**Gemini Serial Port Mode Selection LED & DIO Windows Demo Application**

**Gemini**

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This software is designed for use with Diamond Systems Gemini version 1.0.0 and later on Windows 10 64 bit. This software is incompatible with other windows OS platforms. This software is tested on Windows 10 x64 bit OS.

C Demo programs

* This demo package contains a collection of “console” programs written in C that demonstrate the use of the Diamond Systems Gemini serial port mode selection Application to control the Gemini serial port modules, DIO Application to control the Gemini Digital I/O modules and LED Application to control the BIOS & USER Leds. The demo programs are organized by folder. Each folder contains:
* The C source code
* A ready-to-run executable file

To rebuild these programs, the static library files **GeminiLib.lib, SLABHIDDevice.lib & SLABHIDtoSMBus.lib** must be included in the project properties.

These demo programs may be freely copied, edited, and reused to develop your own applications for the VENUS serial port and DIO modules.

**Drivers included in this package**

**xr17\_win10\_v5.5.0.0** controls the Serial COM Ports and used by the Serial Port Mode Selection Application. The driver is available in exar website.

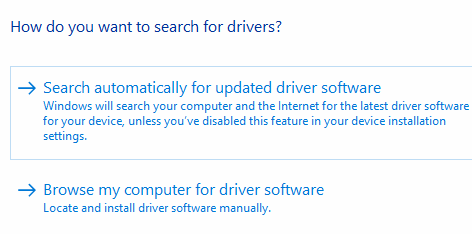
<https://www.maxlinear.com/product/interface/uarts/pcie-uarts/xr17v354>

No need to install any driver for DIO.

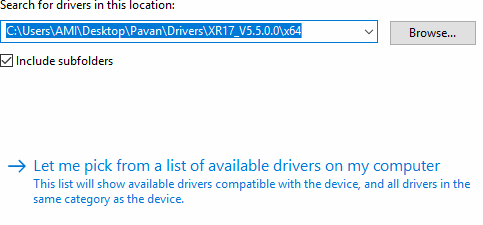
**Installation of driver:**

Actually the driver will be installed as 8COM Ports in default but Gemini will support only 4ports. So we have install Exar driver as 4ports. While installing driver the follow the below steps**,**

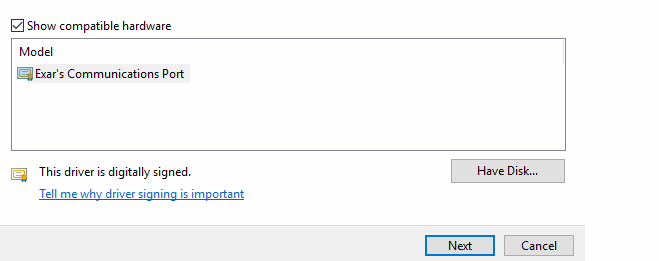
1. Click the Update the driver and browse location of the driver



1. Click the let me pick after select the location of driver



1. Default it will show 8ports PCI. Once you disable the compatible version, it will show 4ports. We can click and install the driver.



The above drivers should be installed and loaded in the operating system before running the Demo applications.

**Simple instructions for using these application programs**

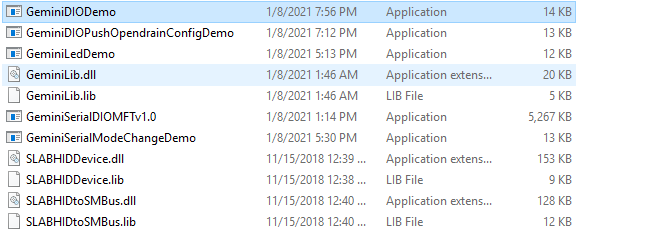
1. Install these serial mode selection, LED & DIO applications by copying them to the desired location in the mass storage device of the system containing your VENUS board.
2. Install the **xr17\_win10\_v5.5.0.0**  by updating the driver as above steps.
3. Run the desired MFT, serial port mode selection, DIO, LED demo applications.

**List of VENUS Demo programs included in this release**

|  |  |
| --- | --- |
| **Program name** | **Description** |
| GeminiSerialModeChangeDemo | Configures serial ports mode as RS232,RS422 and RS485, slew rates and port number can perform external loopback |
| GeminiDIOPushOpendrainConfigDemo | Configure the GPIO pins as Pushpull or opendraine |
| GeminiDIODemo | Configures DIO ports as input or output, reads bytes or bits from ports, and can perform external loopback |
| GeminiLEDDemo | Configures BIOS & USER LEDS |

**Running the Demos**

The library files should in same location with .exe. and you can run those .exe.



For technical support please contact Diamond Systems:

[support@diamondsystems.com](mailto:support@diamondsystems.com)

[www.diamondsystems.com](http://www.diamondsystems.com)