# DAC HAT

#### SKU:U068





## Description

**DAC HAT** is also a type of C-HAT specifically design for M5StickC controller. Same as DAC unit, this is a voltage output DAC converter for stickc. It can generate a voltage of 0 ~ 3.3V.

Packed with a DAC converter chip MCP4725, which is low-power, high accuracy, single-channel, 12-bit buffered voltage output Digital-to-Analog Converter (DAC) with a non-volatile memory (EEPROM). Its on-board precision output amplifier allows it to achieve rail-to-rail analog output swing.

The DAC input and configuration data can be programmed to the non-volatile memory (EEPROM) by the user using the I2C interface command. I2C address: 0x60

## Product Features

- Output: 0 ~ 3.3V
- Software Development Platform: Arduino, UIFlow(Blockly, Python)
- MCP4725

12-BitResolution

- External A0 Address Pin
- NormalorPower-DownMode
- Fast Settling Time of 6 µs (typical)
- ExternalVoltageReference(VDD)
- Rail-to-RailOutput
- LowPowerConsumption
- Single-SupplyOperation:2.7V to 5.5V
- I2C Interface: address 0x60
- ExtendedTemperatureRange:-40°Cto+125°C

## Include

1x DAC HAT
1x 2 Pin 3.96 Pitch Terminal

## Applications

- SetPointorOffsetTrimming
- SensorCalibration
- Closed-LoopServoControl
- LowPowerPortableInstrumentation PCPeripherals
- DataAcquisitionSystems

## Specification

Resources	Parameter
Net weight	6g
Gross weight	19g
Product Size	24*25*13mm

Package Size

67\*53\*12mm

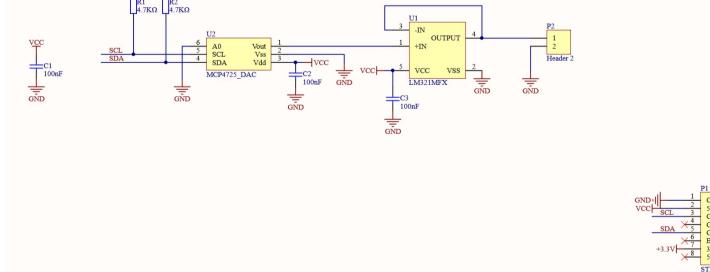
## **Related Link**

• Datasheet - MCP4725

### Pin Map

M5StickC	<b>GPIO0</b>	GPIO26	5V	GND
HAT ADC	SDA	SCL	5V	GND

## Schematic



## EasyLoader





download EasyLoader

1.EasyLoader is a simple and fast program burner. Every product page in EasyLoader provides a product-related case program. It can be burned to the master through simple steps, and a series of function verification can be performed.

• After downloading the software, double-click to run the application, connect the M5 device to the computer through the data cable, select the port parameters, click "Burn" to start burning. (For M5StickC burning, please Set the baud rate to 750000 or 115200)

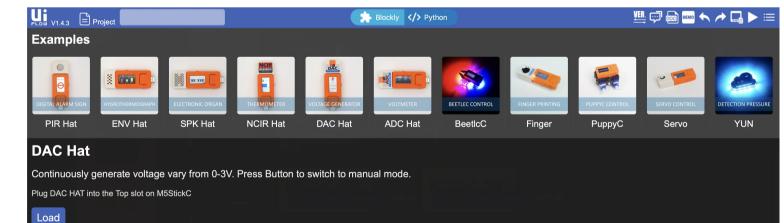
## Example

#### 1. Arduino IDE

• Click here to download the Arduino example

### 2. UIFlow

Open http://flow.m5stack.com and Load Demo



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