

Arananet RetroProducts

Retro products for hobbyists

Mistix ITX

Quick start guide

Dear customer,

First of all, a BIG THANK YOU for purchasing the Mistix ITX.

As you might know, the Mistix ITX was designed as a solution for ITX cases. Part of the hardware of the Mistix ITX is based on the Mister schematics to make it compatible with the current Mister cores.

This quick start guide will help you to start with the Mistix.

Please read the entire manual until the end of it and then start playing with the device.

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Hardware Specifications

High-quality 4 layer board.

RGB output.

I2S PCM5102 audio DAC with Dual stereo RCA jacks.

Secondary MicroSD socket.

ATX connector.

1 DB9 for Amiga Joystick (DB9 to USB).

7 USB ports with overcurrent protection (including one internally).

Serial IO port.

HDD, FDD, POWER leds and User buttons.

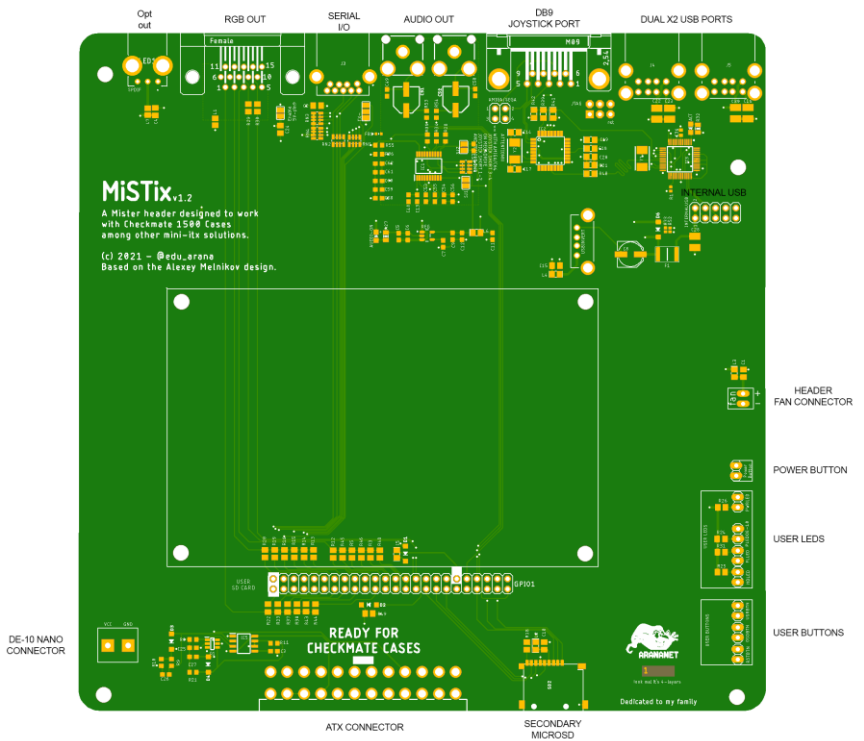
Optical audio port.

Note: There are no serial, parallel, or external floppy ports available.

Note about power supply: An ATX power supply is required to use this solution. Can be a full ATX power supply, a PicoATX, or SFX power supply. Will not work by just connecting the DE-10 Nano directly to a power source because some ATX voltages are required by the board.

Mistix ITX ports explained

In the next image, you can find the description of each connection available.



Connections explained

SECONDARY SD > This MicroSD is required by some cores to load the ROMS and FILES to use them.

ATX connector > A common ATX power supply is required to power up this board.

DE-10 Nano Connector > With your Mistix, a barrel jack cable is connected to this port to power up the DE-10 Nano board.

VGA output > The device has a standard HD15 VGA connector. Any monitor capable of 15khz or 31khz can be used.

USB PORTS > These ports allow plugging USB keyboards, USB mouses, and USB joypads, etc.

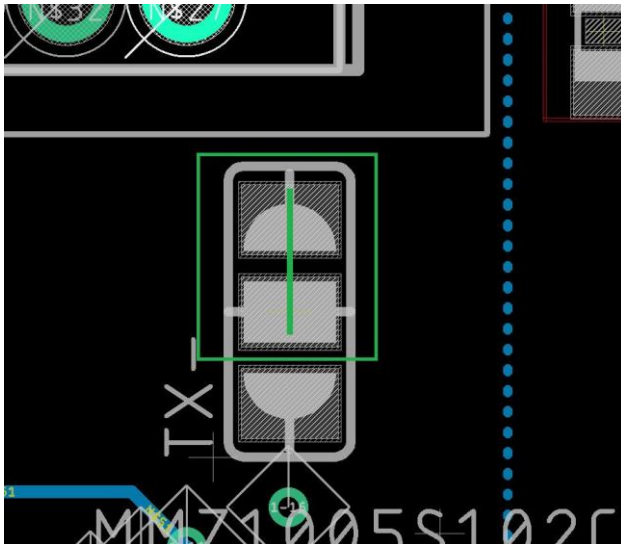
AUDIO OUT > RCA jacks. A professional audio amplifier can be connected to the device for a better experience.

DB9 PORT > There is one port available on the header to connect a DB9 Amiga compatible joystick.

Serial IO port

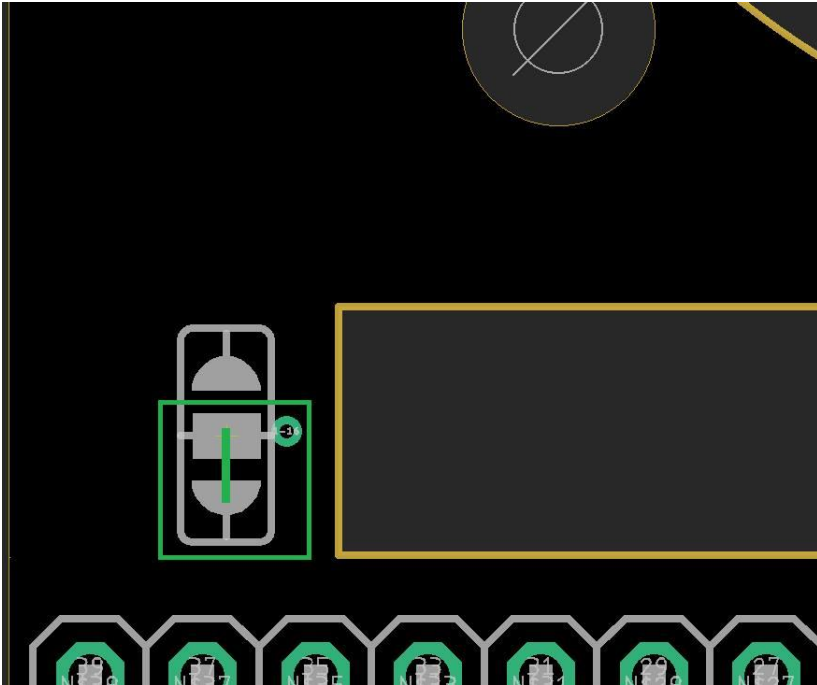
To use the Serial IO port (a usb 3.0 “like” connector on the back of the board), you will need to set two solder jumpers on the Mistix, one on the Mistix and the other on the top header. Next, you can find two images that show what’s needed to enable this port.

Location: behind the SERIAL IO port on the Mistix Header.
Short the solder jumper as the next image.



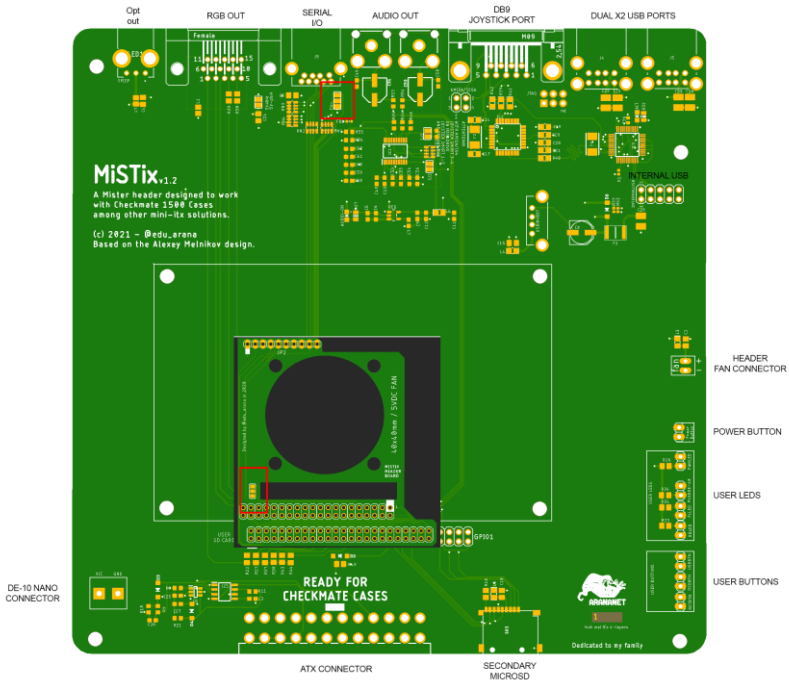
Location: on the top header (the little one where the fan goes installed).

Short the solder jumper as below.



For those who wonder why this is unsoldered, this, as some versions of Mister headers, needs to be manually soldered by the user.

Please use the next image to locate the solder jumpers.



The Mistix

Originally designed and manufactured by Edu Arana (@edu_arana) and co-worked with Stephen Jones for his Checkmate Mini ITX cases.

Part of the Mistix uses the Mister design to make it compatible with the Mister cores. Mister is an FPGA solution based on Alexey Melnikov's work, among others, from the Mister community.

Disclaimer

This hardware has been designed to work on an ITX case. It might not work with other configurations. We try our best to ensure this hardware work (plug and play). However, we cannot always guarantee this. Since the customer is the one that will install it on his case.

We do not take any responsibility if the device is connected in the wrong way or during the installation.

All the names and trademarks referred on this manual are the property of their respective owners.

Dedicated to my family and my wife Blanca.