

Digital I/O Mapping

D0 (Rx)	PD0
D1 (Tx)	PD1
D2	PD2 (INT0)
D3 (PWM)	PD3 (INT1)
D4	PD4 (XCK/T0)
D5 (PWM)	PD5 (T1)
D6 (PWM)	PD6 (AIN0)
D7	PD7 (AIN2)
D8	PB0 (ICP1)
D9 (PWM)	PB1 (OC1A)
D10 (PWM)	PB2 (SS/OC1B)
D11 (PWM)	PB3 (MOSI/OC2)
D12	PB4 (MISO)
D13	PB5 (SCK)

Arduino UNO and ATmega328P microcontroller digital pin mapping.

Analog I/O Mapping

A0	PC0 (ADC0)
A1	PC1 (ADC1)
A2	PC2 (ADC2)
A3	PC3 (ADC3)
A4	PC4 (ADC4/SDA)
A5	PC5 (ADC5/SCL)

Arduino UNO and ATmega328P microcontroller analog pin mapping.

Alternative PIN Functions

PB0	PCINT0/CLKO/ICP1
PB1	OC1A/PCINT1
PB2	~SS/OC1B/PCINT2
PB3	(**) MOSI/OC2A/PCINT3

Alternative PIN Functions (cont)

PB4	(**) MISO/PCINT4
PB5	(**) SCK/PCINT5
PB6	(*) PCINT6/XTAL1/TOSC1
PB7	(*) PCINT7/XTAL2/TOSC2
PC0	ADC0/PCINT8
PC1	ADC1/PCINT9
PC2	ADC2/PCINT10
PC3	ADC3/PCINT11
PC4	ADC4/SDA/PCINT12
PC5	ADC5/SCL/PCINT13
PC6	(*) PCINT14/~RESET
PD0	PCINT16/RXD
PD1	PCINT17/TXD
PD2	PCINT18/INT0
PD3	PCINT19/OC2B/INT1
PD4	PCINT20/XCK/T0
PD5	PCINT6/XTAL1/TOSC1
PD6	PCINT22/OC0A/AIN0
PD7	PCINT23/AIN1

(*) Already reserved on Arduino UNO for crystal (16MHz) and RESET.

(**) Shared with programmer's connector (see AVR910).

Arduino UNO Q/A

What's the crystal frequency?

16MHz

What's the default serial baud rate?

9600 baud

I/O Addressing

PINB (0x03)	PINB0 PINB1 PINB2 PINB3 PINB4 PINB5 PINB6 PINB7
DDRB (0x04)	DDB0 DDB1 DDB2 DDB3 DDB0 DDB4 DDB5 DDB6 DDB7
PORTB (0x05)	PORTB0 PORTB1 PORTB2 PORTB3 PORTB4 PORTB5 PORTB6 PORTB7
PINC (0x06)	PINC0 PINC1 PINC2 PINC3 PINC4 PINC5 PINC6
DDRC (0x07)	DDC0 DDC1 DDC2 DDC3 DDC4 DDC5 DDC6
PORTC (0x08)	PORTC0 PORTC1 PORTC2 PORTC3 PORTC4 PORTC5 PORTC6
PIND (0x09)	PIND0 PIND1 PIND2 PIND3 PIND4 PIND5 PIND6 PIND7
DDRD (0x0A)	DDD0 DDD1 DDD2 DDD3 DDD4 DDD5 DDD6 DDD7
PORTD (0x0B)	PORTD0 PORTD1 PORTD2 PORTD3 PORTD4 PORTD5 PORTD6 PORTD7

Generic GPIO

GPIOR0 (0x1E)	GPIOR00 GPIOR01 GPIOR02 GPIOR03 GPIOR04 GPIOR05 GPIOR06 GPIOR07
GPIOR1 (0x2A)	GPIOR10 GPIOR11 GPIOR12 GPIOR13 GPIOR14 GPIOR15 GPIOR16 GPIOR17
GPIOR2 (0x2B)	GPIOR20 GPIOR21 GPIOR22 GPIOR23 GPIOR24 GPIOR25 GPIOR26 GPIOR27



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 Page 1 of 1.

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