# **Minimig manual**

## Introduction

Well, you have built a Minimig board! Congratulations! This board should be considered purely experimental and is not a finished product. Therefore, some functions may not work and compatibility is not as good as a real Amiga. Also, be especially careful with ESD (electro static discharge). Although some protection is built into the Minimig, ESD can still kill it. This short manual will get you going with your Minimig. Please read it through carefully. I hope you will enjoy using the Minimig!

## Configuring the flash card

To get the Minimig started, a FAT16-formatted MMC card is needed. A compatible card is supplied with the board. This card must contain at least the following files in the root directory:

- MINIMIG1.BIN
- This is the FPGA core file needed to correctly configure the Spartan FPGA KICK.ROM
- This is the kickstart rom file. All kickstart versions are supported but versions 1.2 or 1.3 are recommended for game compatibility.

Besides these two files, some ADF files are needed to let the Minimig do something more than displaying the Amiga boot screen. All files must be in the root directory. Sub directories are not supported.

## Hooking up the Minimig

Power

The Minimig must be supplied with a **5V STABILIZED POWER SUPPLY.** Please use only the supplied power supply. A power supply with the wrong voltage or polarity will certainly damage the Minimig. Connect the power supply to the 2.1mm jack labelled "DC IN" at the back of the board. Centre pin is positive.

• Monitor

The Minimig has a standard 15pin VGA connector labelled "video" at the back of the board. Any monitor capable of displaying 50Hz display modes can be used. The 3-pin jumper next to this connector must be set to 31KHz (default).

- Audio
  - Standard PC-speakers can be connected to the 3.5mm jack labelled "audio" at the back of the board.
- Keyboard

A standard PS2 keyboard must be connected to the 6-pin mini connector labelled "keyboard" on the left-hand side of the board. A keyboard is necessary to operate the Minimig on-screen-display and to load ADF files. Some older keyboards may not work on the Minimig.

Mouse

A standard PS2 mouse must be connected to the 6-pin mini connector labelled "mouse" on the left-hand side of the board. An optical mouse is supported.

Joysticks

The Minimig has 2 9-pin joystick ports at the right-hand side of the board. Standard Amiga joysticks can be connected to these ports. The standard port for single-player games is the "JOY2" (upper) port. Do not use the 9-pin port at the back, that port is a serial port!

## Powering up

Before applying power to Minimig, insert the MMC card. The card is only recognized at powerup. After applying power, the blue led (system power) will light up. The Minimig will search for the "minimig1.bin" and "kick.rom" files to boot the system. This may take a few moments. The loading of the kickstart rom will flash the screen in true retro-decrunching-style. This is normal behaviour. When the system has booted completely, the familiar Amiga boot screen will be shown.

## **On-screen-display**

The Minimig is now ready for use and can be operated using 4 special keys on the PS2 keyboard and a so-called on-screen-display. The keys used are:

• F12

Just as with UAE, this key will invoke the on-screen-display. Pressing F12 again will hide the on-screen-display. The on-screen-display can also be invoked by pressing the menu button at the front of the Minimig board.

- Page-up / Page-down
- These keys are used to navigate the on-screen-display up and down.
- Home
- This key is used to select an item on the on-screen-display.

The operating of the on-screen-display should be self-explanatory .

## **Resetting the Minimig**

Just as with AOS 4.0, the Minimig is reset by holding down the control, left alt and right alt keys simultaneously. This will only reset the Amiga-side of the system. To reset the system completely or to reload the MMC-card, the power must be switched off/on.

## More information

For more information, point your browser to http://home.hetnet.nl/~weeren001.