SRAM Charger for Indus GT (and compatible) drives

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Introduction

Hi!

Thank you for your purchase of a SRAM Charger board for the Indus GT (and compatible) floppy disc drive. I hope you enjoy this piece of hardware for our beloved Atari 8-bit computer systems 😊

There are two versions of the SRAM charger. Both versions uses the same PCB and layout, but have different connectors. The one for the genuine Indus GT drives use a 90 degree rectangle connector, the other version for the clone drives (LDW Super 2000 or CA-2001) has a straight connector. See below in the following picture:
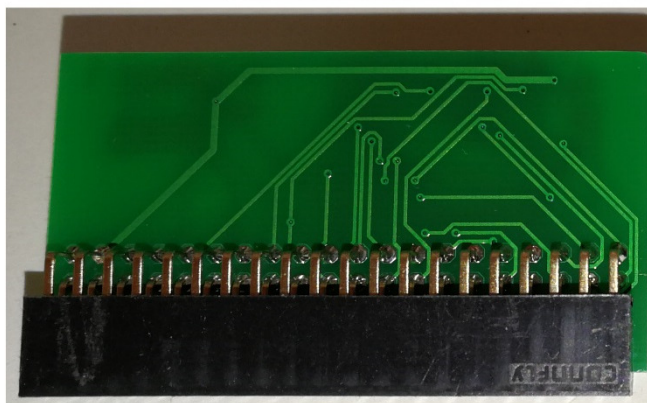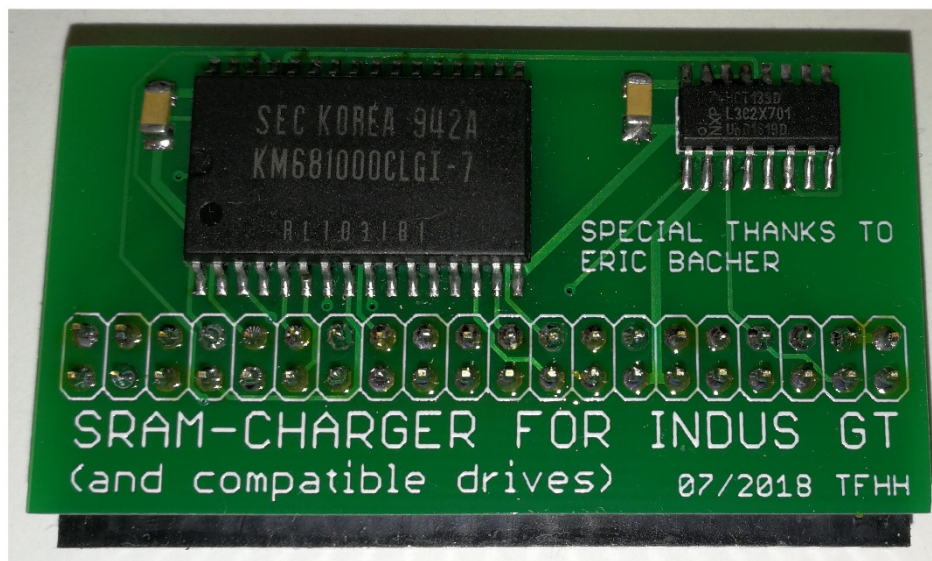
For use with the genuine Indus GT drive
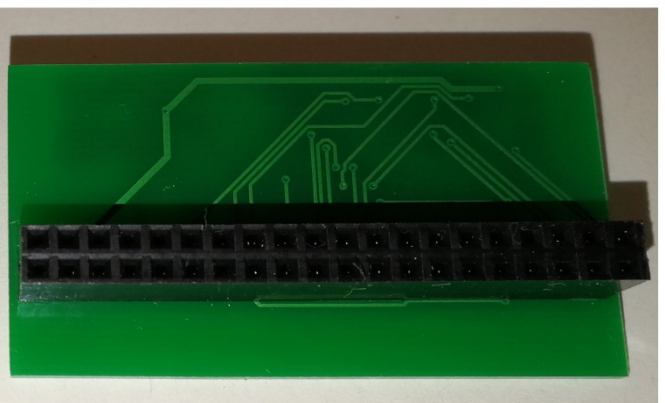
For use with the "clone drives" (LDW Super 2000 or CA-2001)

Installation of the SRAM Charger in your Indus GT drive

You need only a few simple steps to install the SRAM Charger:

1. Open the case of your Indus GT drive. First remove both screws at the plastic bezel at the drive´s rear. Then turn the drive upside down and remove six (or sometimes only four) screws from the left and right side of the metal cage. Pull the upper metal cage over the drive´s rear end completely.
2. Find the expansion connector marked with "J3". It´s located at the right side of the drive if you´re looking from the front of the drive.
3. Insert the SRAM charger with components facing to you. Check the correct alignment (see below).
4. That´s all! Test your drive now, after a successful test re-assemble the metal cage and rear´s bezel, fasten all screws and you´re done!

ATTENTION: Alignment of the SRAM Charger

Please be aware of the right alignment! The J3 expansion connector has 12 volt power attached to some pins – wrong insertion of the SRAM Charger will kill it immediately!
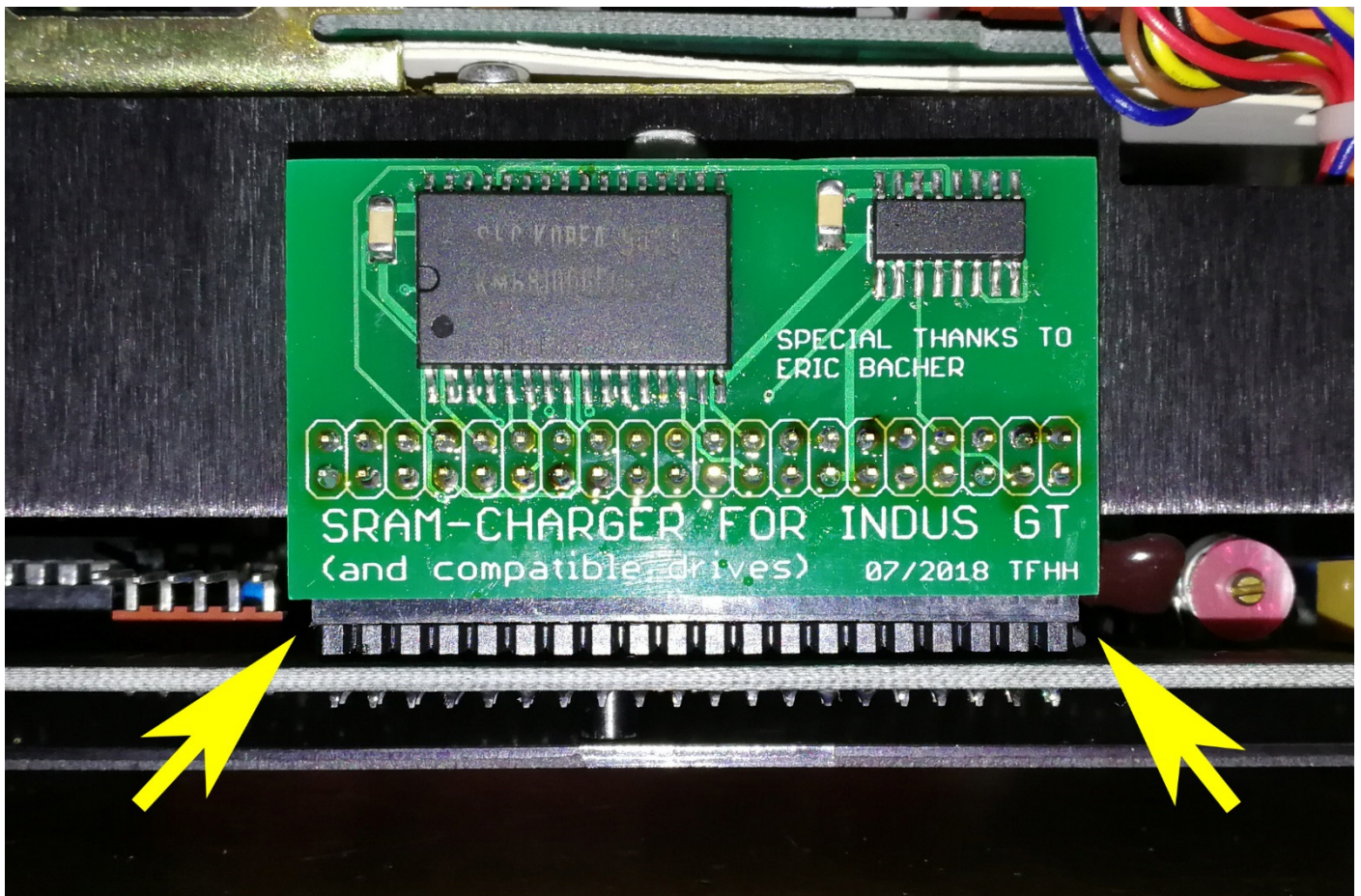
Make sure that the SRAM Charger is plugged in that way, that all pins from the drive´s connector are in touch with the SRAM Charger´s connector. Check left and right side and also the rows of pins!

Installation of the SRAM Charger in your LDW Super 2000 or CA-2001 drive

These drives are nearly identical from the schematics to the Indus GT drive, but some little modifications must be done to make the 64 KB SRAM Charger work.

Trub has already wrote all needed steps, separated by drive and version, on his website. So I didn´t reinvent the wheel and will reference to his fine page:

http://trub.atari8.info/index.php?ref=sramcharger_en

Please scroll down to the chapter "**Mounting into the drive**". Here you will find the needed modifications. After you´ve done that, the same instructions like using the genuine Indus GT drive are valid.

Testing the SRAM Charger (all drives)

When the SRAM charger is successfully installed, the drive should be usable like before. You didn't would mention any difference to the usage without the SRAM Charger…

… but the advanced feature is the ability to run a CP/M command processor – in your drive´s core! ☺

First step is to test the whole 64 KByte of the SRAM Charger. Trub has made a RAM test utility, which can test the SRAM Charger (and other RAM Chargers, too). Look at this webpage:

http://trub.atari8.info/index.php?ref=sramcharger_en

Please scroll down to the last chapter "**Testing the extension**". Here you will find a download link and instructions how to use the RAM test utility. It´s part of the "Indus GT CP/M tool" written by Trub. When running the RAM test, the both 7-segment-displays of your drive will count from $00 to $FF (hexadecimal). If everything is fine, the utility responds with "OK", otherwise with "Not present" (no RAM Charger found) or "ERROR 1" up to "ERROR 8", which means RAM failure.

Usage of CP/M on your drive (all versions)

You need to prepare some real discs to use this feature – CP/M can only be booted by real discs from your Indus GT, LDW Super 2001 or CA-2001 drive. Again all needed steps are explained on Trub´s webpage, so take a look here:

http://trub.atari8.info/index.php?ref=indus_cpm_en

At this page you will find the following, important informations:

1. Where to get the Indus CP/M discs and tools
2. How to fix them (because ATR file has some problems with CP/M´s boot records)
3. How to boot CP/M and use it with the terminal software provided by Indus GT
4. A link to Trub´s fine 80-char terminal for VBXE users

Some similar informations you also can find at the AtariWiki:

https://atariwiki.org/wiki/Wiki.jsp?page=INDUS%20CPM%202.2

CP/M software – how to get?

There´s no known (for me!) source like ftp.pigwa.net etc. for CP/M discs. But a few sources you will find when using Google.

Another way to get CP/M software – specially some bigger applications and tools – is to look at Amstrad CPC download sites. The Amstrad CPC series, also Z80 based 8-bit home computers, was very common in UK (where Amstrad was founded), France and Germany (in Germany labelled as "Schneider CPC").

Amstrad CPC computers are able to use CP/M by default, when you have bought an Amstrad CPC with internal disc drive or an external disc drive with controller, CP/M 2.2 system discs and tool discs were included. So look for Amstrad CPC download areas, forums and links – then you will find CP/M software, also.

Last words

Each SRAM Charger PCB card is fully tested, so you get a fully working and tested device. If anything strange occurs, please first check all components, cables and so on. Read the manual again or, when in doubt, contact me.

Thanks

A big "Thank you" to Bartosz Trybus (Trub) for help with the CA-2001 and LDW Super 2000, testing the SRAM Charger board with these models and the allowance to use his webpages for this manual!

Also another big "Merci" to Eric Bacher, wo enables me to create the SRAM Charger board with sending me an Indust GT drive as a gift 😊

Wistedt, Germany in October 2018 - Jürgen van Radecke alias tf_hh (AtariAge nickname)

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You will find the latest version here:

http://www.van-radecke.de/SRAM_Charger/SRAM_Charger.zip

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