Kickflash OS4 installation



installation

Plug the card with the component side up in an empty Zorro-slot of an A3000/A4000. In the A2000 the component side must face to the diskdrives.

clockport

This port lets you connect vaious expansions that have originally been designed for the Amiga 1200.. This connector has evolved into a standard that individual Computers has supported on many other Zorro cards. Adapted drivers for products like Silversurfer, VarIO and Delfina will follow shortly. Please mind that the orientation of the port is geared toward expansions by individual Computers, because other modules might not fir mechanically, or only fit the wrong way round. The Silversurfer for example only fits the right way round, but other expansions will not fit correctly. If you start the computer with such an improperly installed clockport module on Kickflash, the module and Kickflash might be damaged. This is the case with all clockport expansions by RBM, and for example the Melody1200. Please check back with the vendor of the clockport module to find out if it can work on Kickflash. Damages caused by wrong installation are of course not covered by the warranty. Should you have any doubts, either ask your reseller or send a message to our support through our contact form on the website www.ami.ga.

We recommend to keep the clockport free, because we'll deliver the expansion module for up to 1GB flash memory shortly.

<u>Jumper</u>

The jumper protects the flash memory from unwanted overwriting on accident. If it is not closed, the memory is protected. With the jumper set, programs in the flashsmemory will not be started automatically, so in case you have written false data into the flash, it's still possible to start the computer properly. The jumper can be hot-plugged, that means that it can be set and removed without switching the computer off. If you want to connect a switch (for example the turbo-switch of older tower cases), it can be done without any problem.

drivers

Kickflash OS4 is delivered without a driverdisk. The drivers can either be downloaded from www.ami.ga, or you can make the driverdisk on your own, because the data has been written to the flash memory of your kickflash card before it has been delivered to you. Format a disk with FFS, and leave it in drive df0:. The disk may not be write protected, and double-check that you've chosen FastFileSystem (FFS) as the filesystem! The name of the disk is not important, it's going to be changed when the driverdisk is made.

Restart your computer. Kickflash must be installed, the jumper must be open. Hold down the right mouse button while turning the computer on. Kickflash now writes the data to the disk, and confirm this with a green screen afterwards. If the screen turns red, something went wrong (for example a defectrive disk, disk is write-protected or something similar).

Now remove the disk from the drive, because the computer will be restarted automatically.

The disk now contains a file called "CoyoteFlash.lha". Unpack this archive, and install the software by double-clicking "install".

The Tool CoyoteFlash requires at least 3MB free memory to perform filesystemoperations. This work-buffer must be available in one chunk, so even if your workbench claims that your free memory is bigger than 3MB, the error message "not enough memory" can appear.

The 1MB flash memory of Kickflash is organized in a simple filesystem. The first sector must contain the "firmware", this can be found in the file "Firmware1.0" which can also be found in the archive "CoyoteFlash.lha". This firmware currently only allows installing the OS3.5 or OS3.9 Rom Updates, but not the installation of Kickstart-roms. This feature will be available starting with Firmware1.1 or higher.

Operations can be performed directly on the flash memory, or in the "Mirror", a copy of the flash memory in the workspace of your computer. Since the amount of write-and-erase cycles is limited on flash memory, we recommend always to prepare the contents of Kickflash in the mirror, and write it to the card when all changes are done. Although the amount of write cycles is fairly high with 100.000 (even with daily updates, it would last more than 27 years), we still recommend doing changes on the mirror, because it is a lot faster, and saves a lot of time. If you click on "flash load", the contents of the flash memory are transferred to the memory of your computer. This is done automatically when you start the program.

The Load/Save buttuns under "Image" let you load and store the mirror memory of your computer to a harddisk. This way you can save an exact image of the contents of the flash memory.

On the first start, please format the flashrom by clicking on "Format". You're now asked for the exact operation - please choose "Format" (the other option "diagnostics" is for internal purposes only!). After a safety check, you're asked where this operation shall be done - as mentioned before, please choose "mirror" to prepare the contents of your flashcard in the memory of your computer.

The mirror memory is now formatted and empty. You must fill the first space for files with the "Firmware": Click on the button "Firmware" and choose the file "Firmware1.0" after the safety check. This operation should also be done in the mirror!

Now you're asked if Kickflash shall only be activated if Kickstart V3.1 is installed, or if the programs in the flash memory shall be started regardless of the kickstart version. The conditional activation only makes sense if you don't have a real 3.1 kickstart rom, but still want to have the RomUpdates in the flash memory. In this case you can soft-kick V3.1, and Kickflash will only activate itself after the reboot with the soft-kicked V3.1 rom.

If you have Kickstart 3.0 or lower, and choose "no", programs in the flash memory will always be activated. In this case, you should not install RomUpdates. This only makes sense if you have updates for example for the scsi.device or want to exchange other resident-modules with Kickflash.

With a later version of the firmware, you can also install the Kickstart 3.1 rom file in Kickflash, so the machine can also be started to OS3.5 or OS3.9 without any reboot. Please check our website regularly for updates.

RomUpdates

Since Amiga OS3.5 has been released, the Setpatch-command also installs the so-called RomUpdates. Software that is already present in your kickstart rom is updated during this procedure, and since some modules that are already active during the execution of Setpatch must be exchanged, the computer must be restarted after the update. You can get rid of this reboot with Kickflash if the RomUpdates are stored in the flashrom.

Please click on "AddRom" in the CoyoteFlash-tool. You're now asked if you want to install a kickstart-rom or RomUpdates. Please choose RomUpdates, because Kickstart-roms are not supported at this point. Now choose the file - you can find it on OS3.5 and OS3.9 installations in the directory DEVS:. The filename is "AmigaOS ROM UPDATE".

Now you just have to make sure that the computer really does not reboot if it encounters the Setpatch command, because Kickflash puts the RomUpdates in memory in a way that no vectors are changed. That means that Setpatch does not "see" the updated versions, and would try to update again, which is absolutely unnecessary!

To keep Setpatch from rebooting, add "NOROMUPDATE" (one word, no spaces!) to the line in the startup-sequence. Use a simple text editor to add this argument. The startup-sequence is a textfile that is located in the S: directory. Every line contains a command, and some arguments (parameters that are given to the command). Setpatch usually has "QUIET" as a parameter. Just add a space and the new argument "NOROMUPDATE", this will keep setpatch from applying the patches once more.

Just like the RomUpdates, you can also write other files into the flash memory, but they have to have the form of a replacement-resident module. This can for example be a replacement for the scsi.device that is located in the kickstart rom. With this file in kickflash it's possible to use an A4000 rom in an Amiga 3000. Kickflash can replace the scsi.device of the A4000 rom (which talks to the IDE controller!) with the scsi.device of the A3000 (which talks to the real scsi controller of that mainboard), making the computer bootable again, although the "wrong" kickstart rom is installed.

If you have prepared the rom in the "mirror", you can write it to the flash memory of Kickflash by clicking on "Save" under "Flash". The operation only takes a few seconds. Now you can restart the computer, the RomUpdates and your other programs will be activated immediately, without your computer rebooting during a cold or warm start. Don't forget to remove the jumper, otherwise Kickflash will not start the programs in the flashrom!

Contact

Should our website www.ami.ga not be available at some point, you can also find the same page under www.jschoenfeld.de and under www.siliconsonic.de. These are three different servers in two separate locations, where at least one of them should always work. Please use the contact form on that website for questions to our support, because eMal is flooded by advertisements (spam), and your request might be delayed because of spam mail. We always try to answer your questions within two working days. Please double-check that you're giving a valid return eMail address in the contact form, otherwise we can't send you the answer!

The website of the programmer-team Coyote Flux can be found under www.coyoteflux.nl.

Why did you choose the name Kickflash OS4?

This product was intended as a "lauch support" for the new Amiga operating system V4.0. Together with Hyperion, who develop the new operating system for PPC-processors, we planned a slim product that reduces the startup-time of classic Amigas dramatically. Since OS4 for classic Amiga computers is not yet available, Kickflash OS4 currently only offers a functionality for OS3.5 and OS3.9.

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