

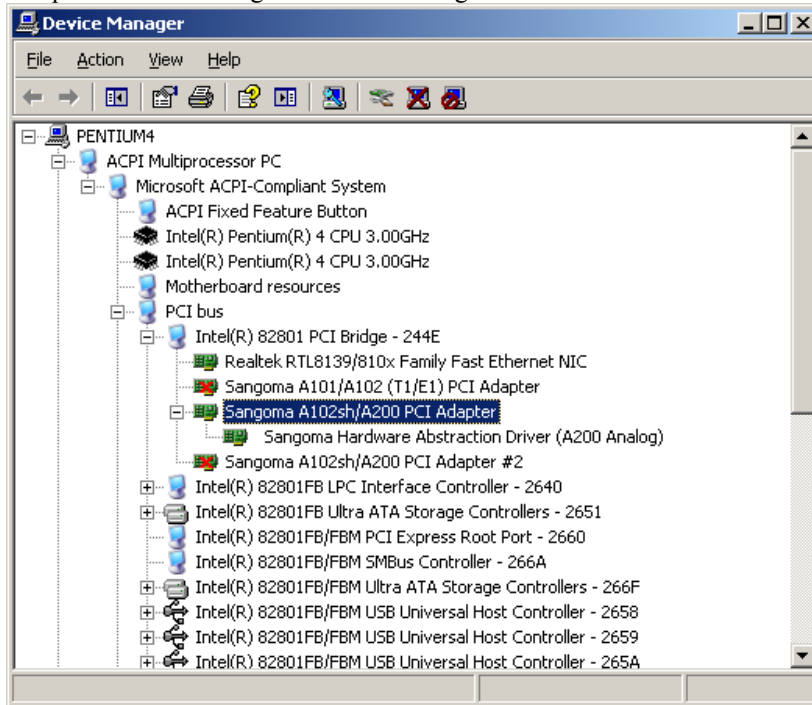
File version : 1.0.0.1  
Date : September 23, 2010.

AFT Firmware Upgrade procedure on Windows XP/2003/Vista/2008/7.

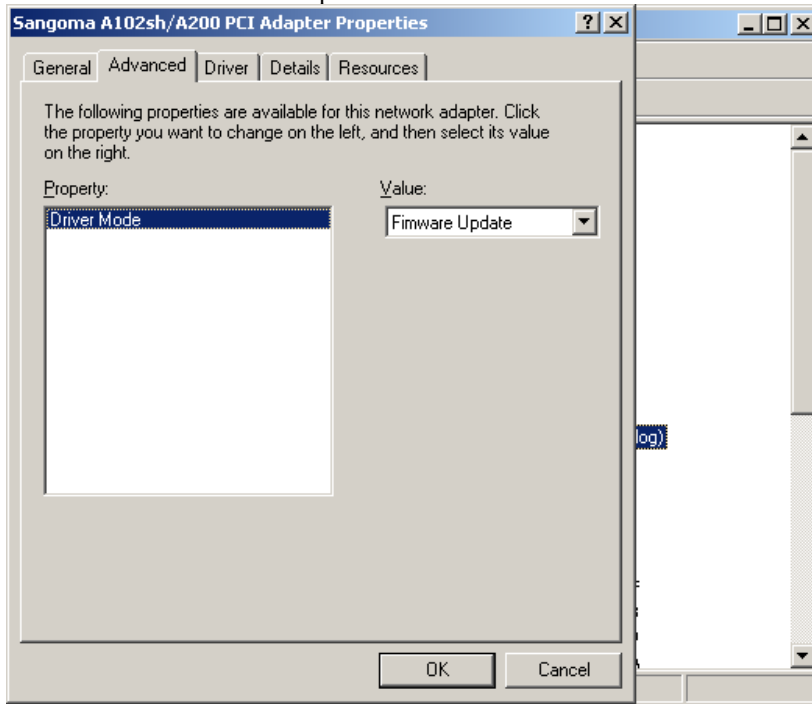
1. Exit ALL applications which use Sangoma Cards/API.

NOTE: Do not turn off your computer or terminate the upgrade process while it is running.

2. Open "Device Manager" and select Sangoma card:

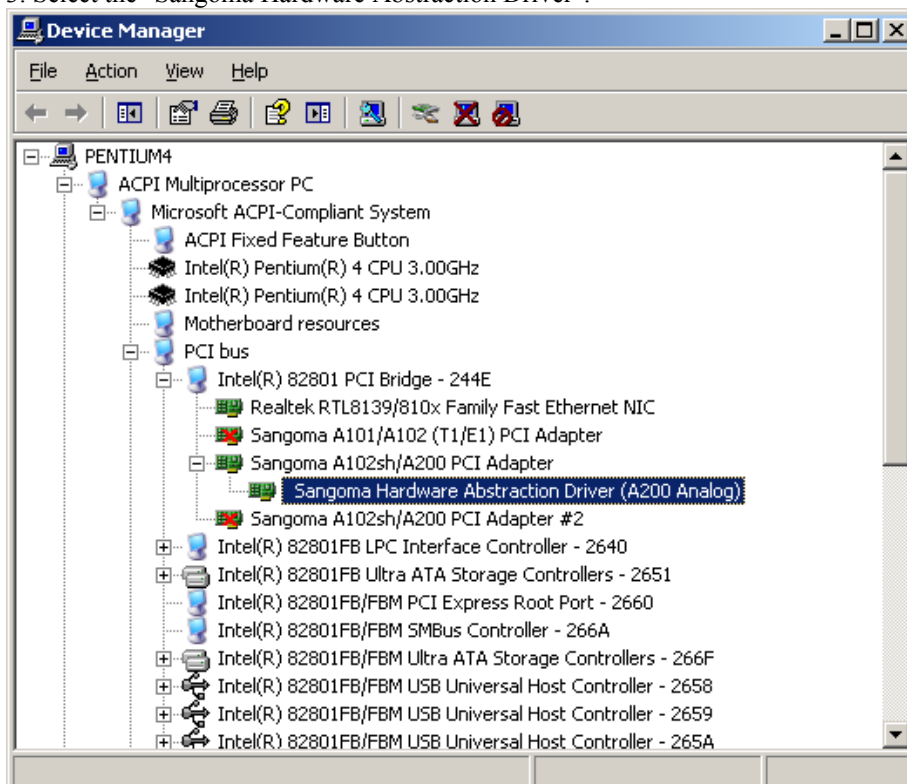


2. Open Properties of the Sangoma card and change Driver Mode to "Firmware Update":

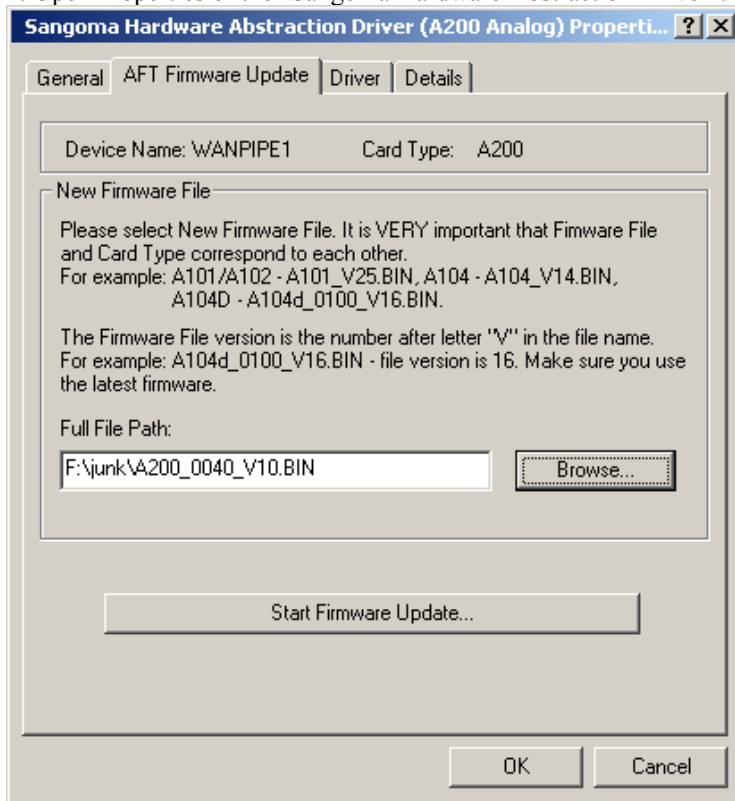


Click on "OK".

3. Select the "Sangoma Hardware Abstraction Driver (A200 Analog)":



4. Open Properties of the "Sangoma Hardware Abstraction Driver":



Browse to the Firmware file you want to use for the upgrade and click on "Start Firmware Update..." button.

Please note: card's PCI ID will be changed by firmware update!

After the upgrade is complete it is important to Power Down/Up the system (Not a Restart).

After system Power Down/Up cycle, Windows PnP system will recognize the card as a "New Device" and will ask for drivers for this "New Device".

Cancel the automatic install and perform the driver 'Upgrade' procedure, as it described in INSTALL.doc or in INSTALL.pdf.

OPTIONAL:

When multiple cards of the **same** type installed on a system, it is possible to run Command-line Firmware Upgrade using wanrouter.exe utility (**without using Device Manager at all**):

```
wanrouter fw_update <Card Model> <Firmware File>
```

Update Firmware of **all** cards of model <Card Model> to the **same** firmware file <Firmware File>.

<Card Model> can be: a101, a102, a104, a108, a200, a400, a500, a140, a56, b600, b700

<Firmware File> is a full path to firmware file appropriate for the <Card Model>

1. Exit ALL applications which use Sangoma Cards/API.

2. Open Command Window and run wanrouter.exe utility.

Examples:

To update all A108 cards in the system:

```
wanrouter fw_update a108 "c:\tmp\A108dm_0100_V43.BIN"
```

To update all A200 cards in the system:

```
wanrouter fw_update a200 "c:\tmp\A200_0040_V13.BIN"
```

3. After the upgrade is complete it is important to Power Down/Up the system (Not a Restart).

After system Power Down/Up cycle, Windows PnP system will recognize the card as a "New Device" and will ask for drivers for this "New Device".

Cancel the automatic install and perform the driver 'Upgrade' procedure, as it described in INSTALL.doc or in INSTALL.pdf.

Note that for A108, starting from firmware V43, the PCI ID will not change after the Upgrade, and Driver re-install will not be necessary. That means transition from V43 to V44 will not change PCI ID, but transition from an earlier version to V43 will still change the PCI ID.