Logbook

Date	Symptom	Problem	Solution
2014-04-11	No values are shown on the 7 segment display.	Forgot to set MR pin to HIGH.	
2014-04-11	The value for the last digit after the decimal dot is not correct.	pow(10, i) is not accurate and returning erroneous values. Ex: pow(10, 3) = 1099.	Use pre-calculated values from an array, we only need powers of 10 with a maximum power of 5 anyhow.
2014-04-24	No value is written to the control register of the TC72 temperature chip.	Data was shifted in starting with the LSB instead of MSB when sending data through the SPI bus.	

Memory Mappings

Start Address	End Address	Size	Function

IO Mappings

Port	Pin	Direction	Define	Function	Module
PORTB	PB0	OUTPUT		SS	spi
	PB1	OUTPUT		SCK	spi
	PB2	OUTPUT		MOSI	spi
	PB3	OUTPUT		MR	display
	PB7	OUTPUT		PWM	rc_servo
PORTK	PK3	OUTPUT		STCP	display
	PK5	OUTPUT		CE	temperature
PORTL	PL0	OUTPUT		Display D	display
	PL1	OUTPUT		Display C	display
	PL2	OUTPUT		Display B	display
	PL3	OUTPUT		Display A	display

MCU Functions

Timer		Function	Module
TIMER0	TOIE0	Refresh display	display
TIMER1	COM1C1	PWM pulse	rc_servo