

# .dp Interface Gen2 Firmware Update for XDPL8220

## XDP™ Digital Power

White Paper

Revision 1.0

## About this document

### Scope and Purpose

The increased functionality of the XDPL8220 Digital PFC+Flyback Controller IC requires firmware version 2.4.3 or newer in the .dp Interface Gen2 to be able to communicate via UART. This White Paper explains how to read out the current firmware version of a .dp Interface Gen2 and how to apply the necessary update of the firmware.

### Intended audience

The intended audience are engineers who design power supplies for different loads using XDPL8220.

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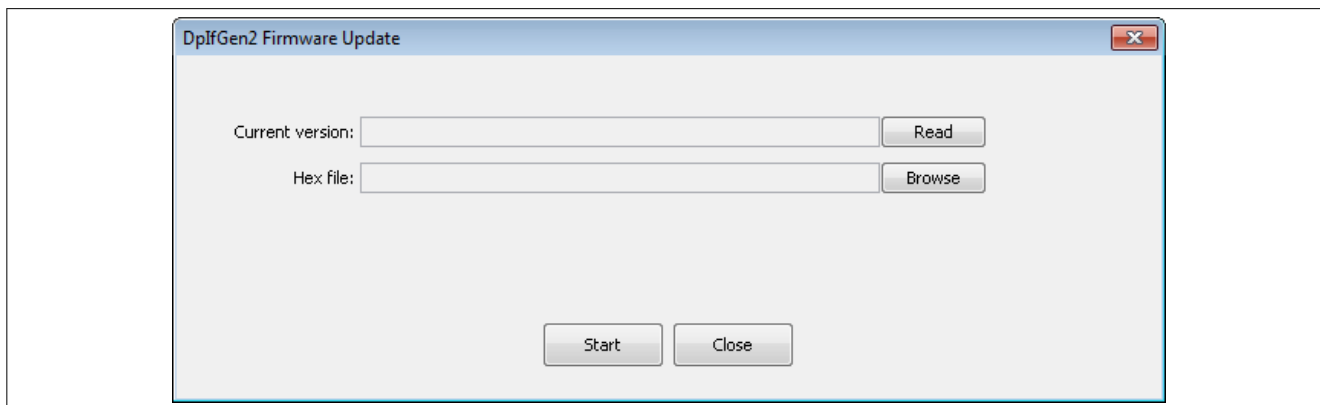
## 1 Identifying Actual Firmware Version

This section describes how to identify the actual version of the firmware inside the .dp Interface Gen2 using the .dp Vision tool which has to be installed on your PC.

To read the firmware version of the .dp Interface Gen2, please perform the following steps:

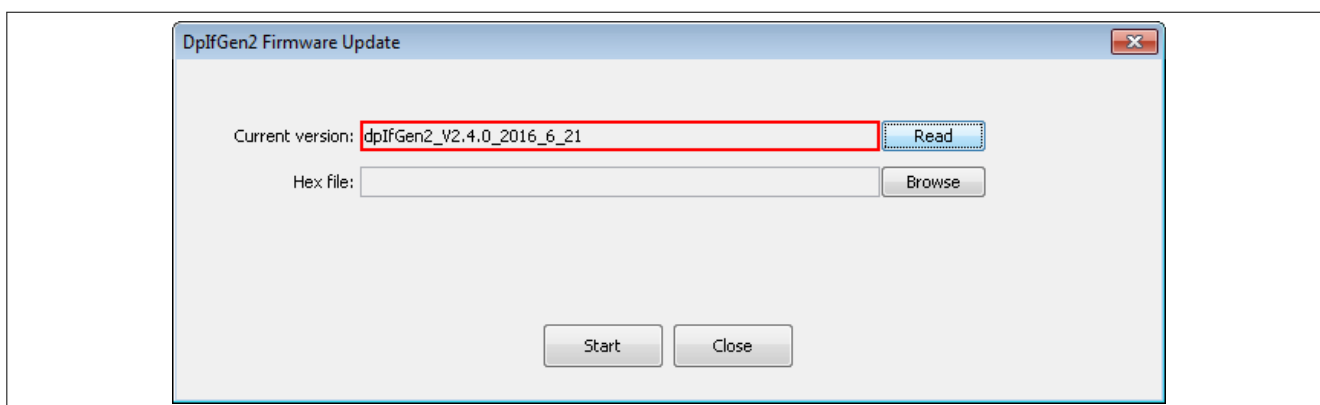
1. Start .dp Vision.
2. From the Tools menu dropdown list select “DplfGen2 Firmware Update”. The appropriate window will appear (see [Figure 1](#)).

## Updating the Firmware Version



**Figure 1 Interface Gen2 Update Dialog**

3. The existing firmware version (Current version) can be read by pressing the “Read” button (see [Figure 2](#)).



**Figure 2 Interface Gen2 Read Firmware Version**

If the firmware version of the .dp Interface Gen2 is 2.4.3 or newer, no update is required to communicate with XDPL8220.

## 2 Updating the Firmware Version

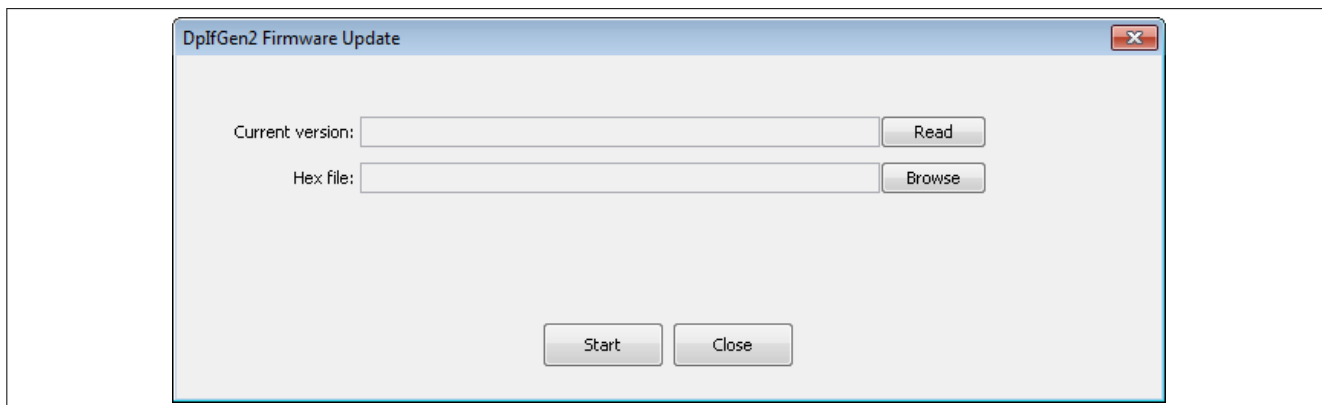
This section describes how to update the firmware on the .dp Interface Gen2 by using the .dp Vision tool.

*Note: Please wait until the USB driver installation has finished after the .dp Interface Gen2 was plugged into the computer for the first time. DO NOT start any firmware update while the USB driver installation is still on-going.*

To update the firmware of the .dp Interface Gen2, please perform the following steps:

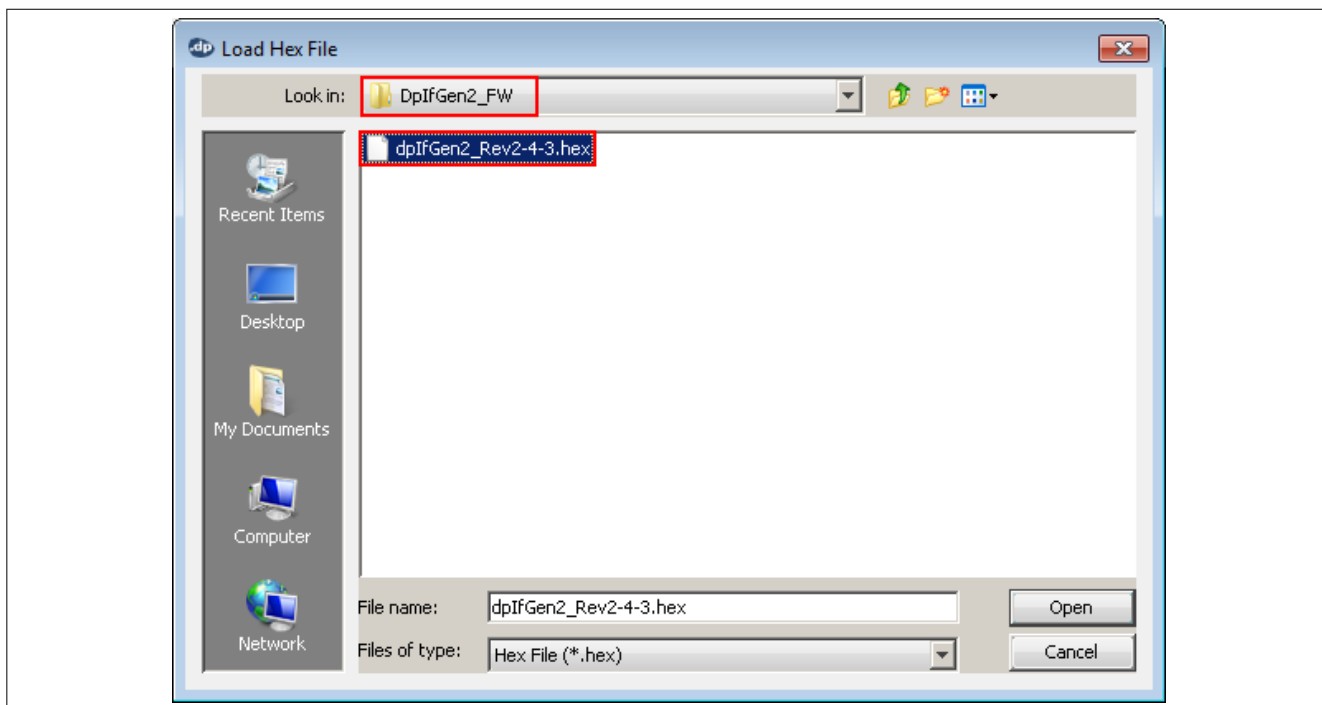
1. Start .dp Vision on your PC if it has not already been started.
2. From the Tools menu dropdown list select “DpIfGen2 Firmware Update”. The appropriate window will appear (see [Figure 3](#)).

## Updating the Firmware Version



**Figure 3 Interface Gen2 Update Dialog**

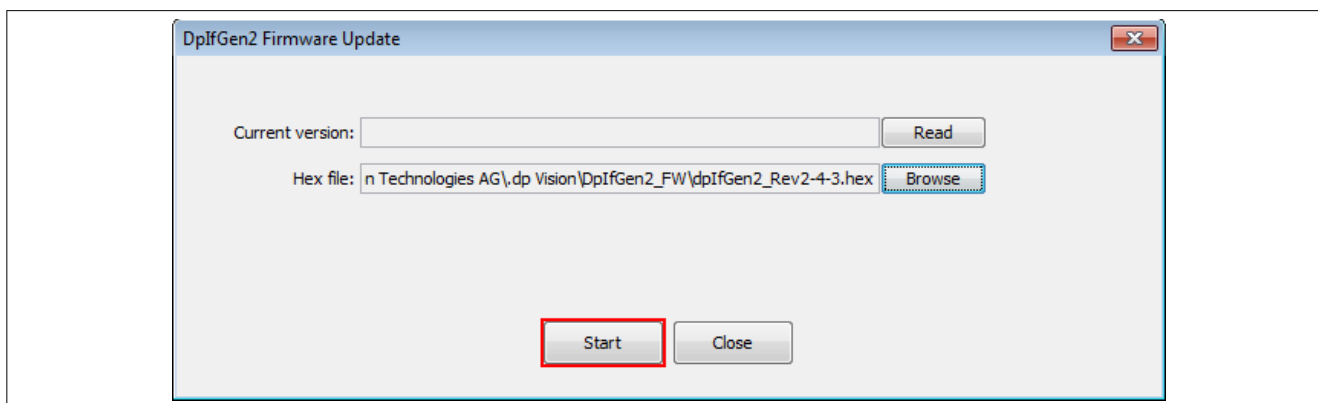
3. Press the “Browse” button (see [Figure 3](#)) and navigate to the folder DpIfGen2\_FW inside your .dp Vision installation. Select the desired hex file dpIfGen2\_Rev2-4-3.hex to be downloaded onto the .dp Interface Gen2 (see [Figure 4](#)).



**Figure 4 Interface Gen2 Select Firmware Dialog**

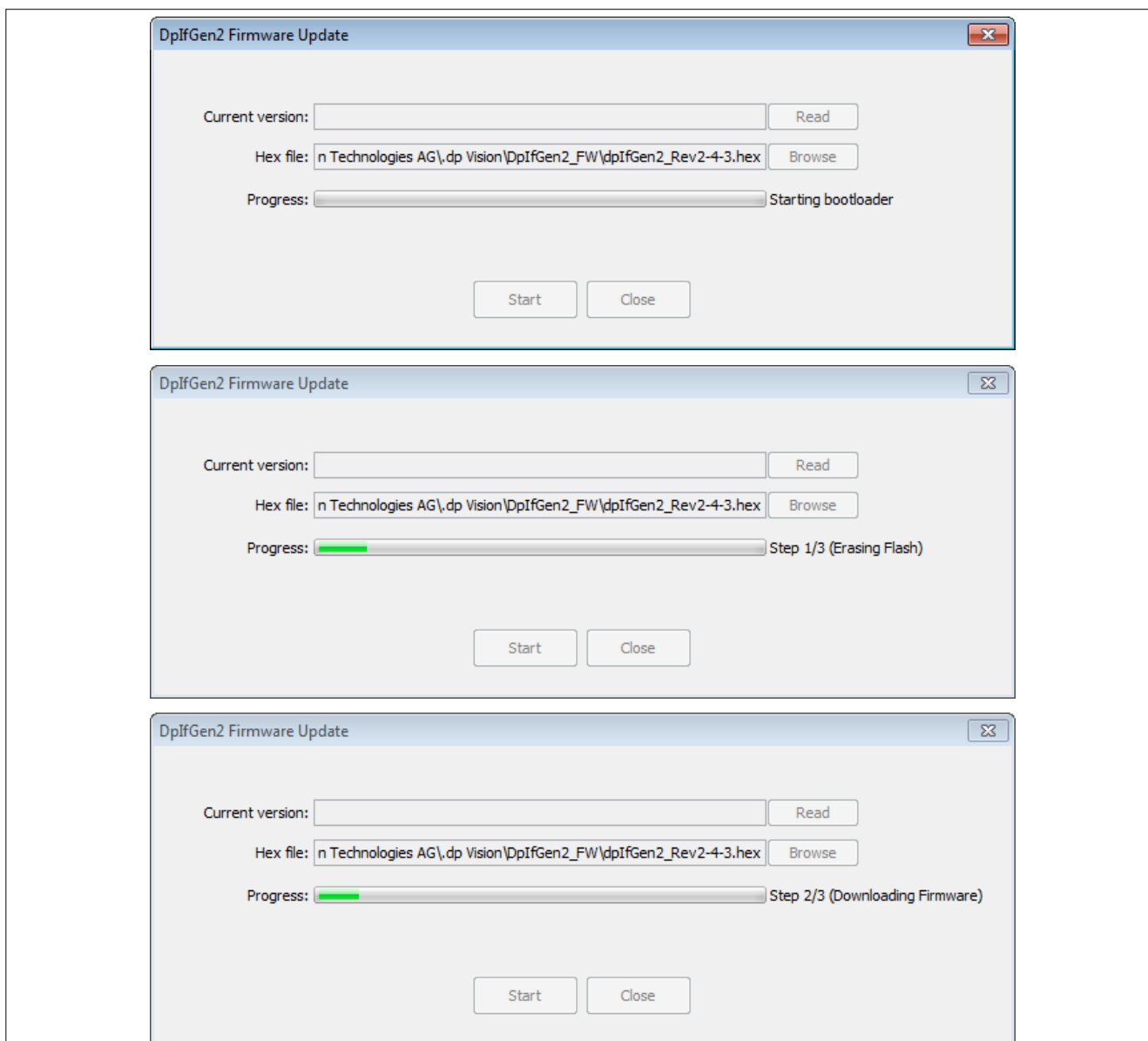
4. In the following window (see [Figure 5](#)) press the “Start” button.

**Updating the Firmware Version**

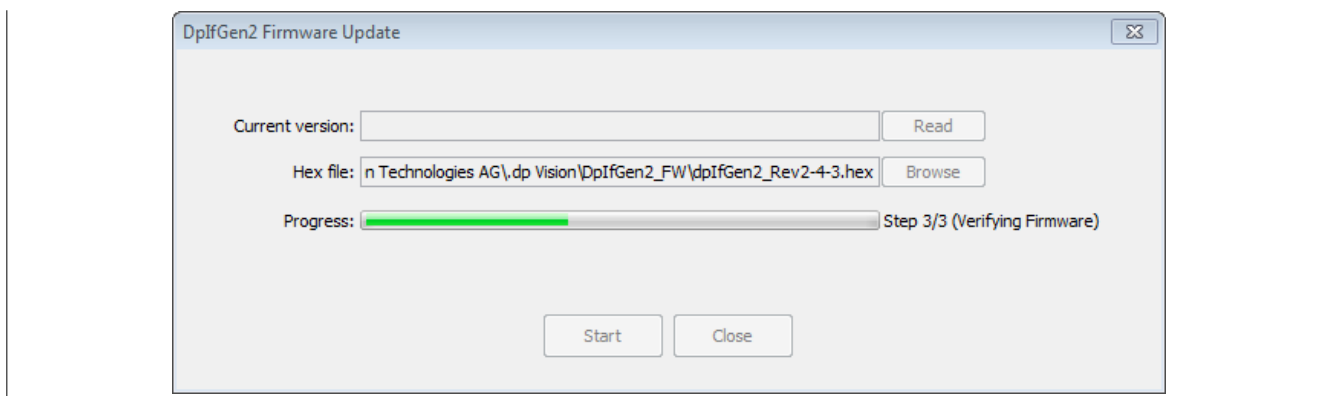


**Figure 5 Interface Gen2 Ready To Start Update**

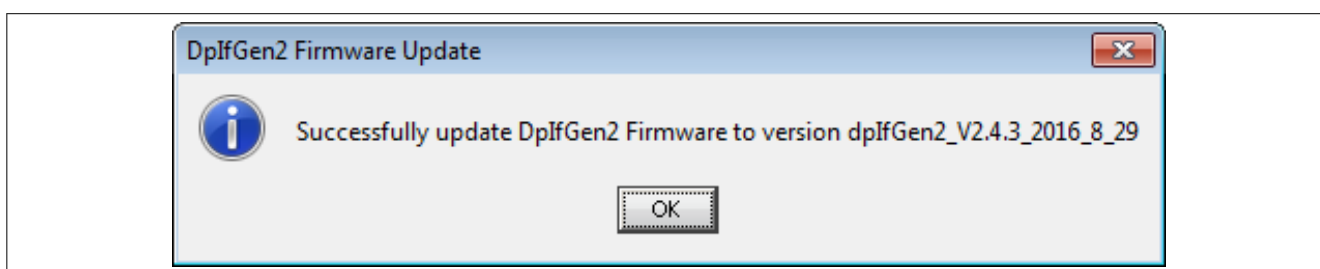
5. Firmware downloading is performed in four steps (Starting Bootloader, Erasing Flash, Downloading Firmware and Verifying Firmware) as shown in [Figure 6](#) . During this process the “DP2x Sync” LED starts flashing. After successful downloading, a corresponding information window will appear (see [Figure 7](#) ).



**Updating the Firmware Version**



**Figure 6 Interface Gen2 Update Firmware**



**Figure 7 Interface Gen2 Update Finished**

*Note: If for some reason communication between the interface board and evaluation board fails or if an error occurs during firmware downloading, simply repeat the firmware update procedure in this section.*

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