Welcome!

This document will show you my selfmade expansions and enhancements for the Atari 8-Bit computer family (and more...)

All PCBs are – unless otherwise noticed – completely populated and ready-to-use. An english manual and/or instructions is always provided in digital form (PDF file). Sometimes other languages, too.

My solutions are handmade (except making of the PCB itself, of course) and hand-soldered. You will get fully tested and working stuff for your beloved Atari computer! Except some End-Of-Life products all the parts I use are purchased at serious stores like Mouser etc.

The next page (no. 2) contains a list of actual things I´ve to offer including pricing and availability.

**Payments** are only possible using Paypal in currency EURO. All fees by Paypal including currency conversion are paid by me. You should use „Pay for goods and services“. Easy payment is possible using this link: [https://www.paypal.me/tfhh](https://www.paypal.me/tfhh)

**Shipping costs**: See page 3 of this document.

If you want to place an order, please sent me an email with the item(s) you want. I will check your order and respond with the grand total including shipping costs. Shipments are always with tracking number due to Paypal rules. Thanks for understanding!

Questions? Just write an email to me. Usually I will answer within 24 hours.

**Note:** I´m sure you will identify that english is not my native language 😊 – if you find mistakes in any way, I´m happy to get a correction by email – Thank you!

Best regards, Jurgen

Contact:

Jurgen van Radecke

Email: tf_hh@gmx.de or jvradecke@gmail.com


Forum [www.abbuc.de](http://www.abbuc.de): User „tfhh“

You can download the following pictures of my stuff in high resolution here:

[http://www.van-radecke.de/STUFF/tfhh_stuff_pics.zip](http://www.van-radecke.de/STUFF/tfhh_stuff_pics.zip)
## List of items made by tfhh

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<th>For use with / compatible with</th>
<th>Price in EURO</th>
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<td>6</td>
<td>3-4 weeks</td>
<td>Atari 600XL, 800XL, all Atari XE with ECI-Port</td>
<td>45</td>
</tr>
<tr>
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<td>4</td>
<td>End-of-Life product</td>
<td>Atari 600XL and Atari 800XL</td>
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</tr>
<tr>
<td>Sys-Check V2.2 XE</td>
<td>4</td>
<td>End-of-Life product</td>
<td>Atari XE with ECI-Port</td>
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</tr>
<tr>
<td>Super Color CPU Card</td>
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<td>BitWriter 1050 Replica „B“</td>
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<tr>
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<tr>
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<td>2-3 weeks</td>
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<td>512 KB SRAM memory expansion V4.4 Standard</td>
<td>2</td>
<td>3-4 weeks</td>
<td>Atari 800XL, 1200XL, all XE models &amp; XEGS except 600XL</td>
<td>23</td>
</tr>
<tr>
<td>576 KB SRAM memory expansion for 600XL</td>
<td>5</td>
<td>3-4 weeks</td>
<td>Atari 600XL – includes 64 KB base and 512 KB expanded memory</td>
<td>31</td>
</tr>
<tr>
<td>Stereo Enhancement</td>
<td>2</td>
<td>End-of-Life product</td>
<td>All Atari XL, XE and XEGS</td>
<td>25</td>
</tr>
<tr>
<td>KEYCON bare PCB</td>
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<td>2 weeks</td>
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<td>5</td>
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<tr>
<td>GTIA Fixer</td>
<td>9</td>
<td>2-3 weeks</td>
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<td>10</td>
</tr>
<tr>
<td>Acorn BBC Dual Joystick Adapter DB-9</td>
<td>6</td>
<td>End-of-Life product</td>
<td>Acorn BBC series with DB-15 analogue joystick connector</td>
<td>10</td>
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</table>

**Parts below are not developed by me!**

<table>
<thead>
<tr>
<th>Name of enhancement, expansion or PCB</th>
<th>Amount in my stock</th>
<th>Lead time for out-of-stock orders</th>
<th>For use with / compatible with</th>
<th>Price in EURO</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOY-2-PIC ICSP PIC Programmer</td>
<td>1</td>
<td>Made by Mytek Controls</td>
<td>See project info here: <a href="https://ataribits.weebly.com/joy2pic.html">https://ataribits.weebly.com/joy2pic.html</a></td>
<td>10</td>
</tr>
<tr>
<td>XEL-CF3 MPBI-IDE incl. CF-Card =&gt; 1 GB</td>
<td>3</td>
<td>Made by Mytek Controls</td>
<td>See project info here: <a href="https://ataribits.weebly.com/xel-cf-drive.html">https://ataribits.weebly.com/xel-cf-drive.html</a></td>
<td>20</td>
</tr>
<tr>
<td>OEM Logitech M-SBF96 PS/2 „NOS“</td>
<td>8</td>
<td>Branded Fujitsu-Siemens</td>
<td>New, sealed PS/2 Mouse, works fine with 1088 XEL/XLD mouse port (or Mousetari)</td>
<td>5</td>
</tr>
</tbody>
</table>

### Additional informations to the list above:

**Amount in my stock:** This is the number of pieces built ready. Immediately shipping possible. Please watch date and time (upper right corner of this page). Standard FiFo (First In, First Out) will be done.

**Lead time for out-of-stock orders:** The worst case time I need to make more pieces, if my personal stock is empty. Normally it should be faster. But for some reasons (Vacancy of PCB maker, some parts with long delivery times etc.) it will take the time I wrote here. If you read „End-Of-Life“ product here, then no new batches will be made. If stock is zero, this item will be removed from the list.

**For use with:** Describes the Atari computer system(s) (or other platforms) which the expansion, enhancement or PCB is used for.

**Price:** The price in currency EURO for one piece.
The last years before 2019 comes I could offer economically priced and reliable shipping to all places in the world – Up to 500 grams could be sent for 9 Euros incl. tracking number and insurance.

Since January 1st 2019 this is impossible, because „Deutsche Post“ (German equivalent to „U.S. Postal Service (USPS)“) changes his standard business conditions. The postal product „letter“ (which I used before) doesn’t allow ANY kind of goods anymore – just paper, documents and magazines („printed items“). ANY content of hardware or „things“ in general is denied.

To prevent customers from including any goods, you can’t label such shipments with the international CN22 customs declaration form any more. If the destination postal service and/or customs will detect any goods in letters, the shipment is withhold and will be destroyed or return to sender with terrible extra fees.

**Breaking news!**

Luckily Deutsche Post has create this week (April the 17.th) a new postage product called „DHL Päckchen XS“ for 13 Euros incl. tracking. The conditions for this postage product: max. 3 cm in height, so this is a good choice for ordering up to three of my „small“ expansions. The Sys-Check V2.2 Standard XL/XE will exceed this postage product’s conditions, so the standard product „DHL Päckchen“ for 20 Euros incl. tracking must be used.

So after all, the new shipping costs as follow – all with tracking number:

<table>
<thead>
<tr>
<th>Postal Product</th>
<th>max. Insurance</th>
<th>max. Weight</th>
<th>max. Height</th>
<th>Destination</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHL Päckchen XS</td>
<td>up to 50 EUR</td>
<td>2 kg</td>
<td>3 cm</td>
<td>Worldwide</td>
<td>13 EUR</td>
</tr>
<tr>
<td>DHL Päckchen</td>
<td>up to 50 EUR</td>
<td>2 kg</td>
<td>10 cm</td>
<td>Worldwide</td>
<td>20 EUR</td>
</tr>
<tr>
<td>DHL Paket</td>
<td>up to 500 EUR</td>
<td>5 kg</td>
<td>60 cm</td>
<td>USA</td>
<td>37 EUR</td>
</tr>
<tr>
<td>DHL Paket</td>
<td>up to 500 EUR</td>
<td>5 kg</td>
<td>60 cm</td>
<td>Russia</td>
<td>31 EUR</td>
</tr>
<tr>
<td>DHL Paket</td>
<td>up to 500 EUR</td>
<td>5 kg</td>
<td>60 cm</td>
<td>Israel, Egypt and some more africa destinations</td>
<td>38 EUR</td>
</tr>
<tr>
<td>DHL Paket</td>
<td>up to 500 EUR</td>
<td>5 kg</td>
<td>60 cm</td>
<td>Canada</td>
<td>38 EUR</td>
</tr>
<tr>
<td>DHL Paket</td>
<td>up to 500 EUR</td>
<td>5 kg</td>
<td>60 cm</td>
<td>China</td>
<td>43 EUR</td>
</tr>
<tr>
<td>DHL Paket</td>
<td>up to 500 EUR</td>
<td>5 kg</td>
<td>60 cm</td>
<td>Rest of the world not included above</td>
<td>46 EUR</td>
</tr>
</tbody>
</table>

Some examples:

- Ordering one Super Colour CPU Card = 13 Euro, two of them = 20 Euros
- Ordering one or two Sys-Check V2.2 Standard XL/XE = 20 Euros (fits not in 3 cm height!)
- Ordering up to three of the SRAM memory expansions = 13 Euros
- Ordering one or two BitWriter Replica 1050 = 20 Euros (fits not in 3 cm height!)
- Ordering the SRAM Charger, Mini-Speedy, Turbo 1050 = 13 Euros

I will always check the cheapest shipping costs for you! Just sent me your interest or order, and then I will calculate the best price for shipping.
Sys-Check V2.2 Standard (for XL and XE)

Manual / Instructions in: English and German

The Sys-Check V2.2 external device offers this major functions:

1. Diagnostic tool for dead computers without the need to open the case
2. External O.S. (operating system) switcher (up to four O.S. can be selected by user)
3. You can also put any standard ROM or EPROM containing Atari O.S.(s) in the DIP socket at Sys-Check’s PCB
4. External 512 KB Standard memory expansion using „RAMBO“ scheme
5. All future updates of the diagnostic tools can be easily flashed into the Flashchip with an easy-to-use flashtool using your Atari XL or XE

Attention: Sys-Check needs to run any XL computer with a PBI interface (all 600 XL and 800XL, but not the 1200XL) or any XE with ECI (800XE, 130XE, some 65XE, but not the XEGS). Some (mostly NTSC) XE models hasn’t an ECI, so Sys-Check will not work with these machines.

See also more informations:
AtariAge: http://atariage.com/forums/topic/233201-orders-for-sys-check-ii-pcb-w-parts-only-accepted/
Video made by Nir Dary: https://youtu.be/hht2tUoBSfc

Download manual / instructions here:
http://www.van-radecke.de/SysCheck/Sys-Check_V2_2.zip
Sys-Check V2.2 XL

The Sys-Check V2.2 XL external device offers this major functions:

1. Diagnostic tool for dead computers without the need to open the case
2. External O.S. (operating system) switcher (up to four O.S. can be selected by user)
3. You can also put any standard ROM or EPROM containing Atari O.S.(s) in the DIP socket at Sys-Check’s PCB
4. External 512 KB Standard memory expansion using „RAMBO“ scheme
5. All future updates of the diagnostic tools can be easily flashed into the Flashchip with an easy-to-use flashtool using your Atari 600XL or Atari 800XL
6. You get a PBI pass-trough connector, so you can connect another PBI device!

Attention: Sys-Check XL needs to work an Atari XL computer with PBI interface. You can use this „XL“ version of Sys-Check with all Atari 600XL or Atari 800XL computers, but not with the Atari 1200XL – this model hasn’t a PBI parallel port.

See also more informations:

Video made by Nir Dary: [https://youtu.be/hht2lUoBSfc](https://youtu.be/hht2lUoBSfc)

Download manual / instructions here:

[http://www.van-radecke.de/SysCheck/Sys-Check_V2_2.zip](http://www.van-radecke.de/SysCheck/Sys-Check_V2_2.zip)
The Sys-Check V2.2 XE external device offers these major functions:

1. Diagnostic tool for dead computers without the need to open the case
2. External O.S. (operating system) switcher (up to four O.S. can be selected by user)
3. You can also put any standard ROM or EPROM containing Atari O.S.(s) in the DIP socket at Sys-Check’s PCB
4. External 512 KB Standard memory expansion using „RAMBO“ scheme
5. All future updates of the diagnostic tools can be easily flashed into the Flashchip with an easy-to-use flastool using your Atari 800XE, 130XE or 65XE
6. You get a PBI like pass-trough connector for your XE 😊

Attention: Sys-Check XE needs to work an Atari XE computer with ECI interface. You can use this „XE“ version of Sys-Check with all Atari 800XE, 65XE or 130XE computers, but not with the Atari XEGS – this model hasn’t an ECI port. Also some XE models has only a cartridge port, but not an ECI. Sys-Check XE can’t work with these models!

See also more informations:

Video made by Nir Dary: [https://youtu.be/hht2tUoBSfc](https://youtu.be/hht2tUoBSfc)

Download manual / instructions here:

[http://www.van-radecke.de/SysCheck/Sys-Check_V2_2.zip](http://www.van-radecke.de/SysCheck/Sys-Check_V2_2.zip)
The Super Color CPU Card (SCCC) is a replacement CPU card (board) for all Atari 400 and Atari 800 computer systems (not XL or XE systems!). The SCCC offers the following features:

1. Usage of 6502B (Standard NMOS 6502 CPU) or 6502C (Special version made for Atari called „SALLY“) possible
2. Can be used with PAL or NTSC systems
3. Includes the phantastic „Ultimate Atari Video“ (UAV rev.D) circuit, developed by Bryan Edewaard. The UAV gives you the best, non RGB quality picture you can get!
4. When installed in an Atari 400, you have automatically a real video output (and also audio, of course) instead of the low quality antenna (RF) signal!
5. You get a ultrasharp S-Video (Y/C) and a very good Composite Video output!
6. Includes a mono audio amplifier mixing POKEY and SIO sound together

See also more informations:
Video made by Jon Halliday: https://youtu.be/E3GsSlmPNj8

Download manual / instructions here:
http://www.van-radecke.de/SuperColorCPUCard/SCCC.zip
48/52 KByte RAM Card for Atari 400

The 48/52 KB RAM Card is made specially for the Atari 400 computer system. By default, this computer is only equipped with 16 KB RAM – not really much software will work with only 16 KB. Expansion cards are rare, expensive and sometimes with compatibility issues when made with stacked DRAMs. So here’s my solution:

1. Offers 48 or 52 KByte RAM, which makes your 400 like an Atari 800 – all software that worked on the Atari 800 will also run now on your Atari 400!
2. You can install up to four different O.S. (operating system) using an industry standard EPROM. Using this feature, you can easily change from NTSC to PAL or vice versa or must not replace expensive defective original ROMs.
3. A standard 27C256 EPROM with OS-B (PAL) and OS-B (NTSC) is already included

See also more informations at AtariAge:

Download manual / instructions here:
http://www.van-radecke.de/Atari400RAMCard/Manual.zip
The BitWriter 1050 Replica is the reproduction about one of the best copy solutions for the Atari 1050 diskdrive. It contains the Super Archiver 1050 and the BitWriter 1050 on one single PCB.

The BitWriter 1050 gives additional possibilities to the well-known Super Archiver 1050. So you´re able to copy the latest copy protection schemes from Electronic Arts for example. BitWriter 1050 supports three different drive motor speeds and complex analytic functions when reading whole tracks of protected disks. It´s a must-have for preservation fans of original software.

**Hint:** Offered is the „B“ model (see AtariAge thread). Because no interest in the „A“ version was stated, I drop the production of the „A“ version.

See also more informations at AtariAge:


Download manual / instructions here:

[http://www.van-radecke.de/BitWriter/BitWriter_Replica_1050.zip](http://www.van-radecke.de/BitWriter/BitWriter_Replica_1050.zip)
This is the smallest floppy speeder for the Atari 1050 diskdrive available: The Mini-Speedy 1050! This small PCB sizes only 5 x 5 cm and it’s installation is absolute solderfree. Just remove two chips, cut of four capacitors and plug the Mini-Speedy in the 1050 mainboard – that’s all!

The Mini-Speedy 1050 offers the following features:

1. Highspeed SIO transfer up to approx 76000 bps – much faster than the Happy 1050!
2. Real Double Density (180k each disk, 256 bytes per sector)
3. Flawless 8 KByte track buffer with highspeed write by default
4. Works with all known Highspeed SIO routines and any DOS
5. Built-in (just boot your 1050 with open disk lever!) Highspeed-Copy-Program or BiboDOS (needs separate switch for changing Speedy O.S. selection).
6. The Mini-Speedy 1050 is equipped with the patched V1.7 firmware (newest one), this firmware works with PAL and NTSC systems (all genuine Speedy firmwares runs only with PAL, but not with NTSC computers using Highspeed-SIO!)

Download manual / instructions here:
http://www.van-radecke.de/MiniSpeedy/MiniSpeedy1050.pdf
This floppy speeder for the Atari 1050 diskdrive includes all features from the Mini-Speedy 1050 above plus one new feature: It can write a whole disk incl. format and verify in less than 30 seconds! The secret: The data is loaded into the Super-Speedy’s onboard 256 KB RAM and then you can write as much copys you want from the RAM inside your 1050 – no transfer through the bottle-neck SIO buss is needed! The installation is absolute solderfree. Just remove two chips, cut of four capacitors and plug the Mini-Super-Speedy into the1050 mainboard – that’s all!

The Mini-Super-Speedy 1050 offers all features like the Mini-Speedy 1050 (see above this page). When you access your 1050 with Mini-Super-Speedy equipped drive all read/write functions are the same like with the standard Mini-Speedy 1050.

The „additional power“ is only available when booting your 1050 with Mini-Super-Speedy as D1: and open disk lever. A special copy program is loaded into your computer, which controls now the high-speed copy features with the Super-Speedy!

Speedy-Software is patched with english words and commands and runs with NTSC, too!

Download manual / instructions here:
http://www.van-radecke.de/MiniSpeedy/MiniSuperSpeedy1050.pdf

Watch video copying a double density disc with the Super Speedy copy tool:
http://www.van-radecke.de/MiniSpeedy/MiniSuperSpeedy_copy_in_action.mp4
The Turbo 1050, made by B. Engl, is one of the „freakiest“ products I know. Just using an EPROM, a GAL (logic chip) and some parts around the Turbo 1050 is a very cool floppy enhancement for the Atari 1050 diskdrive. The power is in the software only! No track buffer, no additional RAM, no CPU with bigger address space. On the other hand, Turbo 1050 can copy more protected games like any Happy 1050!

A short brief about the features:

1. Enables Double Density (180k per disk, 256 bytes per sector)
2. Enables Highspeed-SIO up to 70000 bps (more than „Warp Speed“)
3. Has built-in „BackUp Machine“ for copy protected disks
4. Parallel port printer interface (not included in this replica)

Due to the fact that the Turbo 1050 hasn´t any track buffer the Highspeed-SIO is always used, but really effective only when the disk to be used was formatted using the Turbo 1050. The Turbo 1050 formats disks with a special interleaving, so that these disks can be read at the same speed like all other floppy enhancements with track buffer.

Download manual / instructions here:
http://www.van-radecke.de/Turbo1050/Turbo_1050_Replica.zip
This little PCB is a 64 KByte memory card for the Indus GT disk drive and the compatible clones LDW Super 2000 and CA-2001. With this SRAM Charger add-on card you can run CP/M in your disk drive!

**Important**: Please specify the drive where you want to use your SRAM Charger when placing an order! As you can see in the picture above, two versions are offered.

Indus GT users need only to open the drive, plug in the SRAM charger and that’s all. Of course the standard usage as a standard disk drive is possible further.

If you’re an owner of the clone versions LDW Super 2000 or CA-2001, you must do some solder jobs on the drive’s mainboard first. Detailed informations are provided in the manual.

Special thanks to Bartosz Trybus for supporting me with his useful hints and tests!

Download manual / instructions here:

[http://www.van-radecke.de/SRAM_Charger/SRAM_Charger.zip](http://www.van-radecke.de/SRAM_Charger/SRAM_Charger.zip)
This expansion enables your Atari 800XL, 1200XL or any XE & XEGS model to watch the newest demos or play the actual homebrew games which requires often more than the 64 KB main memory of the machine. My solution don’t need to drill holes for switches, it’s software configured.

The PCB is only 0.8mm thick and doesn’t need the removal of any other parts to fit in all Atari XL/XE/XEGS computers (except the Atari 600XL). For some models and/or mainboard versions of your Atari you need one or two 40 pin machine-head precision sockets to reach the needed distance to other chips and parts.

After power on, the 512 KB „RAMBO“ mode is active. This mode should fit all your needs in 99% of all use cases. For some rare programs you can switch to 256 KB Compy-Shop mode (with seperated ANTIC and CPU access) or switch the whole expansion off. These setting remains active until you power off the computer, a coldstart without power cycling won’t change the setting anyway.

The ANTIC and the MMU needs to desoldered and machine-head precision sockets installed. Just three wires must be soldered, a prepared cable for that is included.

This SRAM based 512 KB memory expansion „Standard“ (V4.4) works technically in all Atari XL, XE and XEGS computers and will fit in the Atari 800XL, 1200XL models as all Atari XE and the XEGS also, but not in the Atari 600XL!

Download manual / instructions here:

http://www.van-radecke.de/SRAM/512KB_SRAM_Expansion_V4_4.pdf
576 KByte SRAM memory expansion for 600XL

(this model specially made for the Atari 600XL with only 16 KB base memory)

Manual / Instructions in: English and German

This solution expands your Atari 600XL computer in two ways:

1. You get 64 KB main / base memory, so that all programs made for the 800XL etc. will also work fine
2. Enables your Atari 600XL to watch the newest demos or play the actual homebrew games which requires often more than the 64 KB main memory of the machine by adding additional 512 KB banked, expanded memory

My solution don’t need to drill holes for switches, it’s software configured.

By default all chips at the Atari 600XL mainboard are in sockets, so installation of the 576 KB SRAM memory expansion is very easy. Just pull off the ANTIC chip, place my PCB in the ANTIC socket and put the ANTIC chip at the top of my PCB. Now only three wires must be soldered, a prepared cable for that is included – ready! It’s not needed to remove the RF modulator any more!

After power on, the 512 KB „RAMBO“ mode is active. This mode should fit all your needs in 99% of all use cases. For some rare programs you can switch to 256 KB Compy-Shop mode (with separated ANTIC and CPU access) or switch the whole expansion off. These setting remains active until you power off the computer, a coldstart without power cycling won’t change the setting anyway.

This SRAM based 576 KB memory expansion „600XL“ works technically in all Atari XL, XE and XEGS computers, but it’s mainly made (size & fit) for the Atari 600XL!

Download manual / instructions here:
http://www.van-radecke.de/SRAM/576KB_SRAM_600XL.pdf
This is one of the several Dual-POKEY Stereo solutions („Gumby“). But some things are done the other way, maybe you will find it also nice 😊

1. A very good amplifier (NE5532) is used with a little more bass than usual making the POKEY sound a little more powerful (IMHO)
2. The Mono/Stereo switching (CMOS 4016/4066 analogue switch) is done BEFORE coupling – so no clicks or other disturbances like with other boards of this kind will occur
3. The PCB is only 5 x 5 cm and fits all Atari XL, XE and XEGS (when using an Atari 600XL, the O.S. must lowered with ultra profile sockets, otherwise it won´t fit with the keyboard)
4. When Mono-Mode is activated, the mono sound is also played on both channels
5. The Mono/Stereo switch input can be directly connected to the Ultimate 1 MB expansion or similar. A high input means „Stereo“, a low input means „Mono“
6. A right channel feedback signal to the onboard LM358 amplifier is included, so both (stereo) channel are played (in mono, of course) when the standard monitor jack audio out is used

**Note:** You can see some additional pads on the PCB. My intention was to include a SIO2PC interface using the FT232RL Serial-to-USB converter chip. Technically it works fine, but from 5 beta testers three of them have several problems with the USB part. Because these problems were always on the PC side, I decide to drop this part of the circuit – I can´t support Windows problems all over the world 😞 – If you want, you can add the parts by yourself.

Download manual / instructions here:

http://www.van-radecke.de/Stereo/Stereo_PCB_Installation_Instructions.pdf
KEYCON is just a tiny thing useful for repair guys and hardware tinkerers. KEYCON enables different kind of connectors to attach a XL or XE keyboard to the computer. You can use single row headers, double row IDC connectors (like SCSI-1 connectors with 50 pins) or the genuine mylar connector found on all Atari XL/XE mainboards.

Additional, the functions keys plus BREAK is included, you can add standard Omron 6mm tactile pushbuttons to press the desired keys directly without attached keyboard. These keys are mostly used for the SALT test-cartridges and that´s the reason why I include them 😊

KEYCON comes bare without any components. You decide, what you want on it!

See also more informations at AtariAge:

The circuit of the GTIA Fixer was developed in 2010 by Simius.

This little PCB fixes the problems you get with some faulty GTIA models found in XE computers (PAL only!). Mostly the 800 XE model is affected. The effect of having a faulty GTIA will be visible using some games and demos, for example the space ship intro sequence of „Rescue on Fractalus“ and much more.

One way is to change the GTIA to a good working one, the other way is to use this little PCB. Just plug the PCB into the place where the GTIA was before, put the faulty GTIA on this PCB and that’s all – now everything is fine.

Requires desoldering the GTIA from the (XE) mainboard!

Download manual / instructions here:

http://www.van-radecke.de/GTIAFIX/Info_GTIA_Fixer.pdf
Acorn BBC Dual Joystick Adapter

Manual / Instructions: Not needed

**Attention:** Not for Atari computers! :-)

This is an adapter for the Acorn BBC series, a MOS 6512 based home computer made in the 80s by the british company Acorn (maybe you know later computers called „Archimedes“ from that company, the first RiSC-machines for the private user!).

You’ve to use special analogue joysticks with 15 pin SUB-D connector. These joysticks – in a working shape – are hard to get and mostly very expensive – when they’re offered in a good working condition.

With this adapter you can use standard joysticks used for the Atari computers or the C64 and connect them to your Acorn. You get two joystick ports, although not all games support two joysticks. General, not all unpatched games will support the digital Atari/C64 like joysticks. And some less support two joysticks. But at the usual places you will find patched / hacked versions of the common games, of course.
Offered builds from other projects

The items below are developed by other people. I make some PCBs, populate and test them. Some parts are completed with additional parts. No further batches or offers are made, if they’re sold, they’re gone!

**XEL-CF3 MPBI-IDE**

including one brand CF-Card with 1 GByte or more, ready to use

The XEL-CF3 is equipped with a pass-through connector, so you can stick another M-PBI device over this (if your case have enough space/height).

The included cable is about 20 cm long.

The included CF-Card to 44 pin IDE adapter can be switched between single/master

See more infos here: [https://ataribits.weebly.com/xel-cf-drive.html](https://ataribits.weebly.com/xel-cf-drive.html)
This tool can be used to program all Microchip PIC microprocessors used in the Mytek projects 1088 XEL, 1088 XLD and other. It supports various PICs up to 18 pins. Just plug this programmer into joystickport #1, load the pre-compiled programming ATR provided by Mytek, press START and that’s all!

With this programmer, you don’t need any special tool to build your 1088 XEL or XLD.

See more infos here: https://ataribits.weebly.com/joy2pic.html
This is a new, unused and sealed („NOS“ – New Old Stock) PS/2 Mouse from Logitech, model M-SBF96, coloured grey. It’s branded with „Fujitsu-Siemens Computers“.

This model works fine with the 1088 XEL/XLD mouse port(s) or Mousetari in general.

Model can be used left- or right-handed!