Introduction

This package provides **libsimpleio**, a .Net Standard 2.0 library package that provides `libsimpleio.dll`, a .Net binding to the **Linux Simple I/O Library**.

It provides services to control ADC (Analog to Digital Converter) inputs, DAC (Digital to Analog) outputs, GPIO (General Purpose I/O) pins, I2C bus controllers, PWM (Pulse Width Modulated) outputs, servo outputs, motor outputs, SPI (Serial Peripheral Interface) devices, and watchdog timers.

With **libsimpleio** you can develop .Net application programs for Linux target computers, including microcomputers like the **BeagleBone** and the **Raspberry Pi**, that control I/O devices. Such programs may be used for physical computing, test fixtures, instrumentation, and other kinds of embedded systems.

Usage

The easiest and best way to use **libsimpleio** is to install the .Net application program project template package **libsimpleio-templates**, by running the following command from a Linux or Windows command line:

```
dotnet new install libsimpleio-templates
```

The above command will install a .Net application program project template called `csharp_console_libsimpleio`. You can then create a project using it with commands like the following:

```
mkdir myprogram
cd myprogram
dotnet new csharp_console_libsimpleio
```

On Windows, after you have run the `dotnet new install` command above, Visual Studio 2022 will automatically pick up the `csharp_console_libsimpleio` project template. You can then create a project using it with File → New → Project... and then search for **libremoteio**.