

Unit DAC2

SKU:U012-B



Description

Unit DAC2 is an I2C digital-to-analog signal conversion unit. It uses the GP8413 solution, which can linearly convert 15-bit digital signals into two independent 0-5V/0-10V analog voltages with an output voltage error of 0.2% and a linearity of 0.01%. In terms of expandability, the circuit design allows for the selection of three hardware addresses A2/A1/A0, supporting the simultaneous operation of up to 8 devices with 16 channels output. In terms of safety, the device has a short-circuit protection function, automatically entering protection mode and stopping output when the output pins are shorted to ground. It is suitable for general signal conversion, motor speed control, LED dimming, inverters, power supplies, and industrial analog signal isolation.

Features

- I2C communication (default address 0x59)
- Supports multiple parallel connections
- Short-circuit protection
- High precision with minimal error

Includes

- 1 x Unit DAC2
- 1 x HY2.0-4P Grove cable (20cm)
- 1 x VH3.96-4P

Applications

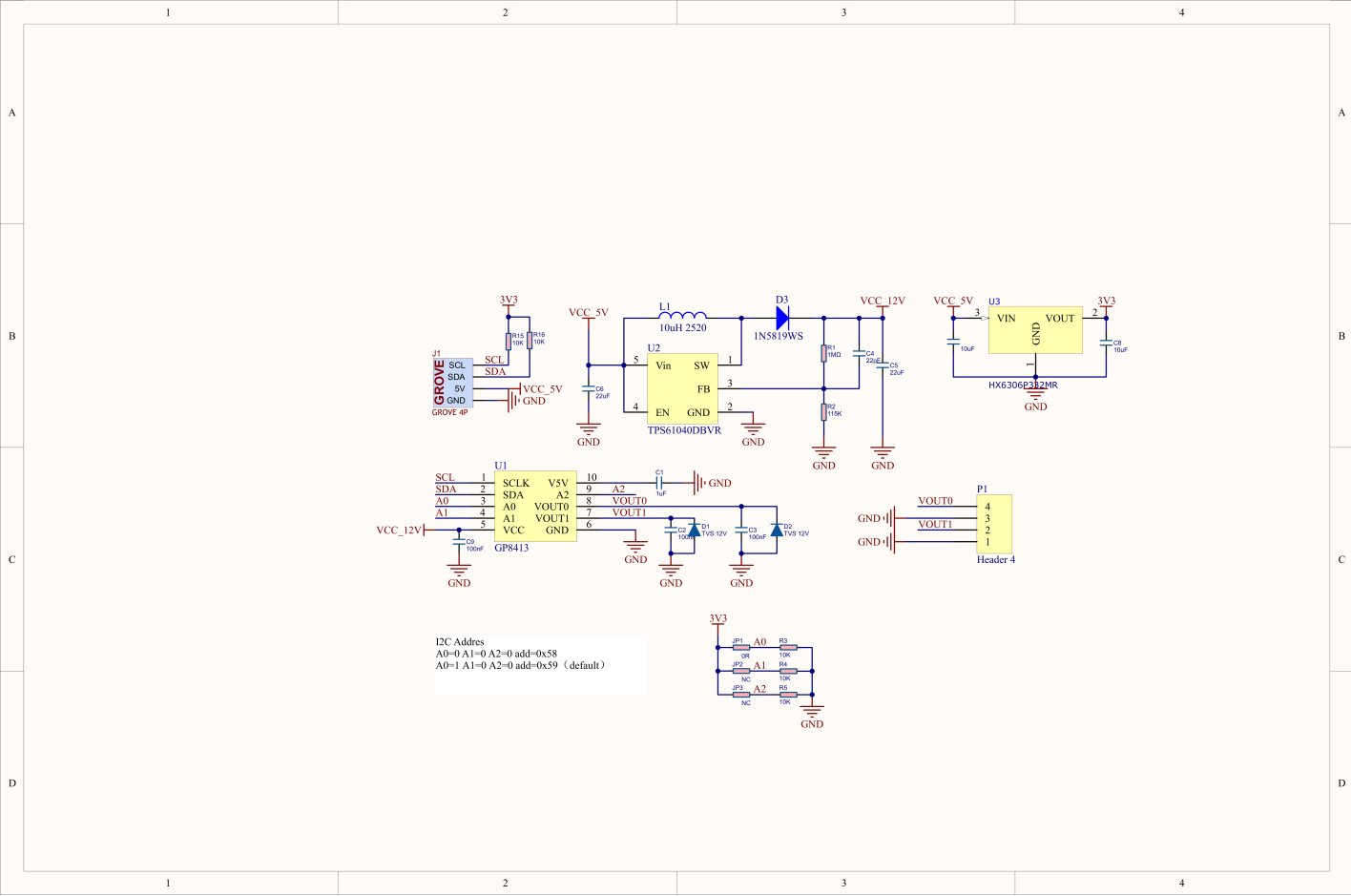
- General signal conversion
- Motor speed control, LED dimming
- Inverters, power supplies
- Industrial analog signal isolation

Specifications

Specification	Parameter
DAC Chip	GP8413
Resolution	15-bit
Communication Interface	I2C Communication @0x58 ~ 0x65, default @0x59
Maximum Output Voltage	10V
Output Voltage Error	<0.2%
Output Voltage Linearity Error	0.01%
Operating Temperature	0 ~ 40°C
Product Size	32.0 x 24.0 x 10.2mm
Product Weight	8.0g
Package Size	138.0 x 93.0 x 12.0mm
Gross Weight	13.4g

Schematics

- [Unit DAC2 Schematics PDF](#)

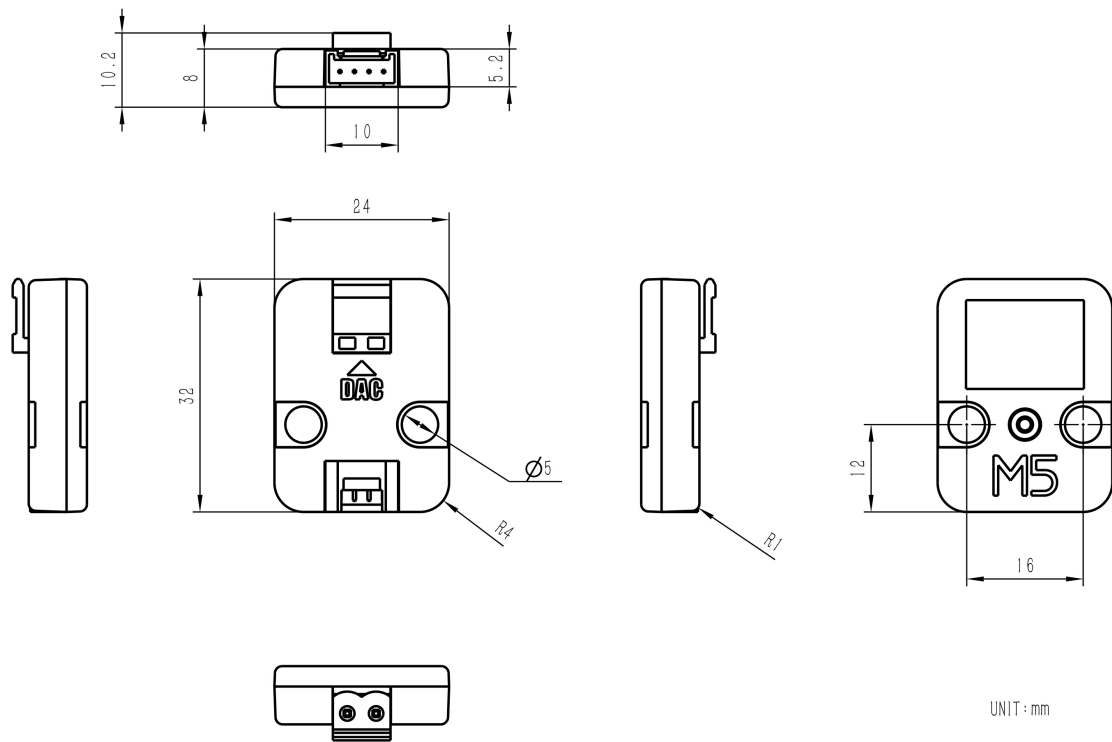


PinMap

Unit DAC2

HY2.0-4P	Black	Red	Yellow	White
PORT.A	GND	5V	SDA	SCL

Model Size



Datasheets

- [GP8413 Datasheet](#)

Softwares

Arduino

- [Unit DAC2 Test Example with M5StickC-Plus](#)
- [Unit DAC2 Test Example with M5StickC-Plus2](#)
- [Unit DAC2 Test Example with M5Core](#)
- [Unit DAC2 Test Example with M5Core2](#)
- [Unit DAC2 Test Example with M5CoreS3](#)

UiFlow2

- [Unit DAC2 UiFlow2 Docs](#)