

# WinDriver Xilinx QDMA IP Sample

The source code for this project is provided with Jungo WinDriver. To compile this application, you will need a compiler and CMake installed.

#### **Files**

• qdma diag.c

The main file which demonstrates access to the Xilinx QDMA IP, using qdma\_lib.c

qdma lib.c

A library for accessing the Xilinx QDMA IP using the WinDriver High Level APIs

CMakeLists.txt

An input file for the CMake build system.

• readme.pdf

Describes the sample files.

We provide several methods of compiling this code:

### Compiling this project using Microsoft Visual Studio/Visual Studio Code

- If you are using Microsoft Visual Studio 2017 and higher or Visual Studio Code, make sure to have installed CMake support for it.
- Open the CMakeLists.txt file and Visual Studio will process it and allow to access the relevant target using the CMake Targets View.
- This will allow you to build the project.

## Compiling using a different IDE/Compiler:

From the terminal, run the following command from the working directory of this project:

```
$ cmake . -b build
```

This will create a Unix Makefile for the project in a new sub-directory named build. To build it, change directory to that sub-directory and run

\$ make

 You can use CMake to generate projects for various other platforms and IDEs. Consult CMake's documentation for more info.

# Creating your own project

- Create a new project using your IDE.
- Choose console mode project.
- Include the following files in the project:

qdma\_diag.c qdma\_lib.c

• Include the WinDriver Diagnostics samples shared files:

(WD\_BASEDIR)/samples/c/shared/wdc\_diag\_lib.c
(WD\_BASEDIR)/samples/c/diag\_lib.c

\$ (WD\_BASEDIR) is the directory where WinDriver is installed at.

• Link your project with \$ (WD\_BASEDIR) /lib/wdapi<version>.lib (Windows)

Or \$(WD\_BASEDIR)/lib/libwdapi<version>.so (Linux)

Of \$(WD\_BASEDIR)/lib/libwdapi<version>.dylib (MacOS)

In order to access WinDriver's High-Level API.

\$ (WD\_BASEDIR) is the directory where WinDriver is installed at.

- Make sure to add the relevant flags to your system:
  - -DKERNEL\_64BIT if using a 64-bit operating system.
  - -DWD\_DRIVER\_NAME\_CHANGE if using a renamed driver.

### Converting to a GUI application:

This sample was written as a console mode application (rather than a GUI application) that uses standard input and standard output. This was done in order to simplify the source code. You may change it into a GUI application by removing all calls to printf() and scanf() functions, and calling MessageBox() instead (on Windows). On other operating systems - you can use the relevant libraries such as GTK or Qt.