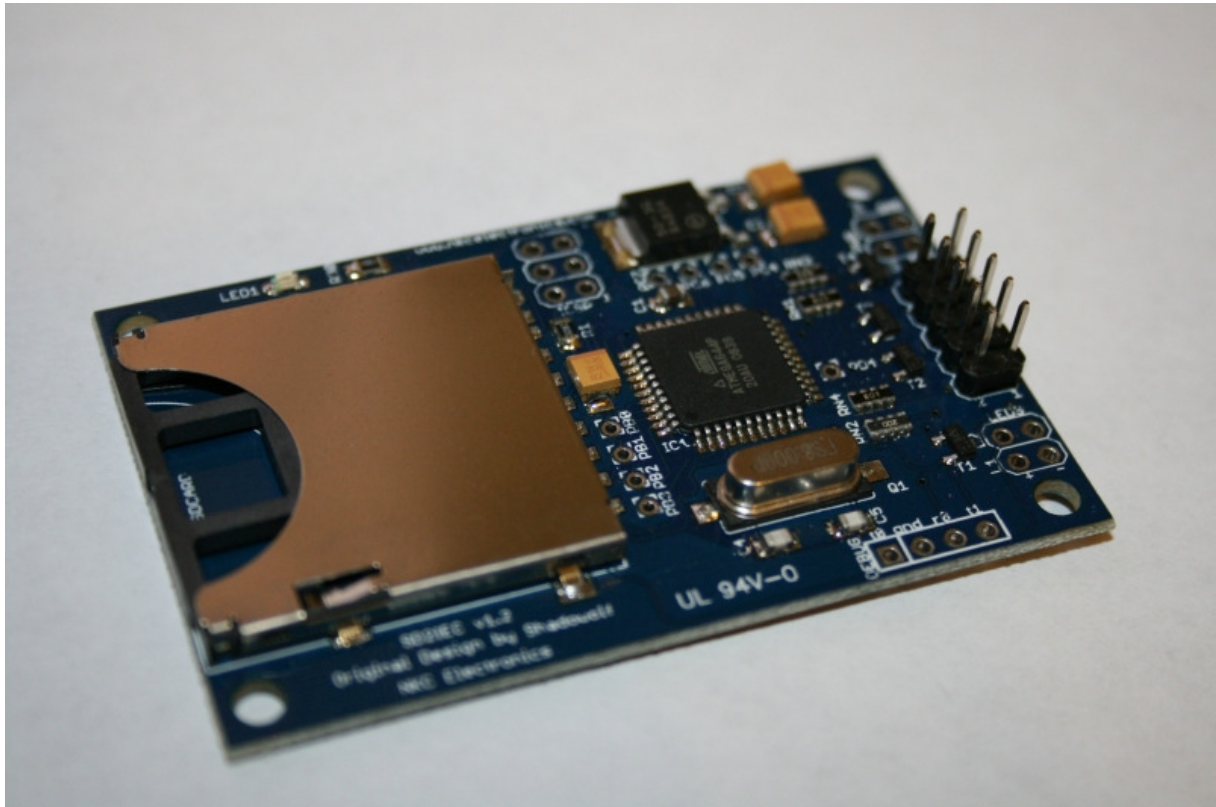


sd2iec



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Product Description

SD2IEC is a hardware mass storage device using an SD/MMC card and interfacing with the IEC bus. It is based on the ATmega644 microcontroller from the Atmel AVR microcontroller family. The most prominent use of SD2IEC is emulation/replacement of a Commodore-1541 disk drive for a C64. Hardware and the microcontroller's firmware is available as open source. (Source: C64 Wiki).

SD2IEC uses firmware also called sd2iec. Firmware version on board: sd2iec-0.7.3-sw2-m644p.

Features

sd2iec hardware Features

- Separate SD2IEC main and daughter board
- Main board has 3 pin headers with power connections, all IEC signals, device selection switches and 2 LEDs
- Main board measures 64.5mm x 40.8mm x 5.6mm (L x W x H)
- Firmware can be upgraded placing the new firmware file in the root directory of the SD Card (bootloader)

sd2iec firmware Features

- D64/M2I support (both reading and writing for D64, even with direct sector access using U1/U2)
- T64 is not supported
- PRG/P00 etc. support
- Subdirectory support (CMD command syntax).
- Support for Turbo Disk AKA Fast Load AKA Speeddisk fastloader
- Supports the JiffyDOS fast serial bus protocol
- Supports the Final Cartridge 3 fastloader/fastsaver
- Supports an external "disk change" button
- Supports FAT long file names
- Supports FAT12/FAT16/FAT32 formatted SD cards
- Improved IEC compatibility
- Supports most typical IEC functions (LOAD, SAVE, OPEN, GET, PUT, CLOSE, ...)
 - 1571 ROM has been taken as reference for implementation
 - Many non-fastloader games run (see <http://www.creepitz.de/downloads/m2i/>).

Firmware updates

- Download Firmware (sd2iec-<VERSION>-sw2-m644p.zip) from <http://sd2iec.de/>
- Unzip the archiv
- Copy the "sd2iec.bin" on top of the file system hierarchy of your SD-card
- Turn Sd2iec off
- Insert your SD-card

- Turn sd2iec on

Request the firmware revision (only usable directly after you turn on your SD2IEC):

```
10 OPEN15,8,15:INPUT#15,A$,B$,C$,D$
20 CLOSE15
30 PRINT A$,B$,C$,D$
RUN
```

The output should be something like

```

      **** COMMODORE 64 BASIC V2 ****
      64K RAM SYSTEM  38911 BASIC BYTES FREE
READY.
10 OPEN15,8,15:INPUT#15,A$,B$,C$,D$
20 CLOSE15
30 PRINT A$,B$,C$,D$
RUN
73          SD2IEC V0.8.1          00
00
READY.

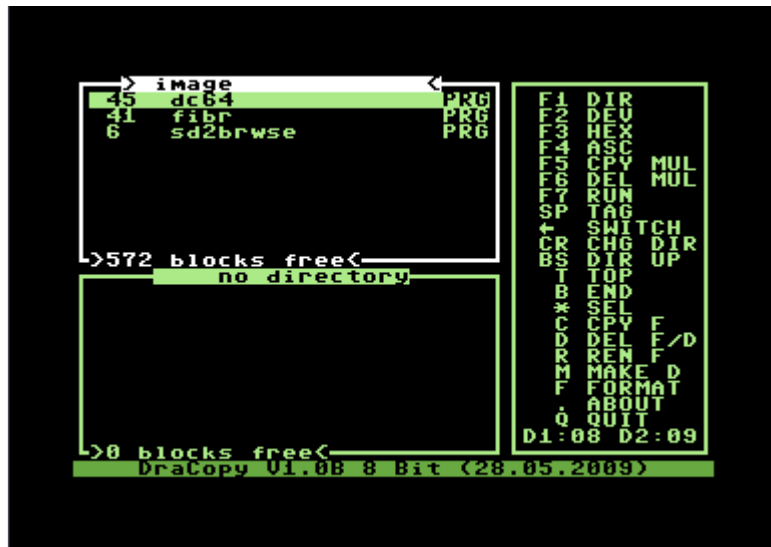
```

Usage

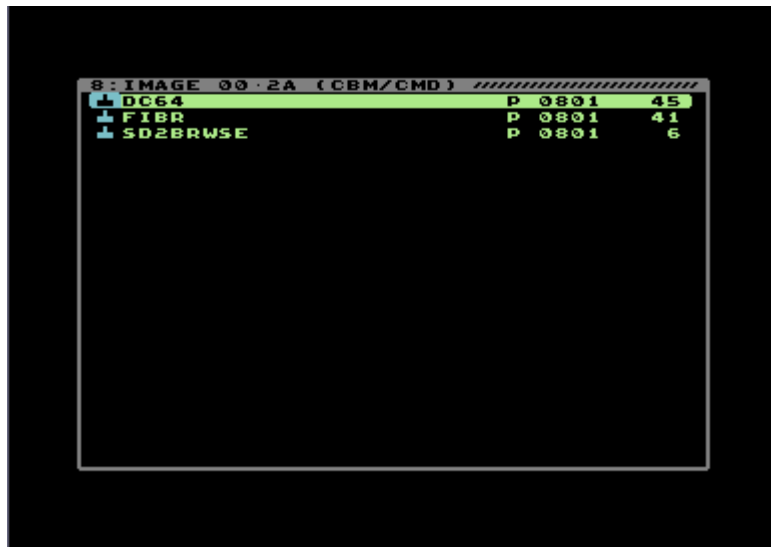
- Changing directories (CMD syntax)
 - OPEN1,8,15,"CD/SOMEDIR":CLOSE1 - change to SOMEDIR (relative)
 - OPEN1,8,15,"CD//":CLOSE1 - change to root directory
 - OPEN1,8,15,"CD//SOMEDIR":CLOSE1 - change to SOMEDIR (in root)
 - OPEN1,8,15,"CD:<":CLOSE1 - go to parent directory (left arrow)
- Using M2Is or D64s
 - OPEN1,8,15,"CD//SOMEDIR/SOMEGAME.M2I":CLOSE1 - change to SOMEGAME.M2I
 - OPEN1,8,15,"CD:<":CLOSE1 - leave M2I (left arrow)
- Loading files
 - LOAD"/SOMEDIR/SOMEFILE" - load SOMEFILE in SOMEDIR (filename gets separated from path using colon)
- mkdir, rmdir see README (<http://snowcat.de/cgi-bin/gitweb.cgi?p=sd2iec.git;a=blob;f=README;hb=HEAD>)

File Browser

Name: DraCopy
Version: 1.0b
Bytes: 11.253
Download: <http://www.sascha-bader.de/html/dracopy.html>



Name: fibr
Version: 1.0a29
Bytes: 10.224
Download: <http://p1x3l.net/downloads/fibr.zip>



Name: sd2brwse

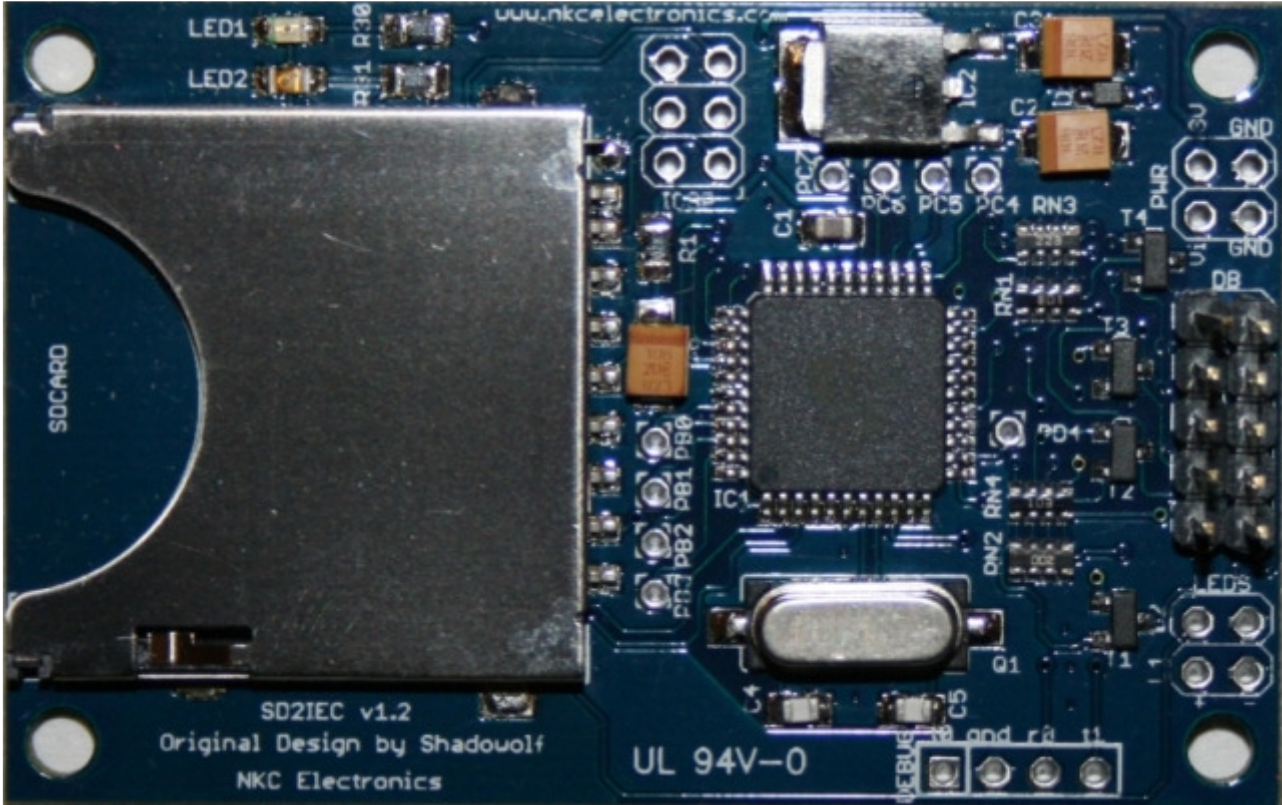
Version: 0.6b

Bytes: 1.490

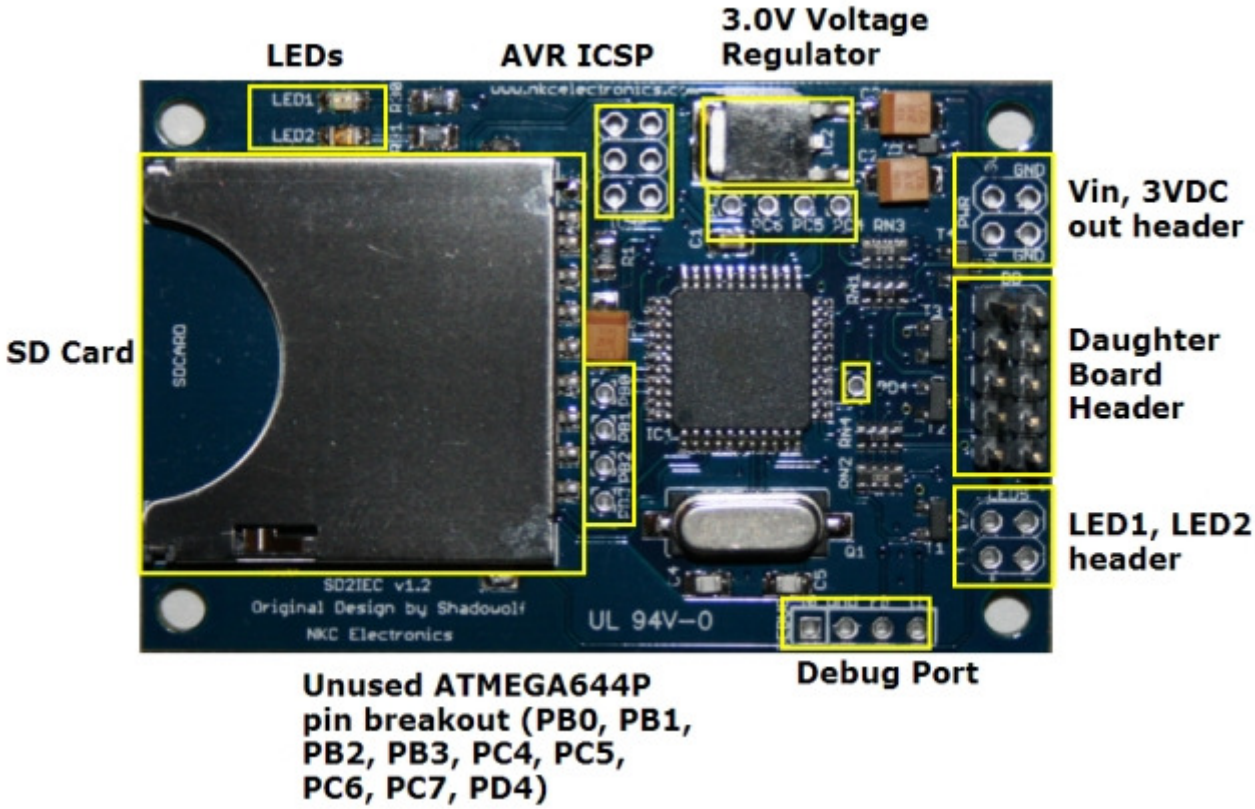
Download: <http://jledger.proboards.com/index.cgi?board=dtvhacking&action=display&thread=1935>



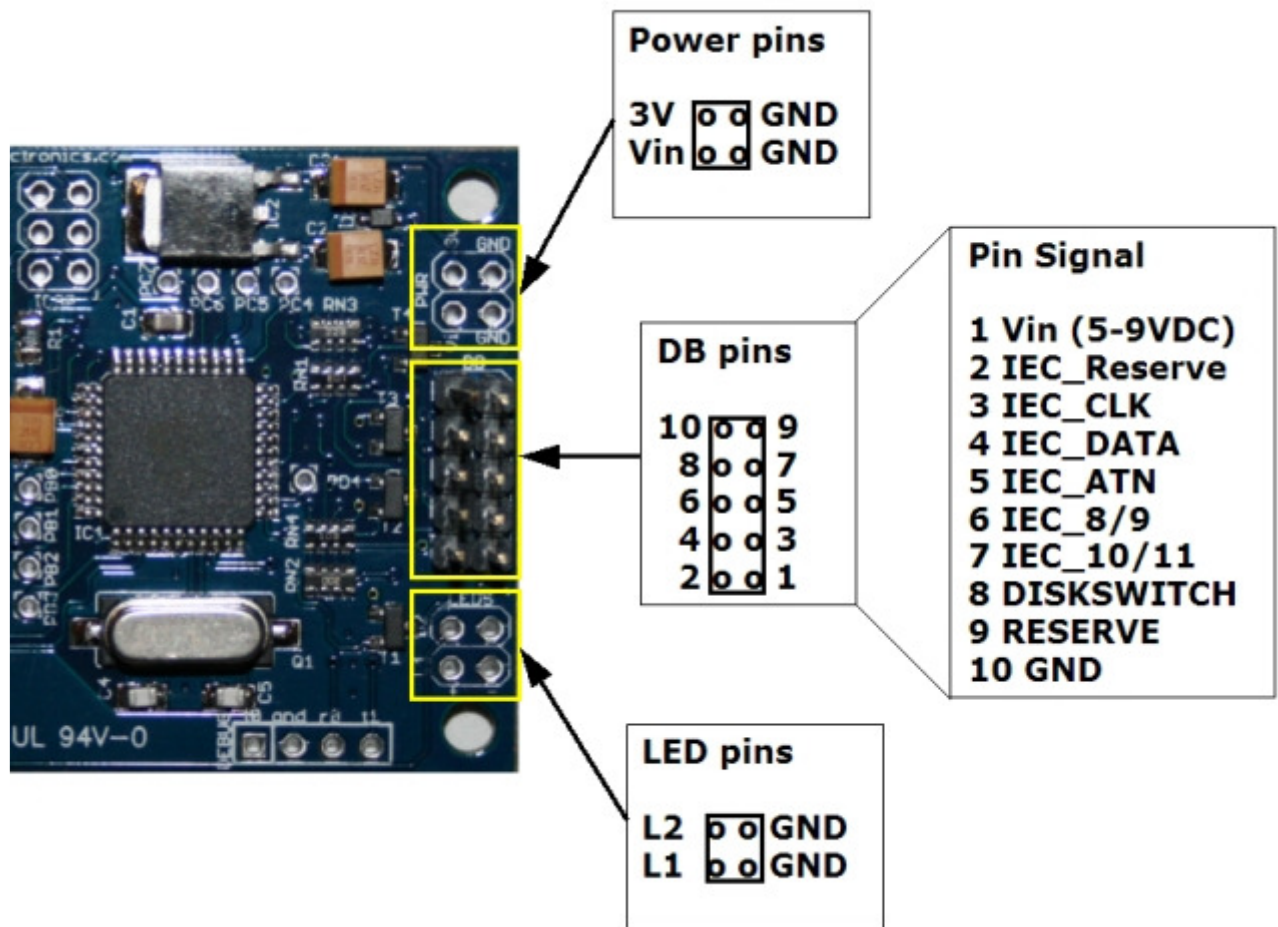
Close-up picture of the board



Features



Pin description



Board is based on original design by Shadowolf. Re-engineered by NKC Electronics with revisions by Shadowolf.

More information

- SD2IEC hardware reference
<http://www.c64-wiki.com/index.php/SD2IEC>
- sd2iec firmware reference
http://www.c64-wiki.com/index.php/sd2iec_%28firmware%29
- sd2iec firmware download page
<http://sd2iec.de/>
- Web shop
<http://www.nkcelectronics.com/sd2iec-boar2.html>