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TF1260 Information

This is some short information about the usage of the TerribleFire 1260 card (TF1260)

First some "Disclaimer"

- Files are now OpenFile for you who want to do it yourself:
  (https://www.exxoshost.co.uk/forum/viewtopic.php?p=72658 but without any support!)
- Cards are sold AS-IS Any support MUST be given by the seller of the board, this is a REQUIREMENT!
- Due to the newly produced edge-connectors installing in the case can be hard. might need to open the
  machine and unscrew one screw to motherboard to easy installing.
  make sure you pushin the card straight and not in an angle. I know it is hard but this needs to be done or you might damage the connector. Especially if the connector on your amiga isn't shamfered.
- To keep compability with mediator (that is a dirty hack) kickstart 3.0 support is dropped. (or you need to manually add ram) – MEANING IF YOU HAVE KICKSTART 3.0 YOU WILL NOT GET ANY FASTMEM!
- NO Support is given from Stephen directly. **all is done via the person who built the board.**
- Some machines might need a Timingfix, done by removing E123C and E125C (Those are usually not assembled on ReAmigas etc)
- For Mediator set the CONFIG Jumper, and 4MB
- Persons who buy a board from me (John Hertell) ALWAYS have a 30-day money back period!

FAQ available at: https://www.exxoshost.co.uk/forum/viewtopic.php?f=65&t=5025

Some tools, download this archive contaning all Files needed for the TF1260: (for OLD Firmware not serialno 1000) https://wordpress.hertell.nu/files/tftools_2021_12_17.zip

New firmware (serialno 1000) https://wordpress.hertell.nu/files/tftools_2022_06_24.zip

Here are also 2 files needed:
MMULib: https://wordpress.hertell.nu/files/MMULib.lha

Newest IDE Driver: https://wordpress.hertell.nu/files/ehide_d2874a8.tar.gz
IDE Driver Changes:

* Resolve DOS device name conflicts by adding '_a', '_b', etc to the device name.
* Fix issue where occasionally units would incorrectly be flagged as read-only/write-protected.
* Fix race-condition where, depending on command ordering, the wrong unit would be addressed (would cause HDToolBox to hang).

If you need an image for a CF/SD card to boot from that is a CLEAN WB3.1 with 060 stuff already prepped please contact with the seller.

cpuspeed – Sets the CPU speed, the card will always boot at 50MHz. but you can set it to another with cpuspeed speed=MHz **cpuspeed speed=66** will set it to the closest to (rounded down) 66 that the multiplier will handle, in this case 62. how far you can go depends on card, cpu, weather and zenith or jupiter.

fancontrol – Sets the speed of the the the fan. nontested and might not work.

To use the IDE. You cannot "boot" from this. you need to have a boot device in the internal controller. but using Loadmodule (https://aminet.net/package/util/boot/LoadModule)
so unpack the driver (in windows I use 7zip. .. once for the gz and once for the tar) put the ehide.device to your DEVS: dir
add this to your S:Startup-Sequence:
loadmodule >NIL: devs:ehide.device

this will at boot initlize the driver and reboot. now if you have a bootable disk on the TF. it will actually boot from it if your bootprio is higher.

You CAN make a own custom kickstart image that includes the ehide.device and boot via that. and NO. this will not be "fixed" in future firmwares.. it is not possible.
reason is: plan was fist to disable the internal IDE with this. but as the internal IDE shares registers with the PCMCIA slot. that would disable the PCMCIA aswell. as this is not an option. plans was simply to remove the IDE on the TF1260.
I told that "nahh let it be, someone might do a driver for it and it could be used as a 2:nd IDE controller" and that is what we have.. as there are no ROM om the TF1260 there is no space for a driver. (TECHNICALLY there is a small ROM implemented in the CPLDs but as this EATS space.. there is no room)

And then you use the MMULib as 060 library install. and you are set to go.. copy the tftools utils to your SYS:C dir also.

A word about 68EC060 and 68LC060 CPUs (rev3 and 4):
You still need to install the 68060 libs as any 060 cpu (SKIP this LC specific version of the lib it doesn't do any good)
BUT there is a very important thing to know: you NEED to understand that you need to handle the card as a 030 card without FPU. meaning NO 060 executeables. only 030 executeables without FPU. this is it seems that C-Compilers for the Amiga defaults to having a FPU EVEN if you tell it you have no FPU. meaning your system might be unstable. With 030 files it will be working just fine but much faster.
If you have a FULL 060 (Rev 1, 5 or 6) this doesn't apply to you.

But.. but.. but. Whichamiga tells I have a 42MHz 060 when I should have 50?
YES it does. this is due to the fact that the TF1260 is somewhat sneaky and lowers the CPU speed to 14MHz when it writes/reads to chipmem, this is a nice way to let the cpu cool down when it would be waiting for chipmem to be finished anyway. This however fools the whichamiga MHz guess routine.. THIS is for release firmware and beta. NOT the new alpha firmware. I would recommend updating the firmware.

Builtin IDE Controller
The builtin IDE controller works as a secondary IDE Controller, you CANNOT boot from it.
The A1200 IDE and PCMCIA works just as before. use that.
You CAN make the TF1260 IDE bootable by doing a custom kickstartrom with ehide built in! other than that._: IT IS NOT BOOTABLE AND WILL NOT BE!

I get 0MB Fastmem?
As told above.. to have some kind of support for Mediator, autoconfig of ram is not used. instead memory is located at a area that Kickstart 3.1 and above automacally adds ram to. but 3.0 doesn't. in short: with Kickstart 3.0 you will NOT get any fastmem.. you can add it with addmem command downloadable from aminet. but get 3.1 or better.

It is instable, Sysinfo crashes etc?
This is a common situation when mmulib is not installed proper. read the instruction how to install it.
(and actually.. sysinfo is kinda crap…)

Where do I get support?
Ask the person who built your card. Builders of the cards must also give support. IF you sell PCBs you must also give builders support.

Well This was crap.. TF1260 doesn't work..
Attitude noted. now contact the builder for a refund and lets go with it. atleast if it is an official board from a official builder. you notice this if it got the TF flame-logo on the top close to the 22ohm resistor in the middle of the board.

But it does not work with my hardware, Z2 adapters etc.
Well unless you can supply such an device to be able to test it out. Sorry cannot support all weird configurations out there..

When I check Whichamiga with my full 060 it says I do not have a FPU
You haven't installed MMU libs proper.. thing is. on ALL 060 cards on the Amiga ther eare a small rom that disables the FPU at power on. this is required as there are instructions in Kickstart 3.1 that does not work with 060 FPU. (this is why cards liker 3660 requires a custom kickstart). so to fix this. FPU is disabled. then at boot setpatch loads the proper libs needed. (installed by MMUlibs) that enables the FPU. so not installing the proper tools. FPU is simply : disabled

After updating to Alpha firmware, I cannot do 100MHz anyway?
What about actually READING the readme file supplied with the firmware? you know. it could actually contain information. like that information that : YOU SHOULD REPLACE THE CPUSPEED COMMAND..?
alpha firmware also have a span of 75-83ish MHz where it is unstable.. investigating this.

RTC?
The A1200 have a feature called "clockport", it is a big hint.

RTG?
The main idea behind the TF cards is KISS (Keep It Simple. Stupid) adding RTG would add complexity and costs etc. in short: it would more or less not happen. If RTG is a thing for you there are other options like the Warp1260 the TF if simply just not "your thing"

How about the FAN?
Well if you noticed there are a connector for a FAN. yeah.. it is usuable buuut well not really "tested" actually it gives out aprox 6V and can via "Fancontrol" be set to on or off.. actually we

haven't checked more than this.. so. yeah 6V fan. softwarecontrolled. we can call it

Can I add a FPU in the motherboard as I can with a TF1230?
NO you CANNOT. the 68060 does not support an external FPU. so if you solder in a FPU om the A1200 motherboard it will still NOT WORK! PERIOD!

LINKS:
Video how to update firmware using FTDI Cable: https://www.youtube.com/watch?v=yIFmiMFizac
Video how to update firmware using XILINX
Adapter: https://www.youtube.com/watch?v=MzaJ4Ze9sGA