

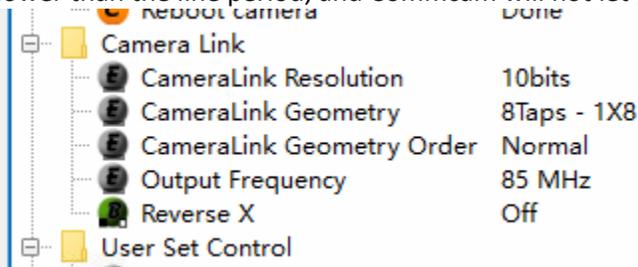
Operating Cobra-S Camera in 80-bit Mode for up to 250 kHz Operation with MX4 Frame Grabber

Overview:

The main steps will be changing the camera settings to 8Tap 10-bit in Commcam, changing the firmware mode to 80-bit on the frame grabber, and using a correct ccf file that supports the 80-bit mode in CamExpert. It is also assumed both Camera Link cables are used to connect the camera to the frame grabber when using anything above 2Tap base mode.

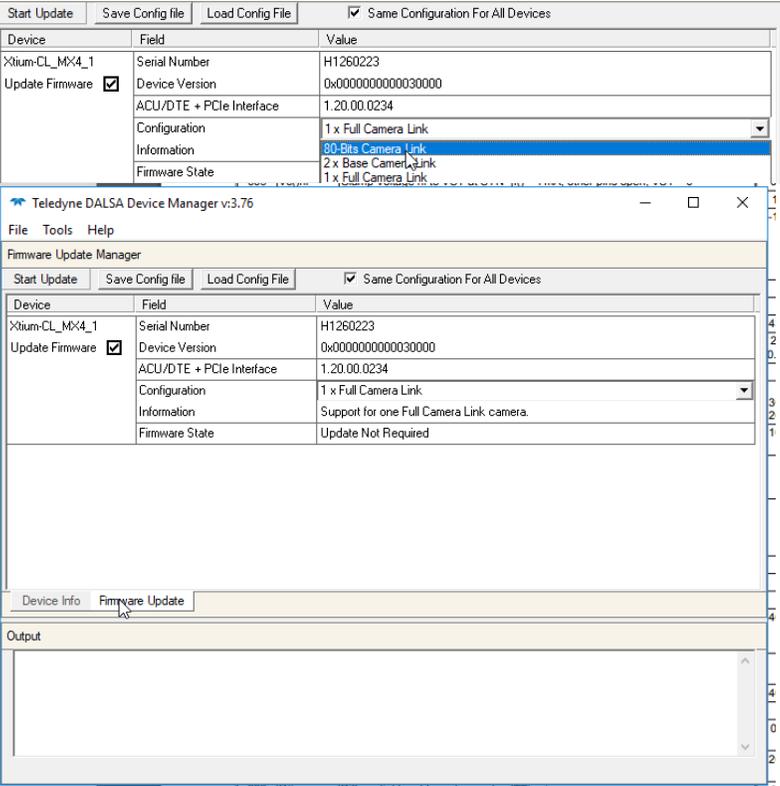
Commcam:

In Commcam, the *CameraLink Resolution* should be set to 10bits, then the CameraLink Geometry can be set to *8Taps - 1x8*. That will allow the minimum 4us line period to be set along with the exposure. The exposure time has to be set lower than the line period, and Commcam will not let you set a value that is not allowed.



Teledyne DALSA Device Manager Firmware Update:

In Teledyne DALSA Device Manager in the *Firmware Update* tab the configuration should be changed to *80-Bits Camera Link* mode and then press *Start Update*. It may be necessary to close out any other running programs like Commcam or CamExpert to proceed with the update.



CamExpert:

In CamExpert, the device to select will be the *CameraLink 8-Tap/10-Bit Mono* under the *Xtium-CL_MX4_1*. The camera configuration file (ccf) is different for 80-bit than base/medium/full modes. Example CCF files are available to use or edit or new ones can be created from scratch.

