Sinara Kasli system

Thursday, June 27, 2024   8:23 PM

M-LABS

Experiment co...

1124 Carrier
Kasli 2.0

USD 3,600.00

- FPGA core device, runs ARTIQ kernels, controls the EEMs.
- 4 SFP 6Gb/s slots for Ethernet or DRTIO.
- 12 EEM connectors.
- 4 MMCX clock outputs.
- Price includes bitstream generation, flashing, testing, and firmware updates for 1 year (USD 1,400.00).

1125 Carrier
Kasli-SoC

USD 5,100.00

- Core device based on Zynq-7000 CPU+FPGA system-on-chip.
- Runs ARTIQ kernels on 1GHz Cortex-A9 CPU with hardware FPU.
- Enables high-speed matrix math on the core device.
- Lower RTIO latency.
- Higher network transfer speeds.
- Dedicated RJ45 port for Gigabit Ethernet.
- 4 SFP 12Gb/s slots for DRTIO.
- 12 EEM connectors.
- 4 MMCX clock outputs.

Rack mountable crate   Desktop crate

ⓘ The selected cards fit in a 42hp desktop crate, consider switching to it for a more compact sy...
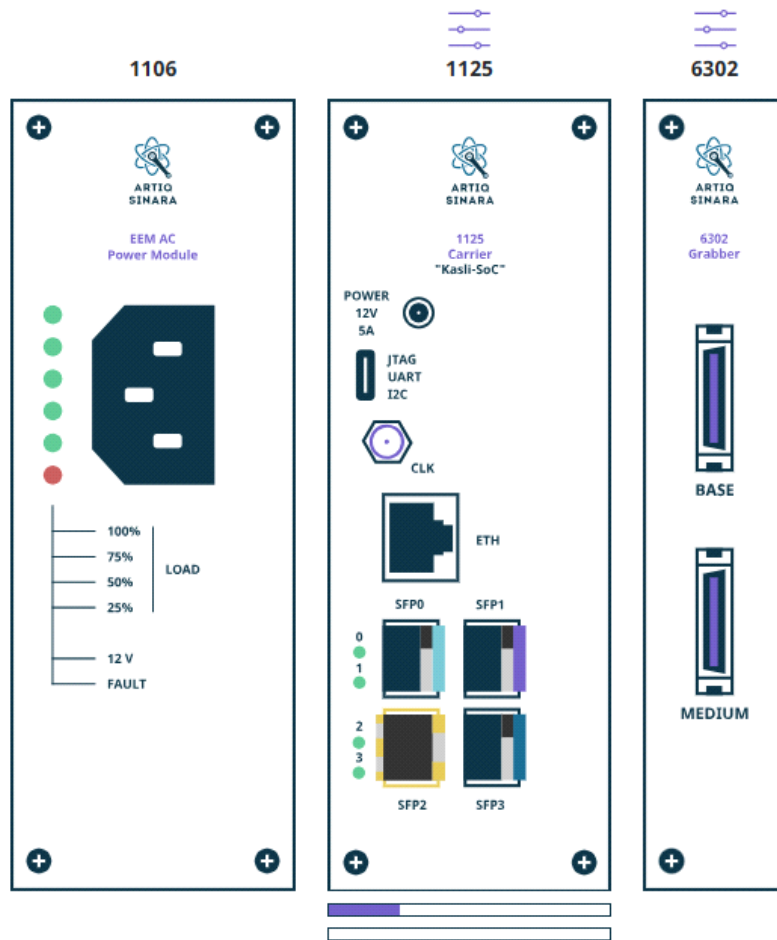
Add fan tray ⓘ

Spare cards

Add new crate

Rack mountable crate #0	USD 550.00	⊗ ⊖
1106 EEM AC Power Module	USD 750.00	⊖
1124 Carrier Kasli 2.0	USD 3,600.00	⊖
1125 Carrier Kasli-SoC	USD 5,100.00	⊖
Spare cards		⊗
Pre-installed NUC mini-computer	USD 1,300.00	⊖
Shipping method: Incoterms 2020 FCA		

Price estimate   **USD 11,300.00**

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Rack mountable crate Desktop crate

1106

1125

6302

1106 — EEM AC Power Module
- ARTIQ SINARA
- 100%
- 75% LOAD
- 50%
- 25%
- 12 V
- FAULT

1125 — Carrier "Kasli-SoC"
- ARTIQ SINARA
- POWER 12V 5A
- JTAG UART I2C
- CLK
- ETH
- SFP0
- SFP1
- 0
- 1
- 2
- 3
- SFP2
- SFP3

6302 — Grabber
- ARTIQ SINARA
- BASE
- MEDIUM

Andor Camera connections

2.2 Power and Signal Connections

The power and signal connections are located on the base plate of the iXon Ultra and Life 888:
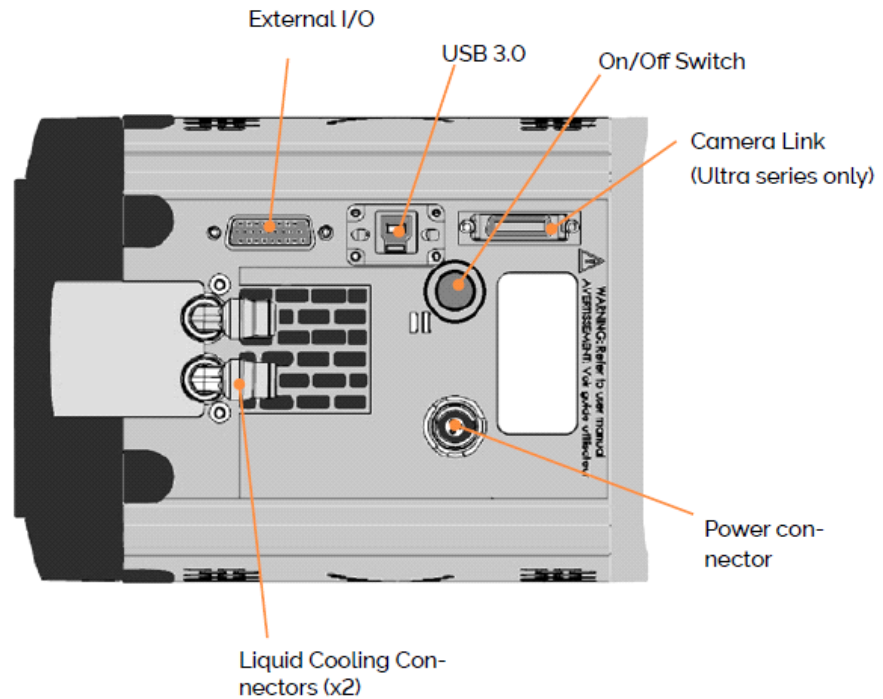

Figure 2: Power and Signal Connections of the iXon Ultra and Life 888

Power connector: For connection to the Power Supply Unit (PSU). Note the connector is keyed and has a locking action.

USB 3.0: A USB connection should be made to the PC with the supplied USB 3.0 cable. Performance with other USB 3.0 cables/cards can not be guaranteed.

Ext I/O: The iXon is supplied with an ACZ-03463 cable for the external I/O connector. This provides industry-standard output BNC connectors:

- Fire (please refer to Section 4.2)
- Shutter (see Section 4.3)
- Arm (please refer to Section 4.2)
- Ext. Trig (External Trigger Input) (please refer to Section 4.2)

These are used to send and receive Trigger and Fire signals. The outputs (Fire & Shutter) are CMOS compatible & series terminated at source (i.e. in the camera) for a 50Ω cable.

The Camera Link output is a base configuration (1-tap interface) running at 40 MHz. All data over the Camera Link interface is 16-bit greyscale. The exact pixel data type is Little Endian 16-bit unsigned integer. The Camera Link channel intercepts the image data stream in the camera head immediately after the on-head FPGA processing step, but before the USB frame buffer, therefore undergoes the same amount of on-head image processing. The data stream only contains pixel data for those pixels within the camera user defined region of interest (ROI) and hence the length of LVAL and FVAL (Camera Link 'LINE' and 'FRAME', respectively) will be dependent on the ROI defined. The user could set the camera to always transmit the same ROI and then use their Camera Link frame grabber card to extract a different ROI but they will not see any speed increase normally associated with smaller ROIs.

From <https://www.oxinst.com/learning/view/article/camera-link-output%20>

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