

PRODUCT DATASHEET · VARIANT OF 333379

NULA Core Female Headers

333387

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/333387**

CORE ATTRIBUTES

SKU **333387**

BARCODE **732388640508**

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. This variant comes with the female headers pre-soldered.

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

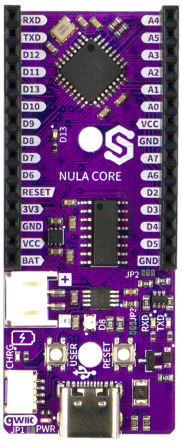
SPECIFICATIONS

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/

GALLERY


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
CHRG
USER
RESET
qwiic
JP1
PWR