MXP Addressing

DigitalInput/DigitalOutput Addressing

NAVX-MXP PORT	MXP PIN NUMBER	ROBORIO CHANNEL ADDRESS
0	DIO0	10
1	DIO1	11
2	DIO2	12
3	DIO3	13
4	DIO8	18
5	DIO9	19
6	DIO10	20
7	DIO11	21
8	DIO12	22
9	DIO13	23

NOTE: The MXP connector has 2 Digital I/O pins which are dedicated to the I2C interface. MXP Digital I/O Pin DIO14 is used for I2C SCL and DIO15 is used for I2C SDA. Since the navX MXP I2C interface is always active, these pins must not be used for any other purpose.

Analog Output Addressing

NAVX-MXP PORT	MXP PIN NUMBER	ROBORIO CHANNEL ADDRESS
0	AO0	0
1	AO1	1

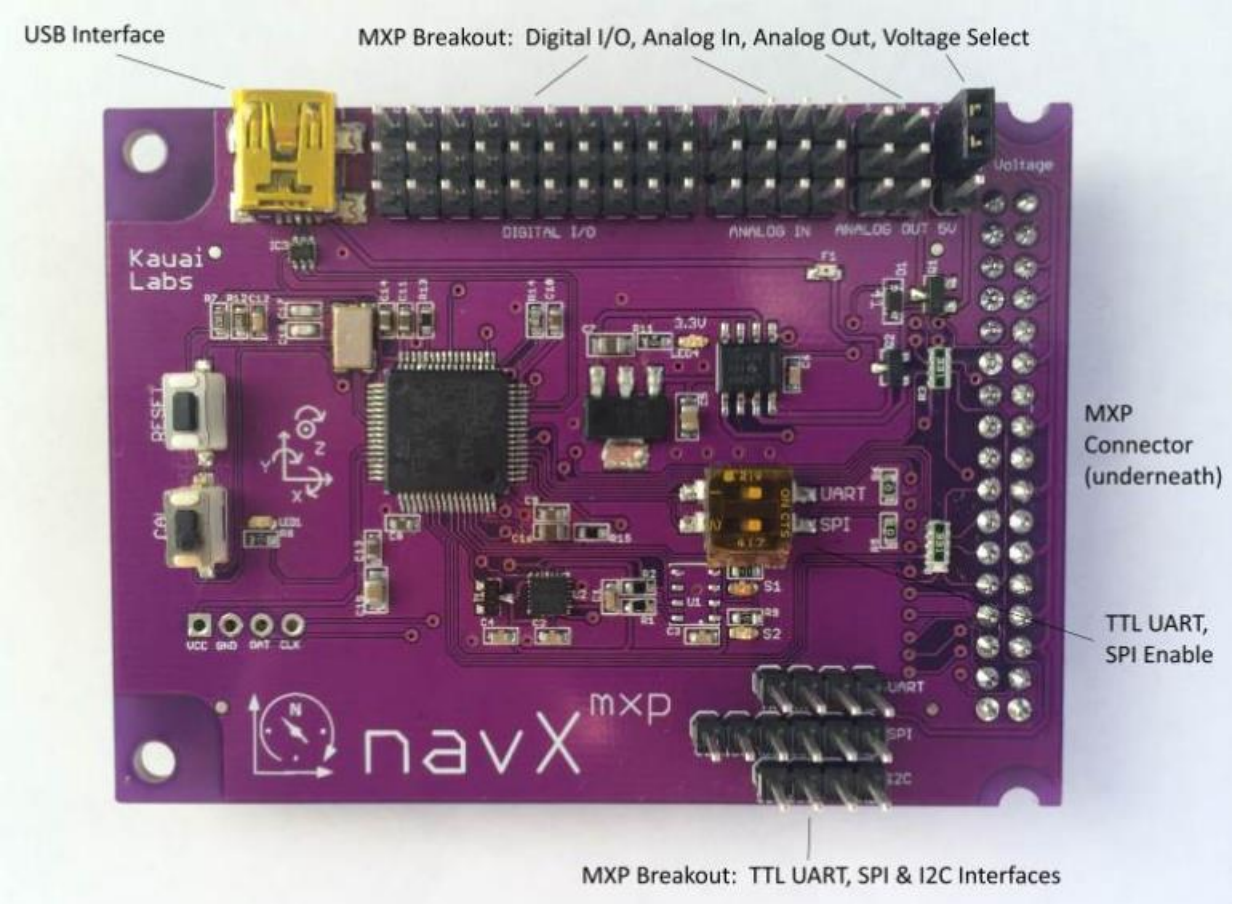
PWM Output Addressing

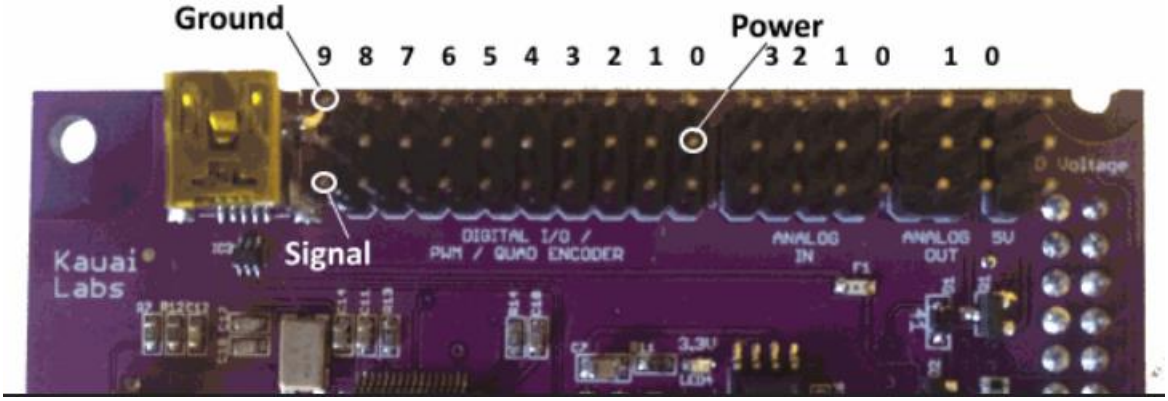
NAVX-MXP PORT	MXP PIN NUMBER	ROBORIO CHANNEL ADDRESS
0	PWM0	10
1	PWM1	11
2	PWM2	12
3	PWM3	13
4	PWM4	14
5	PWM5	15
6	PWM6	16
7	PWM7	17
8	PWM8	18
9	PWM9	19

Analog Input Addressing

NAVX-MXP PORT	MXP-PIN NUMBER	ROBORIO CHANNEL ADDRESS
0***	AI0	4
1***	AI1	5
2	AI2	6
3	AI3	7

******IMPORTANT NOTE:** Due to a board layout issue on the navX-MXP, there is noticeable crosstalk between ANALOG IN pins 3, 2 and 1. **For that reason, use of pin 3 and pin 2 is NOT RECOMMENDED.******


USB Interface
MXP Breakout: Digital I/O, Analog In, Analog Out, Voltage Select
MXP Connector (underneath)
TTL UART, SPI Enable
MXP Breakout: TTL UART, SPI & I2C Interfaces
Kauai Labs
navX mxp
DIGITAL I/O
ANALOG IN
ANALOG OUT 5V
Voltage
UART
SPI
I2C
RESET


Ground
Power
9 8 7 6 5 4 3 2 1 0 3 2 1 0 1 0
Signal
Kauai Labs
DIGITAL I/O / PWM / QUAD ENCODER
ANALOG IN
ANALOG OUT
5V
Voltage