



142

Take stock of
all Atari
hardware
projects!



Summer 2007

All the news of the Atari world!



EDITORIAL

par RayXambeR



© Didier Letot

From the editor 142

And voilà, the third issue of ST Magazine this year while we're still in spring! Well, now you will have to be patient during three long months before being able to indulge in the next issue 143. But you learnt how to be patient with regards to STMag, haven't you? ;-)

This issue is once again full of good things, notably a complete feature on all the hardware projects on our favourite machines. You'll see there are projects for every machine of the range, and that they can provide important services to many of you. To be followed closely, because one can hope a large part of these projects will succeed. Well, we hope so!

We also invite you to an exclusive interview with the late company IFA, famous for public domains on computers, and notably Atari. A page of the Atari world's history is turned. Inshape 3 is back, served with a dash of GEM programming, tests of games, news, demos, etc.

Wishing you a nice read in our company, we want to thank you for your support.

To remain updated on what revolves around ST Magazine and Atari related news, our stmagazine site offers regular news in English, with a direct access from

<http://stmagazine.org/welcome.htm>

C O N T E N T S

ST Magazine #142

| ARTICLES | PAGES |
|------------------------------------|-------|
| In Brief | 4-7 |
| Test: Sudoku | 7 |
| Interview IFA | 8-13 |
| Inshape 3 | 14-15 |
| GEM Programming | 16-17 |
| Software News | 18-22 |
| Demos | 23-24 |
| The Secret of the Selection Switch | 25-27 |
| Hardware Projects | 28-35 |

ST Magazine nouvelle génération #142 - Summer 2007

ST Magazine is a RayXambeR association publication.

Editor and association chairman: Cyril Denis aka RayXambeR

Hyper active participants: Paul Caillet, Stéphane Pérez aka Strider, Thierry Milood aka Tmi, Godefroy de Maupeou aka GdM, Pascal Ricard aka "Rix", Didier Briel et Arnauld Chevallier.

Participants in this issue: GT-Turbo, Frédéric Boudet and Schredder. Thanks to them! Thanks also to all the Atarists and to all readers of ST Magazine. And thanks to Nick Harlow :-)

Layout of this issue: RayXambeR

And it continues on the Internet:

<http://stmagazine.org>

<http://revivalgames.org>

We remind you that you can download all the software we mention in the magazine, from our site. With the unavoidable delay between our French and English versions, do not hesitate to browse our site, because software are online when the French version is available. This will allow you to gain a little advance on next issue.

Translation from French: Didier Briel, unless otherwise mentioned.

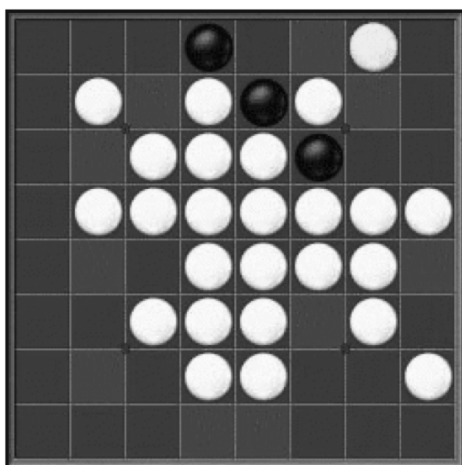
Art for cover and editorial: Didier Letot

Reversi and Othello

If you enjoy playing Reversi (or Othello) then you have to visit this site because its author makes an exhaustive software inventory for all possible platforms. Thus, there is a page dedicated to our beloved Ataris! However, a program is missing: QuikFlip, a game designed by David J. Bohlkke and published in a magazine. If you have it on a disk, it would be nice to send it to Bruno de la Boisserie. Note that even consoles are represented, such as Othello on Atari Lynx.

A real bible for Othello lovers!

The page is located at
http://perso.orange.fr/brunodlb/othel_st.htm



SatanDisk preorder

The SatanDisk project is over and

its author opened a web page for the future customers. It is a SD/MMC memory card reader for ST, plugged to the ACSI port. It is compatible with HDDriver and the transfert speed should reach 120 KB/s. For the moment, only MMC cards are supported. Its price is 35 euros.

Read also our article about Atari hardware projects.

More info on http://ihrisko.org/~mikro/sd_preorder/

PhantomS replaces mXtreme

Concerning boost cards for Falcon, the project mXtreme is canceled and replaced with the Czech project PhantomS. Based on the old boost card Phantom, it boosts the Falcon motherboard: the 68030 and the bus reach 25 MHz, the DSP and the FPU reach 50 MHz. PhantomS includes ClockPatch2: a hardware patch to fix some well-known sound and SCSI problems on Falcon. The whole package (PhantomS, ClockPatch2, installation guide, postage) only costs 35 euros.

Read also our article about Atari hardware projects.

Project page: <http://www.volny.cz/boban07/PhantomS/>

Toxic Mag on line

Toxic Mag was a French diskmag for Atari, published during the nineties. All the issues are available on line, as disk images. The first one and the latest issues were converted to HTML format. You will also find the webzine version created before joining STMag.

To read on

<http://strider.atari.org/toxic.php>



PS/2 mouse adapter

ST and Amiga mice are getting old and rare. An Atari enthusiast proposes a very simple adapter to plug a PS/2 mouse on an Atari ST or Amiga. No external power supply is required. The hardware part is based on a Microchip 16F84 PIC. According to the designer, there are four free pins and some memory left in the PIC: suggestions for improvement are welcome!

Read also our article about Atari

hardware projects.

Web site (in French):

<http://atariamiga.free.fr/sourisps2.php>

Nectarine back on the tracks

The famous demoscene-oriented webradio is online anew. Although the site is being re-developed due to technical failures, audio streams are already available.

The link:

<http://www.scenemusic.eu/>

Atari Games French Connection

The goal of this web site is to reference all the games created by French developers and editors. However, the provider closed the site and its author, Florent Coste, can't be reached. The webmaster of www.atarizone.com didn't succeed in getting in touch with Florent Coste. So, he decided to host the site himself.

The address is

<http://atarigames.atarizone.com/>

Online soundchip jukebox

Ploppbox is a new web site with a



In Brief ...

kind of jukebox. It is possible to listen to soundchip musics from Atari ST (YM format), as well as soundtracks (MOD format) and Amiga soundchips (AHX format). The site should support SNDH musics from ST and SID format from Commodore 64 soon. Visitors can send their favourite musics, so they will be available for everyone.

Note the site uses Java and Javascript technologies. Firefox browser and a recent version of Java are highly recommended. Visit <http://www.plopboss.net/>

A wiki for Highwire

The site of the only web browser still in development on Atari has a wiki now. It is dedicated to put the documentation online and to update it easily. Its webmaster looks for people to participate to the project (a good english skill is recommended).

More info on <http://highwire.atari-users.net/wiki/>

FTP Lip6

The FTP site of the "Laboratoire d'Informatique de Paris 6" (a.k.a. LIP6) is back. Of course the Atari folder is still here! Get it on <ftp://ftp.lip6.fr/pub/atari> or <ftp://ftp.jussieu.fr/pub/atari>

Interviews: Craig Graham and Henk Robbers

The non-official XaAES web site has a new section with articles. One can find there two interviews: the first one with Craig Graham, XaAES' creator, and the second one with Henk Robbers who carry on its development. The address: <http://xaaes.atari-forge.net>

Strider

*Helped by Paul Caillet
and RayXamBeR*

translated by the author



Our Ataris couldn't decidedly remain blind to this reflection game. This true social phenomenon is thus arriving on our machines. Let's remind the principle of the Sudoku: 9x9 grids with 3x3 sub-squares. Each case having to accommodate a number from 1 to 9. A rule: never have double numbers on the same row or column and in a sub-square. Simple but devilish, since it isn't rare to spend an infinite time on the most complex grids of the game. Fortunately, several levels are offered: Easy, Difficult and Devilish. The difference lies in the number of figures already in the grid, since this one is always of the same size.

The graphical aspect is very sober but very nicely done. Playing in a GEM interface is nice, and will allow most machines to handle this game.

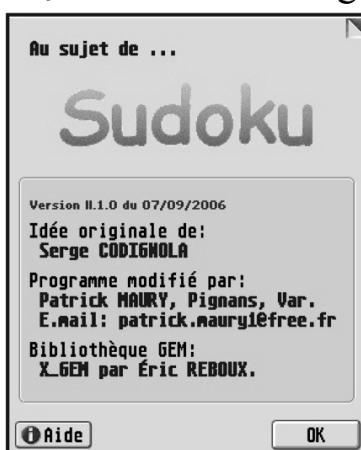
One will regret it isn't possible to write annotations on each square because, very often during the game, one would like to write the possible combinations, i.e., the different figures that can be possibly written on a square. A pity, because one will then much



prefer the simple paper sheet, allowing this very simply with a pencil and an eraser! Let's hope a future version will bring this essential element to the game.

This game is programmed by Patrick Maury in PureC on a Milan. We tested it under emulation on a Mac, and it works perfectly with a minimum resolution of 640 by 480, in true colour only.

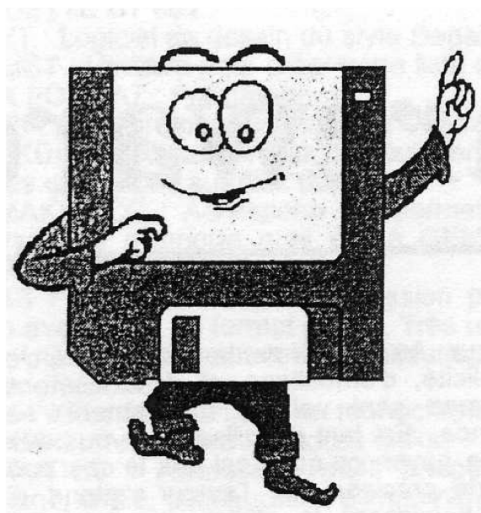
<http://jcb.killer.free.fr/Comtos/Games.htm>



RayXambeR, Sudoku Master! (looks pretentious, you think?)



*Interview done in
COLLERET (France)
13 November 2006*



Shredder: Hello, and thanks for this interview. First question: what does I.F.A. stands for?

Jean-Paul Demaret: Initially, I.F.A. meant *International Free-ware Association*.

Shredder: and how I.F.A. was born?

Jean-Paul Demaret: I.F.A. was born quite simply because, in fact, I was rather known in the region, I had a lot of Ataris at home, and a gentleman came to ask whether I had public domain software. I didn't know it at all, and thus I asked him to explain a little what it was. He explained it was

software than one could distribute as one would like. Thus, I started to take a little an interest in it with a friend, and I.F.A. was born like that. We started to make a little software library, and to offer it to people who placed classified ads in French magazines of that time, such as Tilt, Génération 45, STMag, etc. We started like that, by getting the addresses from the classified ads, and by contacting about 1000 persons.

Shredder: it was an association, initially?

JPD: true, it was an association.

Shredder: and since how long does IFA exist?

JPD: I.F.A. exists...

Catherine Demaret: since 1992.

Shredder: since 1992... Initially, you were in Cerfontaine



(France). Was your departure to Colletret (France) connected to your professional activity?

JPD: Yes, yes, indeed. It had become too small at home. Since the activity was growing... Because in fact, in between, the association had disappeared to become a company, and there was so much expansion, at that time, with needs to hire. We were obliged to find bigger, larger premises.

Shredder: How many persons were employed by I.F.A., and how many at the end?

JPD: We started with two, and after we were seven persons. And now we just closed down, we were only two: Mrs Demaret and I.

Shredder: and who was in charge of the company?

JPD: Mrs Demaret.

Shredder: what are your best memories?

JPD: There's one that always makes me laugh. That's when the postman's van came, and he had no space left to seat (laughs). That was a good one.

Shredder: and bad memories?

JPD: Due to a mistake on our part: we once had the visit of the software protection agency from Paris, together with the police. That day was a miserable one. Even if there were no consequences, and that all things worked themselves out quickly,



we had a very hard day. Someone thought we had wanted to swindle them out of their authors' rights.

Shredder: do you have some specific anecdotes to tell?

JPD: specific anecdotes. I don't know if you see... (talking to his spouse)

CD: maybe not an anecdote but at some point we had so much orders we were obliged to do shifts as in factories. My husband was doing 6 to 2 p.m. with a part of the staff, and I was doing 2 to 10, or the reverse, with the other part of the staff. For us it was funny, because we were only a very small company.

JPD: initially we got caught up. We started very small. Then it grew to such an extent... We would have never thought it would have started like that. That's curious. I think we can say it today, we were certainly one of the first three first distributors of shareware in France, perhaps even in Europe.

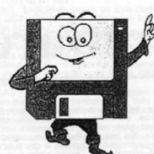
Shredder: you had clients throughout France,

but also in Europe?

JPD: yes, we had...

CD: in DOM TOM (Overseas departments and territories of France) too

JPD: this question just reminds me of an anecdote. When we were still in Cerfontaine, a lady came to get some shareware. We asked how she knew about us. And she answered she had found our catalogue on a desk in Hong Kong.



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FREWARE ET
SHAREWARE
POUR ST**



CD: in Hong Kong, yes.

JPD: it was a lady who worked there, and who came back on holidays once a year around here, and took the occasion to come and see us. At the customers level, it's true we had practically France, Belgium, Switzerland too. We had quite an amount of Maghrebian countries and we even had some order as far as from the USA in Washington.

Shredder: what was your preferred game on Atari?

JPD: we talked about it together the other day... It's Xenon.

Shredder: and for you, Mrs Demaret?

CD: I never really played. At the beginning, I did test some games but I never played. In fact, I never had the time (laughs).

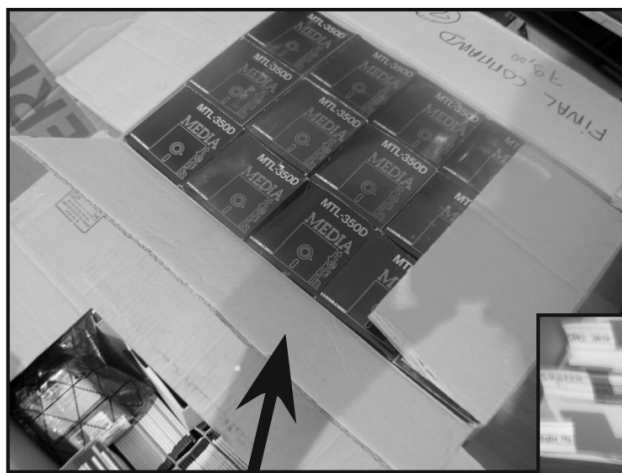
JPD: *Xenon*. There was one for me, that was the top, a completely different style of game, it was *Dungeon Master*. We spent hours and hours and hours on it...

Shredder: with the decline of some machines, you reorientated your activity, notably by manufacturing T-shirts. Did you still maintain your Atari/Amiga activity?

JPD: Yes, indeed.

CD: yes yes but really minor.

JPD: in fact it was declining more and more. Well, we still



Boxes full of 3.5 inches floppies.

And impressive software sotcks.



Special dedication to friend Strider!

had, from time to time, people who contacted us either to get small hardware, mice for instance. Still today, it's a product that is nearly impossible to find and people cry to get it. Cables too, stuff like that. There are always people who are fond of these little things.

Shredder: a word on your T-shirt design activity?

JPD: I went into that because I have always been interested by everything related to graphics, and initially it seemed very interesting to me to put very colourful patterns on T-shirts. This kind of product you don't necessarily find in all textile shops. Because the products we offered really displayed multicoloured patterns. There are a lot of people doing T-shirts in one, two, three colours. While with us, it was really like photography.

Shredder: how did you collect your public domains?

JPD: Initially, the very firsts, we pinched them in STMag's collection, that's clear (laughs). We ordered them from them, and then we resold them. But after, along the way, as soon as we started to advertise in STMag, Gen 4, Tilt, authors were aware of our presence on the market

and they started to send us their software, their creations, without us asking anything.

Shredder: were there squabbles between shareware distributors?

JPD: no, not at all. There never was any... no no, neither with STMag, nor with Dp Tool Club, which I think, at that time, was the biggest European, but which only distributed for PCs. No there never was any... I think that at that level, there was a good understanding. It even happened that we exchange our catalogues with other competitors.

Shredder: do you give permission to publish your public domains on the Internet?

JPD: Myself, I don't have to give permission, that's public domain... Since the authors said it was shareware and freeware, I don't have to make the decision for them. Once they have given permission, I don't have to substitute for them.

Shredder: will you continue to follow the Atari scene?

JPD: Honestly, I don't think so, because I am even totally starting to get away from everything related to computers. I have to stop because of health problems. I find it a little hard to turn the

page. It reminds me of too many things.

Shredder: when did I.F.A. definitely close its doors?

JPD: definitely, the date is the closing down...

CD: 31 October of this year.

Shredder: and how does it feel?

JPD: a page that is turned. For my spouse, I don't know, but for me it is hard to turn it. Inevitably, from necessity, I have too, but it will dim little by little.

Shredder (*speaking to Catherine Demaret*): and for you?

CD: regrets because we were doing well, a little relieved because of health problems too, but for me that's more a relief. A mix of a relief and regrets.

JPD: in fact she was in charge of everything administrative. It was really a rather hard load to bear.

Shredder: a little word for *ST Magazine Nouvelle Génération's* and *Atari Legend's* readers?

CD: that they continue to make the machine live as long as

possible.

JPD: myself, I always knew it was a machine that was going to last long and frankly, I am not surprised there are still people like that being enthusiast, and I wish them a long life on this machine.

Shredder: thanks for this interview.

Interview done by Shredder and edited by RayXamBeR



IFA T-Shirt, collector's item!

INSHAPE 3: practical!

For this 9th episode of articles on InShape 3, no long explanatory tirade. To introduce a probably very technical series of articles on how to create animations with InShape, there is nothing like an example. We'll see the theory later. Consequently, here is a very short article!

I'll just take the time to tell you that the essential element of this article is made of 2 files to download. It's Christmas after the time and gifts are plentiful. The files can be download from ST Magazine's site.

The first file (faill1.lzh) is a video whose computer graphics have been entirely designed and computed with InShape. However, the editing of all the images and the addition of sound was done on a Mac with iMovie (in the absence of an equivalent Gem software in the Atari universe) (Editor's note: did you try with Mountain or Funmedia?). Once the file faill1.lzh uncompressed, you obtain a file faill1.mov in Quicktime format (which can be read also by the Gem software AniPlayer). Well, there are plenty of good things in this slightly sophisticated scene.

- underwater atmosphere (at-



mosphere lighting function)

- multiple lighting
- standard polygonal modelling
- dxf 3D complex objects importation (the ship with the propellers)
- land modelling via Height Field extrusion from a bitmap image (thanks, Olivier)
- procedural texture and bitmap mapping texture
- hierarchical animation and camera tracking
- placing objects "with the mouse" (thanks again Olivier!) for the key positions in the animation

and a lot of other stuff you can do with InShape.

With the second file (scene01.lzh) you have access to

the holy of holies:

- the folder faille01 contains everything you need to take your turn at directing the famous sequence from "The Monster from the Deep".

- faille01.isc InShape's scene file. As is, it contains all the scene and the animation.

- Mapping subfolder: images in IIM format being used for the texture mapping.

- Object subfolder: even if objects are already integrated in the scene, they are here in IOB independent object file, to be used as you wish in other scenes of your own. Note that the HF.TGA image is the original bitmap image that, once converted to IIM format (through the image conversion IIMSHAPE graphic software) allows to obtain 3D lands via InShape's import menu.

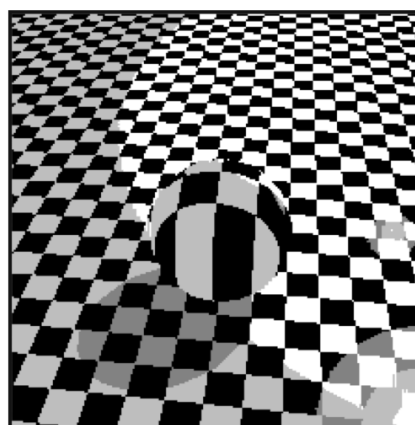
You have everything (OK, a step by step detailed technical explanation from the author of this video is missing). However, since InShape's documentation can be downloaded freely, nothing prevents you anymore to dive into the ocean of computer graphics creation (the demo version can even be downloaded from InShape 3's site.)

Christmas bonus

As we live in a bonus era (where soon the bonus will be more important than the original product), STMag will conform to the trend by offering additional bonuses to download!

CUBOID01.FLI,
ARCHI06C.FLI,
ARCHI06D.FLI,
ROBOT01A.mov

Frédéric Boudet and RayXamBeR



Email contact: frederic.bs@free.fr
InShape 3: <http://inshape.lutece.net>

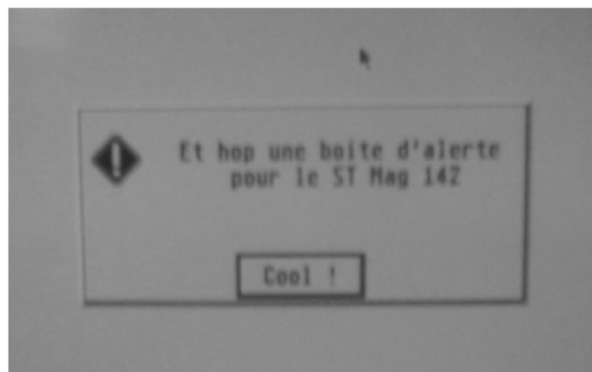
GEM (VDI and AES) Programming in Assembly

Did you manage to swallow the hefty article on VDI? All for the better, since we now start with AES. This part of GEM is in charge of the interface management ("you-application" relation, roughly speaking). This concerns alert boxes as well as menus, dialog boxes as well as event management (mouse click, keyboard, timer, etc.). On the organisation side, the program articulates the same way as for VDI: "station" opening declaration, call of the functions needed and, during the final *Quit*, restoration of the station that was given to us. For memory management (especially if yours is short term!), back to STMag 141!

We open our station with a "little":

```
jsr    Appl_init
```

We will display an alert box to make a little try. We put the small handy routine to display the alert boxes in a0: address of the string for the alert box. And in d0: the default button (the one validated



by a savage press on *Return*) in "bold", which allows to recognise it easily . Thus, before quitting a:

```
jsr    Appl_exit
```

To call other functions, the principle is exactly the same as with the VDI, we fill in the different arrays with the values of the desired function and do a:

```
jsr    Call_aes
```

And that's all!

Control is the main array. You can notice that it really articulates as for the VDI. In it, we put:

First the function number (word format: 2 bytes)
then the number of input values (still a word: 2 bytes) in the *In_t_in* array
then the number of output values (still a word: 2 bytes) in the *In_t_out* array

then the number of input values
(long this time: 4 bytes) in the
Addr_in array
then the number of output values
(long this time: 4 bytes) in the
Addr_out array

So it's the same principle as the
VDI: we fill in our arrays with
the correct values (functions
numbers are to be searched in
usual Atari development books)
and bingo, we send it.

As you can see, programming
GEM in assembly is not that
hard. For those wanting them, I
have complete libraries of VDI
and AES routines, I can send
them to anyone who wants them,
you just have to ask.

The benefit of programming in
assembly al-
lows two
things:

- compact size
of programs
(write the
same thing in
C...)
- execution
speed. While,
in the case of
dialog boxes,
it doesn't have
much impact,
it is different
when one re-

draws windows full of True Color
graphics.

If you want more information or
details, you can post in STMag
news forum (in French only):

[http://forums.acbm.com/acbm/
forum/listthreads?forum=12](http://forums.acbm.com/acbm/forum/listthreads?forum=12)

Good code, and see you soon for
new adventures!

GT Turbo

```

Devpac-3 File Edit Block Search Options Program Tools
: M:\ST_MAG.ART\ST142SRC.S

Line: 1 Col: 1 Mem:595736
*****
< Exemple d'appel Aes : >
*****
Pour le ST Mag
*****
< Code : GT Turbo >
*****
Tab : 16
*****
: Restitution de la ram non utilisé par Mshrink
move.l a7,a6 * Save Stack
move.l 4(a6),a6 * Base Page
move.l 8(a6),d0 * Section text Length
add.l 214(a6),d0 * Section Data Length
add.l 81c(a6),d0 * Section Bss Length
add.l $5200,d0 * 512 Bytes of Stack
move.l d0,d1 * !!!
and.l a6,d1 * Start Addr
move.l d1,d0 * Even Addr
move.l d1,a7 * Stack
move.l d0,-(a7) * Length
move.l a6,-(a7) * Start Addr
clr.w -(a7) * Null
move.w #54a,-(a7) * Mshrink
lea #12(a7),a7 *
*****
: Init de notre partie Aes
jsr Appl_init(pc) * Init AES
move.w Int_out,M9_ap_id
*****
: Une petite boite d'alerte pour essayer
lea Mon_texte,a0
jsr #1,d0
Form_alert
*****
jsr Appl_exit
*****
clr.w -(a7)
trap #1
*****
<< AES Part >>

```

Studio Son 2.091 beta

This sound editor for Falcon has been carried on and enhanced by Yvan Doyeux aka DOCs. The version 2.091b brings some bug fixing and new features such as resampling and filtering. It comes in two flavour: one for the standard Falcons and one for Falcons with 68882 FPU's. Note Studio Son doesn't officially support the CT60.

Download it here:

<http://doyeuxyvan.free.fr/studioson/std2091b/STD2091E.ZIP>

DGEM 1.0 and DEditor 1.0

After some years of hard work, Pierre Tonthat a.k.a. Rajah Lone has just finished the very first complete version of DGEM. It is a Dungeon Master clone for Falcon, Milan, Hades and ARAnyM. A modem system is needed, the author recommends MagiC and a minimal resolution of 640x400 with at least 16 colours. Note a dungeon is provided as an example.

Concerning DEditor, it is a dungeon editor for DGEM.

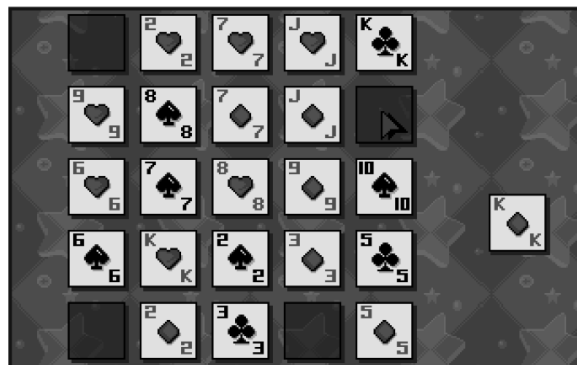
To download on <http://raja.atari.org/>

Poker Square

It deals with a little game realized by Cooper and Marcer from Paradise crew. It is a bright mix of poker and tic-tac-toe. Works on ST/STE and Falcon with at least 1 MB of memory.

Discover it on

<http://home.tu-clausthal.de/~ifmar/paradize/games.shtml>



Kronos 1.71b

The author of MyAES proposes a new version of his benchmarking application. It is now compatible with XaAES.

To download on

<http://olivier.landemarre.free.fr/gem/kronos/>
(pages are in French)

MyAES 0.84

After some bug fixes, "Start Me Up" and Pierre Thontat's "Troll"

and "Joe" should work correctly. This alternative AES can be compiled with GCC 4.2.

Get it on

<http://myaes.lutece.net/#download>

MSX Emulator becomes open source

In 2000, Folkert van Heusden developed a MSX emulator for Atari ST. Fully written in GFA Basic, it emulates a MSX at 1% of its real speed on a standard ST. Since October, the source code is available on the web site of its author.

Available on

http://www.vanheusden.com/atari_st/

TeraDesk 3.86

This version fixes a bug in the AV-protocol implementation and some typing errors in the hypertext documentation.

To download on

<http://solair.eunet.yu/~vdjole/teradesk.htm>

STj 1.20

This is an amazing and innovative application dedicated to DJs. It allows to replay soundchip mu-

sics with lots of options and effects. Users can even run it without a screen. This new version permits STE and Falcon owners to control the music thanks to Jaguar controllers.

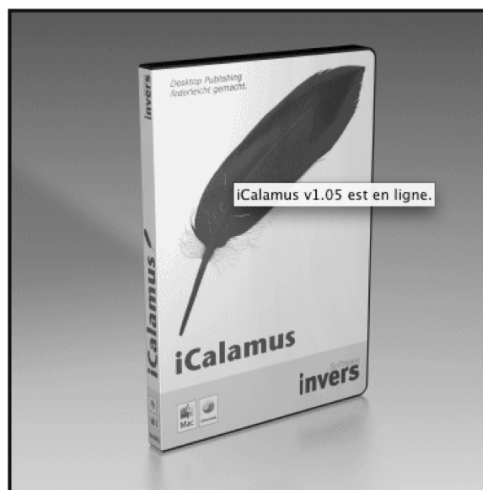
Get it on

<http://preromanbritain.com/stj/>

iCalamus 1.06

iCalamus 1.06 is available! It is a distant cousin of Calamus SL because it is developed natively for Mac OS X (beware, at least version 10.4.5 is needed because it uses some resources proper to Tiger!). Of course, it is always a DTP software and, according to the online videos, it has everything to gain Mac users' confidence. An affair worth following.

Note that according to Ulf Dunkel, it doesn't mean Calamus



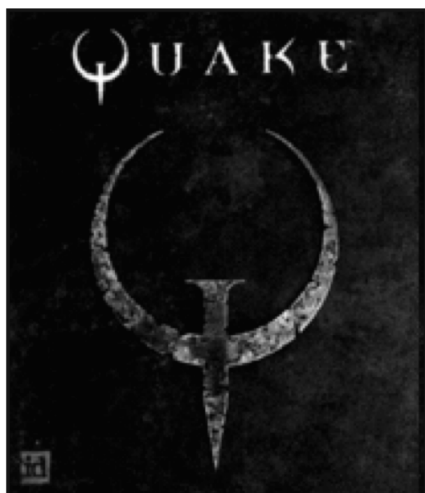
SL will be stopped because there are still novelties in the pipeline. That's just a parallel development. Good news for TOS lovers! The link: <http://www.icalamus.net/>

Duke Nukem 3D

The Falcon CT60 port of Duke Nukem 3D is over. The game runs in 320x200 and 256 colours, on RGB or VGA screen. Players should get it on <http://www.atari.sk/>

Quake 1.02

Quake for Falcon CT60 has just been updated. Due to some improvements, it should run a little bit faster. It runs in 320x200 and 256 colours, both VGA and RGB modes. It contains routines optim



ized for 68060 and can run from TOS, MiNT and MagiC.

The link: <http://www.atari.sk/>

ARAnyM 0.9.4beta

On ARAnyM's web site you will find the latest version for several systems, included Windows, as well as a new AFROS package. This package uses the new bootstrapping feature, it is thus possible to copy files directly from the host system.

The official site:

<http://www.arany.org/>

BoxKite 2.32 goes free

BoxKite is an alternative file selector. This new version brings a lot of new features, especially for MiNT: long name support, display in GEM windows, drag'n'drop support, etc. From this release, BoxKite is now a freeware.

To download on

<http://www.mynetcologne.de/~nc-beckerha3/>

GFA-Basic Editor 1.50

This new version brings among other things the possibility to im-

port an assembler source code and it has a new GEM menu.

For GFA lovers:

<http://www.bright.net/~gfabasic/>

GFA-Basic Editor

html/gbe.htm

FreeMiNT/XaAES on ST

Since XaAES became a Free-MiNT kernel module, no 68000 version was released. This is now done, but your ST will need at least 4 MB of memory.

Address of XaAES:

<http://xaaes.atariforge.net>

PmDoom 0.55, PmHeretic 0.55 and PmHexen 0.55

Some bugfixes in the SDL library (concerning keyboard, mouse and audio interruption) and a better sound replay when the 16-bit stereo mode isn't available.

To download on:

<http://perso.orange.fr/patrice.mandin/>

X-Debug source code is available

Sources of the debugging utility X-Debug have been released by

its author, Andy Pennel. This debugger was mainly designed for Lattice-C but it should work with other languages.

Available on

<http://topp.atari-users.net>

ST-Sound on GP2X

The ST-Sound engine by Arnaud Carré has been ported to GP2X. It is now possible to replay YM, SC68 and SNDH musics on this handheld console.

The link: <http://www.gp2x.de/cgi-bin/cfiles.cgi?0,0,0,0,6,1678>

Hatari 0.90

This new version supports Spectrum 512 pictures in 60 Hz mode, brings a better STE support (borders and blitter), a native graphical interface for Mac OS X and its batch of bugfixes. In the future, the Falcon should be emulated.

To discover on

<http://hatari.sourceforge.net/>

Paula 2.6 and CKBD 1.5 go open source

Pascal Fellerich gave his creations Paula and CKBD to the

open source world. Paula is a soundtrack player (MOD files), whereas CKBD is an accent manager for the keyboard.

Available on
<http://topp.atari-users.net>

GFA-Compiler r11 and GFA-Linker r7

GFA Basic lovers, who rediscovered this language thanks to GFA-Basic Editor, would be pleased to know both compiler and linker have been updated too.

To download on:
<http://www.bright.net/~gfabasic/>

Cécile open source

David Godec put Cécile, his hard disk driver, to open source and under GPL licence.

The link:
<http://topp.atari-users.net>

TT-Digger 7

This very powerful debugger now supports the 68020 processor as well as the MC68851 (memory management unit). Moreover, the configuration system has been fully rewritten. To (re)discover on
<http://digger.atari.org>

FalcAMP 1.20

This new version entirely supports the CT60. It brings a new plugin for soundtrack modules. Note some enhancements concerning the playlist and a MiNTnet cast plugin.

To download on
<http://falcamp.atari.org/>



*Strider
Helped by Paul Caillet
and RayXamBeR*

translated by the author

A thin demo column this time due to a lack of news. We will see two ST intros and a music competition in this issue.

Merry Christmas

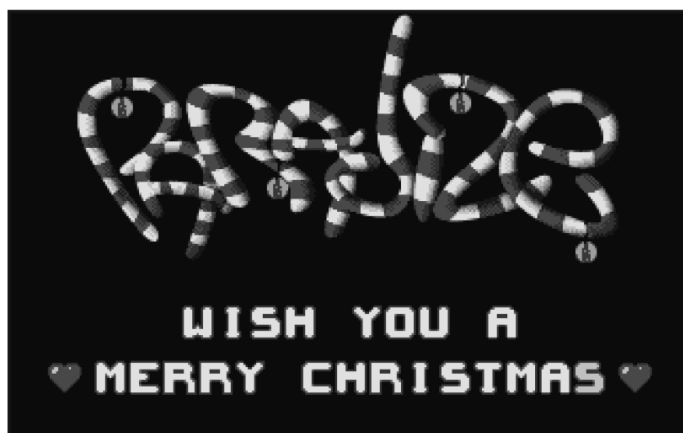
This intro done by The Bits Club is dedicated to Christmas, obviously. Inside: a logo, snow, a scrolltext, an experimental soundchip and coloured rasters. The intro stands apart from the others by TBC because it runs in medium resolution and this is rare enough to note it. As usually, it is possible to disable or modify effects by hitting some keys. Already-seen-effects in a pure oldschool tradition.

To download on
<http://bits.atari.org/>

Intro Xmas

Santa Claus has been kidnapped! At least, that's what the first screen of this Paradize intro says. It was realized by Orion_ to celebrate both Christmas and his admission in the crew. Orion_ was quite generous because there are a lot of things in this intro. The second screen consists of snow flakes over a background picture and a horizontal scrolltext. The scrolltext is jerky, alas, but that's not so important. Then, one can see some metaballs, a bit slow compared to what exist on ST. Next, a 3D "XMAS 2006" logo appears with greetings and credits. Finally, the intro ends with a nice Paradize logo made of sugar cane. Graphics are pleasant and the music is quite good. Note the intro needs at least 1 MB of memory. To download on
<http://paradize.atari.org/>





maxYMizer competition

At the end of 2006, Gwem organized a music competition about its program, maxY-Mizer, a soundchip music editor. There are fourteen musics and they have been composed by eight musicians. Except an Enola Gay remix (very faithful to the original song), all other musics are original compositions. They have a good level of quality in both melodic and technical points of view. Gwem coded a demo



containing all the musics, with an agreeable graphical interface and a nice picture by C-Rem. Musics are also available as MP3 files on Gwem's site. Who were the winners? 505 was ranked first (583 points), followed by Gwem (459 points) and then Starbuck (439

points). The stuff can be reached at:

<http://www.preromanbritain.com/maxymiser/compo.html>

Next coding parties, next issue

When I'm writting these words, the Outline 2007 is just going to happen. I hope there will be nice productions there! Don't miss the Alchimie 2007, on November 2nd to 4th, 2007, in Tain l'Hermitage, France (<http://www.triplea.fr>). In the next issue you will get some party reports (Numerica ArtParty #1 and Breakpoint'07) and, of course, demo tests.

Strider

translated by the author

The Secret of the Selection Switch

It is a very simple way to allocate an SCSI identifier to your devices, with a switch containing numbers from 0 to 7 on an external case. For beginners, here are some advices. In a first time, we will create a quick identification floppy of all the components plugged on the Atari through SCSI.

Format a 720 KB floppy with an Atari (or a PC), and create then an "Auto" folder with some comfort programs, such as for instance the "Fujdestt.prg" Atari logo and the "Maccel3.prg" mouse accelerator. Then, create 3 folders at the root of the floppy. The first one, ID_TEST, to put the "Id_test.app" program, which displays the numbers of your connected devices. The second one, "Kobold", to put "Kobold35.prg".

Then the last, "SYS_INFO", to put the "sysinf08.prg" program that gives all the necessary information on your configuration. At the root of the floppy let's put also the "Xcontrol.Acc" accessory to allow and manage accessories such as

"Mdisc.acc", offering a useful RAM-disk to uncompact Zips using the memory of your machine, rather than its hard drive. Or any other ACC that would be useful.

You now just have to run this floppy without the hard drive. No need to unplug it, you just have to switch on the Atari with the floppy inside and then, as soon as the floppy led lights off, keep a finger on the "Alternate" key while pressing on space. The disk runs without running the internal hard disk (if you have one).

This is at this moment that you choose the resolution of your desktop, its colour, and why not the assignation of a function key to run directly installed programs, with the keys F1 to F10. You can also drag ".prg" files of your utilities on the desktop for a quick access.

This is how you can assign the key F1 to the program "id test", using the desktop as of TOS 2:



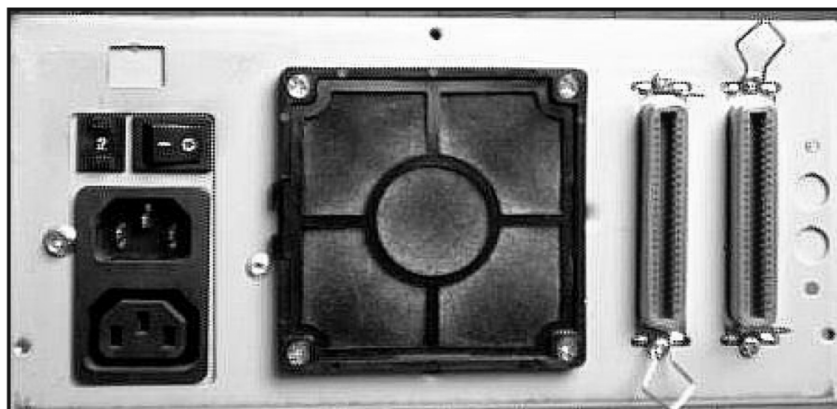
SCSI

click once on the program (prg or app), then on "Option" and "Install an application", the name of your program appears on the first line, then on the field "called by" specify F1, then click on Install.

Don't forget to save the desktop, the whole will be stored in the file "Newdesk.inf", which will be read again at each boot on this floppy.

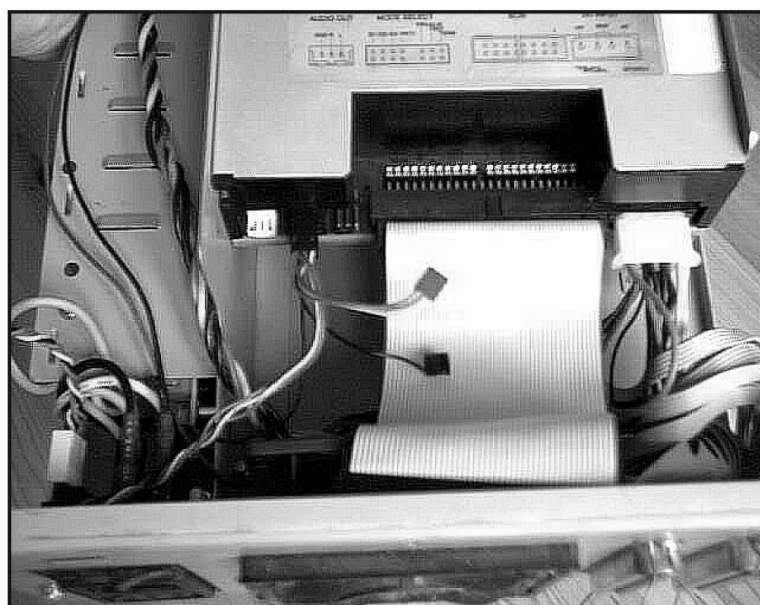
You are now ready to be able to test the right identification of your devices, without the risk of destroying the content of your internal hard drive, during an SCSI conflict (if two components have the same ID, for instance, which could lead to the destruction of part of your hard drive).

Let's go now to the internal wiring of a SCSI case. Inside there is a hard or a CD drive. Locate the coloured twisted cable with two large plugs, with 3 holes, and sometimes connected

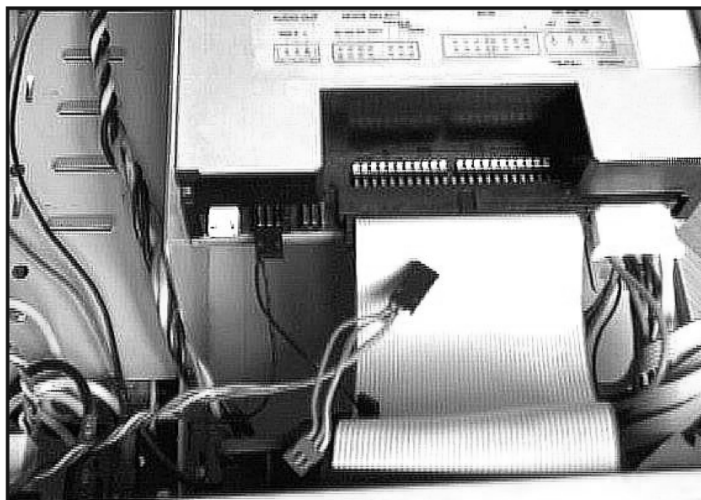


with 2 other flat plugs, smaller and also with three holes. At the bottom left of the devices, there are two rows of 3 pins for the selection of the SCSI # by switch.

Remove the switches, then plug on the bottom row the plug with three holes with a single black wire (the black on the left as on the picture), then on the top row the other plug with 3 coloured wires, yellow, blue or red, or other colours.



SCSI



The yellow is to be positioned on the right. (On the two cases tested, the yellow is always on the right.) Your two plugs are now connected, there are no SCSI pin free. Everything being connected to the selection switch at the rear of the case, it's with it that the SCSI numbers are allocated, you just have to select with the tip of a pen, by pressing the holes around the numbered dial.

Take the occasion to look whether a switch is positioned on the pin "Terminator or Term". If it's the case, leave it only if this case is the last of your SCSI chain, otherwise prefer rather a termination plug to the switch, to be placed at the free plug at the rear of the case (blue centronics).

Connect now the external case(s) to your Atari on the SCSI port, or on the other ACSI port (Atari, with the ICD link interface),

switch on the cases and the computer, then, when the led of the floppy drive lights off, put a finger on "Alternate" and press "space", then when the desktop appears run ID_TEST to see whether SCSI numbers appear.

If everything is OK, and each of your components has a different number, you can reboot without

risk without floppy, letting your internal hard drive start. If a number is not active after the test, it may happen that two components have the same one, or that the selection switch is out of order, in which case you have to try the connection again without the selection switch, but with a switch on the position 1, for instance, of your HD or CD, without forgetting the termination.

In an upcoming issue if STMag, we'll go farther on the management of these devices. Provided there's enough feedback on this article in our forum:

<http://stmagazine.org/forum/list.php>

Tmi

Hardware Projects

Hardware Which projects for our Atari computers?

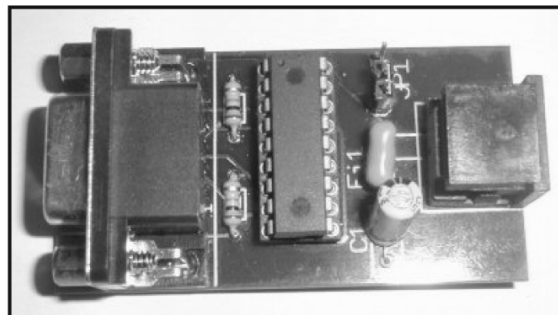
Now we reached the year 2007 and it seems interesting to have an in-depth look at the hardware projects for our old machines. Therefore, we suggest a focus on novelties which are coming soon, those which will happen and even those which will never happen. Projects are classified in four groups, according to the target machine. This project list is exhaustive: if you plan to start a new project or if you note a lack, please contact us. Nota: we won't speak about old (but still interesting) projects such as EtherNEC and Eiffel.

1 - Projects for all Atari TOS computers

PS/2 for Atari

Is your mouse as fast as a snail? Are its buttons totally dirty? This hardware will allow you to benefit from PS/2 mice. It is based on a 16F84A PIC microcontroller. The printed circuit is quite small, it includes a PS/2 plug and a DB9 plug (this is the

format of the ST mouse port). The project is fully open source.

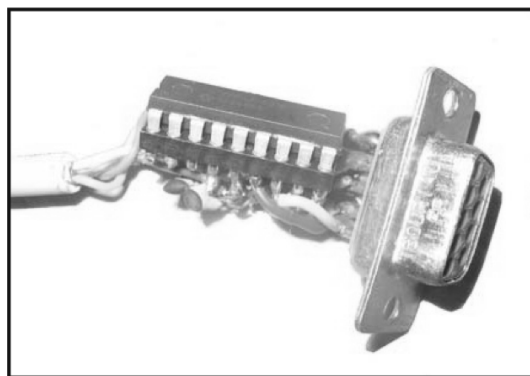


Link: <http://members.aol.com/tgkirk/ps2mous.htm>

Status: in production.

PS/2 mouse for Atari and Amiga (MPLAB project)

This adapter is very similar to the previous one because it uses a 16F84 PIC too. Its main



advantage is to support both Atari ST and Amiga: the recognition is automatic, thanks to a resistance. It is also smaller. As there are

some free bits in the PIC memory as well as four free pins, its author is open to all suggestions for improvement.

Link: <http://atariamiga.free.fr/sourisps2.php>

Status: in production.

HxC Floppy Drive Emulator

Jean-François Del Nero and Torlus are designing a very interesting project for old computer lovers. It is a disk drive emulator for Atari ST and Amiga floppy disks. It will allow to replace both ageing disks and unobtainable drives. In the future, this emulator should support 8-bit computers such as Oric and Amstrad CPC.

How does it work? This piece of hardware uses FPGA technology and functions are written in VHDL language. It totally replaces the disk drive and therefore it must be connected to the motherboard using the disk drive cable. On the other side, it is linked to the USB port of a PC. On the PC, a software server sends the selected floppy disk images to the emulator. This is absolutely transparent for the Atari, it reads this virtual floppy as if it

was a real one. The project goes on well, we saw a prototype running on a STE at Alchimie Party and Atari Connexion 2007 and lots of visitors were filled with enthusiasm. People interested in buying this hardware emulator must be registered on Torlus' site's forum first.



J.-F. Del Nero's site:

http://jeanfrancoisdelnero.free.fr/floppy_drive_emulator/index.html

Torlus' site :

<http://www.torlus.com/floppy/>

Status: designing in progress.

NETUS-Bee

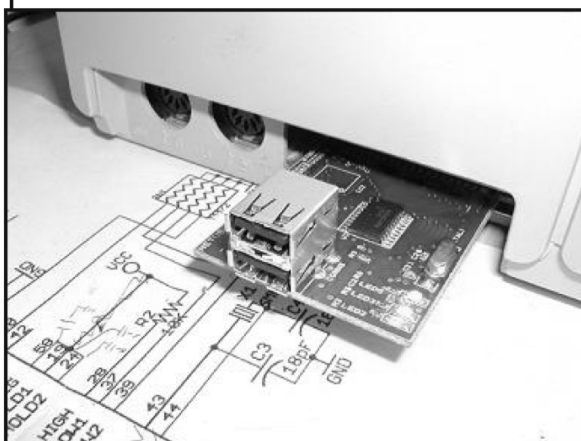
Lyndon Amsdon, famous due to its EtherNEC projects, is designing a card which will integrate USB and network ports. It will be plugged into the cartridge port, consequently almost all ma-

Hardware Projects

chines will have access to modern peripherals. It is cleverly based on chips which drivers already exist for our computers: the network chip RTL8019AS is present in the EtherNEC and the USB chip ISP1160 is used in the EtherNAT.

Link: <http://hardware.atari.org/netusbee/index.htm>

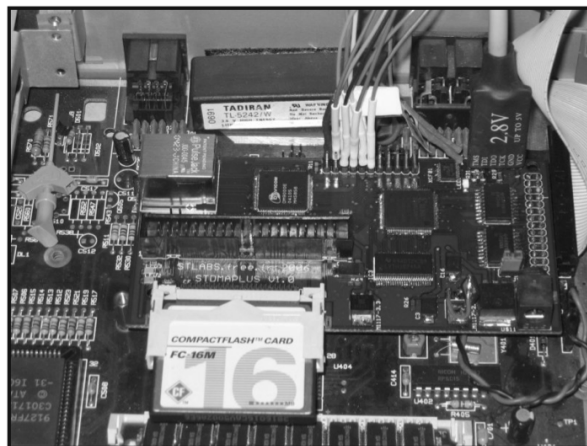
Status: start of production.



2 - Projects for ST

STDMAPLUS

This FPGA-based card is aimed at Mega STes. It integrates an IDE interface and a 10 MBit/s network interface. The IDE part consists of two distinct buses: the first one drives a Compact Flash adapter and the second one can receive two IDE peripherals. Its



designers plan to produce an external version for ST/STE to plug on DMA port.

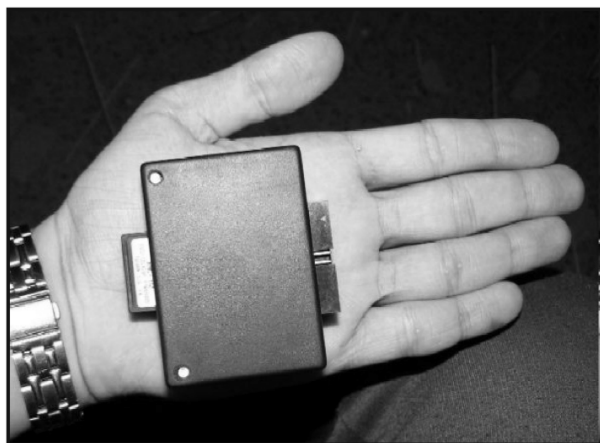
Link: <http://stlabs.free.fr/stdmaplus.html>

Status: end of designing, not in production yet.

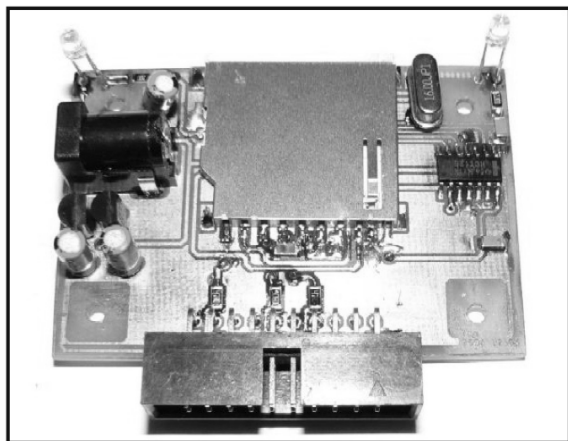
SatanDisk

Here is a project which will resurrect lots of STs! Actually, what is more frustrating than handling old floppy disks to use his favourite computer? With its esoteric name, SatanDisk is a memory card reader to plug on the hard disk port (ACSI) of a ST. It will allow to have a kind of tiny, noiseless, reliable but slow hard disk. As a matter of fact, the announced transfert rate is 120 KB/s (however about 10 times faster than a floppy drive). The maximum storage capacity is the

same as MMC/SD cards, that is to say 4 GB. SatanDisk is compatible with HDDriver. Beware, for the moment only MMCs are supported (only few SDCards are). The card will be integrated in a black box and will be a bit bigger than a 2"1/2 hard disk. Ice on the cake, the project is fully open source.



To end with it, the designing is over and its author opened a web page to allow interested people to register. On May 16th, there were 181 pre-registrations!



Link: <http://joo.kie.sk/satandisk/>

Pre-registering:

http://ihrisko.org/~mikro/sd_pre-order/

Status: in production, available near May 2007.

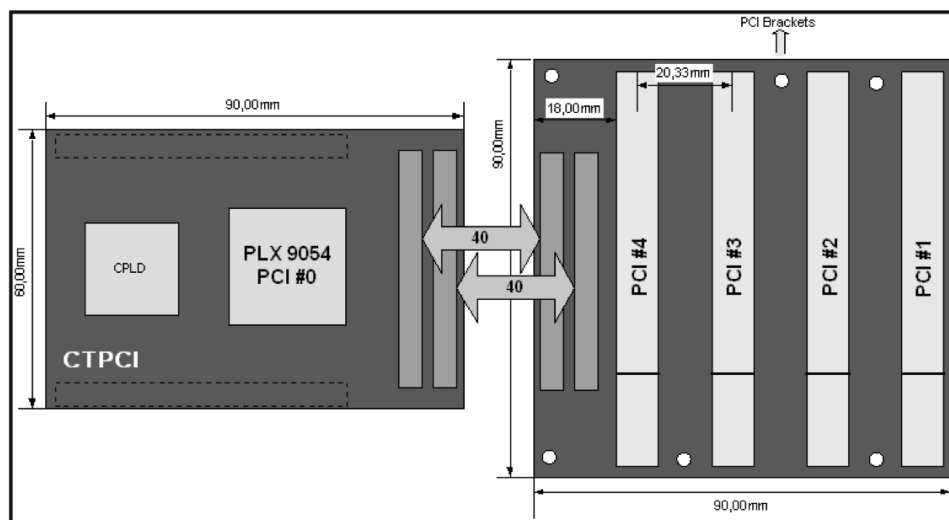
Price: 35 euros + 7 euros for the cable + 5 euros for packaging and postal fees

3 - Projects for Falcon

CTPCI

A highly expected expansion for CT60/CT63 owners because it will permit to plug up to four PCI peripherals. It will use a bridge compatible with the Milan's one, therefore it should facilitate the adaptation of drivers. While waiting the availability of this daughter-board, Didier Méquignon, Aniplayer's author, already finished writing the PCI BIOS and the driver for ATI Radeon 7000 and 7500 cards. He is expecting the CTPCI but its absence didn't prevent him from working on drivers! On the other hand, he wishes the CTPCI to be available before working on USB drivers. For more information about CTPCI, we send you back to our special article about CT60 expansions in STMag double issue 139/140.

Hardware Projects



Link: <http://www.czuba-tech.com/CTPCI/english/welcome.htm>

Status: designing in progress. It should probably be ready in 2007, and even in 2008, because all depends on Rodolphe Czuba's spare time.

Price: 130 euros + postal fees (16 euros for European Union)

EtherNAT

This card puts together a 100 MBit/s network port and two



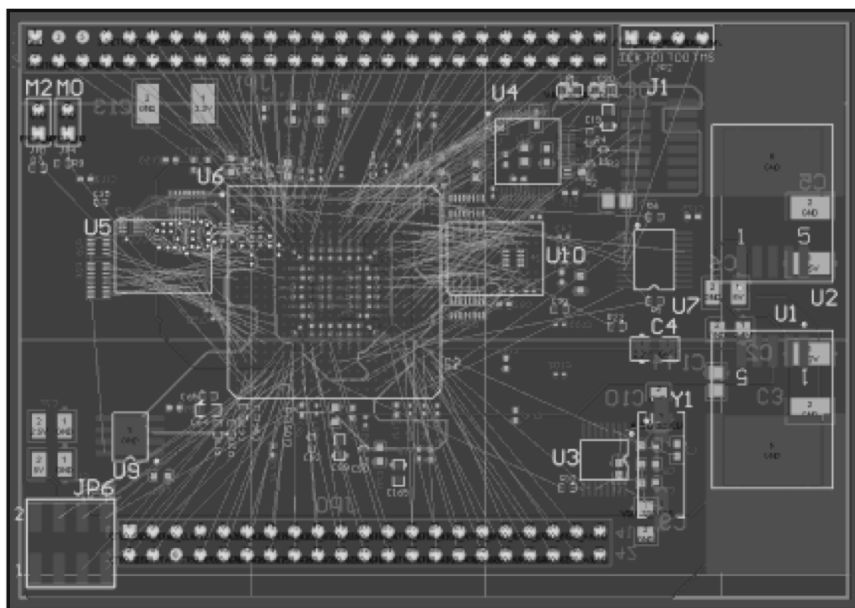
USB 2 ports. Today it is the only expansion available for CT60. Here too, we send you back to our special article about CT60 expansions in STMag double issue 139/140 for more information. Of course, things evolved since this issue: now the cards are available and are sent to users little by little.

Link: <http://nature.atari.org/>
Status: in production.

Price: 125 euros + postal fees (16 euros for European Union)

SuperVidel

We carry on the second project by Nature crew: a new Videl, fully designed in FPGA technology! The Videl, which is the Falcon video coprocessor, constitutes a bottle-



neck because it can't access to the SDRAM of the CT60. Moreover, its resolutions are limited. As said before, our article in issue 139/140 will give you more information about this project. Note the SuperVidel project is suspended because its authors prefer to concentrate themselves on the EtherNAT. They have worked on a light version of the SuperVidel, less expensive but less powerful. It seems the designers finally plan to produce this restricted version, just wait and see.

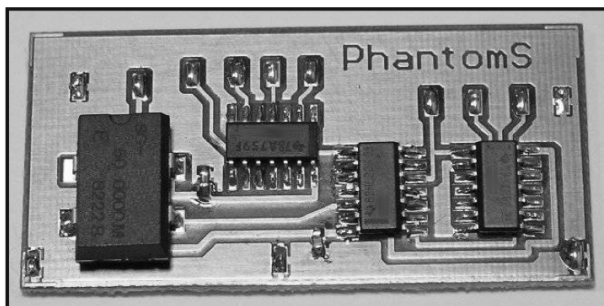
Link: <http://nature.atari.org/>

Status: designing in progress, but suspended project. The card probably won't be available before several years.

PhantomS

This project is the sequel to the Phantom card (with no S) which was a boosting board for Falcon. It consists of two parts: the boosting board itself and an additional card called Clock-Patch2. The latter will permit to fix sound and SCSI problems usually occurring with over-clocked Falcons. Concerning the boosting board, it speeds up the 68030 to 25 MHz, the bus to 25 MHz, the coprocessor to 25 or 50 MHz, the DSP to 50 KHz and the Videl to 50 MHz. According to its designer, it will accelerate the machine in that way by 56%. It is still possible to come back to the initial configuration thanks to a

Hardware Projects



switch. Note this card is designed to run with a CT60 or CT63 to give more power to the Falcon.

Link: <http://www.volny.cz/boban07/PhantomS/>

Status: end of designing and start of production. First cards should be available this year.

Price: 35 euros for the two cards, documentation and postal fees in Europe.

4 - New computers

Atari Coldfire Project

This project exists since several years, more precisely since the Milan was stopped. As its name indicates it, the aim is to suggest a TOS platform based on a Coldfire processor. The project is not stopped but goes on very slowly. The main motivation of the designers is the intellectual curiosity and not the manufacturing of a new kind of computers, for both practical and economical

reasons. So, do not expect a miracle: if a machine is ever produced, it will be in a small-scale and confidential way.

*Link: <http://acp.atari.org/>
Status: designing in progress, the project goes on slowly.*

Atari Osprey

A foolish information came to our ears at the end of 2006: a new Coldfire-based TOS machine would be in the pipeline. The web site doesn't give a lot of news, except the specifications: based on a 240 MHz Coldfire, with 64 MB of RAM, 16 MB of flash RAM, VGA and DVI outputs, a native LCD support (800x600), two RJ45 10/100 MBit/s ports, two PCI ports, two RS232 serial ports, two TTL serial ports and four USB ports. The operating system could have a MiNT-compatible layer above Linux: it makes us tremendously think about ARAnyM. However, all that makes us tremendously think about a huge vapourware, in short a lot of hot air. Well, just wait and see!

*Link: <http://atari.ruggedstyle.org/>
Status: designing in progress.
Warning, vapourware detected!*

Conclusion

It seems 22 years after its creation, the ST is still a source of inspiration for hackers. You can rely on STMag to inform you about latest news concerning

these projects as well as new ones.

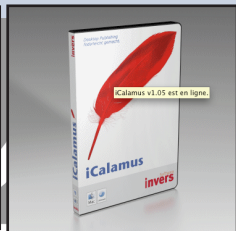
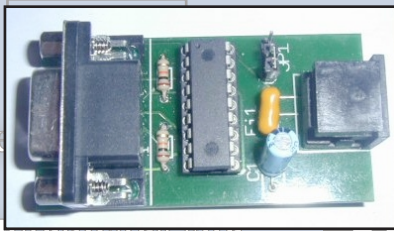
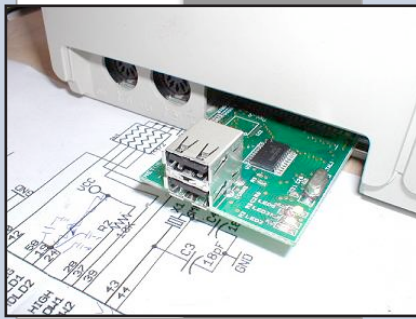
Strider

*With the kind participation of French Atari forum members on Yaronet
Translated by the author*

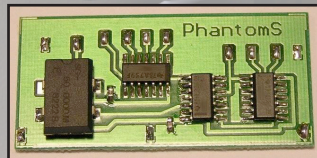
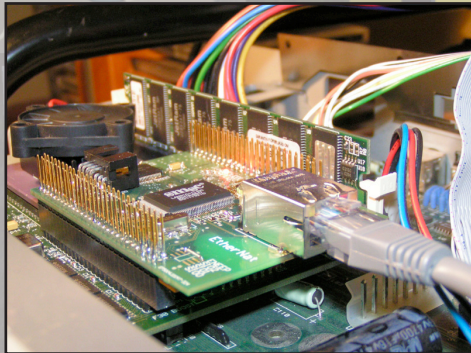
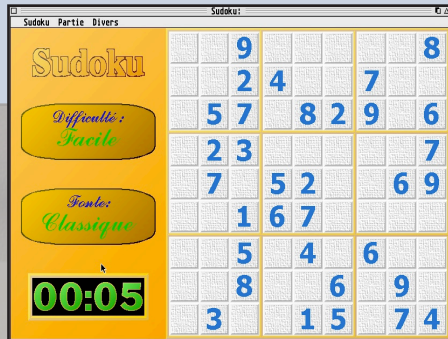


Atari consoles ride high!

You are Atarists, and you often own consoles of the brand, such as Jaguar, Lynx, and the likes of VCS 2600. Know that ReVival is another publication of our association, and is 100% dedicated to retrogaming and alternative consoles. Atari consoles are naturally strongly represented with numerous information, previews and tests. The latest new things are previewed. Since happiness comes in twos, there is an English version of ReVival. Currently, issues 29, 30, 31, 32 and 33 are available from 16/32 Systems as well as from Good Deal Games in the USA.



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