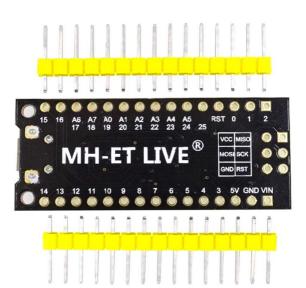


# **Handson Technology**

Datasheet

# **ATiny88 Arduino Nano Compatible Controller Board**

The ATtiny88 Nano is a compatible and cheaper version of the Arduino Nano. This variant is based on the ATtiny88 Microcontroller chip. This board contains a Micro USB connection with which the ATtiny88 can be programmed and powered. Usually Nano boards use a CH340 chip for converting USB to Serial, for example, but the ATtiny88 microcontroller has this built in.



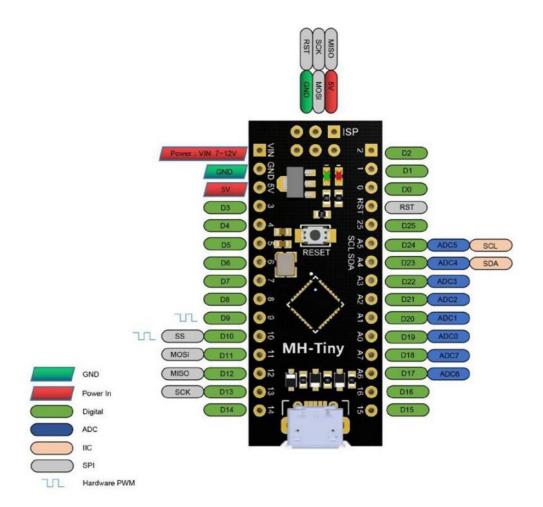


## **SKU: MDU1144**

## **Brief Data:**

- Microcontroller: ATtiny88.
- Arduino Nano Form Factor.
- Memory: 8KB Flash, 512B SRAM, 64B EEPROM.
- Programming Interface: Micro USB.
- Input voltage (VIN pin): (7~12)VDC.
- I/O pin voltage Tolerance: 5V.
- Digital I/O Pins: 26 (including 2 PWM).
- Analogue inputs: 8 Channel.
- Board Size:(45x18x3) mm.
- Power Indicator and Test/Status LED
- Board support package with Arduino IDE.

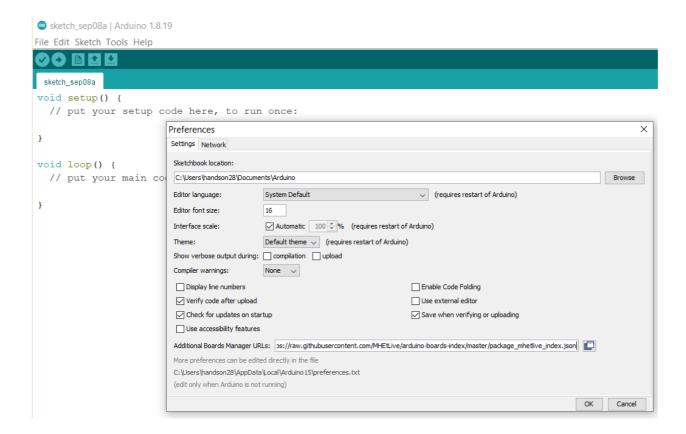
## **Pin Function Assignment:**



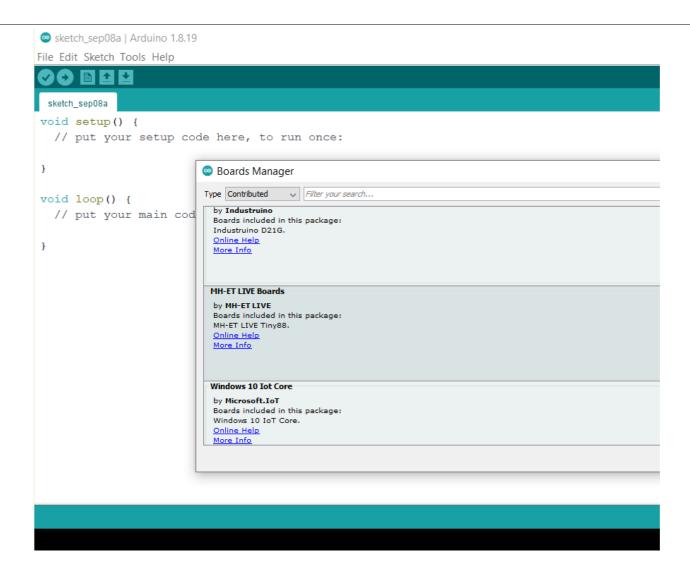
## **Setting Up Atiny88 Development board for Arduino IDE:**

- 1. First download the appropriate Arduino package at the Arduino.cc website: Arduino IDE.
- 2. If using Arduino 1.6.6 or higher and windows you will need to download and install the Digispark Uploader Drivers manually. Download, unzip and run "Install Drivers" (on 32bit systems) or "DPInst64" (on 64bit systems). The driver files are located here: Additional Board.
- 3. Install or Unzip the Arduino IDE application. Run the Arduino IDE application.
- 4. In the Arduino IDE application go to the "File" menu and select "Preferences". In the box labeled "Additional Boards Manager URLs" enter:

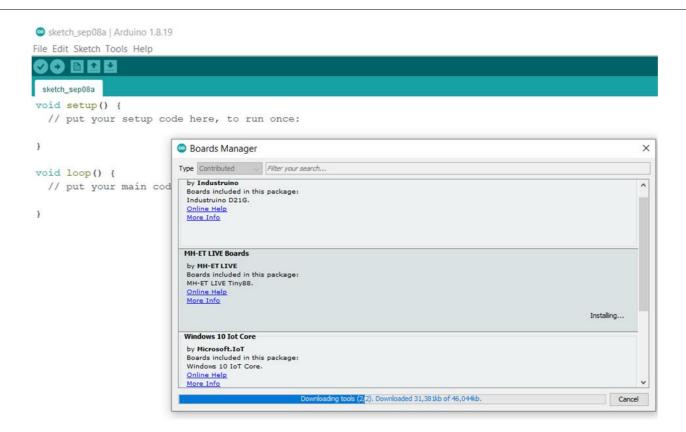
https://raw.githubusercontent.com/MHEtLive/arduino-boards-index/master/package\_mhetlive\_index.json



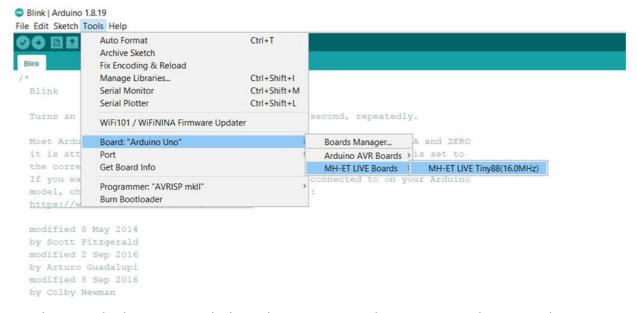
5. Go to the "Tools" menu and then the "Board" submenu - select "Boards Manager" and then from the type drop down select "Contributed": Select the "MH-ET LIVE Boards" package and click the "Install" button.



6. You'll see the download progress on the bottom bar of the "Boards Manager" window, when complete it will show "Installed" next to that item on the list. WINDOWS USERS: When complete the install with pop up a Driver Install Wizard window, please click "Next" on this Window to install the drivers for MH-ET LIVE Boards (If you already have them installed, this installer will update them and install any that are missing).



7. With the install complete, close the "Boards Manager" window and select the MH-ET LIVE Boards "MH-ET LIVE Tiny88(16.0Mhz)" from the Tools→Boards menu.



8. Choose the example that comes with the Arduino IDE. Open the program in File >>Example >> Basic>>Blink. Compile and download into the MH-ET LIVE Tiny88(16.0Mhz) according to the above method, it can be seen that the onboard LED light flashes according to the frequency specified by the program. (Note: When downloading the program, do not connect the ATiny88 module first, wait for the prompt to insert the module after compiling, then plug it in and wait for the automatic download to complete).

# Done uploading. Sketch uses 898 bytes (14%) of program storage space. Maximum Global variables use 9 bytes of dynamic memory. Running Digispark Uploader... Plug in device now... (will timeout in 60 seconds) > Please plug in the device ... > Press CTRL+C to terminate the program. > Device is found! connecting: 16% complete connecting: 22% complete connecting: 28% complete connecting: 33% complete > Device has firmware version 2.2 > Device signature: 0x1e9311 > Available space for user applications: 6650 bytes

## **Web Resouces:**

- https://github.com/dbuezas/lgt8fx/wiki/Installation
- https://github.com/RalphBacon/LGT8F328P-Arduino-Clone-Chip-ATMega328P
- https://github.com/LGTMCU/Larduino\_HSP
- <a href="https://robojax.com/learn/arduino/?vid=robojax\_MH-Tinny\_Tinny88">https://robojax.com/learn/arduino/?vid=robojax\_MH-Tinny\_Tinny88</a>

## **Atiny88 Arduino Board Support Package:**

https://raw.githubusercontent.com/MHEtLive/arduino-boards-index/master/package mhetlive index.json

### **Digispark Uploader Driver:**

https://github.com/MHEtLive/MHEtLiveArduino/releases/download/1.0.0/2.0a4.rar



# Handsontec.com

We have the parts for your ideas

HandsOn Technology provides a multimedia and interactive platform for everyone interested in electronics. From beginner to diehard, from student to lecturer. Information, education, inspiration and entertainment. Analog and digital, practical and theoretical; software and hardware.



Hands *On* Technology support Open Source Hardware (OSHW) Development Platform.

# Learn: Design: Share

handsontec.com



The Face behind our product quality...

In a world of constant change and continuous technological development, a new or replacement product is never far away – and they all need to be tested.

Many vendors simply import and sell without checks and this cannot be the ultimate interests of anyone, particularly the customer. Every part sell on Handsotec is fully tested. So when buying from Handsontec products range, you can be confident you're getting outstanding quality and value.

We keep adding the new parts so that you can get rolling on your next project.



Breakout Boards & Modules



Connectors



Electro-Mechanical Parts



**Engineering Material** 



Mechanical Hardware



**Electronics Components** 

P



Power Supply



Arduino Board & Shield



Tools & Accessory