

Recommended USB3.0 Chipset

	Chip Manufacturer	USB3.0 Host Controller Chip	Bandwidth Limitation *1	Driver Version	Win7(32bit)	Win7(64bit)	Win10(64bit)(*)2
1	Fresco Logic	FL1100	350MB/s	Manufacturer 3.5.106.0	○	○	-
				Windows Driver	-	-	○
2	Renesas	μPD720202	300MB/s	Manufacturer 3.0.23.0	○	○	-
				Windows Driver	-	-	○
3	Intel	Intel 8/9 Series Chipset Built-in Intel USB3.0 Adapter	450MB/s	Manufacturer 2.5.0.19	○	○	-
				Windows Driver	-	-	○
4	VLI	VL805	350MB/s	Manufacturer 6.1.7600.4903	○	○	-
				Windows Driver	-	-	○
5	ASMedia	ASM3142	380MB/s x2 (*3)	Manufacturer 1.16.54.1	○	○	-
				Windows Driver	-	-	○
5	ASMedia	ASM1142	370MB/s	Manufacturer 1.16.54.1	○	○	-
				Windows Driver	-	-	○

*1. Data traffic varies by each camera model, please confirm camera and USB3.0 chipset model:

Example :GO-5000M-USB is $2560 \times 2048 \times (8\text{Bit Mono}) \times 60\text{fps} \div 8\text{bit} = 300\text{MB/s}$

GO-5100M-USB is $2464 \times 2056 \times (8\text{Bit Mono}) \times 74\text{fps} \div 8\text{bit} = 357.5\text{MB/s}$

*2. In Win8.1/10, all drivers are included by OS, no need to install manually.

*3. This chipset can support upto 2 cameras at Max BandWidth.

*4. All data is based on JAI internal test, and the result may be different on user's environment. Please do full test with actual system.

Recommended Machine Vision USB3.0 Board

	USB3.0 Host Controller Chip	Board Manufacturer	Model Name	Max. number of USB3 Vision Camera at full performance	Note
1	μPD720202	AVAL DATA	APX-3424	4	4Port / PCI-E x4 Gen2
		Technoscope	PXU-53	3	3Port/ PCI-E x4 Gen2
			PXU-51	1	2Port/ PCI-E x1 Gen2

*Comparing to consumer products, users can get technical support from Machine Vision Manufacturer.

Tested Consumer USB3.0 Board which can get image with JAI cameras.

	USB3.0 Host Controller Chip	Board Manufacturer	Model Name	Max. number of USB3 Vision Camera at full performance	Note
1	FL1100	IOI Technology	U3X4-PCIE4XE314	4	4Port / PCI-E x4 Gen2.0
2	μPD720202	IOI Technology	U3-PCIE1XG205	1	2Port/ PCI-E x1 Gen2.0
3	Intel 8/9 Series Chipset	Intel 8/9 Series	Z87 or later Chipset Used Motherboard	1	Max.6Port
4	VL805	Kuroutoshikou	USB3.0-PCIE-P4-R2	1	4Port/ PCI-E x1 Gen2.0
5	ASM3142	HighPoint	RocketU 1344A	4	4Port / PCI-E x4 Gen3.0
6	ASM3142	IOI Technology	I3U31-PCIE2XG322-13	2	2Port/ PCI-E x4 Gen3.0
7	ASM1142	StarTech	PEXUSB314A2V	2	4Port / PCI-E x4 Gen2.0
8	ASM1142	Kuroutoshikou	USB3.1A-P2-PCIE2	1	2Port/ PCI-E x4 Gen2.0

Recommended PC

Mother Board	a. Chipset : Intel 8 Series or higher	When using integrated USB3.0 Chipset
	b. Card Bus : PCI Express x1 Gen2 or higher	When using independent USB3.0 card
	c. ECC supported Motherboard	
CPU	Intel® Xeon® E3 or higher	<ul style="list-style-type: none"> For Bayer algorithm please select those for Multiprocessor Support ECC
Memory	DDR3 1600 MHz 4GB or higher, ECC supported	<ul style="list-style-type: none"> Recommend to use dual channel such as 2GBx2 Support ECC
GPU	NVIDIA Quadro	When using OpenCL
OS	Windows 7 Professional SP1/Windows 8.1 Pro/Windows 10 Pro	64bit OS is recommended

[Note]

1. When using multiple cameras, use independent USB3.0 chipset for each camera to get full bandwidth.