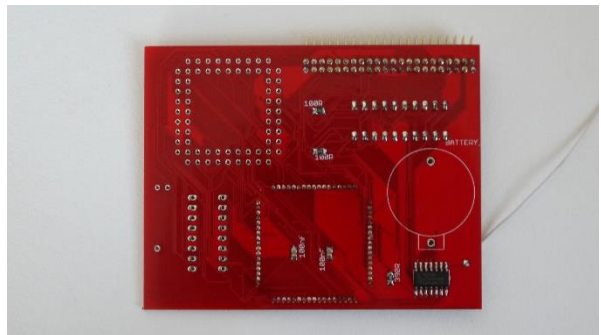
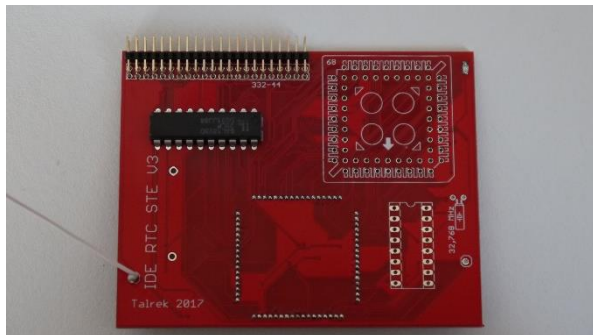
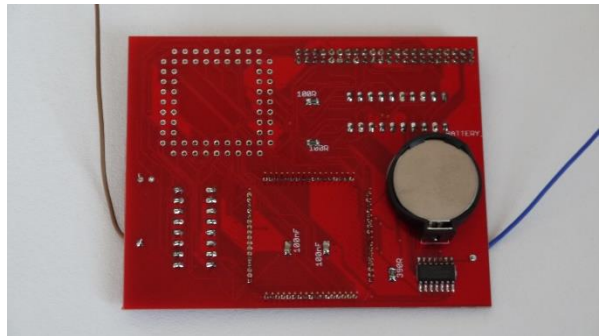


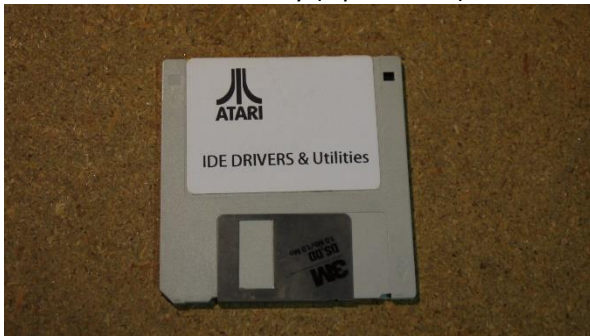
IDE Interface for ATARI STF

V3 With optional RTC



1. What's inside:

- IDE Interface (with RTC on the image and according if you choose the option or not)
- Disk with drivers and utilities to use with your interface (RTC also if you took the option)
- A CR2032 Battery (Option RTC)



2. Read this before:

You don't need soldering skills to install this interface. This version is totally solderless and plug'n play.

Anyway, if you have little soldering skills you should solder the ACSI wire from the interface to the internal ACSI port pin 10. It will be more esthetic. You can also solder the RTC wire instead of inserting it.

Even if this project is solder free you must take your time to install the interface. Proceed with extreme caution to not damage your interface or worse, your computer.

All the interfaces are tested twice: after building it, and just before sending it. If it doesn't work please start again from the beginning.

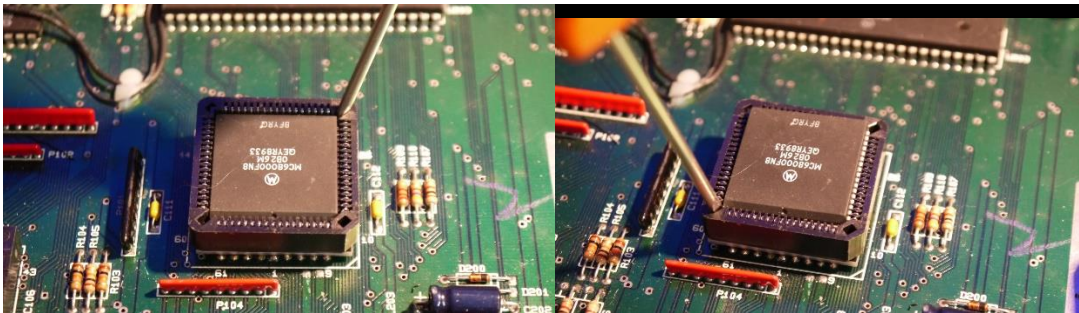
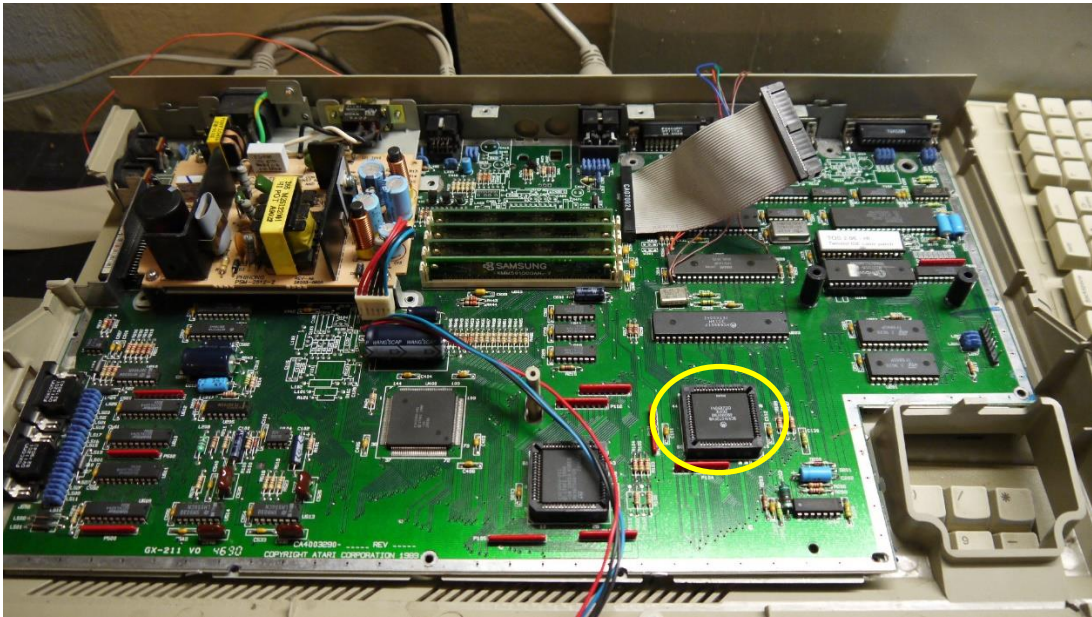
I will not be responsible if you damage your computer after a wrong installation. You must be very careful during the installation when inserting the interface not to damage the 68000 socket.

IF SOME PARTS SEEM TO BE MISSING, DON'T PANIC, IT'S NORMAL !!!!

You must have choose the version without RTC (Real Time Clock), So a part of this manual doesn't concern you.

1. Installation

- 1.1 Open your Atari STE, remove everything so you can access the processor, and remove it (Yellow circle).



- 1.2 Insert a first time the interface in the STE socket without the processor in it. It make more space after between the socket's pins and the plastic. This operation is not absolutely necessary but it will make the final step easier.
- 1.3 Put the processor back in its socket.

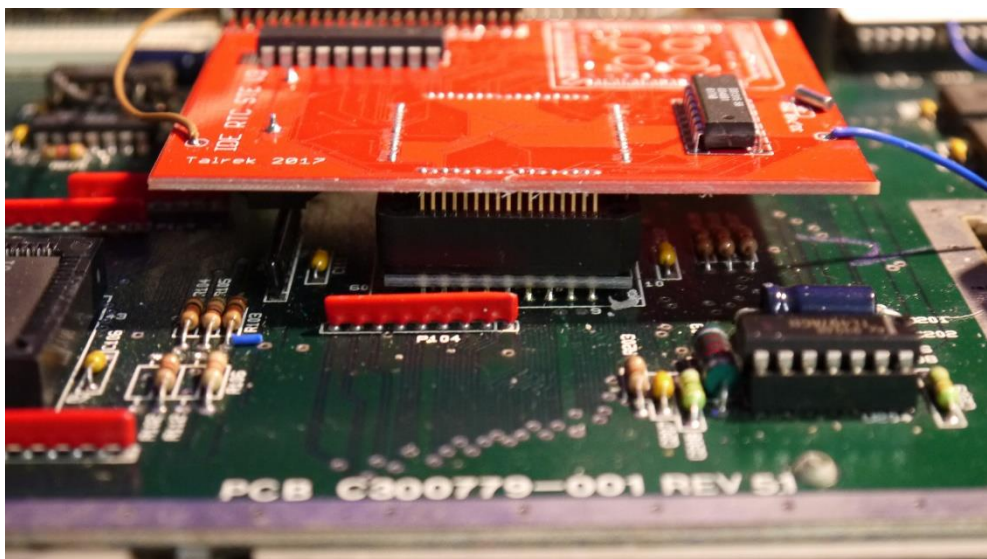
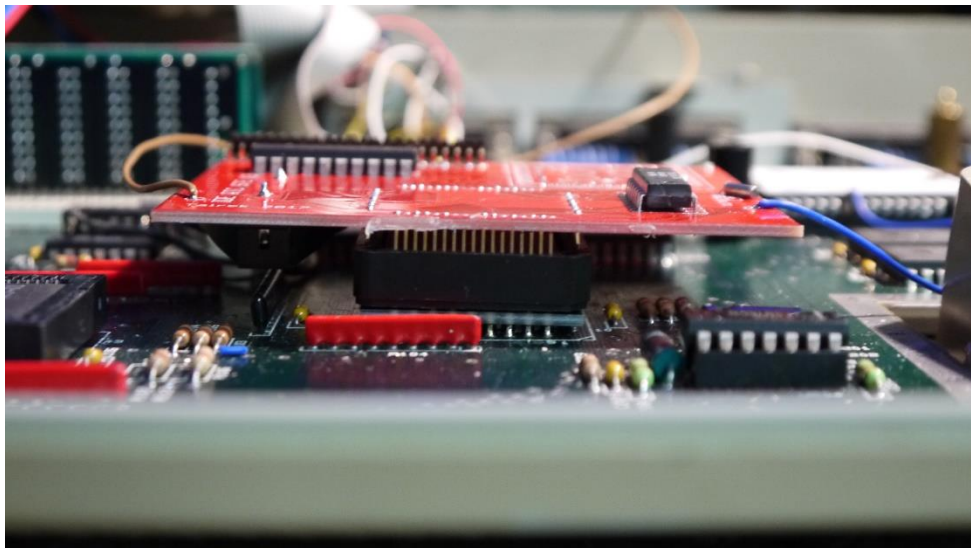
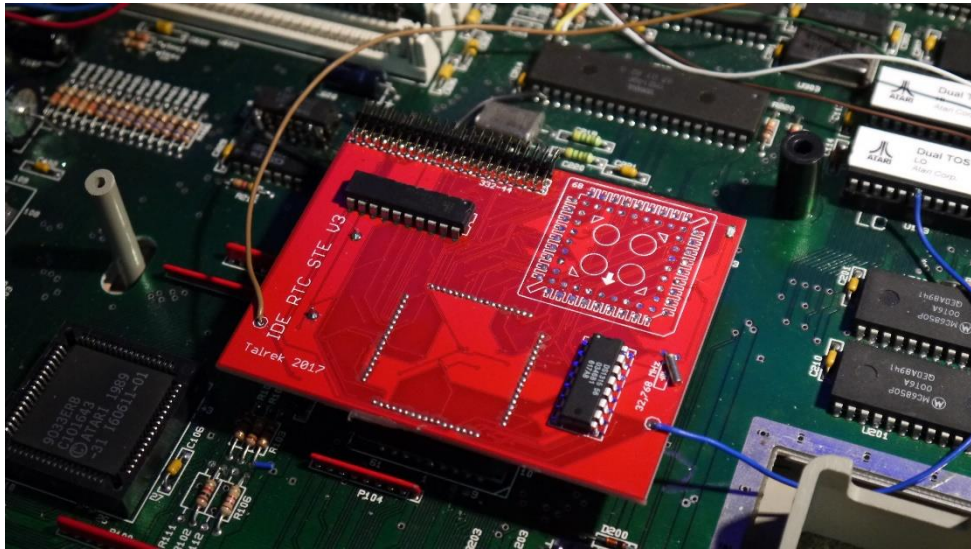
This is the most difficult step : Interface plugging.

You must insert the interface pins between the socket pins and the plastic. Space is small, it is why you should proceed with caution and very slowly. Make sure everything is on line before pushing it.

You should press very slowly first, then when you see it is in, push stronger. If it doesn't insert, remove, check and retry.

Once it is in it, push it stronger. The interface must stay in without help. the interface can goes out several time. But after several try the pins will have the right form of the socket and everything will remain in place without any help.

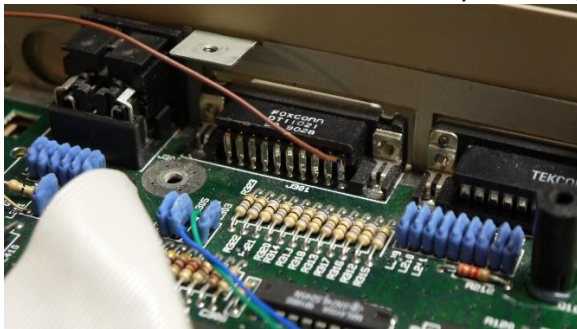
Be careful not to remove and insert the interface too much, either your socket will be damaged and even the processor only will not be recognized.



3.4 Prepare the interface by plugging in the wire to the pin no 10 of the ACSI port.
There are two ways of doing this:

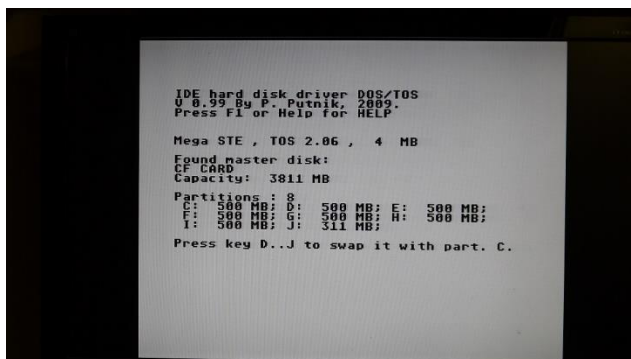


By soldering or by inserting the wire



3.5 If you have the RTC, please go to the "RTC Install" Chapter

3.6 Connect the interface to the peripheral of your choice. In my example i choose a 2.5 CF drive where i partitionned several drives.



4 Installation du RTC

4.1 Hardware part

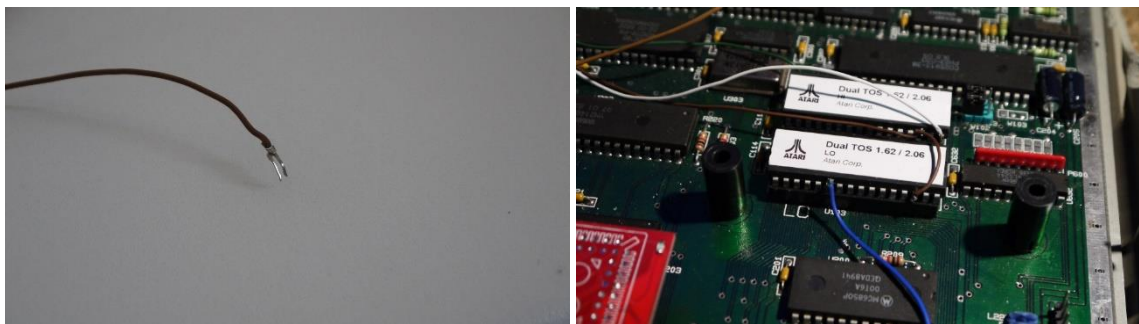
You have to connect the wire on the right side of the interface.

1/ If you have a TOS 2.06 or a 32 pins rom (see picture) you must connect the wire to pin No 22 (either Hi rom or Lo rom)

2/ If you have an Original TOS 1.62 or a 28 pins rom, you must connect the wire to pin No 20 (either Hi Rom or Lo Rom)

In any case, it will be the 6th pin from the left, just put the wire between the rom's pin and the socket.

It's not the original TOS on the pictures, and you don't need these. RTC will work very well with original TOS.



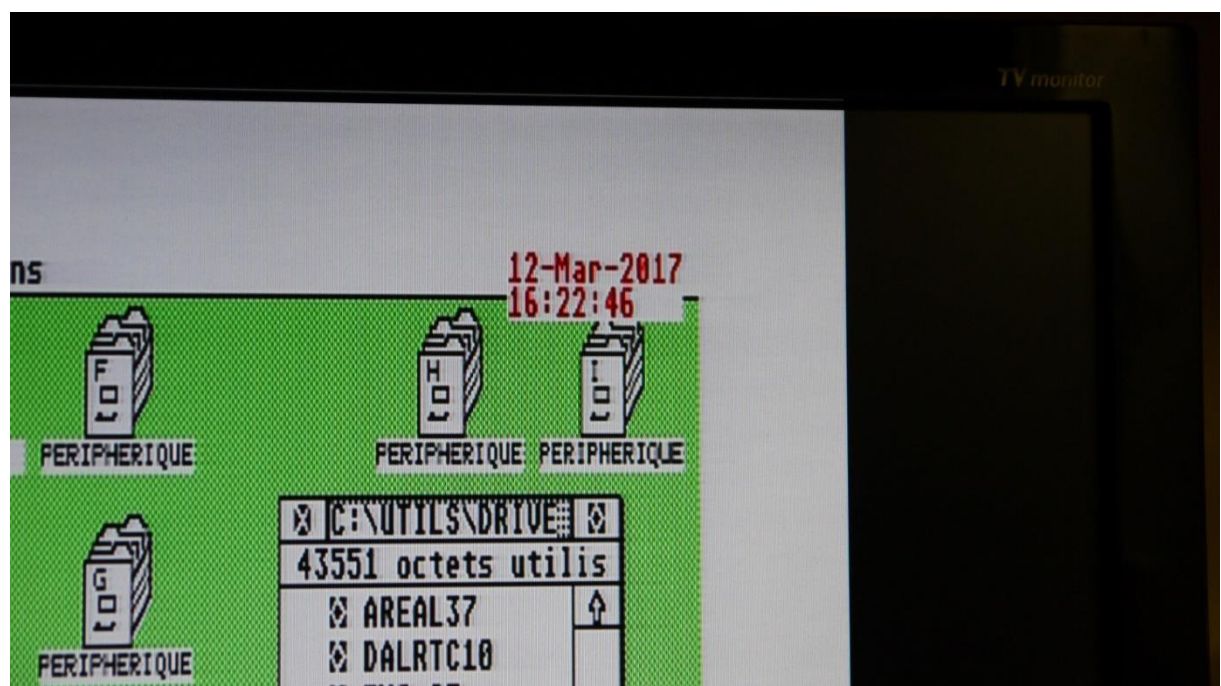
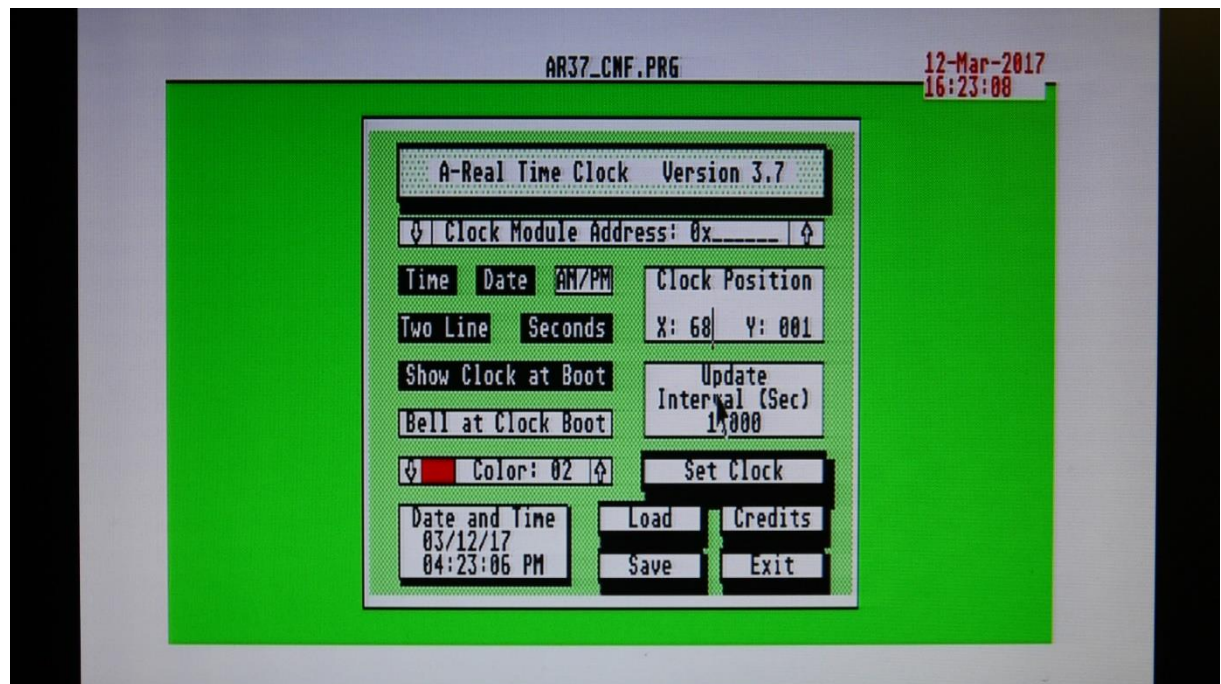
Don't forget to verify your interface is equipped with a battery.

4.2 Software part

All software you need are in the floppy disk provided with your interface. You'll find an AUTO dir with :

- DALLRTC.PRG is the 2000 year patch program. It must be executed first. Before AR37BOOT.PRG
- AR37BOOT.PRG is the RTC Driver. It must be executed each time you want to use RTC.
- AR37_CNF.PRG is the configuration program, to set the date and hour.
- AREAL37.ACC is an accessory under TOS 2.06 to put date and hour on the gem (see screenshot)

Your Interface has been set to the correct date and hour.



5 Start

It's time to power on your computer. If nothing happens, don't panic !

Verify :

1. ACSI wire connection
2. Is the IDE peripheral connected ? Sometimes when you don't connect a peripheral, or if you connect a peripheral without a media in it, you have bombs on screen.
3. Is your peripheral declared as Master ? It may be a jumper to move ?
4. Are all the interface pins well straight ? and inserted in the 68000 socket ?
5. The interface pins could be bent ...

Don't forget : this interface has been tested twice : first just after building, the second just before shipping.

6 Driver Install

In the floppy disk you will find several files :

- BIGDOS.PRG : To manage 1GB partitions
- IDDED_7.PRG : normal IDE driver
- TWID_7.PRG : twisted IDE driver (patched tos needed)
- AUBDUD09.PRG : install the driver on your DD so you can boot from it without need of a floppy disk. (Tos 2.06 needed)

There is a difference between « Twisted » et « Normal », it is mainly DD speed. For common user like me, the difference is not perceptible. By default I send "Normal" cables because "twisted" ones need to use a specific patched TOS. So if you are interested let me know, but you should know you'll have to change your TOS eproms.

Bootting from the HDD only work with TOS 2.06.

Partition must be FAT16 formatted, max 1Gb and not more than 14 partitions.

Another way is to buy the « commercial » driver to his author ppera: It will cost you 10€ but you'll gain several points:

- Speed
- Memory size
- You'll not have to use BIGDOS but will be blocked at 500Mo / partition
- Partitioning utility: no more need to use your PC, you can partition the disk with your Atari.

You can buy it on ppera website: <http://atari.8bitchip.info/pphdr.php>