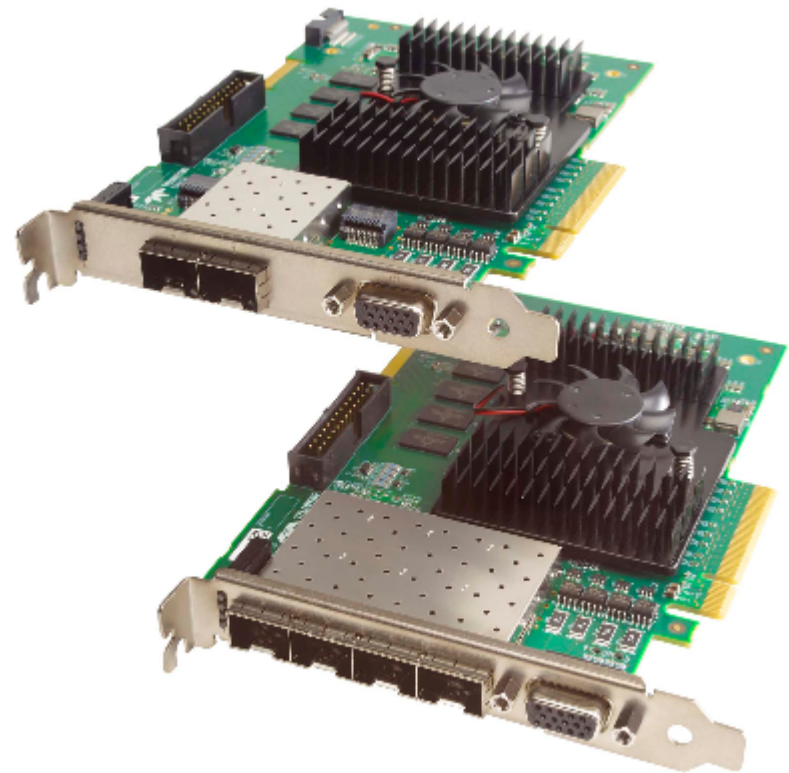


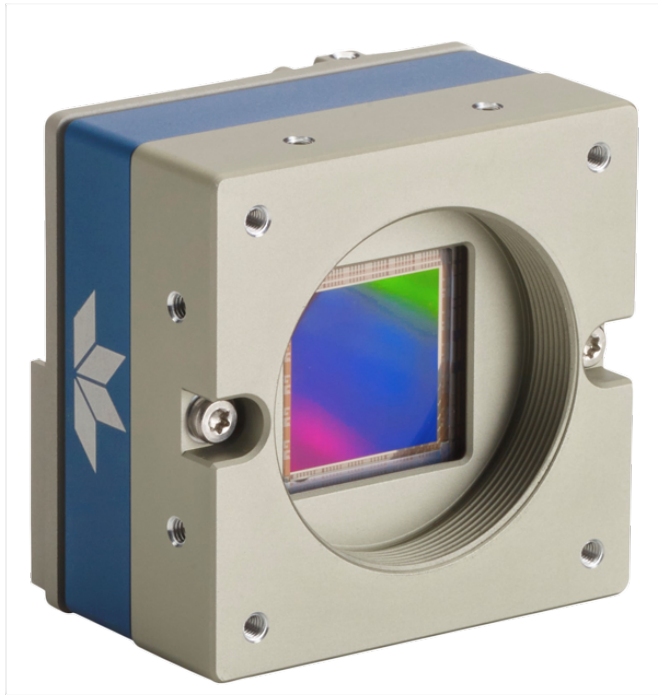
## Multi-port 10 GigE Image Acquisition Board

Xtium2-XGV is a GigE Vision® compatible image acquisition board that features a real-time depacketization engine to convert GigE Vision image packets into ready-to-use images. It has a hardware-assisted packet resend logic that improves the reliability of image transfers while reducing the CPU overhead. Xtium2-XGV targets image acquisition from single or multiple independent 10, 5, 2.5, or 1GigE Vision area scan cameras, line scan cameras, and 3D profile sensors.



## Supporting up to 32 Cameras

Building on the field-proven technology and performance of



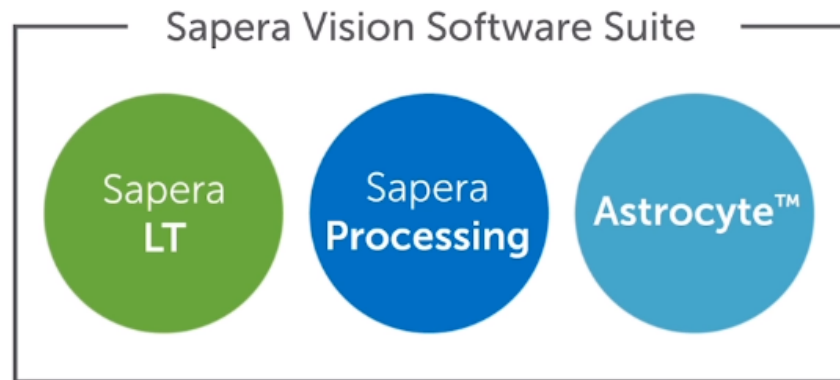
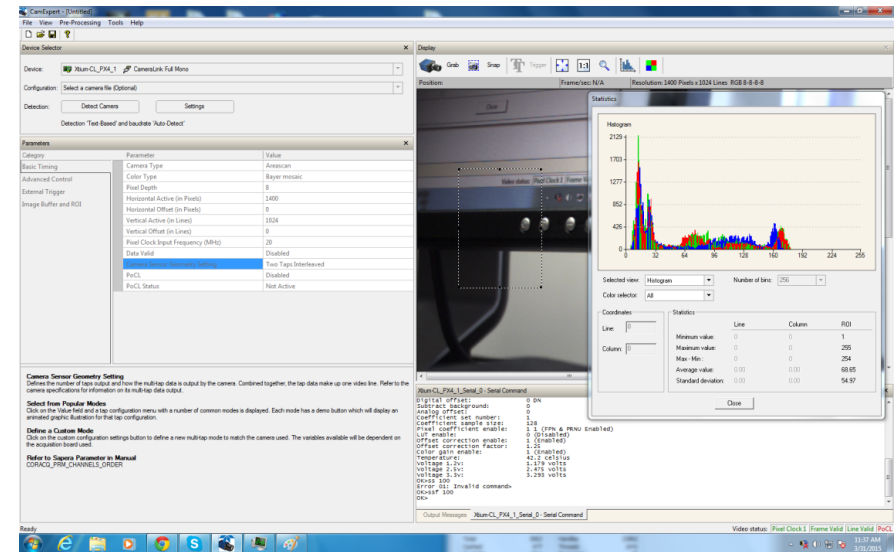
Teledyne DALSA's Xtium2 family of image acquisition boards, the new Xtium2-XGV is a half-length multi-port 10GigE frame grabber for PCI Express™ Gen 3.0 x8 platforms. It can support up to 32 cameras in a variety of different link-speeds and scanning configurations. Available in four or two port SFP+ configurations, the Xtium2-XGV can sustain aggregate input bandwidth of 4 GByte/s (4x10 Gbs) and up to 6.8 GBytes/sec output bandwidth to the host memory. It can also perform a variety of on-board format conversions like Bayer to RGB, Bi-colour to RGB, etc. before sending the images to the host computer.

For a more reliable GigE vision system, Xtium2-XGV supports hardware assisted packet resend. It is capable of transmitting/re-transmitting IEEE-1588 messages across the multiple GigE ports and also pass or trigger Action Command messages based on multiple user programmable sources, including input hardware triggers for perfect synchronisation on all GigE ports.

## Free Acquisition and Control Software Libraries

The Xtium and Xtium2 series of frame grabbers are fully

supported by **Sapera LT SDK**. Sapera LT SDK is an image acquisition and control software development toolkit (SDK) for Teledyne DALSA's cameras and frame grabbers. Hardware independent by nature, Sapera LT offers a rich development ecosystem for machine vision OEMs and system integrators. Sapera LT SDK supports image acquisition from cameras and frame grabbers based on standards including GigE Vision™, Camera Link®, CoaXPress®, and Camera Link HS™.



## Fully supported by Sapera™ vision SDK

Sapera Processing is at the heart of **Sapera Vision Software**, delivering a suite of image processing and analysis functions. These functions include over 400 image processing primitives, barcode tools, pattern matching tools (both area-based and edge-based), OCR, color and blob analysis, measurement, and calibration tools for perspective and lens correction.

**Please Note:** This software is not included with the XGV PX8 model.

# Specifications

<b>Part Number</b>	OR-A8G0-PXF20
<b>Bandwidth</b>	Input camera: up to 2.5 GB/s in frame grabber memory PCIe bus output: up to 7.0 GB/sec sustained (PCIe payload @ 512 bytes) PCIe bus output: up to 6.8 GB/sec sustained (PCIe payload* @ 256 bytes)
<b>Board Type</b>	PCIe
<b>Host Bus</b>	PCIe Gen3 x 8 slot
<b>Board Interface</b>	GigE Vision
<b>Connectors</b>	Data input: 2 x SFP+ cages I/O: 1 x DB15
<b>Camera Format</b>	GigE Vision 2.0
<b>Transmission Rate</b>	2 x 10 Gbps Ethernet (20 Gbps total)
<b>Bits Per Pixel</b>	Mono: 8, 10, 12, 14 and 16-bit RGB: 8, 10 or 12-bit/pixel/color Bayer: 8, 10 and 12-bit/pixel
<b>Camera Control</b>	External trigger (action command), GPIO
<b>GPIO</b>	Inputs: 4x opto-coupled lines Outputs: 8x lines

**Frame Buffer**

2048 MB on-board memory (shared with processing function)

**Features**

Hardware based action command real-time, IEEE1588 (PTP) inter-port re-distribution of PTP messages, packet-offload engine supports, data conversion

**Software**

Sapera LT SDK

**OS Support**

Windows 11 (64-bit)

**Input Camera Port**

2 ports (up to 32 cameras)