Joystick

x-axis - PA0

Blue LEDs Pins 1-8

Ground Pins 17-20 & 29-32

Pin	Left Label		Right Label	Pin
(PCINT8/XCK0/T0)	PB0	1	40	PA0 (ADC0/PCINT0)
(PCINT9/CLKO/T1)	PB1	2	39	PA1 (ADC1/PCINT1)
(PCINT10/INT2/AIN0)	PB2	3	38	PA2 (ADC2/PCINT2)
(PCINT11/OC0A/AIN1)	PB3	4	37	PA3 (ADC3/PCINT3)
(PCINT12/OC0B/$\overline{SS}$)	PB4	5	36	PA4 (ADC4/PCINT4)
(PCINT13/ICP3/MOSI)	PB5	6	35	PA5 (ADC5/PCINT5)
(PCINT14/OC3A/MISO)	PB6	7	34	PA6 (ADC6/PCINT6)
(PCINT15/OC3B/SCK)	PB7	8	33	PA7 (ADC7/PCINT7)
	$\overline{RESET}$	9	32	AREF
	VCC	10	31	GND
	GND	11	30	AVCC
	XTAL2	12	29	PC7 (TOSC2/PCINT23)
	XTAL1	13	28	PC6 (TOSC1/PCINT22)
(PCINT24/RXD0/T3*)	PD0	14	27	PC5 (TDI/PCINT21)
(PCINT25/TXD0)	PD1	15	26	PC4 (TDO/PCINT20)
(PCINT26/RXD1/INT0)	PD2	16	25	PC3 (TMS/PCINT19)
(PCINT27/TXD1/INT1)	PD3	17	24	PC2 (TCK/PCINT18)
(PCINT28/XCK1/OC1B)	PD4	18	23	PC1 (SDA/PCINT17)
(PCINT29/OC1A)	PD5	19	22	PC0 (SCL/PCINT16)
(PCINT30/OC2B/ICP)	PD6	20	21	PD7 (OC2A/PCINT31)

PORT C

- I used PORT C to ground my LED matrix which is Pins 17-20 and 29-32

PORT D

- PORT D was connected to pins 1-8 of the LED matrix which are used to control the blue LEDs

PORT A

- I used PORT A pins 0 and 1 for the input from the 2-axis joystick.