

Version 2.8 – March 2019

Abstract

The syn1588[®] PCIe NIC Revision 2.1 is available in several different configurations. They differ in the type of the network interface, the oscillator and cable connector options. This application note describes the available options in detail..

Introduction

The syn1588[®] PCIe NIC Revision 2.1 is delivered with a large (standard height) PCI bracket; a short (reduced height) PCI bracket is included as well. The following pictures show all available options briefly as well as the related ordering codes.

Oscillator Options

In order to enable our customers to trade off costs versus accuracy Oregano Systems offers it's syn1588[®] PCIe NIC Revision 2 cards with two different oscillator options.

- standard TCXO (1,5 ppm, default option)
- high-stability OCXO (better than 0,5 ppm)

The default configuration of the syn1588[®] PCIe NIC Revision 2.1 cards include the cost effective option "standard TCXO".

Video Option

Another option is the video add-on board (option Video) that allows the generation of analog video sync signals (e.g. as required for SMPTE applications). The vSync software utility can be used to control the generation of several video modes. See the respective application note for details.

Cable Options

Oregano Systems offers its syn1588[®] PCIe NIC Revision 2.1 cards with two different cable options.

- Plug (option free of charge)

Oregano Systems supplies a cable (length approx. 300 mm) that can be connected on one side to X5 and X6 on the syn1588[®] PCIe NIC (MMCX connector). This cable offers a SMA plug on the other side enabling directly connecting a SMA connector in your system.

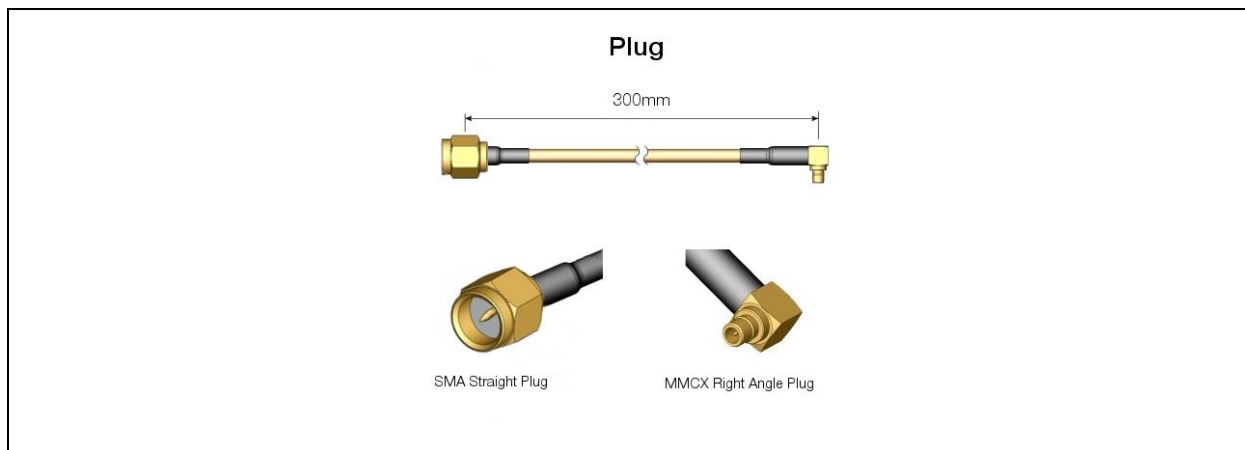


Figure 1. SMA cable for Plug option

- ExtClk (surcharge option)

Another option is the external clock input (option ExtClk) to drive the syn1588[®] hardware clock directly from this external signal.

Caution

Please note that the ExtClk option implies a large PCI bracket for the third SMA connector (external clock input).



Figure 2. SMA cable for ExtClk option

syn1588® PCIe NIC Revision 2.1: RJ45 Interface

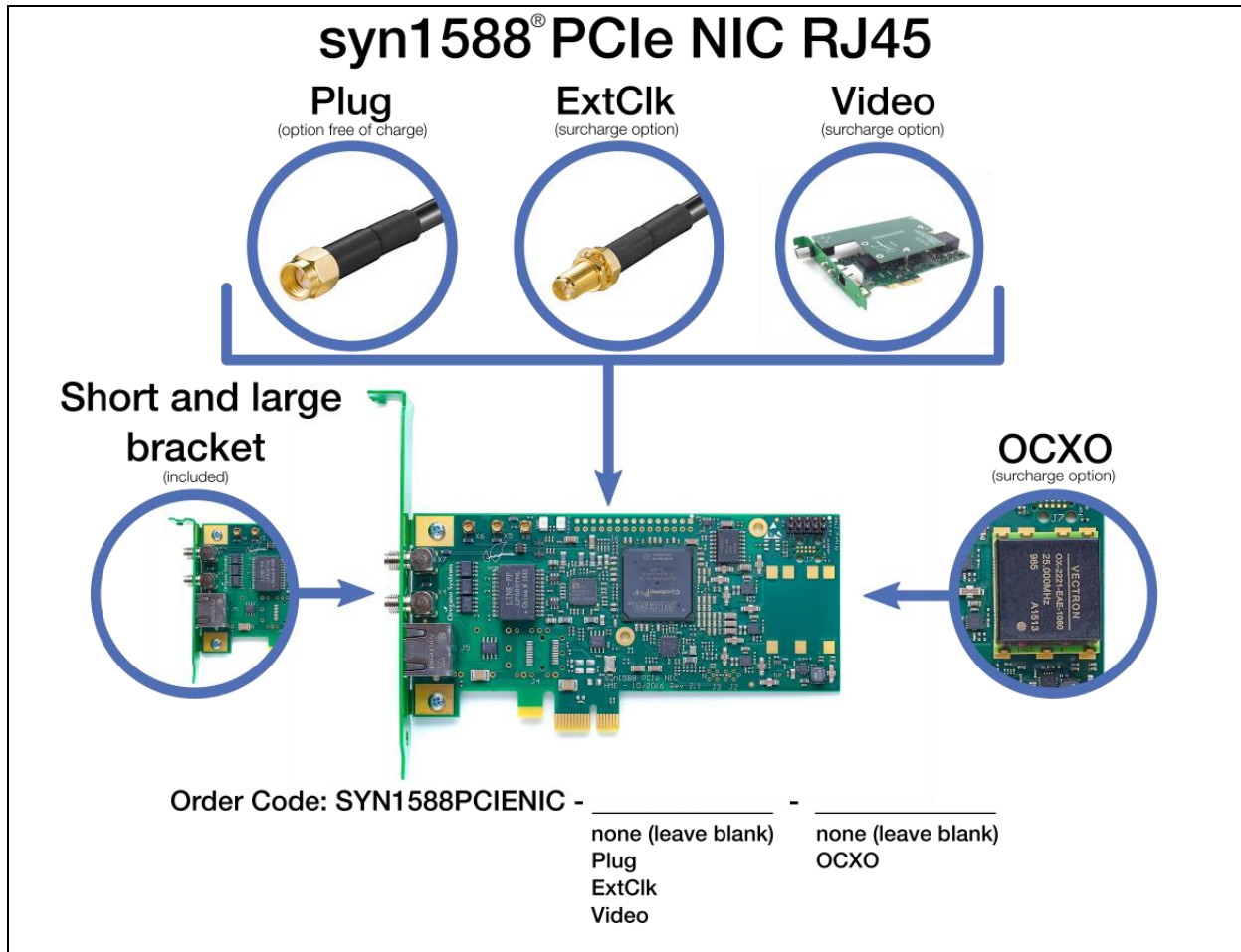


Figure 3. syn1588® PCIe NIC Revision 2.1: RJ45 interface

syn1588® PCIe NIC Revision 2.1: SFP Interface

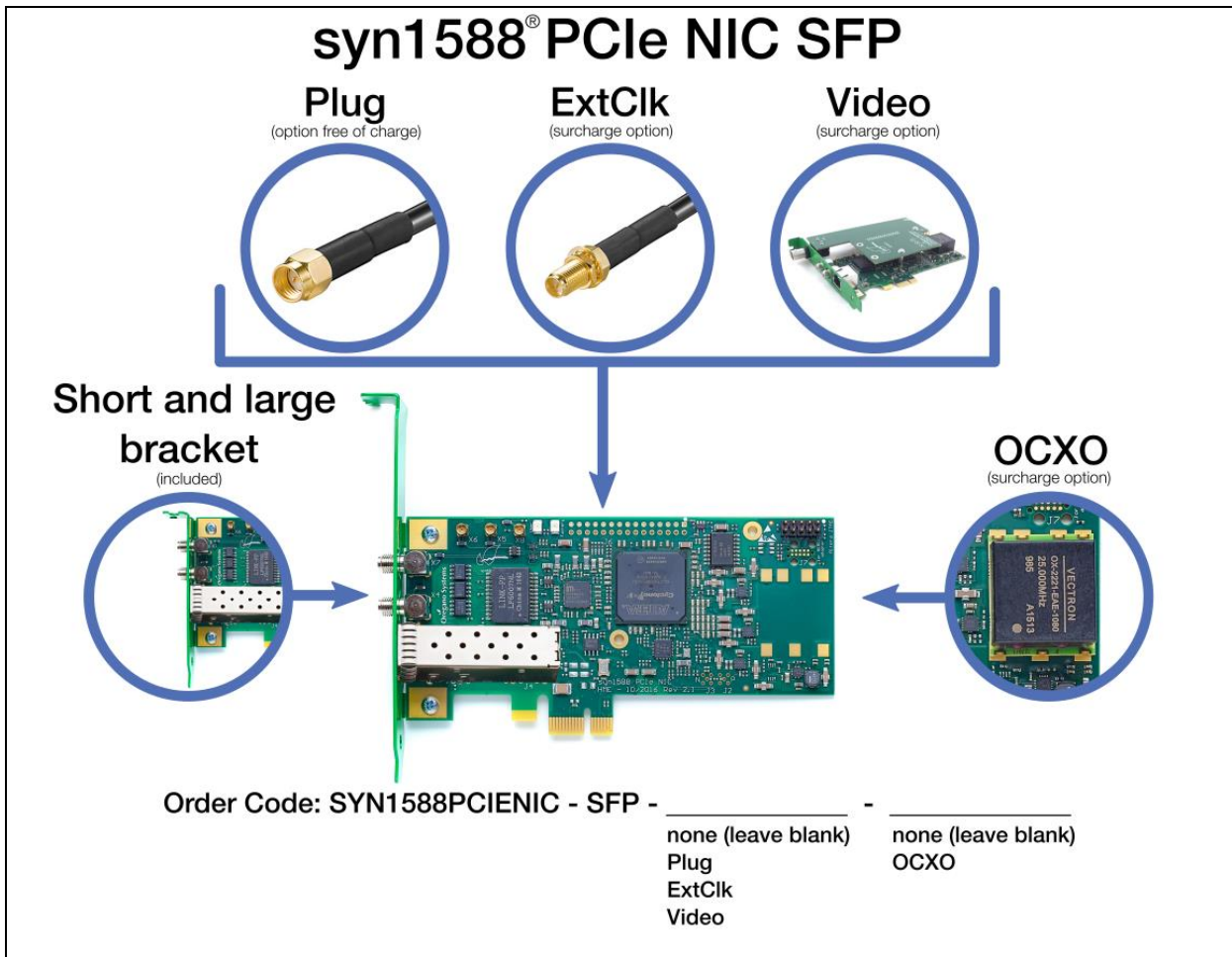


Figure 4. syn1588® PCIe NIC Revision 2.1: SFP interface



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