

Rotary Racer 10 Electronics

I2C Bus

Unit	Address	Description
LCD	0x7C	The two line LCD display
GpDisplay	0x10	The GpDisplay board for switches and LED's
RTC	0xD0	The real time clock chip
Memory	0xA0	The memory devices
Memory	0xA2	
Memory	0xA4	
Memory	0xA6	

GpDisplay

We will set this to have an I2C address of 0x10. The Picaxe 20x2 will work as an I2C slave and respond to requests from the GpSpeed controller. It will have the following registers:

Address	Name	Description
0x00	Leds	Bits 0 – 4 light the LED's. A '1' turns the LED on.
0x01	Switches	Bits 0 – 4 provide the state of the switches. A '1' indicates the switch is pressed.