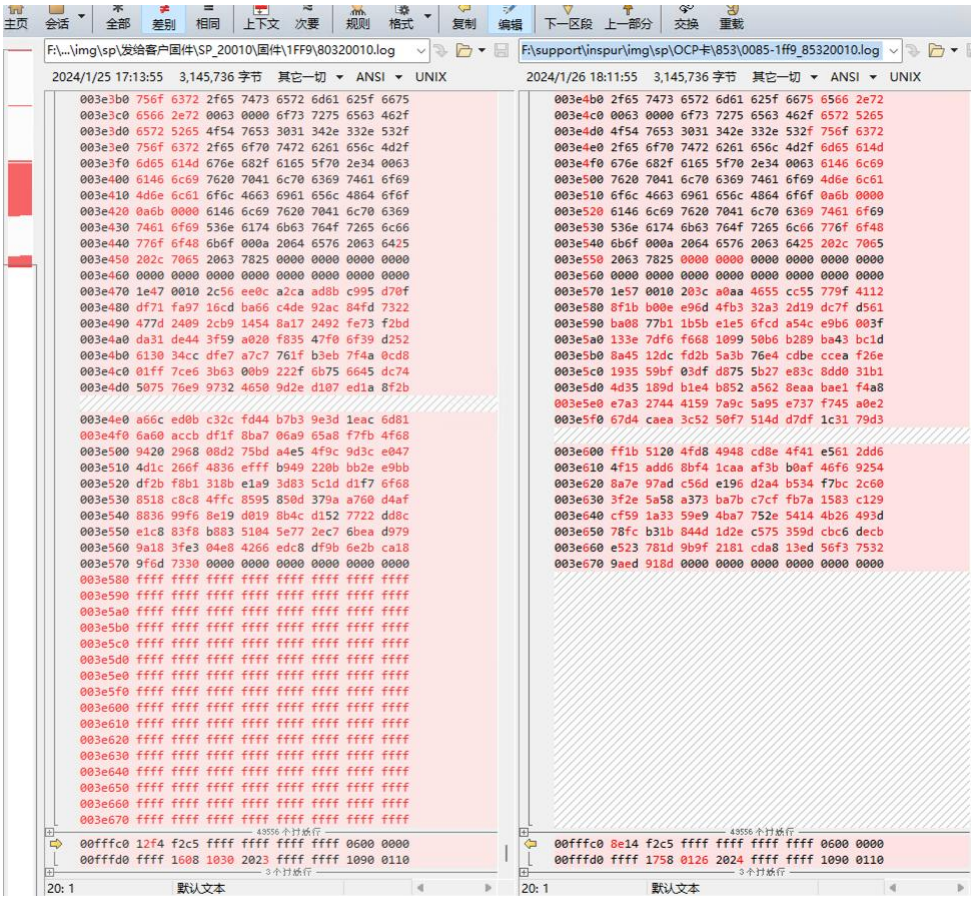
2. 测试用例

2.1 固件 img 检查

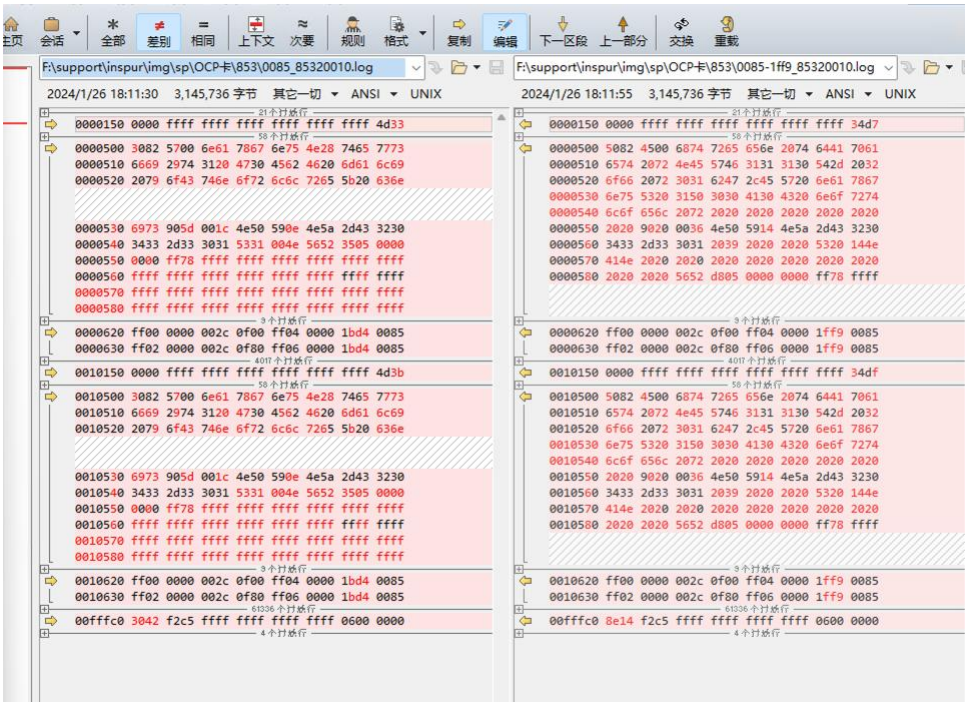
img 检查对比：

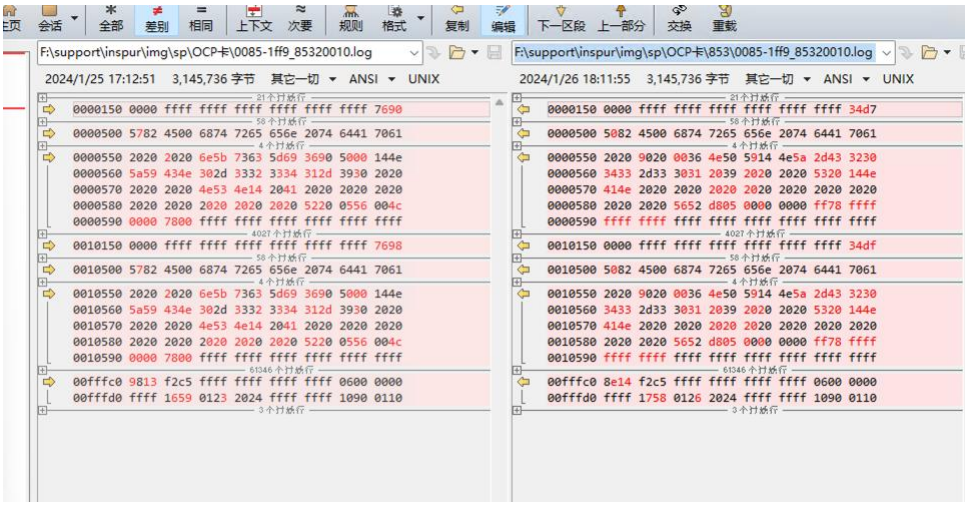
0085-1ff9：只修改了 fw。


会话(S) 文件(F) 编辑(E) 搜索(R) 视图(V) 工具(T) 帮助(H)
新版本可用
主页 会话 全部 差别 相同 上下文 次要 规则 格式 复制 编辑 下一区段 上一部分 交换 重载
F:\...\img\sp\发给客户固件\SP_20010\固件\1FF9\80320010.log
F:\support\inspur\img\sp\OCP卡\853\0085-1ff9_85320010.log
2024/1/25 17:13:55 3,145,736 字节 其它一切 ANSI UNIX
2024/1/26 18:11:55 3,145,736 字节 其它一切 ANSI UNIX
20: 1 默认文本


主页 会话 全部 差别 相同 上下文 次要 规则 格式 复制 编辑 下一区段 上一部分 交换 重载
F:\...\img\sp\发给客户固件\SP_20010\固件\1FF9\80320010.log
F:\support\inspur\img\sp\OCP卡\853\0085-1ff9_85320010.log
2024/1/25 17:13:55 3,145,736 字节 其它一切 ANSI UNIX
2024/1/26 18:11:55 3,145,736 字节 其它一切 ANSI UNIX
20: 1 默认文本

0085-1bd4:





固件版本信息、**subsys id**、**device id**、**VPD**

RP0085_disable_arp_85320010.ncsi.img 固件信息

```
[root@localhost ~]# lspci -d 8088: -nm
98:00.0 "0200" "8088" "1001" -r03 "1bd4" "0085"
98:00.1 "0200" "8088" "1001" -r03 "1bd4" "0085"
[root@localhost ~]# ethtool -i ens17f0
driver: txgbe
version: 1.3.4
firmware-version: 0x85320010
expansion-rom-version:
bus-info: 0000:98:00.0
supports-statistics: yes
supports-test: yes
supports-eeprom-access: yes
supports-register-dump: yes
supports-priv-flags: yes
[root@localhost ~]# ./wxtool_x86 show -s 98:00.0 -i
98:00.0 Class 0200: Device 8088:1001 (rev 03)

chip status: ok
flash status: ok
Cab0 0: c000003f
Flash 0:        5aa54000
fw version:     85320010
fw init:        00000133
wol:    disable
ncsi:   enable
oprom arch:     arm64/x86
TX_EQ:  40 - 0 - 0
image_name:RP1000[ncsi]
```

```
[root@localhost ~]# lspci -s 98:00.0 -vvv
98:00.0 Ethernet controller: Beijing Wangxun Technology Co., Ltd. Ethernet Controller RP1000 for 10GbE SFP+ (rev 03)
        Subsystem: Inspur Electronic Information Industry Co., Ltd. Device 0085
        Physical Slot: 17
        Control: I/O- Mem+ BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr+ Stepping- SERR+ FastB2B- DisINTx+
        Status: Cap+ 66MHz- UDF- FastB2B- ParErr- DEVSEL=fast >TAbort- <TAbort- <MAbort- >SERR- <PERR- INTx-
        Latency: 0, Cache Line Size: 32 bytes
        Interrupt: pin A routed to IRQ 18
        NUMA node: 1
        Region 0: Memory at db620000 (64-bit, non-prefetchable) [size=128K]
        Region 4: Memory at dba44000 (64-bit, non-prefetchable) [size=16K]
        Expansion ROM at db580000 [disabled] [size=512K]
        Capabilities: [40] Power Management version 3
                Flags: PMEClk- DSI- D1- D2- AuxCurrent=375mA PME(D0+,D1-,D2-,D3hot+,D3cold+)
                Status: D0 NoSoftRst- PME-Enable- DSel=0 DScale=0 PME-
        Capabilities: [50] MSI: Enable- Count=1/1 Maskable+ 64bit+
                Address: 0000000000000000  Data: 0000
                Masking: 00000000  Pending: 00000000
        Capabilities: [70] Express (v2) Endpoint, MSI 00
                DevCap: MaxPayload 512 bytes, PhantFunc 0, Latency L0s unlimited, L1 unlimited
                        ExtTag+ AttnBtn- AttnInd- PwrInd- RBE+ FLReset+ SlotPowerLimit 75.000W
                DevCtl: Report errors: Correctable+ Non-Fatal+ Fatal+ Unsupported-
                        RlxdOrd+ ExtTag+ PhantFunc- AuxPwr- NoSnoop+ FLReset-
                        MaxPayload 512 bytes, MaxReadReq 256 bytes
                DevSta: CorrErr+ UncorrErr- FatalErr- UnsuppReq+ AuxPwr+ TransPend-
                LnkCap: Port #0, Speed 8GT/s, Width x8, ASPM L0s L1, Exit Latency L0s <512ns, L1 <4us
                        ClockPM- Surprise- LLActRep- BwNot- ASPMOptComp+
                LnkCtl: ASPM Disabled; RCB 64 bytes Disabled- CommClk+
                        ExtSynch- ClockPM- AutWidDis- BWInt- AutBWInt-
                LnkSta: Speed 8GT/s, Width x8, TrErr- Train- SlotClk+ DLActive- BWMgmt- ABWMgmt-
                DevCap2: Completion Timeout: Not Supported, TimeoutDis+, LTR-, OBFF Not Supported
                DevCtl2: Completion Timeout: 50us to 50ms, TimeoutDis-, LTR-, OBFF Disabled
                LnkCtl2: Target Link Speed: 8GT/s, EnterCompliance- SpeedDis-
                         Transmit Margin: Normal Operating Range, EnterModifiedCompliance- ComplianceSOS-
                         Compliance De-emphasis: -6dB
                LnkSta2: Current De-emphasis Level: -3.5dB, EqualizationComplete+, EqualizationPhase1+
                         EqualizationPhase2+, EqualizationPhase3+, LinkEqualizationRequest-
        Capabilities: [b0] MSI-X: Enable+ Count=64 Masked-
                Vector table: BAR=4 offset=00000000
                PBA: BAR=4 offset=00002000
        Capabilities: [d0] Vital Product Data
                Product Name: Wangxun(Netswift) 10GbE Family Controller [ncsi]
                Read-only fields:
                        [PN] Part number: YZNC-02343-101
                        [SN] Serial number: 112211221122112211
                        [RV] Reserved: checksum good, 4 byte(s) reserved
                End
        Capabilities: [100 v2] Advanced Error Reporting
                UESta:  DLP- SDES- TLP- FCP- CmpltTO- CmpltAbrt- UnxCmplt- RxOF- MalfTLP- ECRC- UnsupReq- ACSViol-
                UEMsk:  DLP- SDES- TLP- FCP- CmpltTO- CmpltAbrt- UnxCmplt- RxOF- MalfTLP- ECRC- UnsupReq+ ACSViol-
                UESvrt: DLP+ SDES+ TLP+ FCP+ CmpltTO- CmpltAbrt- UnxCmplt- RxOF+ MalfTLP+ ECRC- UnsupReq- ACSViol-
                CESta:  RxErr- BadTLP- BadDLLP- Rollover- Timeout- NonFatalErr-
                CEMsk:  RxErr- BadTLP- BadDLLP- Rollover- Timeout- NonFatalErr+
                AERCap: First Error Pointer: 00, GenCap+ CGenEn- ChkCap+ ChkEn-
```

```
                AERCap: First Error Pointer: 00, GenCap+ CGenEn- ChkCap+ ChkEn-
        Capabilities: [148 v1] Alternative Routing-ID Interpretation (ARI)
                ARICap: MFVC- ACS-, Next Function: 1
                ARICtl: MFVC- ACS-, Function Group: 0
        Capabilities: [158 v1] #19
        Capabilities: [178 v1] Single Root I/O Virtualization (SR-IOV)
                IOVCap: Migration-, Interrupt Message Number: 000
                IOVCtl: Enable- Migration- Interrupt- MSE- ARIHierarchy+
                IOVSta: Migration-
                Initial VFs: 64, Total VFs: 64, Number of VFs: 0, Function Dependency Link: 00
                VF offset: 128, stride: 2, Device ID: 1000
                Supported Page Size: 00000553, System Page Size: 00000001
                Region 0: Memory at 00000000db940000 (64-bit, non-prefetchable)
                Region 4: Memory at 00000000db840000 (64-bit, non-prefetchable)
                VF Migration: offset: 00000000, BIR: 0
        Capabilities: [1b8 v1] Transaction Processing Hints
                Device specific mode supported
                No steering table available
        Capabilities: [244 v1] Vendor Specific Information: ID=0001 Rev=1 Len=038 <?>
        Kernel driver in use: txgbe
        Kernel modules: txgbe
```

RP0085-1FF9_disable_arp_85320010.ncsi.img 固件信息

```
[root@localhost ~]# lspci -d 8088
lspci: -d: ':' expected
[root@localhost ~]# lspci -d 8088: -nm
98:00.0 "0200" "8088" "1001" -r03 "1ff9" "0085"
98:00.1 "0200" "8088" "1001" -r03 "1ff9" "0085"
[root@localhost ~]# ethtool -s ens17f0
[root@localhost ~]# ethtool -i ens17f0
driver: txgbe
version: 1.3.4
firmware-version: 0x85320010
expansion-rom-version:
bus-info: 0000:98:00.0
supports-statistics: yes
supports-test: yes
supports-eeprom-access: yes
supports-register-dump: yes
supports-priv-flags: yes
[root@localhost ~]# ./wxtool_x86 show -s 98:00.0 -i
98:00.0 Class 0200: Device 8088:1001 (rev 03)

chip status: ok
flash status: ok
Cab0 0: c000003f
Flash 0:        5aa54000
fw version:     85320010
fw init:        00000133
wol:    disable
ncsi:   enable
oprom arch:     arm64/x86
TX_EQ:  40 - 0 - 0
image_name:RP1000[ncsi]
```

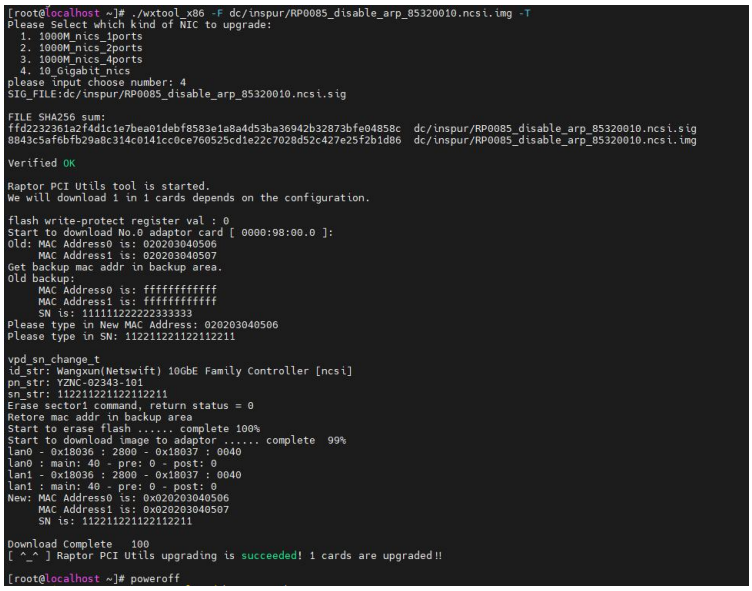
```
[root@localhost ~]#
[root@localhost ~]# lspci -s 61:00.0 -vvv
61:00.0 Ethernet controller: Beijing Wangxun Technology Co., Ltd. Ethernet Controller RP1000 for 10GbE SFP+ (rev 03)
        Subsystem: Device 1ff9:0085
        Control: I/O- Mem+ BusMaster+ SpecCycle- MemWINV- VGASnoop- ParErr- Stepping- SERR- FastB2B- DisINTx+
        Status: Cap+ 66MHz- UDF- FastB2B- ParErr- DEVSEL=fast >TAbort- <TAbort- <MAbort- >SERR- <PERR- INTx-
        Latency: 0
        Interrupt: pin A routed to IRQ 89
        NUMA node: 3
        Region 0: Memory at e4c20000 (64-bit, non-prefetchable) [size=128K]
        Region 4: Memory at e4e44000 (64-bit, non-prefetchable) [size=16K]
        Expansion ROM at e4b80000 [disabled] [size=512K]
        Capabilities: [40] Power Management version 3
                Flags: PMEClk- DSI- D1- D2- AuxCurrent=375mA PME(D0+,D1-,D2-,D3hot+,D3cold+)
                Status: D0 NoSoftRst- PME-Enable- DSel=0 DScale=0 PME-
        Capabilities: [50] MSI: Enable- Count=1/1 Maskable+ 64bit+
                Address: 0000000000000000  Data: 0000
                Masking: 00000000  Pending: 00000000
        Capabilities: [70] Express (v2) Endpoint, MSI 00
                DevCap: MaxPayload 512 bytes, PhantFunc 0, Latency L0s unlimited, L1 unlimited
                        ExtTag+ AttnBtn- AttnInd- PwrInd- RBE+ FLReset+ SlotPowerLimit 0.000W
                DevCtl: CorrErr+ NonFatalErr+ FatalErr+ UnsupReq-
                        RlxdOrd+ ExtTag+ PhantFunc- AuxPwr- NoSnoop+ FLReset-
                        MaxPayload 512 bytes, MaxReadReq 256 bytes
                DevSta: CorrErr+ NonFatalErr- FatalErr- UnsupReq+ AuxPwr+ TransPend-
                LnkCap: Port #0, Speed 8GT/s, Width x8, ASPM L0s L1, Exit Latency L0s <512ns, L1 <4us
                        ClockPM- Surprise- LLActRep- BwNot- ASPMOptComp+
                LnkCtl: ASPM Disabled; RCB 64 bytes Disabled- CommClk+
                        ExtSynch- ClockPM- AutWidDis- BWInt- AutBWInt-
                LnkSta: Speed 8GT/s (ok), Width x8 (ok)
                        TrErr- Train- SlotClk+ DLActive- BWMgmt- ABWMgmt-
                DevCap2: Completion Timeout: Not Supported, TimeoutDis+, LTR-, OBFF Not Supported
                         AtomicOpsCap: 32bit- 64bit- 128bitCAS-
                DevCtl2: Completion Timeout: 50us to 50ms, TimeoutDis+, LTR-, OBFF Disabled
                         AtomicOpsCtl: ReqEn-
                LnkCtl2: Target Link Speed: 8GT/s, EnterCompliance- SpeedDis-
                         Transmit Margin: Normal Operating Range, EnterModifiedCompliance- ComplianceSOS-
                         Compliance De-emphasis: -6dB
                LnkSta2: Current De-emphasis Level: -3.5dB, EqualizationComplete+, EqualizationPhase1+
                         EqualizationPhase2+, EqualizationPhase3+, LinkEqualizationRequest-
        Capabilities: [b0] MSI-X: Enable+ Count=64 Masked-
                Vector table: BAR=4 offset=00000000
                PBA: BAR=4 offset=00002000
        Capabilities: [d0] Vital Product Data
                Product Name: Ethernet Adapter ENFW1101-T2 for 10GbE, Wangxun SP1000A Controller
                Read-only fields:
                        [PN] Part number: YZNC-02343-109
                        [SN] Serial number: SN-123456789
                        [RV] Reserved: checksum good, 4 byte(s) reserved
                End
        Capabilities: [100 v2] Advanced Error Reporting
                UESta:  DLP- SDES- TLP- FCP- CmpltTO- CmpltAbrt- UnxCmplt- RxOF- MalfTLP- ECRC- UnsupReq- ACSViol-
```

```
        Capabilities: [148 v1] Alternative Routing-ID Interpretation (ARI)
                ARICap: MFVC- ACS-, Next Function: 1
                ARICtl: MFVC- ACS-, Function Group: 0
        Capabilities: [158 v1] #19
        Capabilities: [178 v1] Single Root I/O Virtualization (SR-IOV)
                IOVCap: Migration-, Interrupt Message Number: 000
                IOVCtl: Enable- Migration- Interrupt- MSE- ARIHierarchy+
                IOVSta: Migration-
                Initial VFs: 64, Total VFs: 64, Number of VFs: 0, Function Dependency Link: 00
                VF offset: 128, stride: 2, Device ID: 1000
                Supported Page Size: 00000553, System Page Size: 00000001
                Region 0: Memory at 00000000db940000 (64-bit, non-prefetchable)
                Region 4: Memory at 00000000db840000 (64-bit, non-prefetchable)
                VF Migration: offset: 00000000, BIR: 0
        Capabilities: [1b8 v1] Transaction Processing Hints
                Device specific mode supported
                No steering table available
        Capabilities: [244 v1] Vendor Specific Information: ID=0001 Rev=1 Len=038 <?>
        Kernel driver in use: txgbe
        Kernel modules: txgbe
```

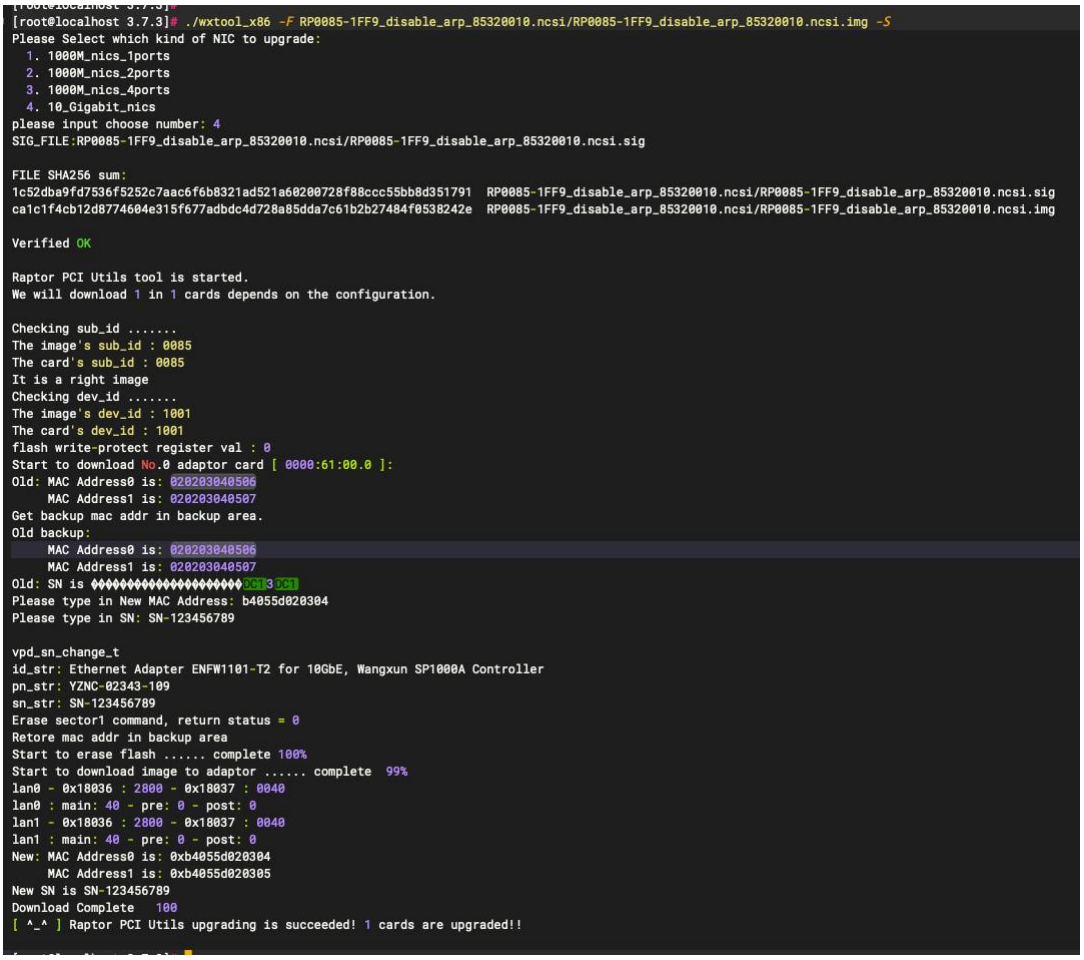
2.2 烧录测试

使用 wxtool3.7.2 进行固件烧录：

烧录 RP0085_disable_arp_85320010.ncsi.img 固件



烧录 RP0085_disable_arp_85320010.ncsi.img 固件



2.3 NCSI

1、设备初始化测试:

测试步骤:

a. 不插电源，网卡网口不插网线，插上电源，等待 bmc 初始化完成，网口 0/1 插上网线,查看 ip 通信情况；

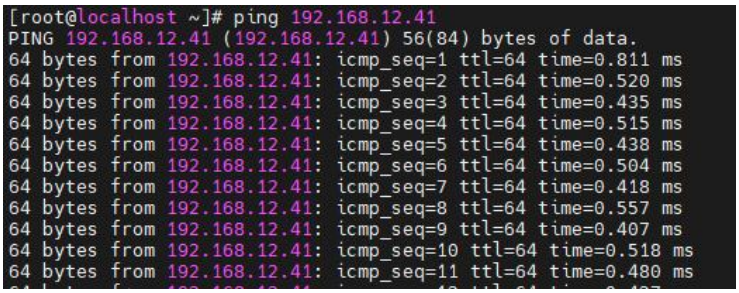
b.不插电源，网卡网口 0 插上网线，插上电源，等待 bmc 初始化完成，观察现象；

c.不插电源，网卡网口 1 插上网线，插上电源，等待 bmc 初始化完成，观察现象；

d.不插电源，所有网口都插网线，插上电源，等待 bmc 初始化完成，网口 0/1 插上网线观察现象。

测试结果:

Bmc 可以识别到网卡，有虚拟网口 eth0/1； bmc 对应的板载卡的网口，能获取到动态 ip，或者手动配的静态 ip，可以 ping 通



2、网口插拔测试

测试步骤：

在系统初始化完成的基础上，长 ping BMC 上的 eth1 的 ip 地址，然后循环 0-1 插拔换口。

测试结果：

插拔网口中间会断 ping 几秒，然后恢复正常。

3、系统启动测试

测试步骤：

a. OS 下执行 reboot；

b.BMC 远程登录，网页上点击硬重启；

c.OS 下重启，在 BIOS 界面重启（ctrl+alt+del）；

d. OS 下执行 poweroff。

测试结果：

关机的整个过程，BMC eth1（板载卡对应的网口）的 ip 地址可以一直 ping 通。

4、OS 下驱动测试

测试步骤：

a.加载/卸载驱动：rmmod txgbe，modprobe txgbe；

b.down/up 网口；

c.强制切换速率。

测试结果：

BMC eth1 的 ip 地址可以一直 ping 通。

```
64 bytes from 192.168.12.41: icmp_seq=26 ttl=64 time=0.408 ms
64 bytes from 192.168.12.41: icmp_seq=27 ttl=64 time=0.417 ms
From 192.168.12.140 icmp_seq=47 Destination Host Unreachable
From 192.168.12.140 icmp_seq=48 Destination Host Unreachable
From 192.168.12.140 icmp_seq=49 Destination Host Unreachable
From 192.168.12.140 icmp_seq=50 Destination Host Unreachable
From 192.168.12.140 icmp_seq=51 Destination Host Unreachable
From 192.168.12.140 icmp_seq=52 Destination Host Unreachable
From 192.168.12.140 icmp_seq=53 Destination Host Unreachable
From 192.168.12.140 icmp_seq=54 Destination Host Unreachable
From 192.168.12.140 icmp_seq=55 Destination Host Unreachable
From 192.168.12.140 icmp_seq=56 Destination Host Unreachable
From 192.168.12.140 icmp_seq=57 Destination Host Unreachable
From 192.168.12.140 icmp_seq=58 Destination Host Unreachable
From 192.168.12.140 icmp_seq=59 Destination Host Unreachable
From 192.168.12.140 icmp_seq=60 Destination Host Unreachable
From 192.168.12.140 icmp_seq=61 Destination Host Unreachable
From 192.168.12.140 icmp_seq=62 Destination Host Unreachable
From 192.168.12.140 icmp_seq=63 Destination Host Unreachable
From 192.168.12.140 icmp_seq=64 Destination Host Unreachable
From 192.168.12.140 icmp_seq=65 Destination Host Unreachable
From 192.168.12.140 icmp_seq=66 Destination Host Unreachable
From 192.168.12.140 icmp_seq=67 Destination Host Unreachable
From 192.168.12.140 icmp_seq=68 Destination Host Unreachable
From 192.168.12.140 icmp_seq=69 Destination Host Unreachable
From 192.168.12.140 icmp_seq=70 Destination Host Unreachable
From 192.168.12.140 icmp_seq=71 Destination Host Unreachable
From 192.168.12.140 icmp_seq=72 Destination Host Unreachable
From 192.168.12.140 icmp_seq=73 Destination Host Unreachable
From 192.168.12.140 icmp_seq=74 Destination Host Unreachable
From 192.168.12.140 icmp_seq=75 Destination Host Unreachable
From 192.168.12.140 icmp_seq=76 Destination Host Unreachable
From 192.168.12.140 icmp_seq=77 Destination Host Unreachable
From 192.168.12.140 icmp_seq=78 Destination Host Unreachable
From 192.168.12.140 icmp_seq=79 Destination Host Unreachable
From 192.168.12.140 icmp_seq=80 Destination Host Unreachable
From 192.168.12.140 icmp_seq=81 Destination Host Unreachable
From 192.168.12.140 icmp_seq=82 Destination Host Unreachable
From 192.168.12.140 icmp_seq=83 Destination Host Unreachable
From 192.168.12.140 icmp_seq=84 Destination Host Unreachable
From 192.168.12.140 icmp_seq=85 Destination Host Unreachable
From 192.168.12.140 icmp_seq=86 Destination Host Unreachable
From 192.168.12.140 icmp_seq=87 Destination Host Unreachable
From 192.168.12.140 icmp_seq=88 Destination Host Unreachable
From 192.168.12.140 icmp_seq=89 Destination Host Unreachable
From 192.168.12.140 icmp_seq=90 Destination Host Unreachable
64 bytes from 192.168.12.41: icmp_seq=91 ttl=64 time=2684 ms
64 bytes from 192.168.12.41: icmp_seq=92 ttl=64 time=1684 ms
64 bytes from 192.168.12.41: icmp_seq=93 ttl=64 time=684 ms
```

2.4 网卡稳定性测试

1. Ifconfig ethx down/up 1000 次，插拔网线测试，无异常现象。部分脚本示例如下：

```
##Sapphire dual Ports check, and return status, result
os.system("ifconfig %s  down" % sp_net_devs[0])
os.system("ifconfig %s 10.10.10.5/24 up"%sp_net_devs[0])
time.sleep(3)

status, result = subprocess.getstatusoutput("ping 10.10.10.10 -c 2")
if status == 0:
    result = result.split("\n")
    #print(result)
else:
    print("DEBUG: ping cmd failed")
    os.system("echo 'ping cmd failed..' >> test_result.log")
    break

ping_flag = 0
os.system("ethtool %s"%sp_net_devs[0])
for i in result:
    print(i)
    if "64 bytes from" in i:
        ping_flag = 1
if ping_flag == 1:
    print("eth0 ping passed...")
    os.system("echo 'eth0 ping pass..' >> test_result.log")
    os.system("echo `ethtool %s` >> linstatus.log" % sp_net_devs[0])
else:
    print("eth0 ping failed...")
    os.system("echo `ethtool %s` >> linstatus.log" % sp_net_devs[0])
```

2. 卸载加载驱动 1000 次，无异常现象。部分脚本示例如下：

```
for i in range(1000):
    print "====This is ",i,"times===="
    os.system("rmmod %s" % driver_name)
    time.sleep(2)
    os.system("modprobe %s" % driver_name)
    time.sleep(1)
```

```
enp129s0f0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
1234 times enp129s0f0 PASS,continue drive-test
enp129s0f1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
1234 times enp129s0f1 PASS,continue drive-test
enp129s0f0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
1235 times enp129s0f0 PASS,continue drive-test
enp129s0f1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
1235 times enp129s0f1 PASS,continue drive-test
enp129s0f0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
1236 times enp129s0f0 PASS,continue drive-test
enp129s0f1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
1236 times enp129s0f1 PASS,continue drive-test
```

3.问题测试

问题现象：

将两个口都接上线缆，bmc 下的 ncsi 模式设置为自动故障切换模式，就无法获取到 sharelink IP，只接一个口时，可以正常获取 sharelink ip

原因分析：

适配其他 BMC 系统时，修改了 cm3 下发命令，原本固件里 cmd3 一次只允许一个口配置

问题复现：

烧录问题固件 RP0085_80320010.ncsi.img，将两个网口同时接入网络，查看共享口 ip 状态，共享口 ip 无法获取

```
[root@localhost ~]# ./wxtool_x86 -F dc/inspur/RP0085_80320010.ncsi.img
Please Select which kind of NIC to upgrade:
  1. 1000M_nics_1ports
  2. 1000M_nics_2ports
  3. 1000M_nics_4ports
  4. 10_Gigabit_nics
please input choose number: 4
SIG_FILE:dc/inspur/RP0085_80320010.ncsi.sig

FILE SHA256 sum:
d31ab99f264c3b9bab63c8f88404d40b58d6db5e4cb39959d5aa76bedcbcde2c  dc/inspur/RP0085_80320010.ncsi.sig
fd711a787b53da44ba3fa125125c1fde2a3b6aafb35f74f136815a90107f58a0  dc/inspur/RP0085_80320010.ncsi.img

Verified OK

Raptor PCI Utils tool is started.
We will download 1 in 1 cards depends on the configuration.

Checking sub_id .......
The image's sub_id : 0085
The card's sub_id : 0085
It is a right image
Checking dev_id .......
The image's dev_id : 1001
The card's dev_id : 1001
flash write-protect register val : 0
Start to download No.0 adaptor card [ 0000:98:00.0 ]:
Old: MAC Address0 is: 020203040506
     MAC Address1 is: 020203040507
Get backup mac addr in backup area.
Old backup:
     MAC Address0 is: 020203040506
     MAC Address1 is: 020203040507
     SN is: 11221122112211211
Please type in New MAC Address: 020203040506
Please type in SN: 111122223333444455

vpd_sn_change_t
id_str: Wang Xun 10GbE Family Controller
pn_str: YZNC-02343-101
sn_str: 111122223333444455
Erase sector1 command, return status = 0
Retore mac addr in backup area
Start to erase flash ...... complete 100%
Start to download image to adaptor ...... complete  99%
lan0 - 0x18036 : 2800 - 0x18037 : 0040
lan0 : main: 40 - pre: 0 - post: 0
lan1 - 0x18036 : 2800 - 0x18037 : 0040
lan1 : main: 40 - pre: 0 - post: 0
New: MAC Address0 is: 0x020203040506
     MAC Address1 is: 0x020203040507
     SN is: 111122223333444455

Download Complete   100
[ ^_^ ] Raptor PCI Utils upgrading is succeeded! 1 cards are upgraded!!
```

```
[root@localhost ~]# ipmitool lan print 8
Set in Progress         : Set Complete
Auth Type Support       : MD5
Auth Type Enable        : Callback : MD5
                        : User     : MD5
                        : Operator : MD5
                        : Admin    : MD5
                        : OEM      : MD5
IP Address Source       : DHCP Address
IP Address              : 0.0.0.0
Subnet Mask             : 0.0.0.0
MAC Address             : 9c:c2:c4:0c:95:de
SNMP Community String   : AMI
IP Header               : TTL=0x40 Flags=0x40 Precedence=0x00 TOS=0x10
BMC ARP Control         : ARP Responses Enabled, Gratuitous ARP Disabled
Gratituous ARP Intrvl   : 0.0 seconds
Default Gateway IP      : 0.0.0.0
Default Gateway MAC     : 00:00:00:00:00:00
Backup Gateway IP       : 0.0.0.0
Backup Gateway MAC      : 00:00:00:00:00:00
802.1q VLAN ID          : Disabled
802.1q VLAN Priority    : 0
RMCP+ Cipher Suites     : 0,1,2,3,6,7,8,11,12,15,16,17
Cipher Suite Priv Max   : caaaaaaaaaaaXXX
                        :     X=Cipher Suite Unused
                        :     c=CALLBACK
                        :     u=USER
                        :     o=OPERATOR
                        :     a=ADMIN
                        :     O=OEM
Bad Password Threshold  : 3
Invalid password disable: yes
Attempt Count Reset Int.: 200
User Lockout Interval   : 300
```

烧录新版固件，该问题解决

```
[root@localhost ~]# ./wxtool_x86 -F dc/inspur/RP0085-1FF9_disable_arp_85320010.ncsi.img
Please Select which kind of NIC to upgrade:
  1. 1000M_nics_1ports
  2. 1000M_nics_2ports
  3. 1000M_nics_4ports
  4. 10_Gigabit_nics
please input choose number: 4
SIG_FILE:dc/inspur/RP0085-1FF9_disable_arp_85320010.ncsi.sig

FILE SHA256 sum:
227d53b8472c545650679b6e0946da67b3c1a3ffa9e4dc71db4ac068b3338c0d  dc/inspur/RP0085-1FF9_disable_arp_85320010.ncsi.sig
ba2bdba6201d1b5d546d40625bf4403bcaf49b01e7cd19330a846d4558fb1317  dc/inspur/RP0085-1FF9_disable_arp_85320010.ncsi.img

Verified OK

Raptor PCI Utils tool is started.
We will download 1 in 1 cards depends on the configuration.

Checking sub_id .......
The image's sub_id : 0085
The card's sub_id : 0085
It is a right image
Checking dev_id .......
The image's dev_id : 1001
The card's dev_id : 1001
flash write-protect register val : 0
Start to download No.0 adaptor card [ 0000:98:00.0 ]:
Old: MAC Address0 is: 020203040506
     MAC Address1 is: 020203040507
Get backup mac addr in backup area.
Old backup:
     MAC Address0 is: 020203040506
     MAC Address1 is: 020203040507
     SN is: 111122223333444455
Please type in New MAC Address: 020203040506
Please type in SN: 111122223333222211

vpd_sn_change_t
id_str: Ethernet Adapter ENFW1101-T2 for 10GbE, Wangxun SP1000A Controller              [ncsi]
pn_str: YZNC-02343-109
sn_str: 111122223333222211
Erase sector1 command, return status = 0
Retore mac addr in backup area
Start to erase flash ...... complete 100%
Start to download image to adaptor ...... complete  99%
lan0 - 0x18036 : 2800 - 0x18037 : 0040
lan0 : main: 40 - pre: 0 - post: 0
lan1 - 0x18036 : 2800 - 0x18037 : 0040
lan1 : main: 40 - pre: 0 - post: 0
New: MAC Address0 is: 0x020203040506
     MAC Address1 is: 0x020203040507
     SN is: 111122223333222211

Download Complete   100
[ ^_^ ] Raptor PCI Utils upgrading is succeeded! 1 cards are upgraded!!
```

```
[root@localhost ~]# ipmitool lan print 8
Set in Progress         : Set Complete
Auth Type Support       : MD5
Auth Type Enable        : Callback : MD5
                        : User     : MD5
                        : Operator : MD5
                        : Admin    : MD5
                        : OEM      : MD5
IP Address Source       : DHCP Address
IP Address              : 192.168.12.41
Subnet Mask             : 255.255.255.0
MAC Address             : 9c:c2:c4:0c:95:df
SNMP Community String   : AMI
IP Header               : TTL=0x40 Flags=0x40 Precedence=0x00 TOS=0x10
BMC ARP Control         : ARP Responses Enabled, Gratuitous ARP Disabled
Gratituous ARP Intrvl   : 0.0 seconds
Default Gateway IP      : 192.168.12.1
Default Gateway MAC     : 3c:c7:86:34:b4:ad
Backup Gateway IP       : 0.0.0.0
Backup Gateway MAC      : 00:00:00:00:00:00
802.1q VLAN ID          : Disabled
802.1q VLAN Priority    : 0
RMCP+ Cipher Suites     : 0,1,2,3,6,7,8,11,12,15,16,17
Cipher Suite Priv Max   : caaaaaaaaaaaXXX
                        :     X=Cipher Suite Unused
                        :     c=CALLBACK
                        :     u=USER
                        :     o=OPERATOR
                        :     a=ADMIN
                        :     O=OEM
Bad Password Threshold  : 3
Invalid password disable: yes
Attempt Count Reset Int.: 200
User Lockout Interval   : 300
```