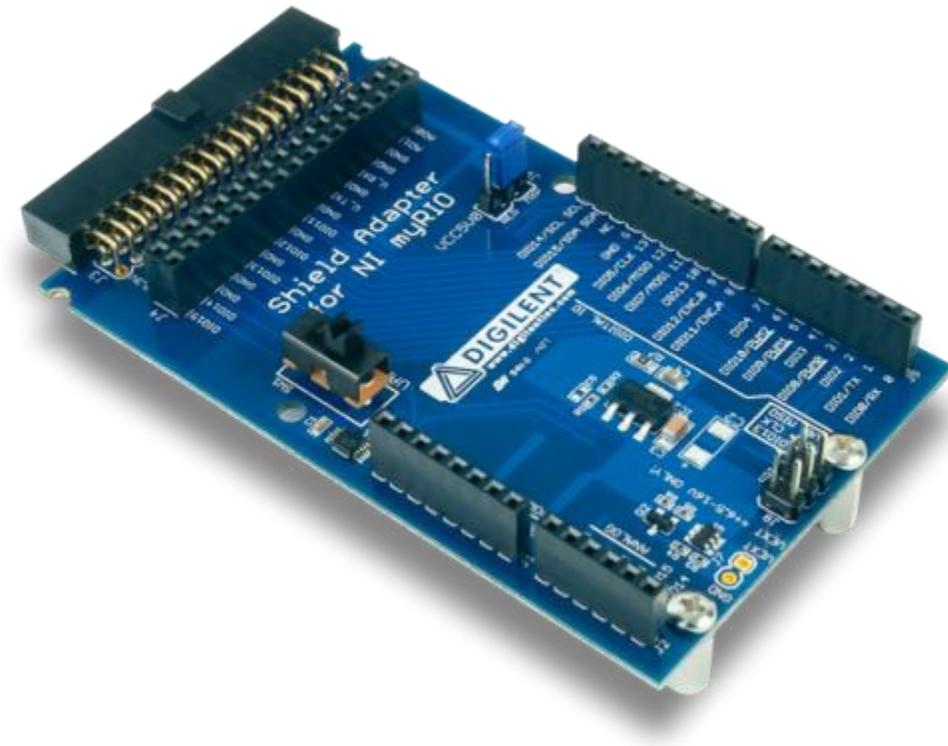


# Shield Adapter for myRIO



## Overview

With the Shield Adapter for myRIO, you can now connect your myRIO to the expansive shield options offered by the Arduino™ ecosystem. The Shield Adapter is designed to work with any shield that is compatible with the Arduino Uno using the 3.3 or 5V power from the myRIO MXP connector. The silk screen is labeled on the shield pins to reflect the myRIO inputs.

Features include:

- Uses the [myRIO Expansion Port \(MXP\) connector](#)
- Signal and power lines adapted to the standard Arduino™ Uno footprint.
- I2C is hardwired to A4 and A5 pins and adheres to the revised [Arduino Leonardo standard](#)
- Standard 34-pin female breakout
- Switch allows users to select between UART and DIO pins 0 and 1
- No external power required for shields operating at 3.3V or 5V

## Configuring the Adapter

### Pin Connections

Arduino Pin Name	myRIO Pin#	myRIO Pin Function
IOREF	NC	No Connection
RESET	NC	No Connection
3.3V	33	3.3V
5V	1	5V
GND	6, 8, 12, 16, 20, 24, 28, 30	
GND	6, 8, 12, 16, 20, 24, 28, 30	
GND	6, 8, 12, 16, 20, 24, 28, 30	
VIN	NC	No Connection
A0	3	AI0
A1	5	AI1
A2	7	AI2
A3	9	AI3
A4	34	I2C.SDA
A5	32	I2C.SCL
RX ← 0	MUXED: 10 - 11	MUXED: UART.RX - DIO0
TX →1	MUXEd: 14 - 15	MUXED: UART.TX - DIO1
2	15	DIO2
3	27	DIO8 / PWM0
4	17	DIO3
5	29	DIO9 / PWM1
6	31	DIO10 / PWM2
7	19	DIO4
8	18	DIO11
9	22	DIO12
10	26	DIO13
11	25	DIO7 / SPI.MOSI
12	23	DIO6 / SPI.MISO
13	21	DIO5 / SPI.CLK

Arduino Pin Name	myRIO Pin#	myRIO Pin Function
GND	6, 8, 12, 16, 20, 24, 28, 30	
AREF	NC	
SDA	34	I2C.SDA
SCL	32	I2C.SCL

### Using the Adapter with myRIO

Please visit the [myRIO Community Website](#) for example code and project ideas.