EXOSTIV

Using the VCU108 Virtex Ultrascale evaluation kit

Rev. 1.0.0 - October 25, 2017

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References

Revision History

Revision	Modifications
1.0.0	• Initial revision

EXOSTIV – using the VCU108 kit

Introduction

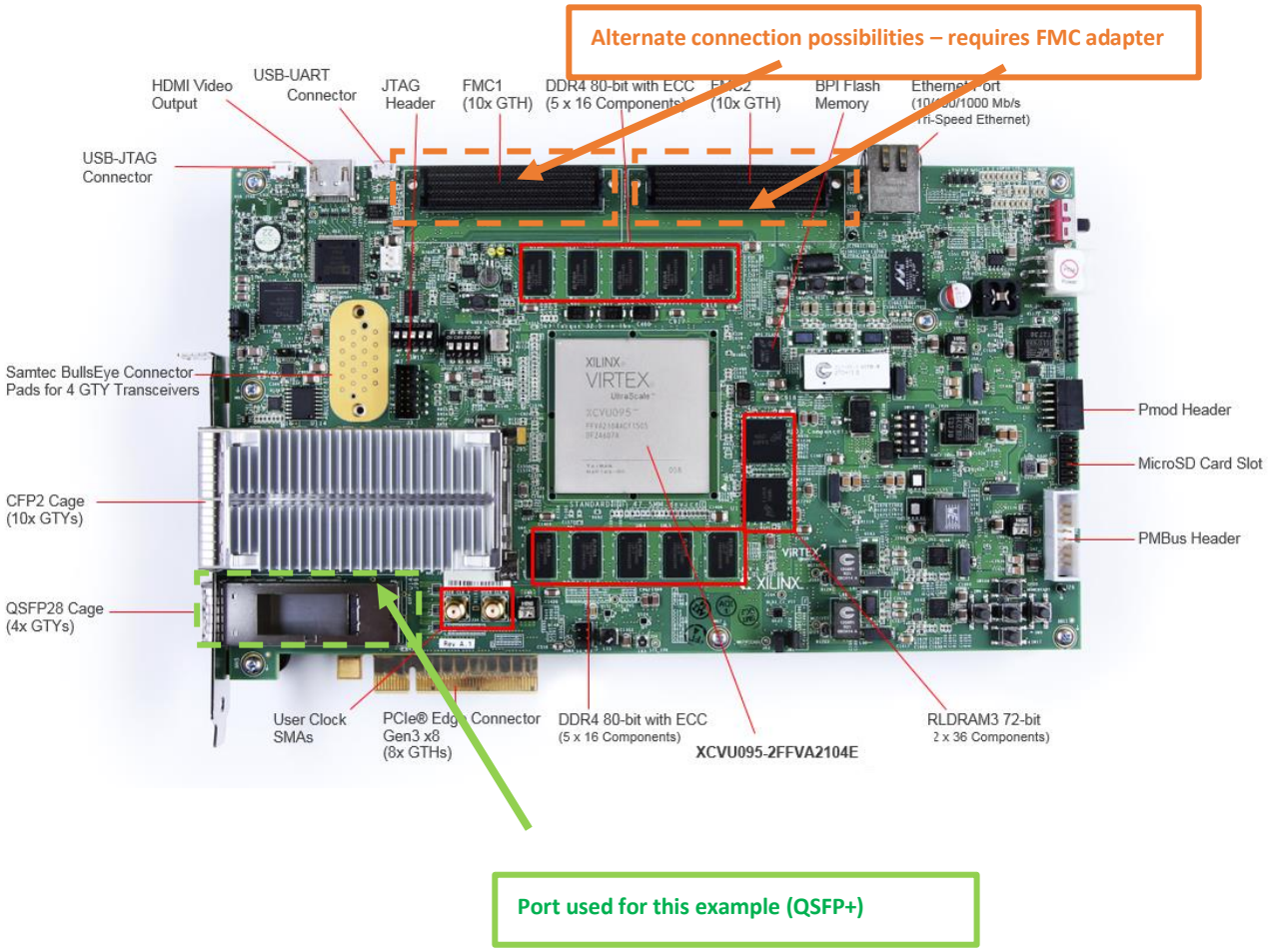
This document provides information about using EXOSTIV with the VCU108 Virtex Ultrascale evaluation kit (https://www.xilinx.com/products/boards-and-kits/ek-u1-vcu108-g.html).

Using EXOSTIV with the VCU108 evaluation kit

EXOSTIV can be connected to the VCU108 evaluation kit through the QSFP+ connector with a QSFP+ to 4x SFP+ cable with splitter or through another connector (e.g. the FMC HPC), possibly with an adapter.

In this document, we'll describe how to use EXOSTIV with the VCU108 QSFP+ connector. We provide a .epf file to be used with the EXOSTIV Dashboard, that is pre-configured for use with this port.

VCU108 : overview



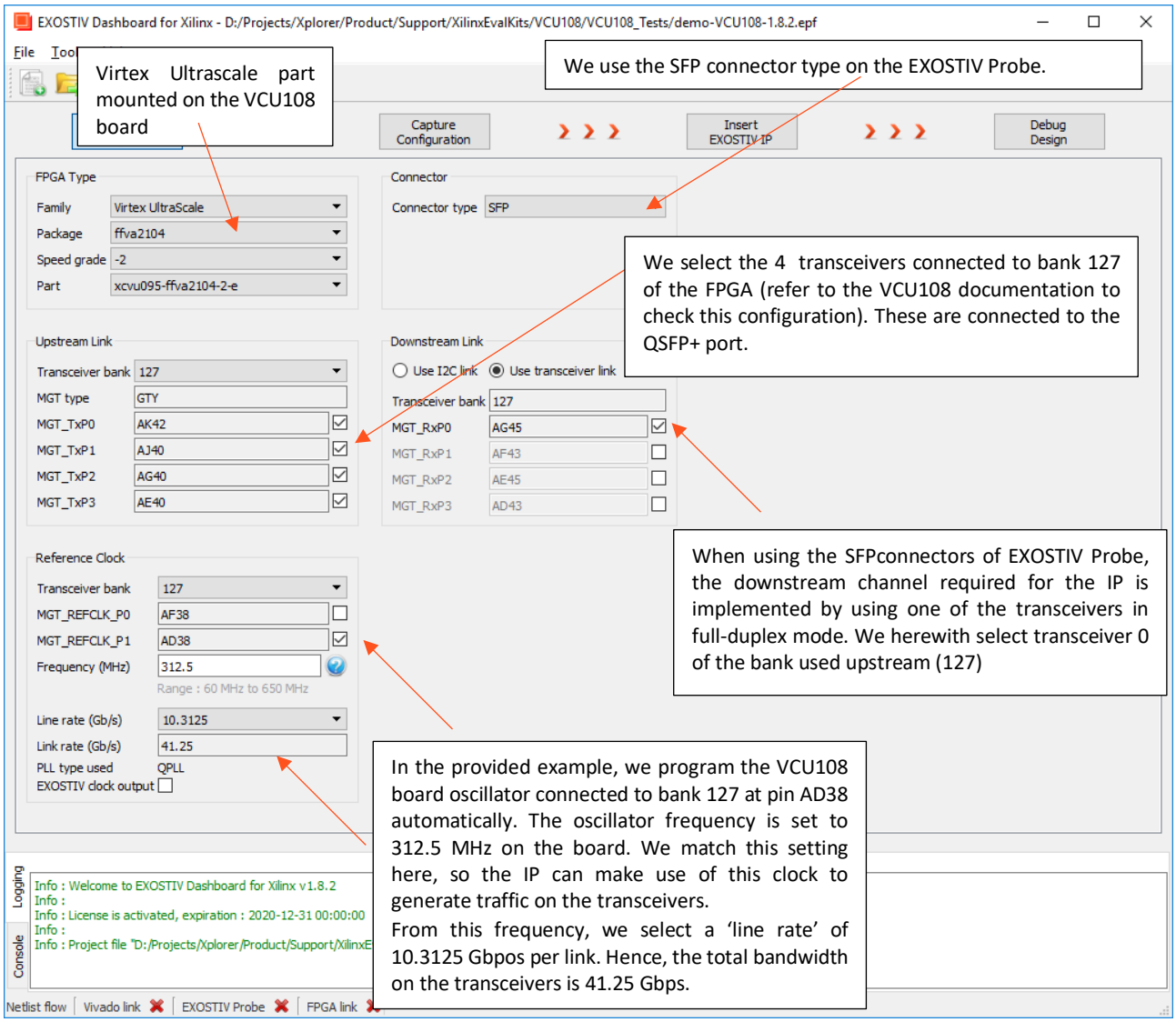
Connecting the VCU108

All the 4 transceivers of EXOSTIV Probe are connected with a 4xSFP+ to QSFP+ cable.

Reviewing the .epf files settings for the link configuration

Using the SFP connectors on EXOSTIV Probe and the QSP+ port on the VCU108 board.

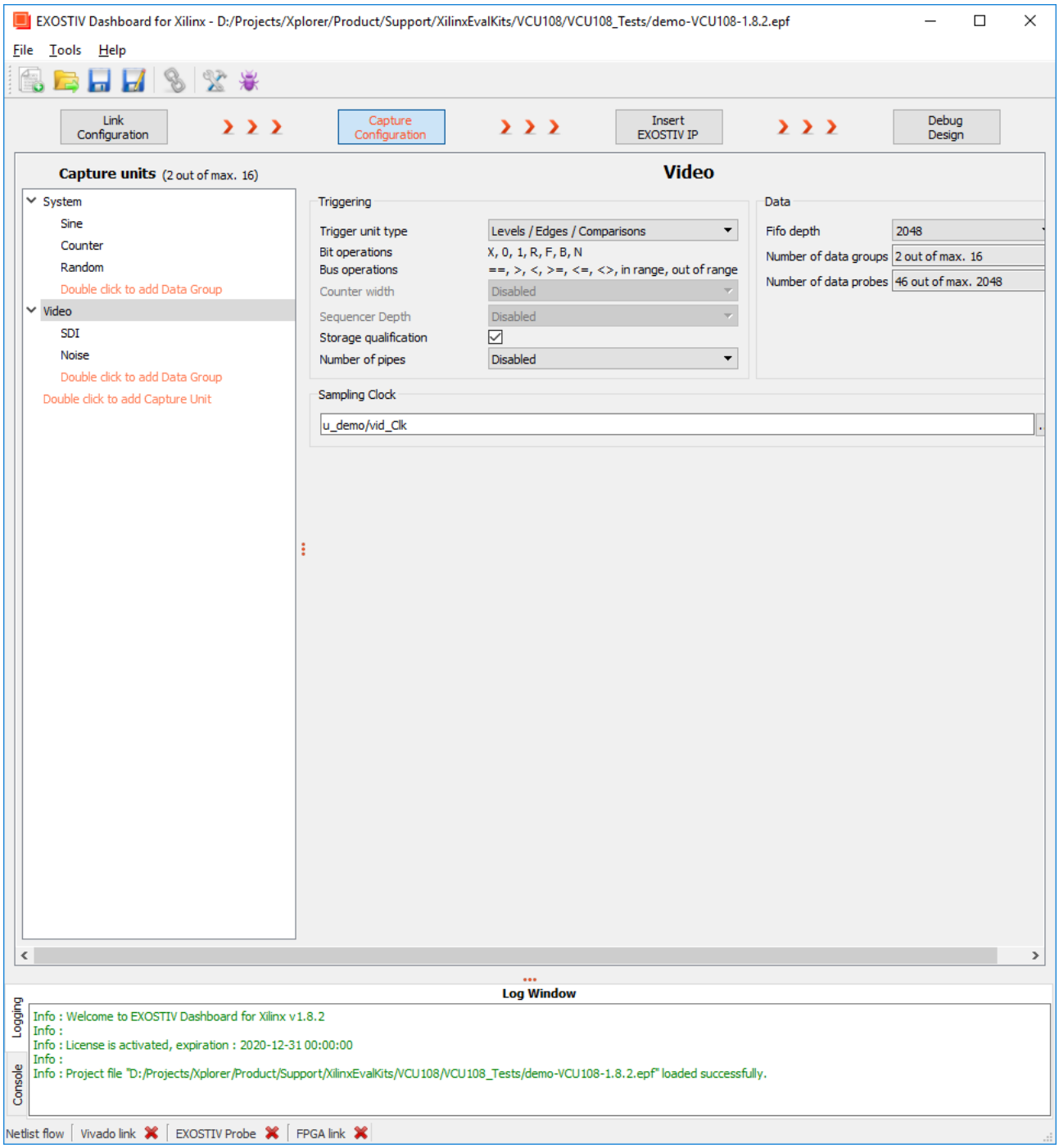
'demo-VCU108-1.8.2.epf' (for use with EXOSTIV Dashboard version 1.8.x)



Reviewing the .epf files settings for the capture configuration

Please open the .epf files and review them through the EXOSTIV Dashboard interface.
Here are the main characteristics of the example:

- There are 5 data generators in the example design. There are connected to 2 capture units:
  - 'System' capture unit (16 bits) – memory buffer: 1,024 samples.
    - Digital sine wave: 'Sine' data group
    - A counter: ''Counter' data group
    - A pseudo random number generator: 'Random' data group
  - 'Video Capture Unit' (46 bits) – memory buffer: 2,048 samples – Storage qualification enabled
    - Video (SDI) stream : 'SDI' data group
    - A set of data used to generate a sine wave with noise : 'Noise'.



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