Controller uCU (Atmega 328) pins assignment

See the datasheet for the package information (32-TQFP).

Port/pin#[1]	Pin #[2]	Atmega function[3]	I/O	Connector/pin	Comments
ADC6	19	**ADC** only	I	P5/1	ADC
ADC7	22	**ADC** only	I		Vbatt ADC input.
PB0	12	**GPIO**/CLKO/ICP1	I	P10/2	ICP1 for US sensor accurate timing capture.
PB1	13	GPIO/**OC1A**	O	P9/1, P11 (power)	PWM for servo or fan (PWM0 channel).
PB2	14	GPIO/**OC1B**/SS	O	P15/2	16-bit PWM. Can be used for servo if PWM0 is used for power control. Note that a 4to3 pin adapter is required for servo.
PB3	15	GPIO/**OC2A**/MOSI	O	P6/3	8-bit PWM. D3 control (active LOW, i.e. inv.PWM).
PB4	16	**GPIO**/MISO	**I**/O	P10/3	GPIO. Must use internal pull-up if not connected.
PB5	17	**GPIO**/SCK	**I**/O	P13/3	GPIO. Must use internal pull-up if not connected.
PB6	7	**XTAL1**/TOSC1			Do not change/use.
PB7	8	**XTAL2**/TOSC2			Do not change/use.
PC0	23	GPIO/**ADC0**	I	P8/1	ADC or GPIO.
PC1	24	GPIO/**ADC1**	I	P16/1	ADC or GPIO.
PC2	25	GPIO/**ADC2**	I	P14/1	ADC or GPIO.
PC3	26	GPIO/**ADC3**	I	P8/1	ADC or GPIO.
PC4	27	GPIO/ADC4/**SDA**	I/O	P7/2	TWI SDA **(3.3V).**
PC5	28	GPIO/ADC5/**SCL**	I/O	P7/1	TWI SCL **(3.3V).**
PC6	29	**/RESET**	I		**DO NOT redefine it as GPIO!!! You will not be able to program the chip.**
PD0	30	**RXD**	I		RX. Connected to USB chip.
PD1	31	**TXD**	O		TX. Connected to USB chip.
PD2	32	**GPIO**/INT0	I	P6/2	Can be used to trigger INT0. Must use internal pull-up if not connected.
PD3	1	**GPIO**/OC2B/INT1	I	P13/2	Can be used to trigger INT1 or as PWM. Must use internal pull-up if not connected.
PD4	2	**GPIO**/XCK/T0	O	P18 (power)	ON/OFF channel 1 control. Active HIGH.
PD5	9	GPIO/**OC0B**/T1	O	P1/1, P3 (power)	PWM2 channel. Active HIGH. 8-bit PWM.
PD6	10	GPIO/**OC0A**/AIN0	O	P2/1, P4 (power)	PWM1 channel. Active HIGH. 8-bit PWM.
PD7	11	**GPIO**/AIN1	O	P17 (power)	ON/OFF channel 0 control. Active HIGH.

[1] Use the pin names from this column in your code. Do NOT use Arduino "PIN#".
[2] Pin numbers in this column refer to 32-TQFP package, NOT to Arduino "pins".
[3] GPIO functions set by the provided init file are shown in **BOLD.**