

APPLICATION NOTE

Hardware Selection for Allied Vision GigE Cameras

2017-Nov-01

Introduction

This document was generated to identify third-party hardware components tested with GigE Vision Cameras from Allied Vision. This is not a complete list of all compatible products, only a list of products that have been tested by Allied Vision.

GigE network interface cards

The network interface card is the most critical system component, and for maximum performance we highly recommend using one of the following PCI/PCI-E cards.

Manufacturer	Model	PCI-32	PCI-Ex 1	PCI-Ex 4
Intel Corporation	Intel [®] PRO/1000 GT Desktop Adapter	~		
Intel Corporation	Intel [®] PRO/1000 PT Desktop Adapter		~	
Intel Corporation	Intel [®] CT		✓	
Intel Corporation	Intel [®] PRO/1000 PT Dual Port			✓
Intel Corporation	Intel [®] ET2 Server Quad Port			✓
Intel Corporation	Intel [®] I340-T4 Server Quad Port			✓
Intel Corporation	Intel [®] I350-T2 Server Dual Port			~

The following Intel cards have performance issues and are not recommended:

- Intel[®] PRO ET Server Quad Port
- Intel[®] PRO/1000 MT
- Intel[®] PRO/1000 PT Quad Port. This card lacks Microsoft Windows[®] 7 operating system support.



For a full list of which Intel cards are supported in Microsoft Windows[®] 7 operating system, see http://www.intel.com/support/network/sb/CS-030613.htm.



GigE switches

We recommend that you work with manufacturers to select switches to satisfy your requirements. It is not possible to test a majority of new and existing GigE switches. The primary consideration when selecting a switch should be system capacity. These include things like: RAM, flash memory, packet buffer memory, switch fabric speed, switching capacity and maximum bandwidth in packets per second.

Manufacturer	Model	Number of ports
Dell	PowerConnect 28xx Series	8*
*24 port available		

GigE PCMCIA cards for laptops

Manufacturer	Model
U.S. Robotics (UNICOM Global)	USR997903 10/100/1000 Gigabit Ethernet PC Card
Linksys	PCM1000 Gigabit Notebook Adapter
TRENDnet	TEG-PCBUSR

GigE ExpressCards for laptops

Manufacturer	Model
Sonnettech Technology Inc.	Presto Gigabit Ethernet Pro ExpressCard/34

GigE media converter (copper to fiber adapters)

Manufacturer	Model
Omnitron Systems Technology Inc.	FlexPoint Gx, Gigabit Media Converter; 1000BASE-T to 1000BASE- SX/LX MM/LC 850 nm; 220 m
Optolinx (Antaria)	FCU-3002A-SC, MM/SC

Laptop models that support GigE adapters

The following laptops are known to be offered with on-board Gigabit Ethernet adapters that support jumbo frames of > 8000 MTU.

Manufacturer	Model
Apple	Macbook Pro



10 GigE host adapter cards

The following adapter is recommended for 10Gb link over SFP+ direct attach passive copper cable.

Manufacturer	Model	PCI-Ex 1	PCI-Ex 4	PCI-Ex 8
Intel Corporation	Intel [®] X520-DA2			•

10 GigE switches

The following switch is recommended for 10Gb link over SFP+ direct attach passive copper cable.

Manufacturer	Model	Number of ports
NETGEAR	ProSAFE GSM7328Sv2	24

PoE/PoE+ components

GigE host adapter/frame grabber PoE+ cards

Manufacturer	Model	Form factor
ADLINK	PCIe-GIE72 Dual port with PoE+ support	PCI Express x4 compliant
ADLINK	PCle-GIE74 Quad port with PoE+ support	PCI Express x4 compliant

GigE switches with PoE/PoE+ support

Manufacturer	Model	Number of ports	PoE/PoE+
Allied Telesis	AT-GS950/8POE	8	PoE
Allied Telesis	AT-GS950/10PS	10	PoE/PoE+
Cisco	SRW2008MP	8	PoE
HP Networking	NJ2000G IntelliJack Switch	4 + 2 pass-through	PoE/PoE+
HP Networking	V1905-10G-PoE Switch	10	PoE
Linksys	LGS308P	8	PoE/PoE+
Linksys	LGS108P	8	PoE/PoE+
NETGEAR	GS510TP	8	PoE/PoE+



GigE PoE modules

Manufacturer	Model	Injector/Splitter	PoE/PoE+
D-Link	DPE-101GI	Injector	PoE
Linksys	LACPI30	Injector	PoE/PoE+
Microsemi	PowerDsine PD-7001G/AC	Injector	PoE
Microsemi	PowerDsine PD-AS-701/12	Splitter	PoE/PoE+
Microsemi	PowerDsine 9001GR	Injector	PoE/PoE+
Phihong	POE20U-560(G)	Injector	PoE
Phihong	POE36U-1AT-R	Injector	PoE
TP-Link	TL-POE-150S	Injector	PoE



Additional References

Technical manuals and GigE feature reference, see https://www.alliedvision.com/en/support/technical-documentation

For technical support, please contact support@alliedvision.com. For comments or suggestions regarding this document, please contact info@alliedvision.com.

Disclaimer

Due to continual product development, technical specifications may be subject to change without notice. All trademarks are acknowledged as property of their respective owners. We are convinced that this information is correct. We acknowledge that it may not be comprehensive. Nevertheless, Allied Vision cannot be held responsible for any damage in equipment or subsequent loss of data or whatsoever in consequence of this document.

For the latest version of this document, please visit the Allied Vision documentation website. Copyright © 2017 Allied Vision Technologies GmbH. All rights reserved.

This document was prepared by the staff of Allied Vision Technologies Canada ("Allied Vision") and is the property of Allied Vision, which also owns the copyright therein. All rights conferred by the law of copyright and by virtue of international copyright conventions are reserved to Allied Vision. This document must not be copied, or reproduced in any material form, either wholly or in part, and its contents and any method or technique available there from must not be disclosed to any other person whatsoever without the prior written consent of Allied Vision.