

- HA-2P-X4G3-SFF-X4G3  
Host adapter

Ximea accessories ●  
Technical Manual ●  
Version v240830 ●

# Introductions

## About this manual

Dear customer,

Thank you for purchasing a product from XIMEA.

We hope that this manual can answer your questions, but should you have any further queries or if you wish to claim a service or warranty case, please contact your local dealer or refer to XIMEA Support on our website:

[www.ximea.com/support](http://www.ximea.com/support)

The purpose of this document is to provide a description of Ximea accessories and to describe the correct way to install related software, drivers and run it successfully. Please read this manual thoroughly before operating your new Ximea accessories for the first time. Please follow all instructions and observe the warnings.

This document is subject to change without notice.

## About XIMEA

XIMEA is one of the worldwide leaders for innovative camera solutions with a 30-year history of research, development and production of digital image acquisition systems. Based in Slovakia, Germany and the US, with a global distributor network, XIMEA offers their cameras worldwide. In close collaboration with customers XIMEA has developed a broad spectrum of technologies and cutting-edge, highly competitive products.

XIMEA's camera centric technology portfolio comprises a broad spectrum of digital technologies, from data interfaces such as USB 2.0, USB 3.1 and PCIe to cooled digital cameras with CCD, CMOS and sCMOS sensors, as well as X-ray cameras.

XIMEA has three divisions – generic machine vision and integrated vision systems, scientific imaging and OEM/custom.

Our broad portfolio of cameras includes thermally stabilized astronomy and x-ray cameras, as well as specialty cameras for medical applications, research, surveillance and defense.

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# 1 General description

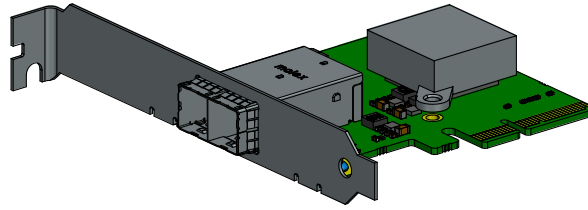


Figure 1: isometric view of the host adapter

- X4 gen 3. PCIe host adapter with dual ports for SFF-8644 fiber optic cables with lengths of up to 100 m
- Supports PCIe Gen3 x4 lines and requires PCIe Gen.3 x4 slot on the computer side
- The bandwidth of 32 Gbps, Male connector
- For use with xiB-64 or xiX camera series

## LED Description

LED	Description
PERST	ON when not active
PORT_GOOD0	Upstream port speed <sup>1</sup>
PORT_GOOD1	Downstream port 1 speed <sup>1</sup>
PORT_GOOD2	Downstream port 2 speed <sup>1</sup>
PORT_GOOD3	Downstream port 3 speed <sup>1</sup>
PORT_GOOD4	Downstream port 4 speed <sup>1</sup>

<sup>1</sup>Trained speed: OFF - Link is down

Blinking 1 Hz (512 ms ON / 512 ms Off) - Link is up, 2.5 GT/s, any negotiated link width

Blinking 2 Hz (256 ms ON / 256 ms Off) - Link is up, 5.0 GT/s, any negotiated link width

ON - Link is up, 8.0 GT/s, any negotiated Link Width

Table 1: LED status

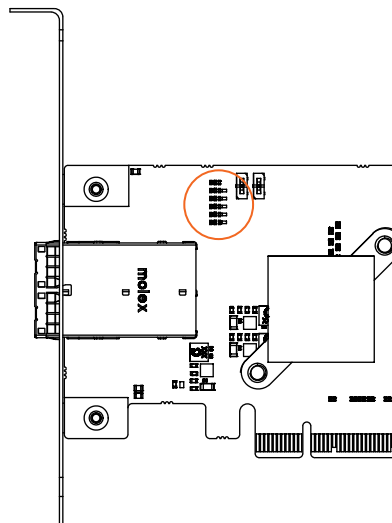


Figure 2: LED position

## 2 Dimensional drawings

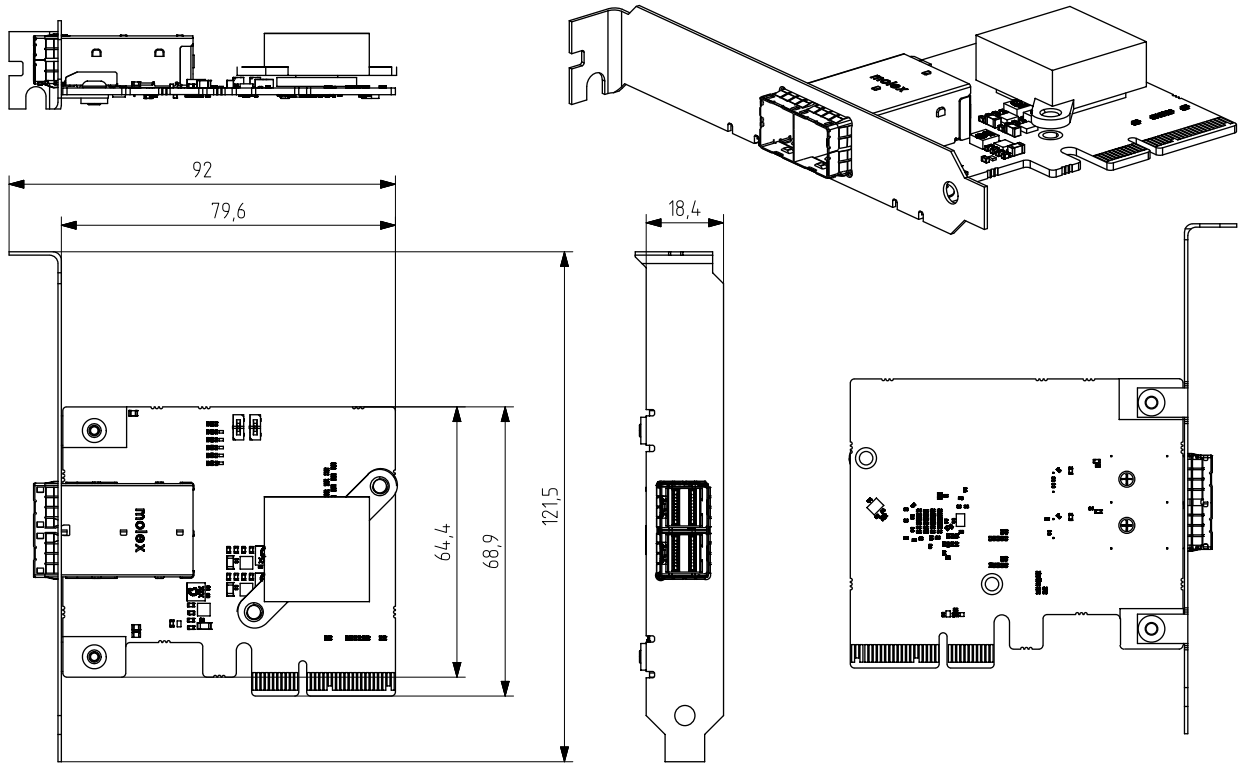


Figure 3: host adapter dimensional drawing

Width [ W ]	Height [ H ]	Depth [ D ]	Mass [ M ]	Material	Cooling options
92 mm	121.5 mm	18.4 mm	60.6 g	Stainless steel	Passive heatsink

Table 2: parameters

### 3 Configuration

#### 3.0.1 DIP switches

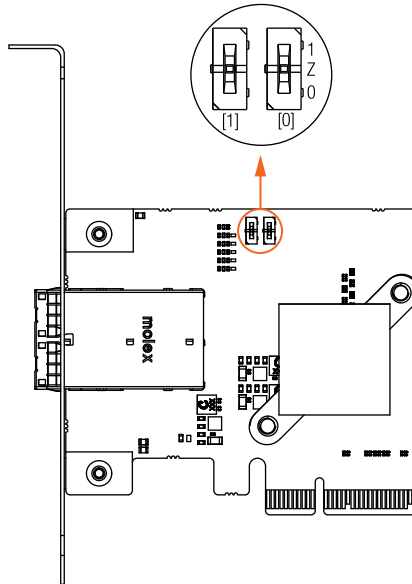


Figure 4: DIP switches

Switches		
DIP switch 1 status	Z	1
DIP switch 2 status	Z	Z
Lines		
PCIe blade lines	x4	x4
SFF PORT A lines	x4	x2, x2
SFF PORT B lines	x4	x2, x2
PCIe PORT configurations	Port A - Port 1, Port B - Port 2 <sup>1</sup>	Port A - Port 1/Port 2, Port B - Port 3/Port 4

<sup>1</sup>Devices connected to Port 1 and Port 2 have to share X4G3 bandwidth

Table 3: DIP switches

## 4 Connectors

### 4.1 Location of connectors

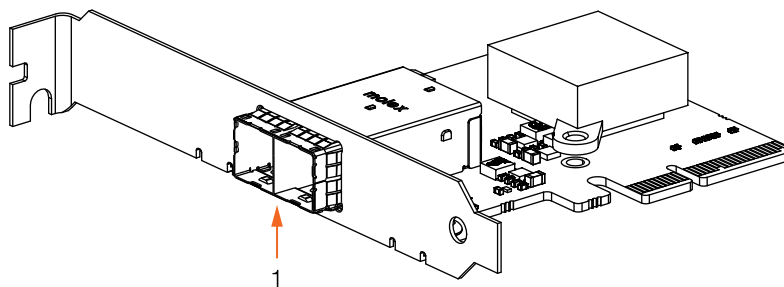


Figure 5: HA-2P-X4G3-SFF-X4G3 connectors

num.	connector
1	2x ports for SFF-8644 fiber optic cables

Table 4: connectors location

**Note:** Port 1 is the port located further from the PCIe edge connector (PCIe blade).

## 5 Quickstart guide

### 5.1 Hardware setup

#### 5.1.1 Essential components

- host PC (adapter requires PCIe Gen.3 x4 slot on the computer side)
- host adapter
- SFF-8644 fiber optic cables

#### 5.1.2 Connecting the components

- Step 1.** Deploy the host adapter to the turned-off PC and ensure the PC is also unplugged from the power source
- Step 2.** Connect SFF-8644 fiber optic cables to the host adapter
- Step 3.** Connect SFF-8644 fiber optic cables to the turned-off connected device (e.g., the camera)
- Step 4.** Power up the connected device
- Step 5.** Power up the PC

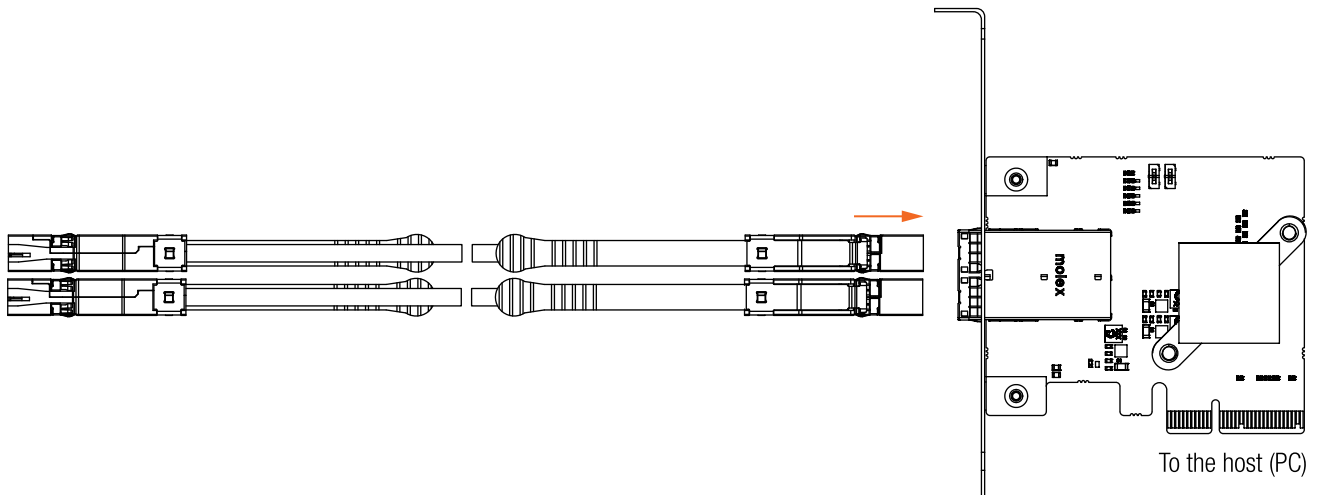


Figure 6: host adapter connecting

For more information about HA-2P-X4G3-SFF-X4G3 please contact: [sales@ximea.com](mailto:sales@ximea.com).



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