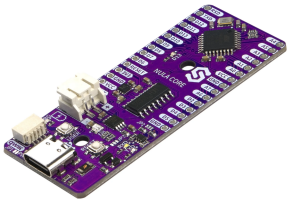
PRODUCT DATASHEET



# NULA Core

333379

NULA Core is a compact Arduino-compatible development board with 22 I/O pins, ideal for electronics projects and makers of all levels.

Full product documentation, files and tutorials: **solde.red/333379**

## CORE ATTRIBUTES

SKU **333379**

BARCODE **732388641307**

## DESCRIPTION

Looking to get started with electronics and Arduino projects, or searching for a reliable board for your next design? **NULA Core** is a compact, beginner-friendly yet powerful development board designed for makers of all skill levels. It is the direct successor to the well-known **Dasduino CORE**, featuring the same trusted hardware with updated labeling and a refreshed identity. If you've used older Croduino or Dasduino boards, you'll feel right at home.

Despite its small footprint, NULA Core packs serious capability. Measuring just **63 × 22 mm**, it offers **22 I/O pins** (14 digital and 8 analog, with A6 and A7 analog-only), enough for the vast majority of projects. At its heart is the proven **ATmega328 microcontroller**, fully compatible with the Arduino ecosystem and programmable via the Arduino IDE. The board connects via **USB Type-C**, operates at **5 V**, and includes a **3.3 V** regulator. A **USB-C to USB-C** cable is included in the package, so you can start programming right out of the box.

NULA Core also integrates features that simplify portable and modern projects, including a **Lithium-ion** battery charger and connector, a **qwiic** connector for effortless **I²C** expansion, and both a standard pin 13 LED and a full-color WS2812 RGB LED. Available with no headers, male headers, or female headers, NULA Core adapts easily to breadboards, soldered projects, and enclosures alike.

## TECHNICAL DETAILS

- **Microcontroller:** ATmega328P (8-bit AVR)
- **CPU Architecture:** AVR RISC, up to 16 MIPS @ 16 MHz
- **Clock Frequency:** Up to 16 MHz
- **Flash Memory:** 32 KB (in-system programmable)
- **SRAM:** 2 KB
- **EEPROM:** 1 KB
- **GPIO Count:** 23 programmable I/O lines
- **Board I/O Pins:** 22 total (14 digital, 8 analog; A6 & A7 analog-only)
- **ADC Resolution:** 10-bit, up to 8 channels

- **Timers:** 2 × 8-bit timers, 1 × 16-bit timer
- **PWM Channels:** 6
- **Communication Interfaces:** UART, SPI, I²C (TWI)
- **Operating Voltage:** 2.7 V - 5.5 V (board operates at 5 V)
- **Operating Temperature:** - 40 °C to +85 °C (MCU rating)
- **Low-Power Modes:** Idle, ADC Noise Reduction, Power-down, Power-save, Standby
- USB Type-C connector
- Qwiic I²C connector
- Li-ion battery connector with onboard charger
- 3.3 V voltage regulator
- Status LED (Pin 13)
- WS2812 RGB LED
- **Form Factor:** Compact, breadboard-friendly
- **Dimensions:** 63 × 22 mm
- **Hardware Design:** Open-source, made in EU

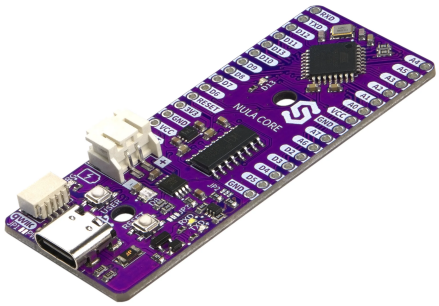
## SPECIFICATIONS

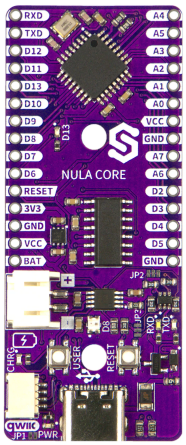
| | |
|---|---|
| MCU PART NUMBER | ATmega328P |
| MCU CLOCK (MHZ) | 20 MHz |
| SRAM (KB) | 2 KB |
| FLASH (MB) | 0.03 MB |
| WIFI | None |
| BLUETOOTH | None |
| QWIIC COMPATIBLE | Yes |
| BREADBOARD COMPATIBLE | Yes |
| BATTERY CONNECTOR | Jst 2Pin |
| ONBOARD BATTERY CHARGER | Yes |
| SUPPLY VOLTAGE | 5V |
| LOGIC LEVEL | 5V |
| DEV ENVIRONMENTS | Arduino IDE, MicroPython |

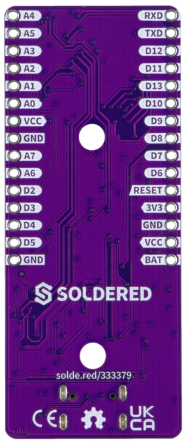
## LINKS

| | |
|---|---|
| Full Documentation | https://docs.soldered.com/nula-core/overview/ |
| Pinout | https://cms.soldered.com/products/333379/media/333379_pinout-png_c5c706.svg |

## GALLERY


NULA CORE


RXD
TXD
D12
D11
D13
D10
D9
D8
D7
D6
RESET
3V3
GND
VCC
BAT
A4
A5
A3
A2
A1
A0
VCC
GND
A7
A6
D2
D3
D4
D5
GND
NULA CORE
JP2
USER
RESET
CHRG
PWR
JP1


A4
A5
A3
A2
A1
A0
VCC
GND
A7
A6
D2
D3
D4
D5
GND
RXD
TXD
D12
D11
D13
D10
D9
D8
D7
D6
RESET
3V3
GND
VCC
BAT
SOLDERED
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