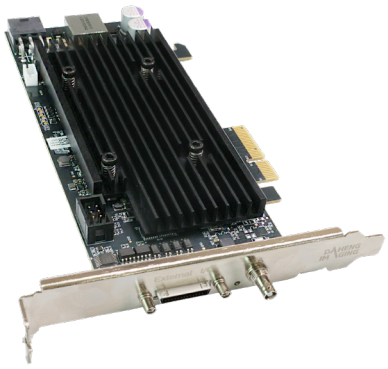
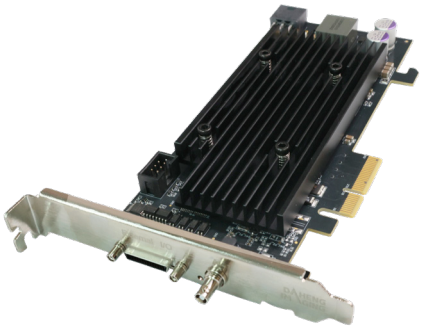
# POLS-C12-1T-G38

## POLARIS Single Channel CoaXPress Frame Grabber





POLS-C12-1T-G38 is based on the industry standard PCIe Gen3 bus and CoaXPress2.0 protocol, which can realize high-speed image acquisition and data transmission. POLS-C12-1T-G38 can acquire images at a speed of 12.5Gbps per channel and transfer the images to host memory through the PCIe×8 slot.

## Applications

Suitable for machine vision applications such as industrial inspection, medical, scientific research, education and so on.

## Features

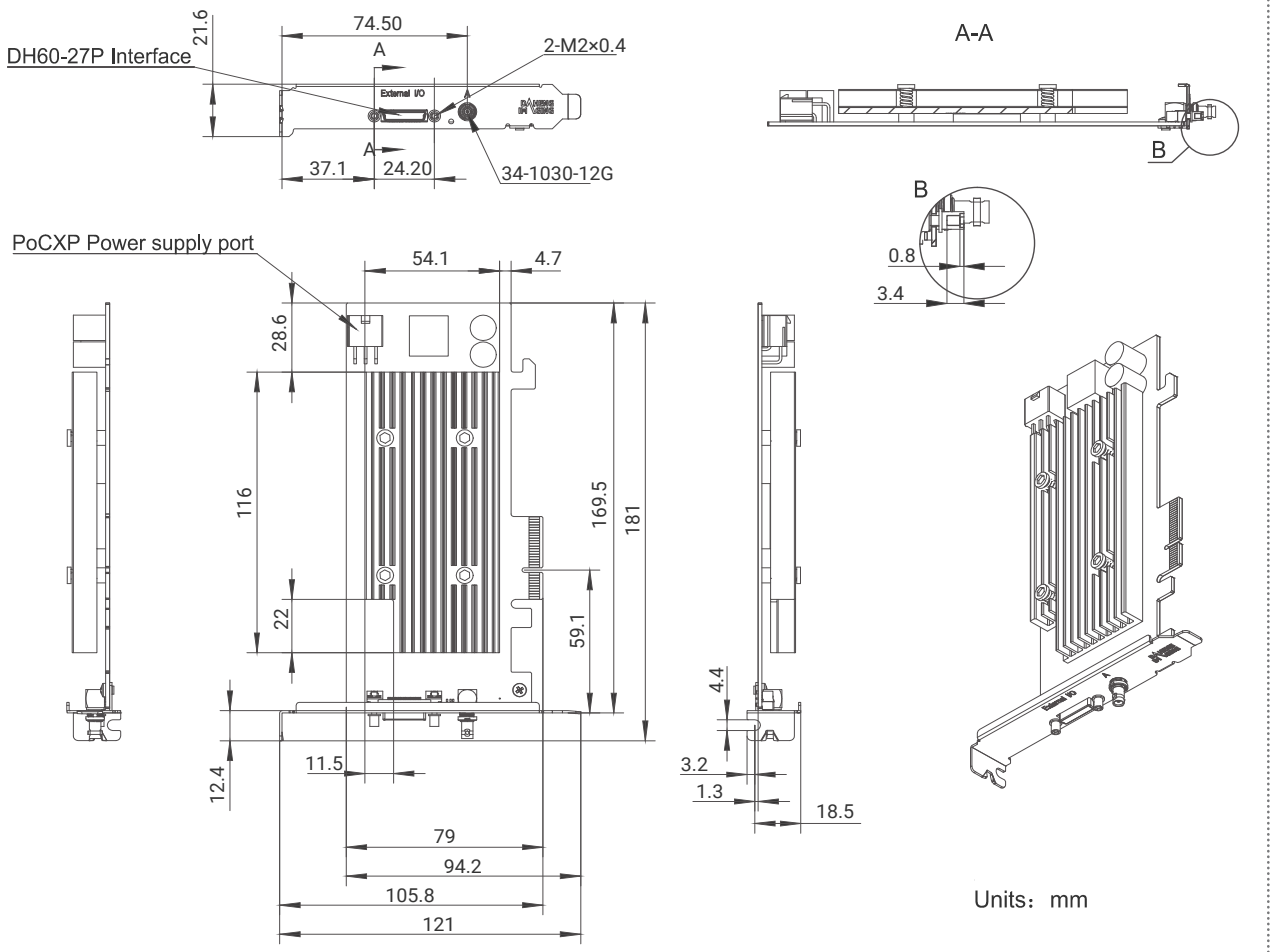
- PCIe Gen3×8 bus: 6700 MB/s bus bandwidth
- The transmission speed is up to 12.5Gbps per channel (CXP-12)
- Rich I/Os
- Convert Bayer to RGB
- Red-Blue conversion
- Power over CoaXPress
- Encoder control, Timer

## Specifications

| Model | POLS-C12-1T-G38 |
|---|---|
| **Memory** | |
| Memory | 512MB DDR4 SDRAM |
| Payload Size | <256MB |
| **Host Interface** | |
| Bus | PCIe Gen3 × 8 |
| Bus Performance | 6700 MB/s |
| **Camera Interface** | |
| CXP Protocol | CoaXPress 1.0/2.0 |
| Cable Connectors | HD-BNC 75Ω |
| Supported Cameras | 1 |
| Channel Indicator Light | 1 dual color LED, each channel equipped with 1 indicator light |
| PoC Power Output | 13 W @ 24 VDC × 1 |
| Maximum Aggregate Bandwidth | 12.5 Gbps × 1 |
| Download Speed | 1.25/2.5/3.125/6/10/12.5 Gbps (CXP-1/2/3/5/6/10/12) |
| Upload Speed | Low-speed 20.83 Mbps (CXP-1 ~ CXP-6); Low-speed 41.6 Mbps (CXP-10, CXP-12) |
| Maximum Flow Packet Size | 16 KB |
| Pixel Format | Mono8/10/12/14/16; Bayer**8/10/12/14/16; RGB8 (**=GR, RG, GB, BG) |
| Data Transmission Method | Taps: 1X-1Y, 1X-2YE |
| Number of Encoder | 1 |
| Number of Timer | 2 |
| User-defined Output | 11 (UserOutput0~9, UserOutputTL0) |
| **Mechanical** | |
| Cooling | Heatsink |
| Mounting | PCIe Gen3 × 8 or above slot |
| Dimensions | 181mm × 21.6mm × 121mm |
| Operating Temp. | 0° C ~ +50° C |
| Storage Temp. | -20° C ~ +70° C |
| Operating/Storage Humidity | Up to 95% non-condensing |
| **I/O** | |
| Onboard I/O | 4 intput with opto-isolated, 2 TTL input/output,<br>2 differential input, 2 output with opto-isolated |
| Extend I/O | - |
| Connector | Onboard I/O: DH60-27P. The matching plug model is DH40-27S<br>Extend I/O: - |

| Electrical | |
|---|---|
| **Typical Power** | 8.2 W (excluding power consumption of PoCXP, camera and onboard I/O power ) |
| **PoCXP** | 12 VDC,  6-pin power plug |
| **Others** | |
| **SDK** | GalaxyView 2.0 or above |
| **OS** | Win7/10/11, 64bit system is recommended |
| **Conformity** | CE, RoHS, FCC, WEEE, CoaXPress®, GenICam® |

## Technical Drawing




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