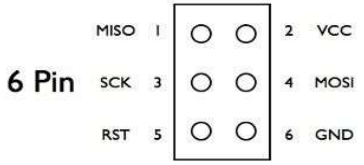
Software Constant	Arduino Uno SMD Header Pin	ATmega328P Pin	ATmega328P Port	PWM Support	Destination	Destination Pin	Destination Label	PCB Connection
UART_RX_IO	0	30	PD0	-	Serial Debug UART	-		
UART_TX_IO	1	31	PD1	-	Serial Debug UART	-		
ALARM_MAX_OVERRUN_TIME_LED_IO	2	32	PD2	-	Max Runtime Fault LED	-		
ALARM_PUMP_LED_IO	3	1	PD3	Yes	Pump Fault LED	-		
ALARM_UVC_LED_IO	4	2	PD4	-	UV-C Lamp Fault LED	-		
ALARM_S_TANK_LOW_LED_IO	5	9	PD5	Yes	Source Tank Empty Fault LED	-		
ALARM_FLOAT_ERROR_LED_IO	6	10	PD6	Yes	Treated Tank Float Fault LED	-		
SILENCE_ALARM_BUTTON_IO	7	11	PD7	-	Silence Alarm Button	-		
PUMP_OUT_IO	8	12	PB0	-	Water Pump	-		
ALARM_BUZZER_IO	9	13	PB1	Yes	Alarm Buzzer	-		
UVC_OUT_IO	10	14	PB2	Yes	UV-C Lamp	-		
SPI_MOSI	11	15	PB3	Yes	SPI / ICSP (PIN 4)	-		
SPI_MISO	12	16	PB4	-	SPI / ICSP (PIN 1)	-		
SPI_SCK	13	17	PB5	-	SPI / ICSP (PIN 3)	-		
XTAL	N/A	7	PB6	-	System Oscillator	-		
XTAL	N/A	8	PB7	-	System Oscillator	-		
CURRENT_ADC_IN	A0	23	PC0	-	CT for UV-C Lamp Current	-		
MAX_RUNTIME_JUMPER_IN_IO	A1	24	PC1	-	Max Runtime Jumper	-		
FLOAT_T2_SWITCH_IN_IO	A2	25	PC2	-	SPST Switch	-		
FLOAT_T1_SWITCH_IN_IO	A3	26	PC3	-	SPST Switch	-		
FLOAT_S_SWITCH_IN_IO	A4	27	PC4	-	SPST Switch	-		
OVERRIDE_BUTTON_IN_IO	A5	28	PC5	-	SPST Switch	-		
	A6	19	ADC6	-		-		NC
	A7	22	ADC7	-		-		NC
	AREF	20	AREF	-	+5V	-		+5V
	AVCC	18	AVCC	-	+5V	-		+5V
	RESET	29	PC6 / RESET	-	ICSP (PIN 5)	-		10k pull up

Atmel ICSP Schematic



1	MISO	Master In, Slave Out
2	VCC	Voltage Common Collector
3	SCK	Serial Clock
4	MOSI	Master Out, Slave In
5	RST	Reset
6	GND	Ground