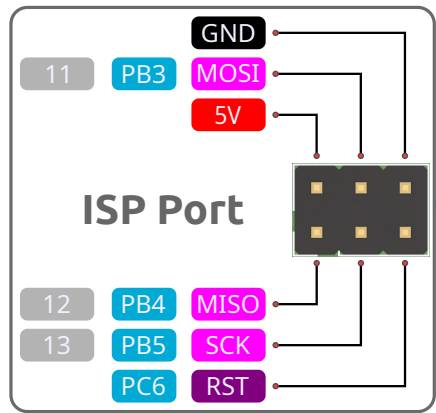


# GroundStudio Jade U1+

ATMEGA328PB based development board featuring picoPower® technology for better power management, Peripheral Touch Controller (PTC), **32kBytes** of In-System Self-Programmable **Flash** program memory, **1kBytes** EEPROM, **2kBytes** Internal **SRAM**, **10 PWM** Channels, **24 Digital Pins**, **2 USART**, **2 SPI**, **2 I<sup>2</sup>C** ports with an I<sup>2</sup>C 3V3 adapter on port 0 (default) and **8 ADC** Pins with 10 bit Resolution

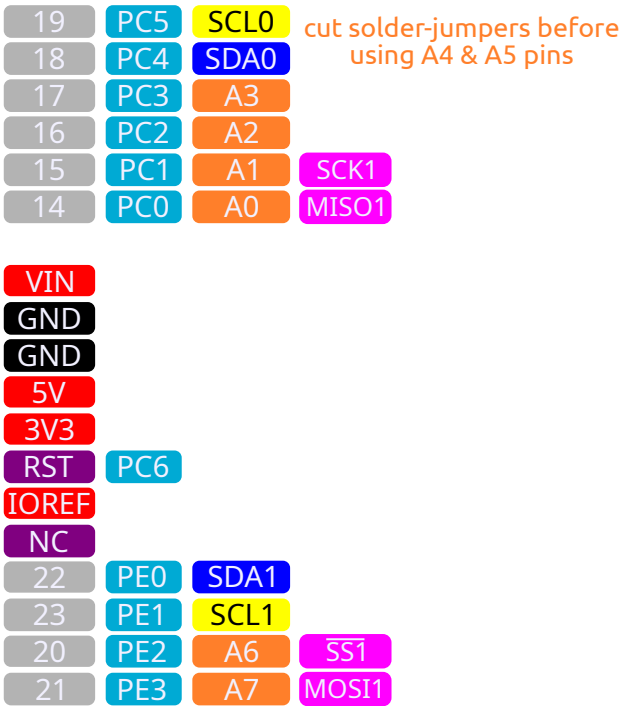
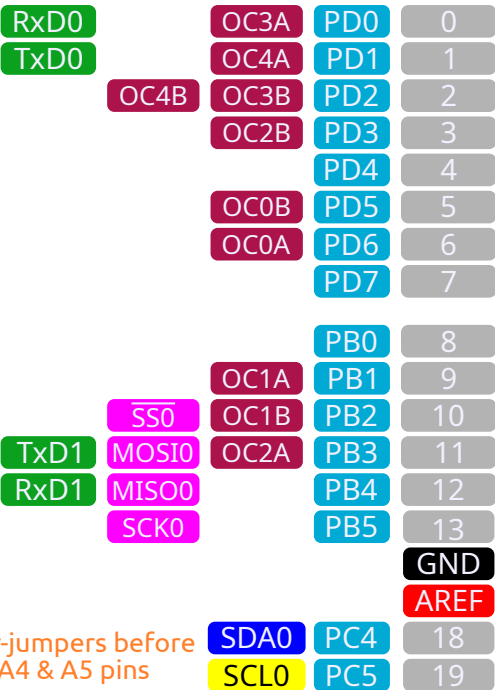


**ATMEGA328PB**

The ATmega328PB is a low-power, high-performance 8-Bit microcontroller with enhanced RISC architecture

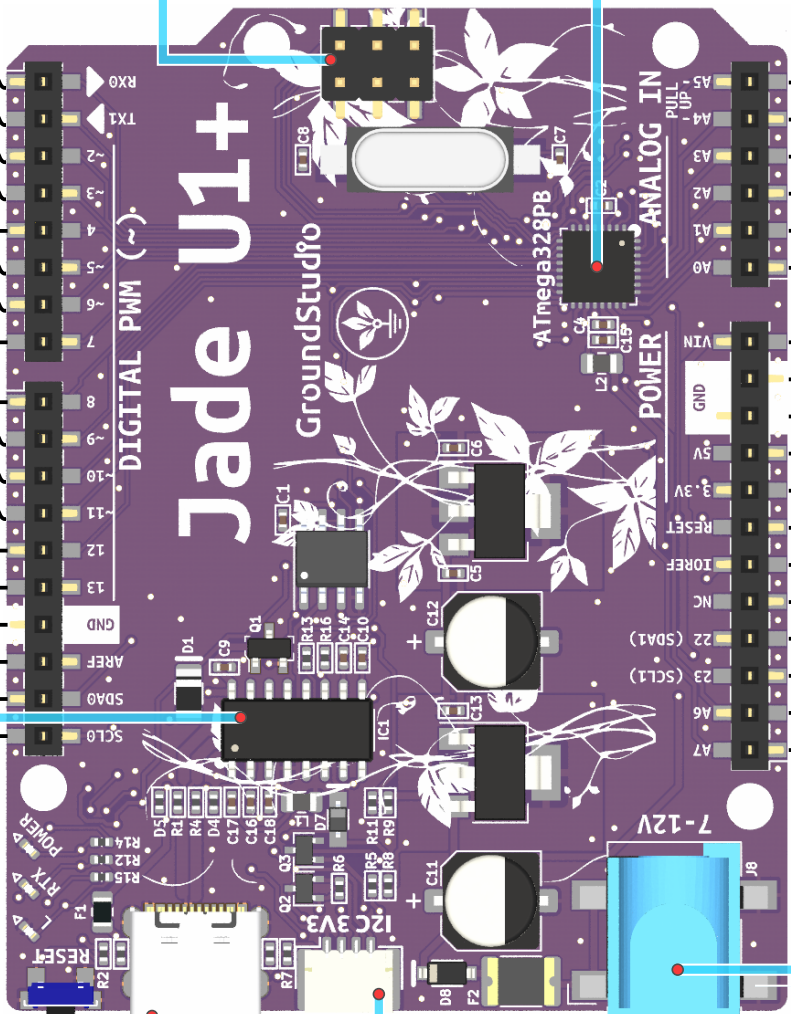
**COLOR DIAGRAM**

- Digital Pin Number
- uController Pin
- ADC
- PWM
- SCL
- SDA
- SPI
- USART Pins
- Ground
- Power
- Others
- PWM Enabled Pin



cut solder-jumpers before using A4 & A5 pins

cut solder-jumpers before using A4 & A5 pins



**Power Jack**

DC 5.5mm x 2.0mm power connector can receive **7V to 12V** DC for the board power supply

GND VIN

**USB DRIVER**

HT42B534 with built-in 12MHz clock generator. Implements Human Interface Device (HID) protocol for user configure USB VID, PID and device description strings

**USB C**

USB 2.0 **type C** for double-sided connection

**I<sup>2</sup>C 3V3**

I<sup>2</sup>C SH adapter with 1.0mm pitch, **Qwiic** and **StemmaQT** compatible.

GND 3V3 PC4 PC5 SDA0 SCL0

**BACK SIDE**

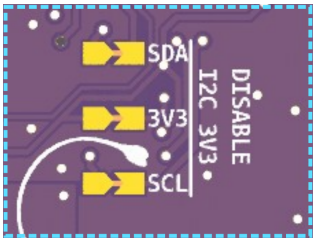
53.4mm 68.6mm



\* A4 & A5 pins are pulled up by default for I<sup>2</sup>C 3V3 conversion.

This will cause the pins to always be HIGH!

To use A4 & A5 as regular pins detach them first from I<sup>2</sup>C 3V3 connector by cutting the solder jumpers on the backside of the pcb.



GroundStudio.ro

Board: "GroundStudio Jade U1+" OLMPHC\_GS REV 1.1.0

Credits: "Arduino UNO REV3" by Arduino

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Pinout REV: 1