

DCAM-API Lite for Linux Tested Configurations v24.2

DCAM Module Version

v4.0.6764

Support Cameras

Camera Nick Name	Camera Name	Interfaces	Notes
ORCA-Quest	C15550-20UP	CoaXPress	(*1)
		USB3.0	(*1) (*2)
ORCA-Fusion BT	C15440-20UP	CoaXPress	-
		USB3	(*2)
ORCA-Fusion	C14440-20UP	CoaXPress	-
		USB3	(*2)
ORCA-Flash4.0 V3	C13440-20CU	Camera Link	-
		USB3	(*2)

***1.** If the user chooses a 12-bit pixel depth, high CPU performance is required and, depending on the PC specifications and capturing frame rate, the user may lose some frames. To avoid such frame loss, use single-cycle capture. This means that the user specifies the number of frames to capture and captures the frames in SNAP mode.

***2.** These cameras may not produce the fastest frame rate as determined by the camera's specifications.

Operation Confirmed Distribution

- Ubuntu 22.04 LTS (*3)

- Debian 11 (*4)
-

*3. Kernel Verion <= v5.xx.

*4. Supported x86_64 only.

Supported Interfaces

CoaXPress(Active Silicon FireBird)

Driver Versions

- v8.26.14 (for AS-FBD-4XCXP6-2PE8)
- v8.26.14 (for AS-FBD-2XCXP6-2PE8)

Supported Frame Grabbers and Cameras

- AS-FBD-4XCXP6-2PE8 : PCI Express 2.0 x8
 - ORCA-Fire, ORCA-Quest
- AS-FBD-2XCXP6-2PE8 : PCI Express 2.0 x8
 - ORCA-Fusion BT, ORCA-Fusion

Camera Link(Active Silicon FireBird)

Driver Versions

- v8.13.03 (for AS-FBD-1XCLD-2PE4L-F / AS-FBD-1XCLD-2PE4L-L)

Supported Frame Grabbers and Cameras

- AS-FBD-1XCLD-2PE4L-F / -L(80bit mode / Full) : PCI Express 2.0 x4
 - ORCA-Flash4.0 V3

USB3.0

Supported Interface Cards

- U3-PCIE1XG205P1-10
- U3-PCIE1XG322

Recommended BIOS Settings

For all PCIe interface options, it is highly recommended to set the BIOS to the recommended settings.

For example, if you have a DELL Precision 5860, please follow the settings below:

(1) Performance

Confirm the settings especially for the following 4 items in the “Settings - Performance” options. Click the item in “Settings – Performance” to confirm.

Items	Correct settings	Notes
Intel(R) Hyper-Threading Technology	<input checked="" type="checkbox"/> Enable Hyper-Threading Technology	Checked ON
Intel(R) SpeedStep	<input type="checkbox"/> Enable Intel(R) SpeedStep Technology	Unchecked OFF
C-States Control	<input type="checkbox"/> Enable C-State Control	Unchecked OFF
Intel(R) Turbo Boost Technology	<input checked="" type="checkbox"/> Enable Intel(R) Turbo Boost Technology	Checked ON

(2) Virtualization Support

Confirm the settings especially for the following 2 items in the “Settings - Virtualization Support” options. Click the item in “Settings – Virtualization Support” to confirm.

(5)>

Items	Correct settings	Notes
Intel(R) Trusted Execution Technology(TXT)	<input type="checkbox"/> Enable Intel(R) Trusted Execution Technology(TXT)	Unchecked OFF
VT for Direct I/O *(5)	<input type="checkbox"/> Enable Intel(R) VT for Direct I/O	Unchecked OFF

(3) Power

Confirm the settings especially for the following 1 item in the “Settings - Power” options. Click the item in “Settings – Power” to confirm.

Items	Correct settings	Notes
Intel Speed Shift Technology	<input type="checkbox"/> Intel Speed Shift Technology	Unchecked OFF

If your settings are different from the settings shown in the above table, change your settings to be the same as the above and save the new settings so they are applied on the next system restart.

If you have a PC other than a DELL Precision 5860, you should use the above settings as a guide to adjust your BIOS settings to have similar effect.

***5. VT : Virtualization Technology Direct I/O (VTd).**