Getting Via VT6410/VT6420/VT6421 SATA-controllers to work

- Your computer does not show any BIOS-Information to configure your add-on SATA card? Here is my solution that worked for my VT4610 powered wintech card. -

Use this tutorial at your own risk. I will not be responsible for any mis-flashes or "DEAD" systems. Remember you are using this tutorial entirely at your own risk. The information presented here may not work for you. If you are not comfortable modifing BIOS's and flashing them, do not attempt to modify them. If you cannot recover from a "bad flash", do not attempt any BIOS mod.

There seem to be some issues with the VT6410-based controllers. They should work out of the box, but on some computers they don't. This was really a hard piece of work to figure out why it's not working and how to get it working finally. But I did it :-).
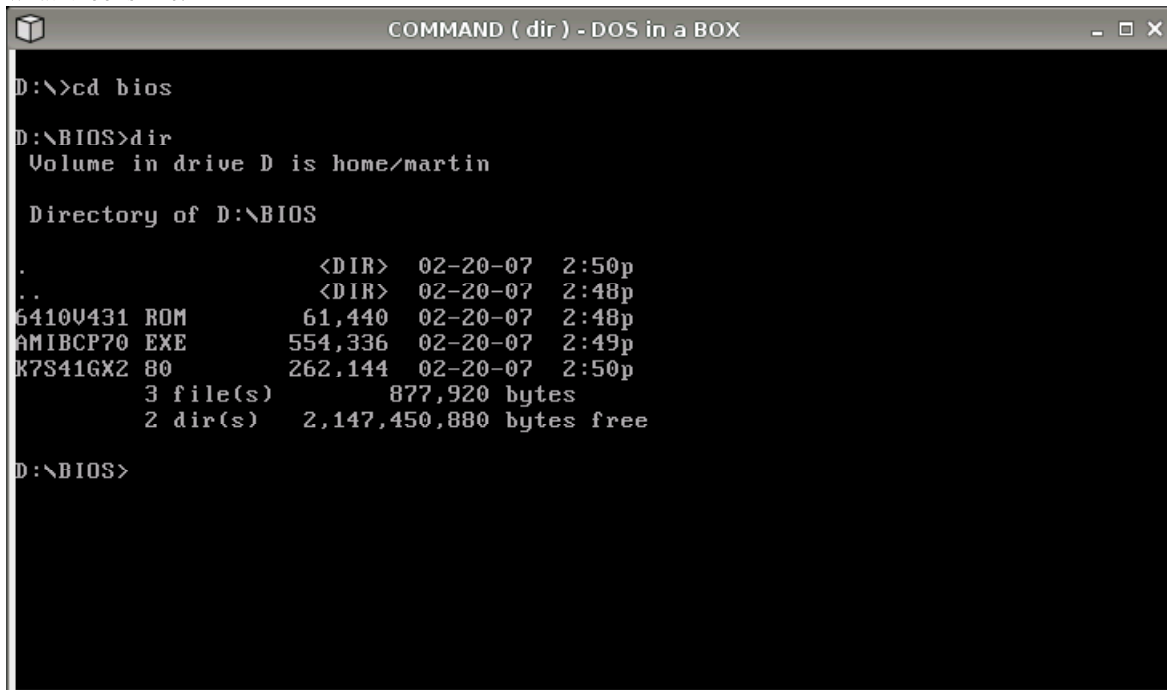
Requirements

- BIOS-Firmware for your motherboard (In my case it was an Asrock K7S41GX Mobo)
- Software to modify that original Firmware (AMI: amibcp / AWARD: Cbrom6 -> search google for it)
- VT64xx-Firmware (get it from Viaarena: VIA_RAID_V410a.zip)
  - http://www.viaarena.com/downloads/drivers/RAID/VIA_RAID_V410a.zip
- Bootdisk for BIOS-Flashing (get one @bootdisk.com)
- BIOS-Flash-Tool (AMI: / AWARD:)

What we will do

The problem with these budget-SATA controllers seems to be that their BIOS is not not booted by the system-BIOS. So we will integrate that piece of sw into our systembios and see if thats fixing it.
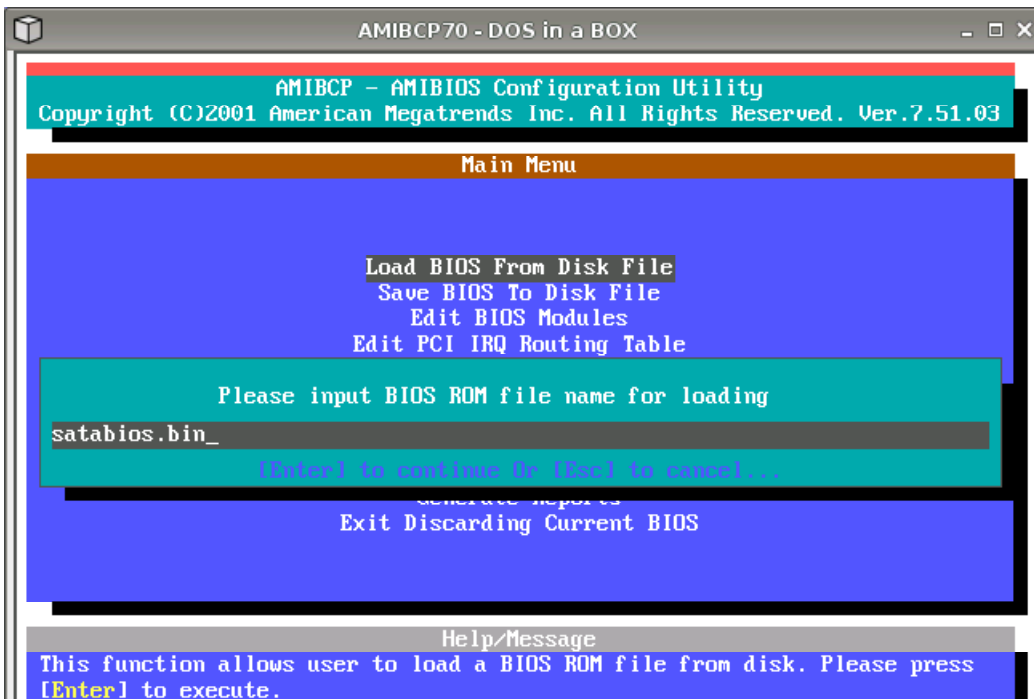
Let's do it

Get the software mentioned and unpack it to a directory of your choice. In my case I created a directory named bios. Here is what it looks like:
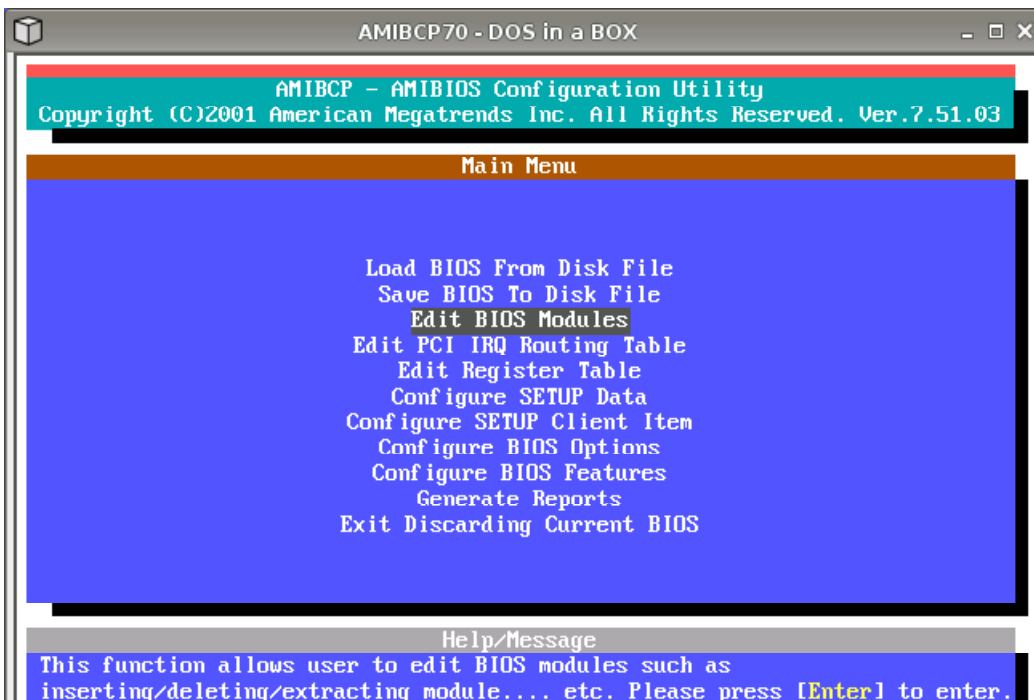
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COMMAND ( dir ) - DOS in a BOX                    _ □ ✕

D:\>cd bios

D:\BIOS>dir
 Volume in drive D is home/martin

 Directory of D:\BIOS

.                    <DIR>  02-20-07   2:50p
..                   <DIR>  02-20-07   2:48p
6410V431 ROM         61,440 02-20-07   2:48p
AMIBCP70 EXE        554,336 02-20-07   2:49p
K7S41GX2 80         262,144 02-20-07   2:50p
        3 file(s)        877,920 bytes
        2 dir(s)   2,147,450,880 bytes free

D:\BIOS>
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Next, I renamed 6410V341.rom (the VT6410 Firmware) to sata.rom and K7S41GX2.80 (System BIOS) to catbios.bin

Next, I renamed 6410V341.rom (the VT6410 Firmware) to sata.rom and K7S41GX2.80 (System-BIOS) to satabios.bin.
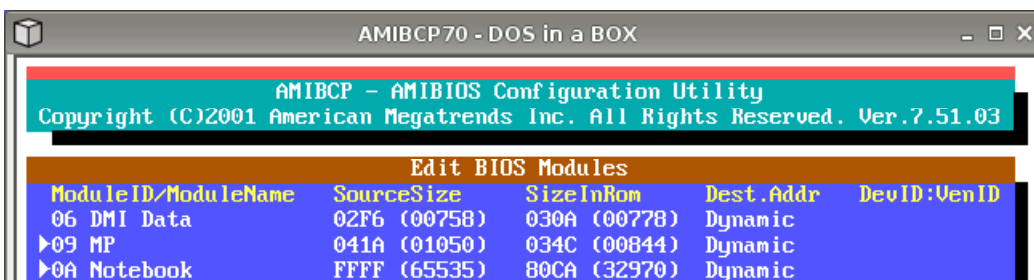
Now fire up AMIBCP and load your System-BIOS:
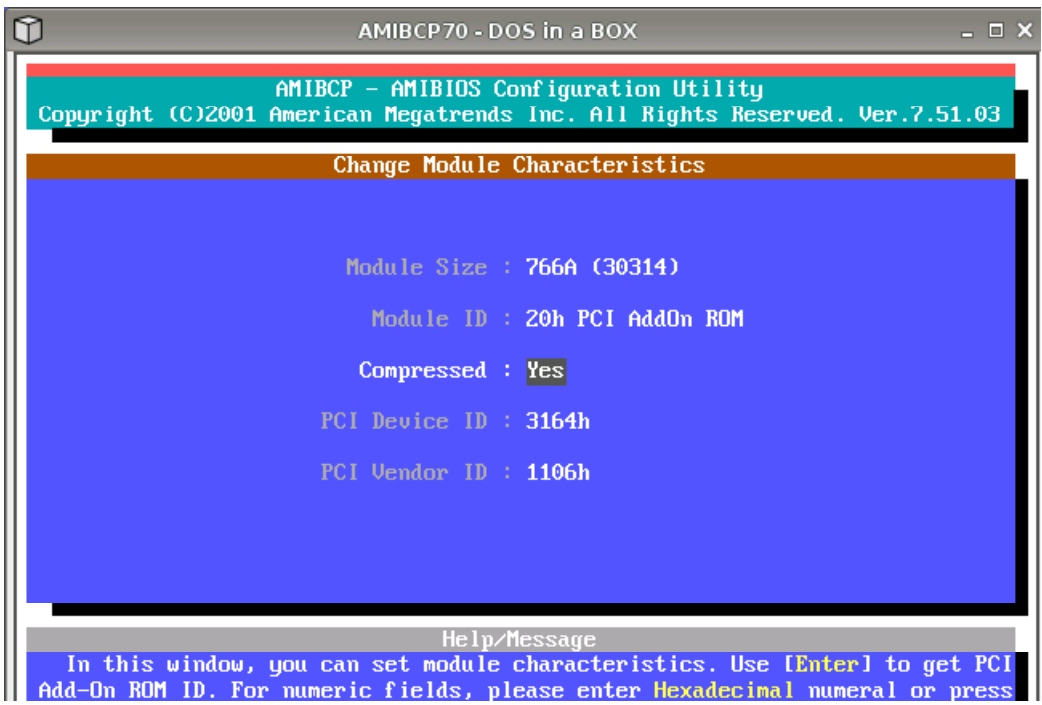

Next select "Edit BIOS Modules"

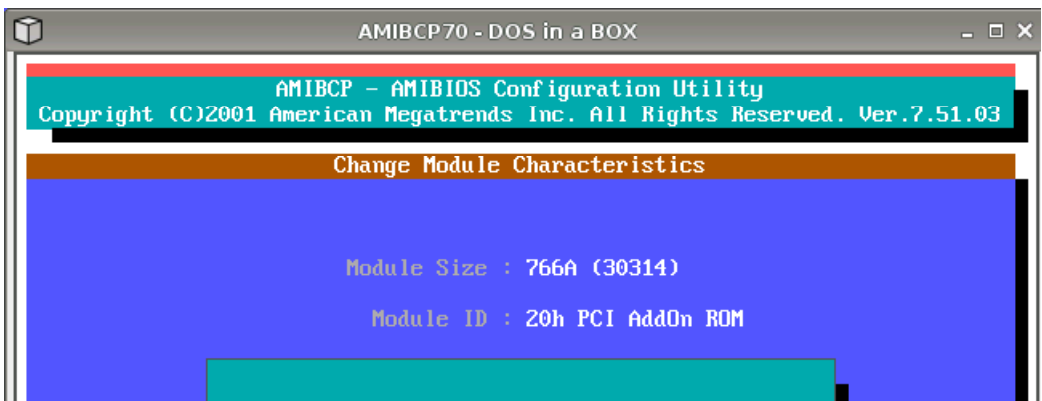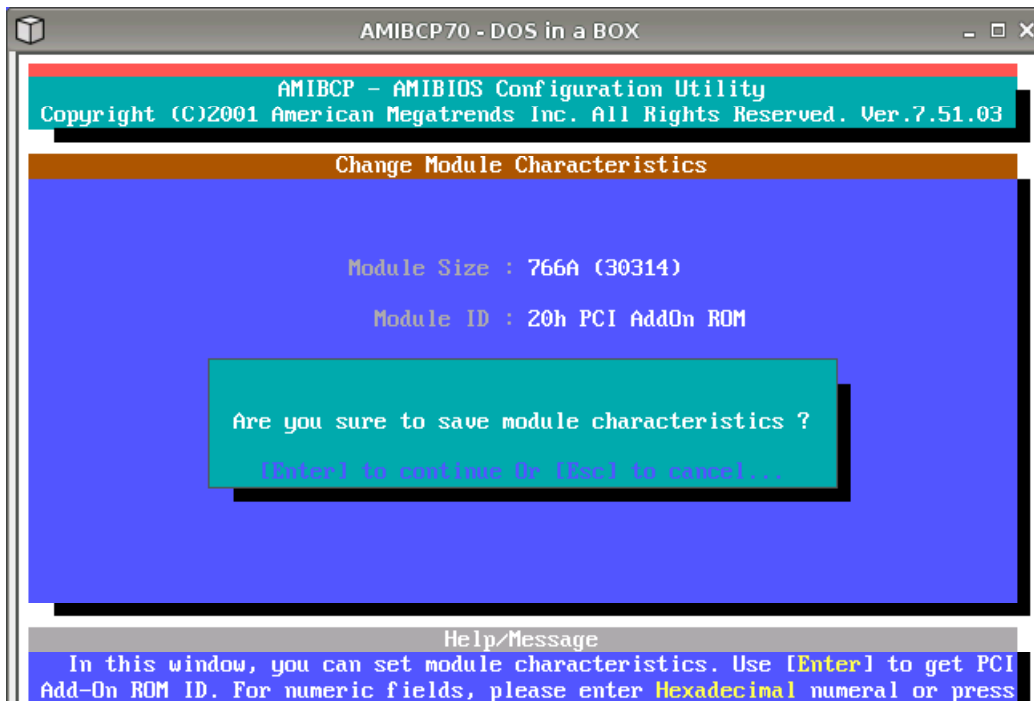Press "Insert" and open the sata.rom file:
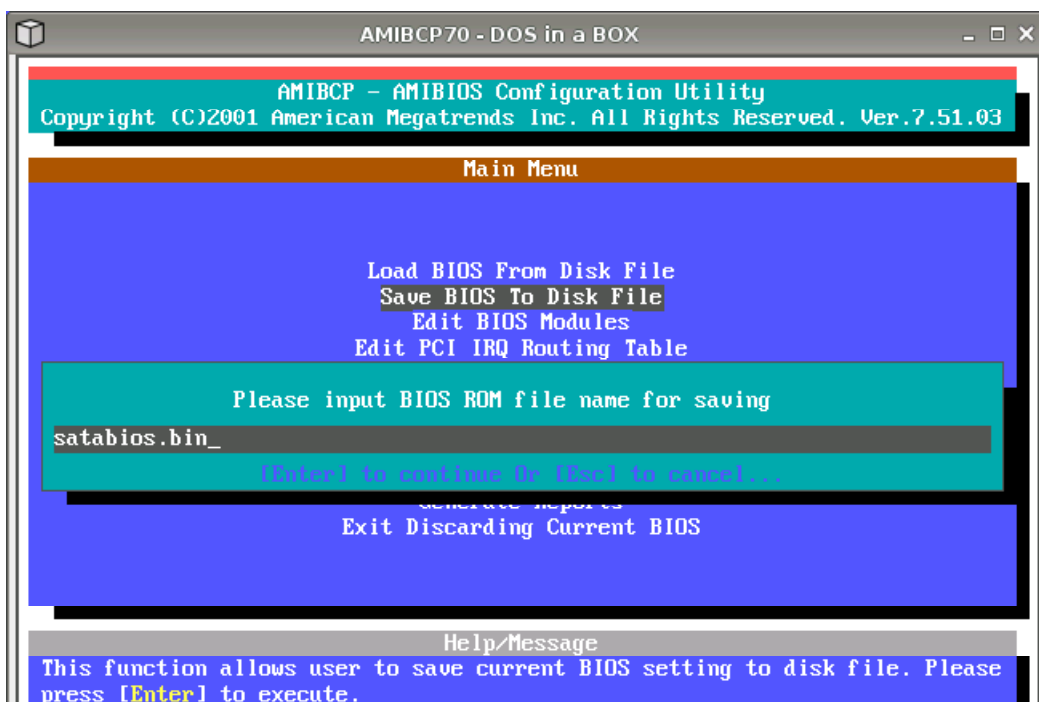
Compression is an good idea:

Now save module settings:

Go back to main menu & save new bios:

Finish

Copy your new BIOS to a floppy and do a BIOS-Update on your System-BIOS. Reboot & your SATA-Controller should show up :-)