# SDCard HxC Floppy Emulator

(Spécifications version 1.1-11/03/10)

# **Description:**

3", 3"1/2 and 5"1/4 Floppy disk drive emulator based on SDCard.

# **Supported/tested computers:**

Atari ST, Amiga, Amstrad CPC6128(+), MSX2, Oric + MicroDisk, SuperWildcard, Synthésiseur Korg DSS-1, PC, And many more...



# Floppy images files that can be converted for this emulator:

To use the emulator you need to convert your floppy image files with the HxC Floppy Emulator software.

Below is the actual list of supported file images type:

ST, MSA, ADF, ADZ, DMZ, CPC DSK (standard and extended), CopyQM DSK, Oric DSK, IMG, SMC, MSX DSK, IMD, Zx Spectrum DSK, BetaDisk TRD, BetaDisk SCL, Thomson TO8D SAP, Thomson TO8D FD, PC88 D88, x68000 HDM (beta), x68000 XDF (beta), custom raw floppy geometry...



An AmigaDOS or FAT12 floppy disk image can also be generated from spares files.

## **Some details:**

## - Floppy interface:

HE10 34 pins floppy connector:

- ->Shugart compatible mode supported.
- ->PC compatible mode supported.

Tested on PC, Atari ST, Amiga, Amstrad CPC, Thomson, MSX, ZX Spectrum series computers.

-> Two floppy disk drives emulation (In the next firmware version)

### - Power supply:

-> 5V +/- 10% standard power floppy connector input.

#### - User Interface:

- -> 3 LEDs ("Power LED", "Floppy access LED", "SDCard access LED").
- -> 3 buttons ("Next", "Select/Eject", "Previous").
- -> 1 audio transducer.
- -> 2\*16 chars Alphanumerical LCD.

(Note: LCD and buttons can be put on an external front panel)

## - SDCard support:

- ->SD Card up to 2GB.
- ->SDHC Card supported up to 32GB.

(10Mhz SPI bus mode. Average byterate: ~500KB/s)

#### - SDCard Filesystem:

->FAT32 supported. Subdirectory and long name file supported.

#### - Read / Write support:

Track mode based floppy emulator (Full track pre-encoded in the HFE image file)

- -> **Read support:** Most of existing formats (FM/MFM/Amiga track...) supported. Custom tracks supported.
- -> Write support: ISO MFM 256/512/1024Bytes sector write supported.

(Note: Write support not available on Amiga computers!)

#### - Floppy bitrate supported:

- ->250/300Kbits/s (DD floppies)
- ->500Kbits/s (HD floppies)

(others bitrates possible)

(Note: Variable bitrate not supported. So protected floppy disk image (IPF and STX file format) file support will be only partial! If you look for a device supporting IPF / STX please a have a look to the <u>USB HxC Floppy Emulator device</u>)

HxC Floppy Emulator Project
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http://hxc2001.free.fr/floppy\_drive\_emulator/ http://torlus.com/floppy

# <u>-RPM:</u>

300 RPM , 360 RPM supported. (others RPM possible).

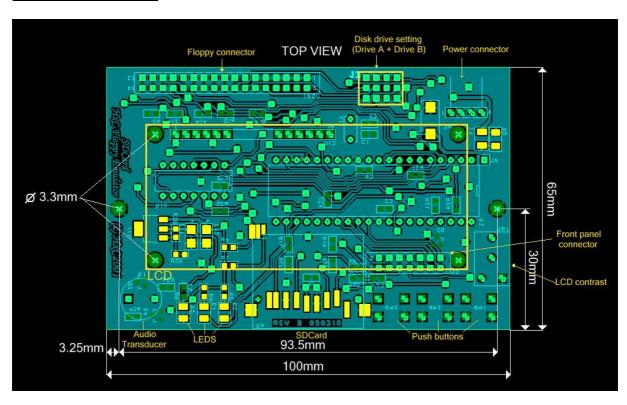
## -Tracks / Side:

- ->Up to 256 tracks per floppy.
- ->1 or 2 sides.

## -Additionnal features:

- ->Firmware update via the SDCard.
- ->Last Loaded Floppy Image autostart at power up.
- ->Fast floppy image loading (<<1second), no conversion time.

## **Mechanical drawing:**



# → For more informations, software update and firmware update :

Project website: <a href="http://hxc2001.free.fr/floppy\_drive\_emulator">http://hxc2001.free.fr/floppy\_drive\_emulator</a>

Project Forum : <a href="http://www.torlus.com/floppy/forum">http://www.torlus.com/floppy/forum</a>
Official seller : <a href="http://www.mmj.pl/~lotharek/atari/">http://www.mmj.pl/~lotharek/atari/</a>

## Some youtube videos showing the device:

http://www.youtube.com/watch?v=MzfUZorBayw http://www.youtube.com/watch?v=g6dBTyfPrkg http://www.youtube.com/watch?v=xeJvNCPMU-c