Interrupt problems with DAP FireAdapter and FireTrac products with Linux kernel and Xeon chipsets

Linux kernel version 5.6.5 and newer will disable boot interrupts on certain Intel Xeon E5/E7 v2, v3 and v4 platforms. This is to work around another potential problem where the system chipset can trigger boot interrupts due to threaded interrupt handling and masking of the IO-APIC. This change was backported by RedHat into RHEL 8.4 kernel 4.18.0-305.el8.

Disabling IRQs will break interrupt handling of any PCI or PCI Express device using this mechanism of interrupt delivery. This includes all FireAdapters and most FireTracs.

Systems with affected kernel version and system chipset have the following message in their boot log:

```
# dmesg | grep "disabled boot interrupts on device"
[   10.123072] pci 0000:00:05.0: disabled boot interrupts on device [194a:1201]
```

An attempt to open a 1394 bus with `fxCreateBusHandle()` will result in error -31: “Device Interrupt Handling Failed”

If you are using any of the mentioned DAP products on a system with Intel 6300ESB chipset and affected Linux kernel, you can add the following kernel command-line parameter to your bootloader configuration to restore the old behavior:

pci=noioapicquirk

References:

1. Linux commit 9ad284c07611ed3802eb05af43e74201f13df839: https://cdn.kernel.org/pub/linux/kernel/v5.x/ChangeLog-5.6.5
2. RedHat bug 1978379: https://bugzilla.redhat.com/show_bug.cgi?format=multiple&id=1978379
3. SUSE SLES 15SP4 Release Notes: “Loading lpfc driver in INTx mode”: https://www.suse.com/releasenotes/x86_64/SUSE-SLES/15-SP4/index.html