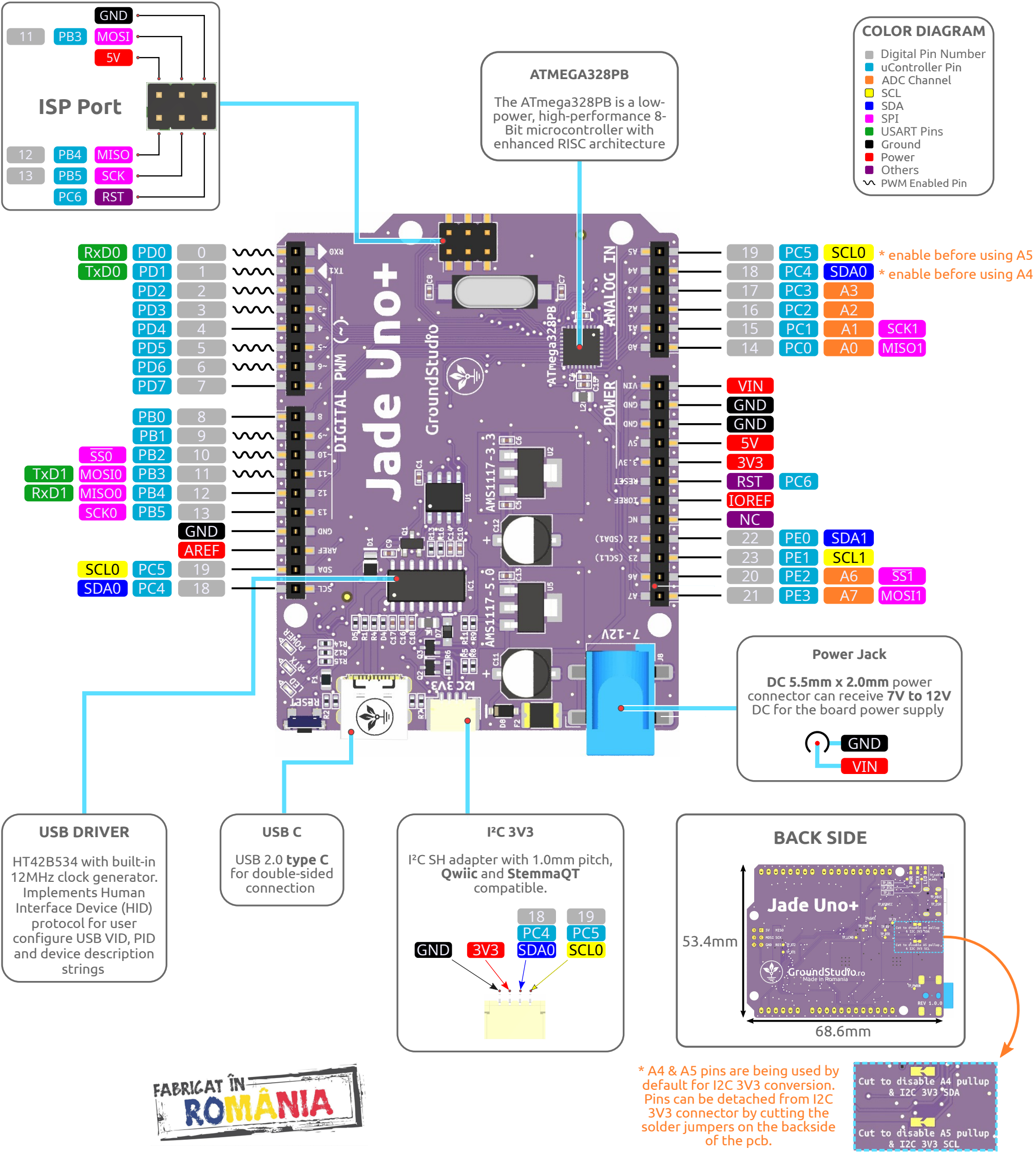# GroundStudio Jade Uno+

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**, **10x PWM** Channels, **24x Digital Pins**, 2x **USART**, 2x **SPI**, 2x I²C ports with an I2C 3V3 adapter on port 0 (default) and **6x channel 10 bit ADC**

ISP Port

GND
11	PB3	MOSI
		5V
12	PB4	MISO
13	PB5	SCK
	PC6	RST

COLOR DIAGRAM

- ⬜ Digital Pin Number
- 🟦 uController Pin
- 🟧 ADC Channel
- 🟨 SCL
- 🟦 SDA
- 🟪 SPI
- 🟩 USART Pins
- ⬛ Ground
- 🟥 Power
- 🟪 Others
- ∿ PWM Enabled Pin

ATMEGA328PB

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

RxD0	PD0	0
TxD0	PD1	1
	PD2	2
	PD3	3
	PD4	4
	PD5	5
	PD6	6
	PD7	7
	PB0	8
	PB1	9
SS0	PB2	10
TxD1	MOSI0	PB3	11
RxD1	MISO0	PB4	12
SCK0	PB5	13
		GND
		AREF
SCL0	PC5	19
SDA0	PC4	18

19	PC5	SCL0	* enable before using A5
18	PC4	SDA0	* enable before using A4
17	PC3	A3
16	PC2	A2
15	PC1	A1	SCK1
14	PC0	A0	MISO1

		VIN
		GND
		GND
		5V
		3V3
		RST	PC6
		IOREF
		NC
22 (SDA1)	PE0	SDA1
23 (SCL1)	PE1	SCL1
20	PE2	A6	SS1
21	PE3	A7	MOSI1

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

I²C 3V3

I²C SH adapter with 1.0mm pitch, **Qwiic** and **StemmaQT** compatible.

18	19
PC4	PC5
GND	3V3	SDA0	SCL0

BACK SIDE

Jade Uno+

53.4mm

68.6mm

GroundStudio.ro
Made in Romania
REV 1.0.0

Cut to disable A4 pullup & I2C 3V3 SDA

Cut to disable A5 pullup & I2C 3V3 SCL

* A4 & A5 pins are being used by default for I2C 3V3 conversion. Pins can be detached from I2C 3V3 connector by cutting the solder jumpers on the backside of the pcb.

FABRICAT ÎN ROMÂNIA