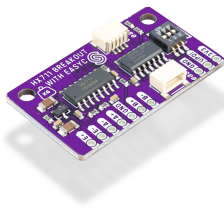


PRODUCT DATASHEET



Load-Cell Amplifier HX711 With Qwiic

333006

The HX711 load cell amplifier offers precise 24-bit weight measurements with Qwiic connectivity for easy integration with microcontrollers.

Full product documentation, files and tutorials: solde.red/333006

CORE ATTRIBUTES

SKU 333006

WEIGHT 6 g

BARCODE 732388675807

DESCRIPTION

The HX711 is a highly versatile load cell amplifier that is widely used in various applications requiring precise weight measurements. This version of the breakout comes with a Qwiic connector and a pre-programmed Attiny404 microcontroller. It is designed to convert analog signals into digital values and make them easily available over Qwiic, making it ideal for integration with microcontrollers and other digital systems. An Arduino and MicroPython library to communicate with the board is also provided.

This load cell amplifier employs a 24-bit analog-to-digital converter (ADC) to ensure high-resolution and accurate readings. It supports differential input signals and offers two differential input channels, allowing the connection of up to two load cells simultaneously. This feature enables the measurement of both single- and multi-load cell systems, expanding its application range.

The HX711 incorporates an integrated voltage regulator, which provides a stable supply voltage for the load cells and ensures accurate and reliable measurements. This Qwiic version only requires a Qwiic cable for operation, sending power and I2C data over one convenient connector. You can use the other connector to continue daisy chaining other Qwiic sensors. It also comes with switches for selecting the I2C address.

TECHNICAL DETAILS

- **ADC:** HX711
- 24-bit
- **Input voltage:** 2.6V to 5.5V
- **IC:** ATTiny404
- **Mounting holes:** 2
- **Dimensions:** 38 × 22 mm / 1.5 × 0.9 inch

SPECIFICATIONS

INTERFACE	I2C
QWIIC COMPATIBLE	Yes
I2C ADDRESS DEFAULT	0x30
I2C ADDRESS CHANGEABLE	Yes
BREADBOARD COMPATIBLE	Yes
MEASUREMENT TYPES	Weight
MEASUREMENT ACCURACY	24-bit ADC resolution
IC PART NUMBER	HX711
MCU PART NUMBER	ATTINY404
SUPPLY VOLTAGE MIN V	2.6
SUPPLY VOLTAGE MAX V	5.5
LOGIC LEVEL	3V3 Only
OPERATING CURRENT (mA)	1.5 mA
SLEEP CURRENT uA	1

LINKS

Arduino Library	https://github.com/SolderedElectronics/Soldered-HX711-ADC-For-Weight-Scales-Arduino-Library
Open Source Hardware Files	https://github.com/SolderedElectronics/Load-cell-ampfilier-HX711-board-with-easy-C-hardware-design
Full Documentation	https://docs.soldered.com/hx711/overview/
Arduino: Get Started	https://docs.soldered.com/hx711/arduino/getting-started/
Arduino Library Documentation	https://docs.soldered.com/hx711/arduino/simple-read/
Hardware Details	https://docs.soldered.com/hx711/hardware/
mim_package	https://checkmim.com/packages/solderedelectronics+Soldered-HX711-MicroPython-Library
MicroPython Module	https://github.com/SolderedElectronics/Soldered-HX711-MicroPython-Library

GALLERY

