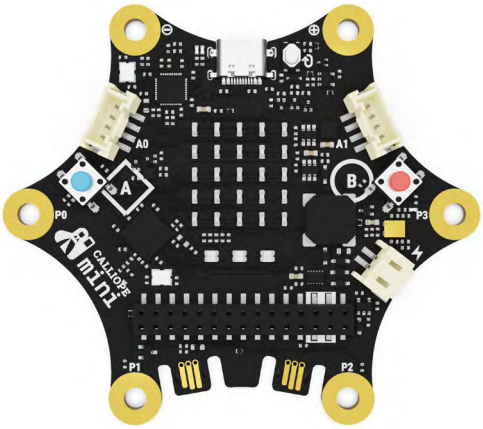
CALLIOPE

PRODUCT INFORMATION

The Calliope mini proves that everyone can code - and it's a lot of fun. It's easy to get started, so children, teachers and parents can get going without any prior knowledge. From the first self-programmed flashing lights to self-propelled robots and wirelessly communicating Calliope mini swarms: with just a few clicks on a connected computer, you can design your own programs for the Calliope mini to bring it to life.

CALLIOPE MINI

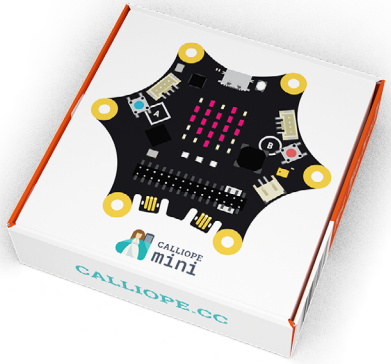
Alongside a **display** consisting of 25 red LEDs, **three RGB LEDs** and two programmable **buttons**, the Calliope mini features a **temperature, light and volume sensor** as well as a combined **position sensor** with **motion sensor and e-compass** and a **radio module** that allows several Calliope mini to communicate with each other. Furthermore, many other sensors and actuators can be connected either with the integrated **Grove or Jacdac** connectors or via the pin header. An overview can be found on the website.



The Calliope mini can be programmed via laptop, computer and mobile devices using free editors. To get to know the Calliope mini for the first time, it uses graphic elements to explain its individual components. The Calliope mini also comes with five pre-installed programmes, the operation of which is explained in a small accompanying booklet and on our website. A battery holder with high-quality batteries and a USB-C cable (1 metre long) for connecting to the computer are included so that you can get started right away. The free Calliope mini app enables the programmes to be transferred via Bluetooth.

CALLIOPE MINI START-BOX

The Calliope mini Start Box includes a Calliope mini and the following accessories: battery holder, USB-C cable, quick start guide, a rubber band (for attaching the battery compartment) and stickers.



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DATA SHEET

Nordic nRF52833 (Application) Bluetooth 5.4 SoC, Bluetooth Low Energy, Bluetooth mesh
64 MHz Arm Cortex-M4 Prozessor, 512 KB Flash, 128 KB RAM
Nordic nRF52820 (Interface) USB 2.0 full speed
5x5 LED matrix
3x RGB-LED (Neopixel)
USB-C (Programming and power supply)
Acceleration sensor, magnetometer
DC motor driver (2 motors can be controlled independently)
Piezo-speaker
MEMS microphone
2 programmable buttons
4 banana connector pins
2x15 double pin header (2,54 Pitch)
2x Grove connectors (I2C + serial/analogue)
2x Jacdac connectors
Touch-Logo (on the back side)
Battery connector (3.3V)

SIZE AND DIMENSIONS

Start-Box
Dimensions of the circuit board: 8,5 x 1,3 (Ø x H in cm)
Weight: 18g (incl. packaging and accessories: 97g)
Packaging dimensions: 10 x 10 x 2,7 (B x L x H in cm)

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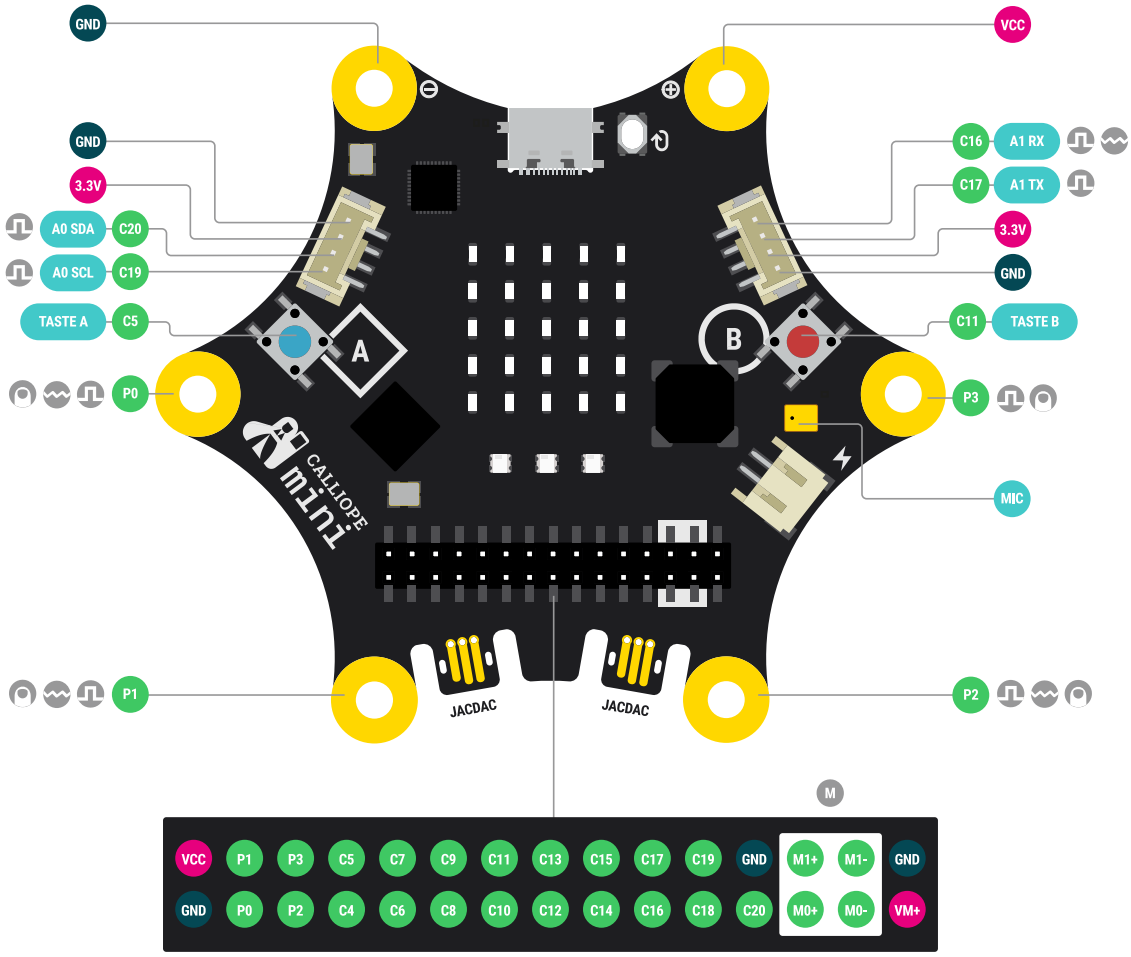
PINOUT CALLIOPE MINI



Further details can be found on our website.

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CERTIFICATES AND SAFETY INSTRUCTIONS

The Calliope mini is a teaching device that is primarily intended for use in schools under the supervision of adults. The Calliope mini has been positively tested in accordance with the product safety standard EN60950-1 and EN62368-1.

Please observe the following instructions:

- The USB port must only be connected to a computer.
- The maximum length of the connected USB-C cable must not exceed one metre.
- Always disconnect the computer when not in use.
- The Calliope mini should never be operated simultaneously with USB and battery!
- If the Calliope mini is connected to the computer, the battery holder must not be connected to the Calliope mini or the battery holder must be switched off (switch to „off“)!
- In battery mode the Calliope mini may only be operated with the original battery compartment and batteries of type AAA or LR03.
- The voltage applied to the Calliope mini battery connector must never exceed 3.3 volts.
- The external motor support may only be operated with a 9V battery (or 6LR61).
- Operation with rechargeable batteries is not permitted.
- Avoid handling the printed circuit board while it is powered. Only handle by the edges to minimise the risk of electrostatic discharge damage.
- Small parts must be kept away from small children.

Information on connecting external electronic components:
5 mA maximum per connection
15 mA maximum load (all connections together)
150 mA maximum when connected to edge contacts (+/-), supply of max. 3.3V

- Please use a resistor with at least 220Ω when connecting an LED.
- If the Calliope mini gets hot, disconnect it from the power supply immediately and stop using it.

Further important information, certificate data and contact addresses can be found at:
https://calliope.cc/en/safety-advice

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CONTACT

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