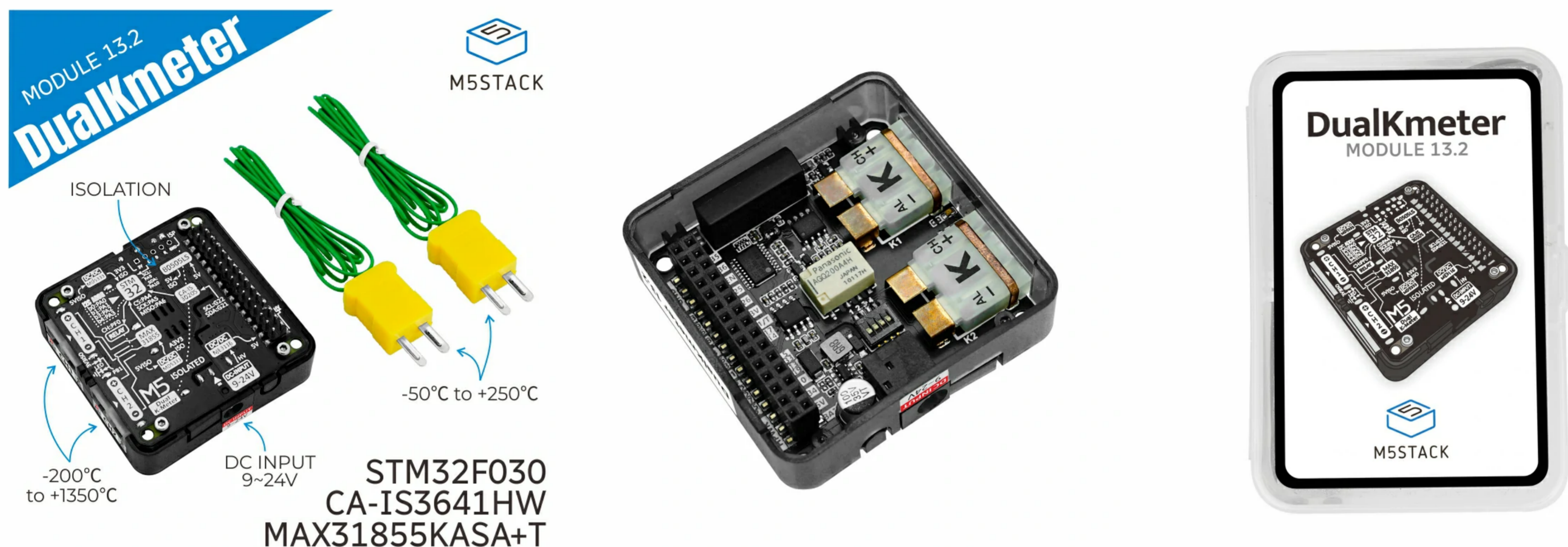


DualKmeter Module13.2

SKU:M127



Description

The **DualKmeter module13.2** is a dual-channel K-type temperature measurement module based on the **MAX31855KASA+stm32f030f4p6+galvanic isolation**. The module has a built-in **two-way K-type thermocouple sensor interface**, which uses the signal **relay to measure the temperature value of the two channels in turn**, supporting a measurement range of **-200°C to 1350°C**, and a measurement accuracy of $\pm 2^\circ\text{C}$. At the same time, the module also has built-in voltage and signal isolation chips such as **B0505LS-1WR2** and **CA-IS3020S**, ensuring the 'stability and safety' of the system. In addition, the module has a built-in **dial code on** off, which can easily switch different I2C addresses to meet the different application needs of users. It can be applied to multiple scenarios such as **industrial automation and instrument detection**.

Features

- STM32F030F4P6, a 32-bit microcontroller with Cortex-M0 core
- MAX31855KASA+T: (14Bit ADC, 0.25°C Resolution, $\pm 2\%$ Accuracy)
- Supported probe types: Type K - Supports access probe measuring range from -200°C to 1350°C
- Has galvanic isolation
- Dual type K thermocouples
- Dial the code to switch the I2C address (default 0x11)
- Programming platform: Arduino, UIFlow

Includes

- 1 × DualKmeter Moudle13.2
- 2 × Type K thermocouples

Applications

- Industrial automation
- Instrument detection

Specification

Resources	Parameters
MCU	STM32F030F4P6, a 32-bit microcontroller based on the Cortex-M0 core, 64KB Flash memory and 8KB SRAM
DCDC	ME3116
LDO	HX6306P332、MD5333
Digital temperature sensor	MAX31855KASA+T
Relay	AGQ200A4H
Galvanic isolation	B0505LS-1WR2、CA-IS3020S
Measure the temperature	-270°C至+1800°C
Module operating temperature	0-40°C
Thermocouple type	K
Product Size	54-54*13.2mm
Package Size	95*65*25mm

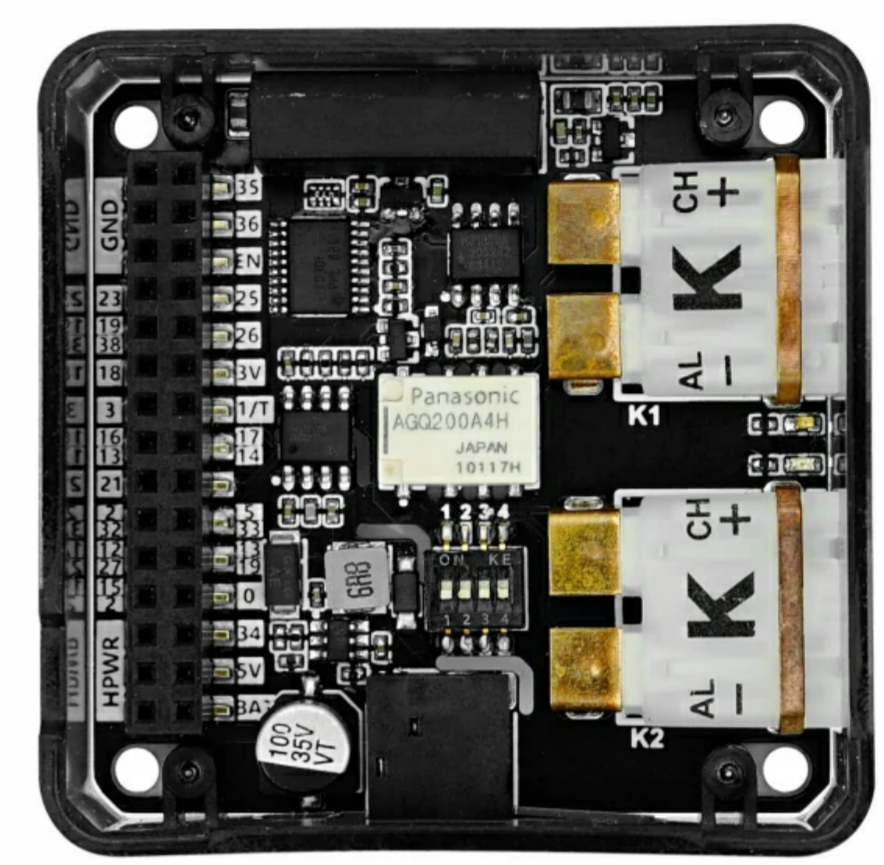
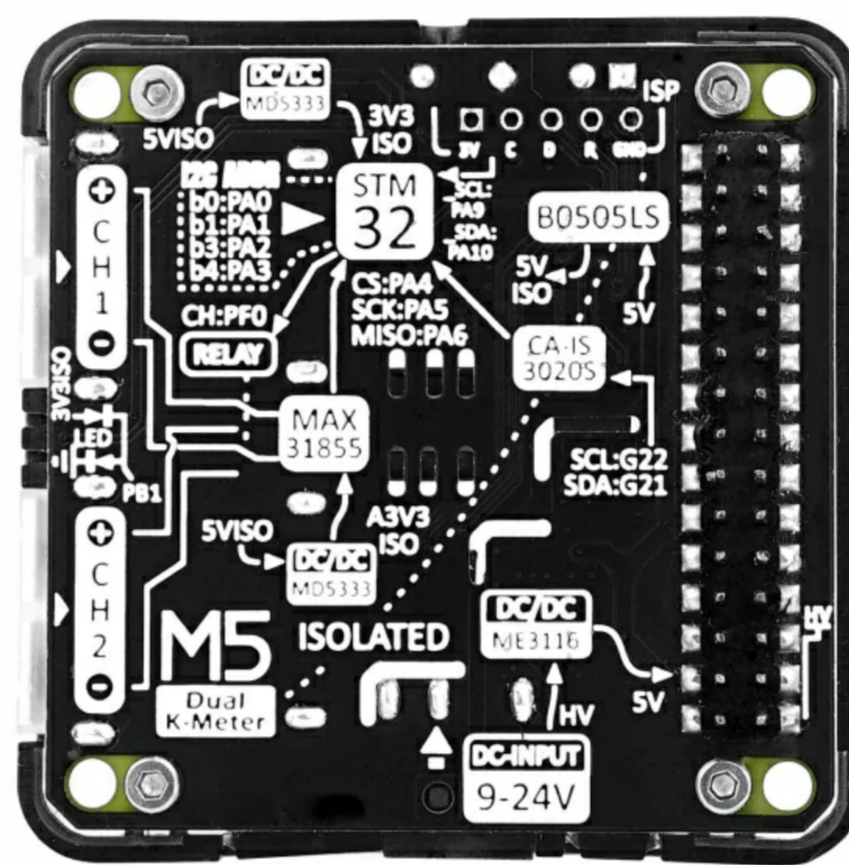
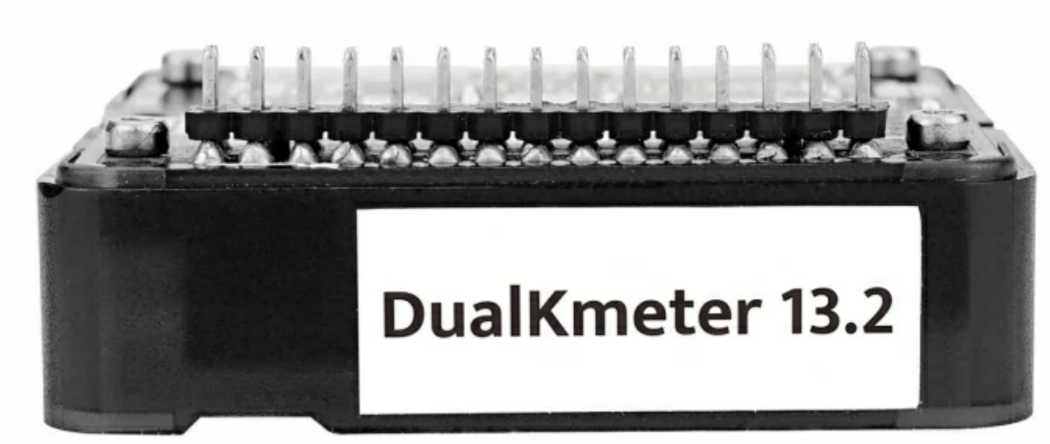
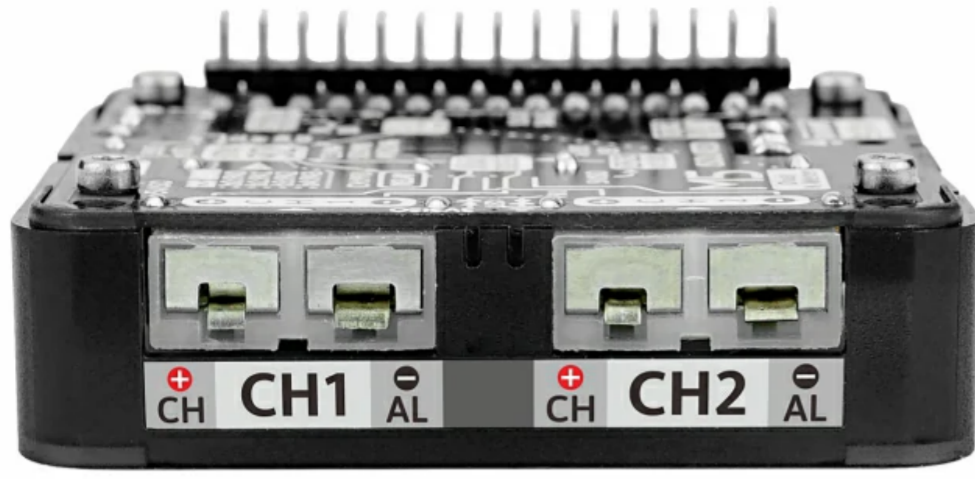
Product Weight

Resource

37.2g
Parameters

Package Weight

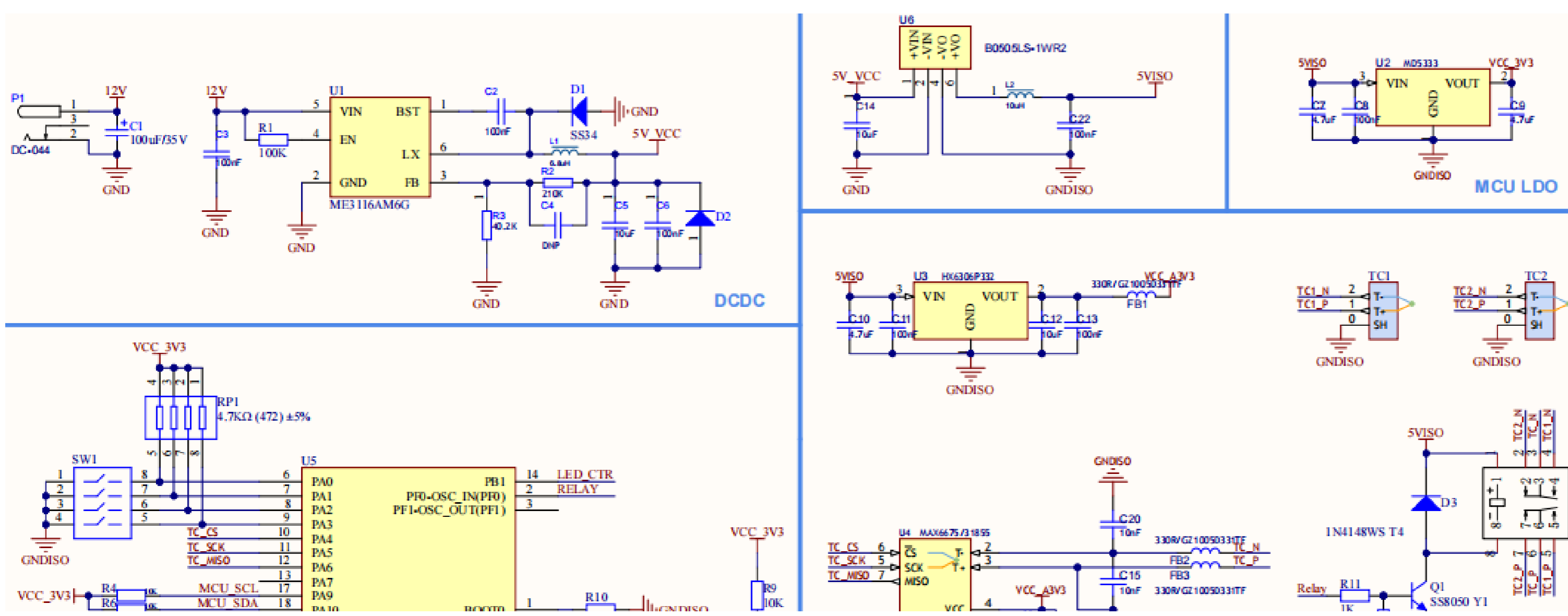
65.6g

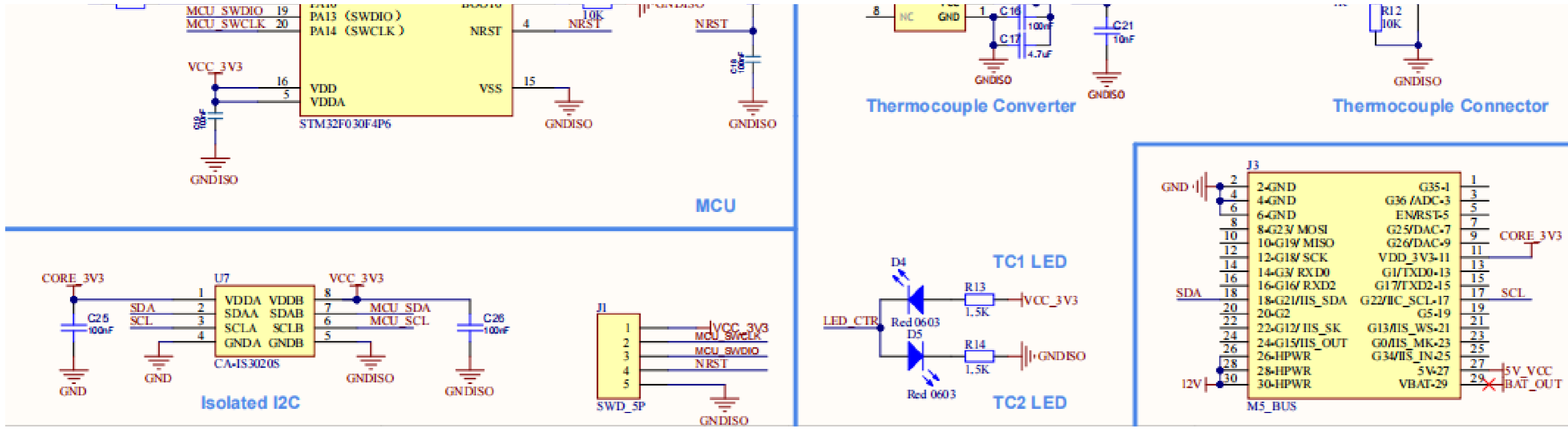


Related Link

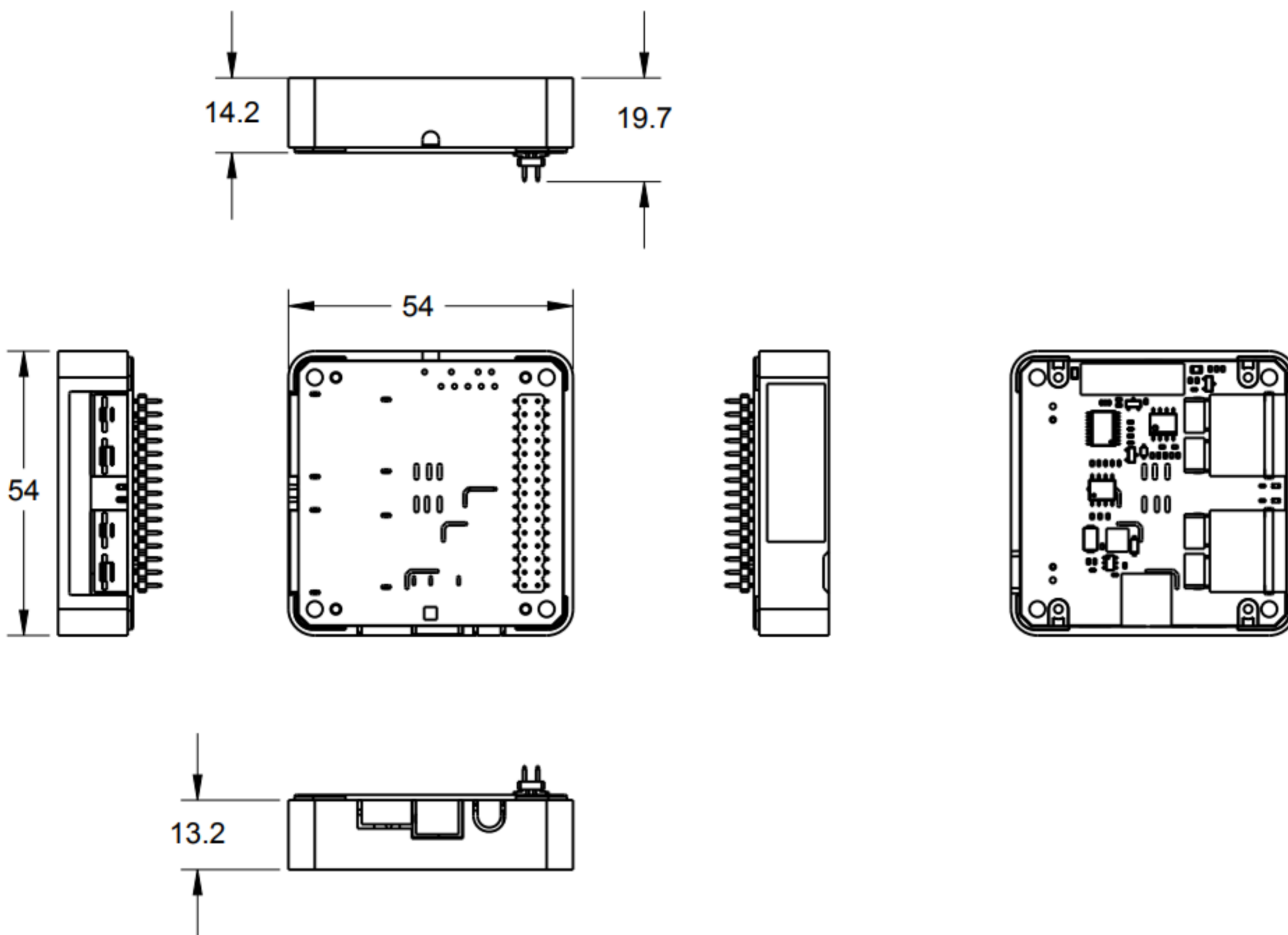
- [STM32F030F4P6](#)
- [B0505LS-1WR2](#)
- [CA-IS3020S](#)
- [HX6306P332](#)
- [MAX31855KASA](#)
- [MD5333](#)
- [ME3116AM6G](#)

Schematic





Module Size



Protocol

- o I2C map

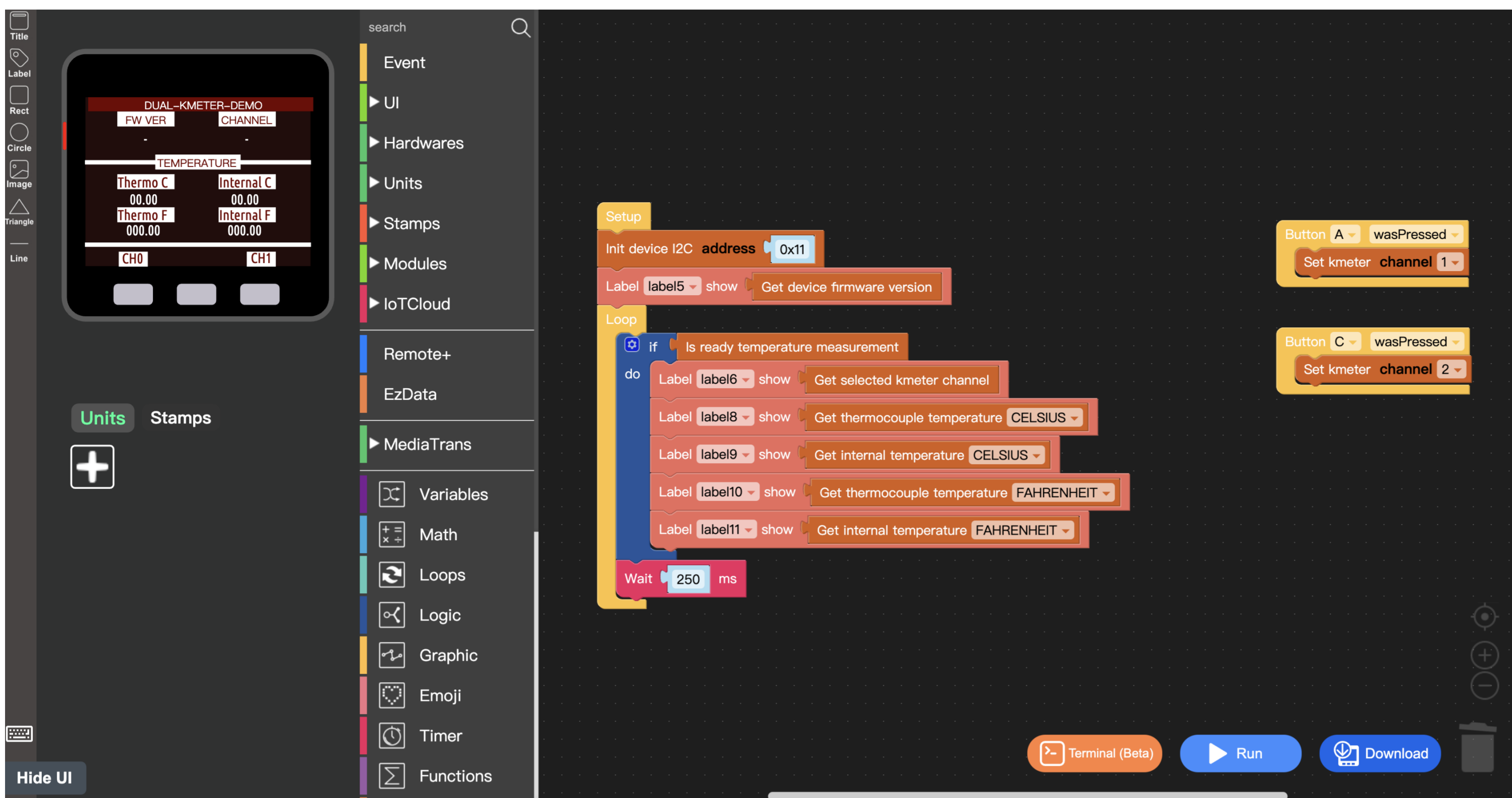
detail

Examples

Arduino

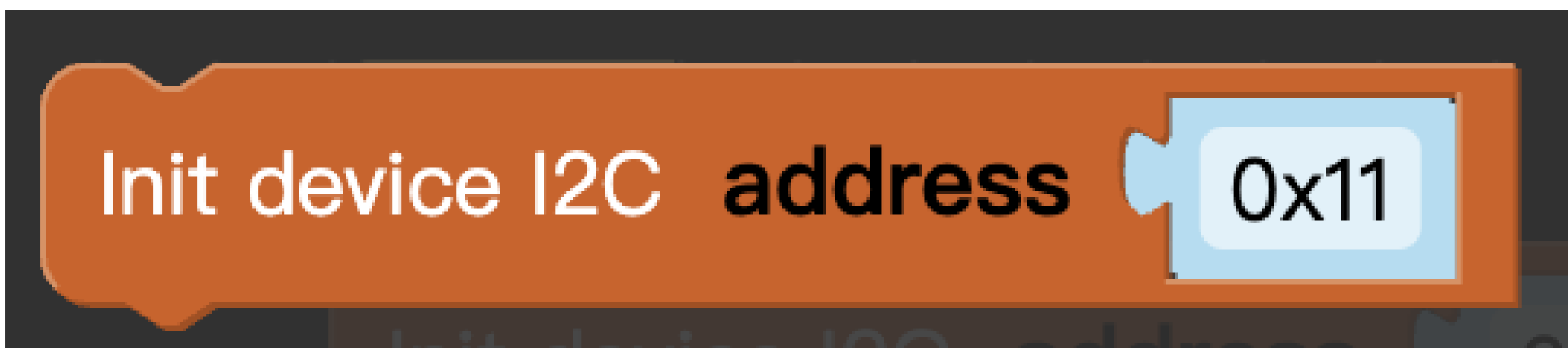
- o [DualKmeter Module13.2 Firmware](#)
- o [DualKmeter Module13.2 Arduino Example](#)

- DualKmeter Module 13.2 Example



UIFlow Blocks

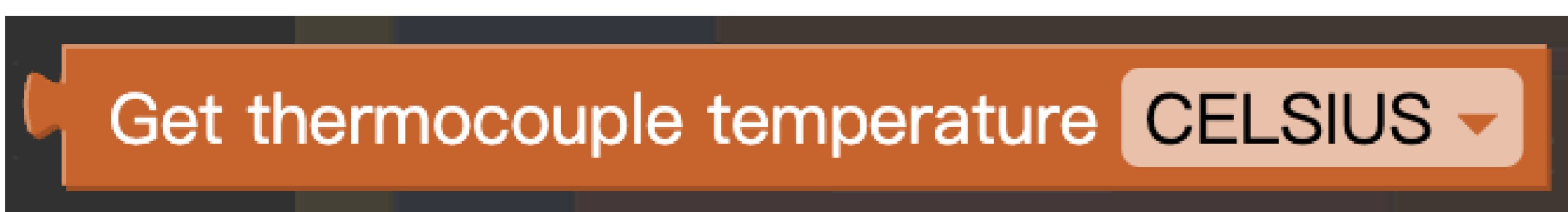
- Init device I2C address



- Get selected kmeter channel



- Get thermocouple temperature



- Get internal temperature



- Get string thermocouple temperature



Get string thermocouple temperature CELSIUS

- Get string internal temperature

Get string internal temperature CELSIUS

- Is ready temperature measurement

Is ready temperature measurement

- Get device firmware version

Get device firmware version

- Set kmeter channel

Set kmeter channel 1

- Set kmeter channel

Set kmeter channel 1