

## **zuragon** Engineering excellence is our motto

Zuragon was founded by a team committed to a disruptive change of the way the industry works with development and test systems for Autonomuous Driving (AD) and Advanced driver assistance systems (ADAS). By introducing a consistent family of products reutilizing the power of multi-OS design, ADAS knowledge and open source computer vision technology, hand in hand with established standard technologies, Zuragon can offer a suite of products that assists in ADAS development from concept to code on the road.



Vicanlog pro+ is a super powerful and robust real-time Al computing machine specialized for the autonomous industry. It gives you not only the workstation-grade performance and industrial-grade reliability, but also versatile configuration which can be tailored for your need.

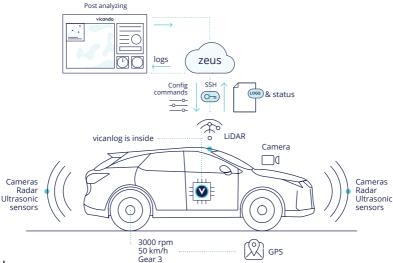
The logging system records all data from various sensors and time stamps all the data with an universal application level timestamp. With the help of the unique patented time synchronization system, it is possible to control the replay with offset in time for various sensor data. The recorded data in Vicanlog can also be used to later analysed and visualized with various GUI components, such as graphs, traces etc. in Vicando at the office. It is also possible to run your own customized components developed with our SDK while logging and replaying. The unique logging system logs all data into separate sensor specific log files for improving search efficiency during post analysising process.

If needed, recorded data can also be exported to other applications in various standardized formats. Vicanlog pro+supports most commonly used sensor brands for ADAS and AD development. It is also possible to daisy chain several units to increase i.e. the number of cameras upto to 24. The writing speed to the disk depends on the interface type of the SSD. ViCANlog also integrates to Zuragon's smart cloud solution Zeus where log files can be set OTA, trigger conditions and software upgrades can be transfered OTA and a direct stream of what is going on inside the logger at a specific moment is enabled to a direct access OTA to the logger. It is pre-equipped with modem and a high precision GPS and can be, through its versatile hardware concept ViCANlog can be configured to cover more or less every possible hardware scenario.





### Vicanlog data collection



## Vicanlog pro+ highlights

- Covers all vehicles busses, CAN-HS/FD, LIN, FlexRay, BroadRReach, Ethernet.
- 02. Covers all types of video stream, LVDS, Ethernet, USB.
- Recording of auxiliaries, sound, position, I/O, Analogue.
- 04. Highly configurable hardware to suit the need of modern development.
- Powerful trigger machine enabling smart logging of scenes that contains only necessary and valuable data.
- 06. Event triggering is possible on all connected sensor data.
- Instant notification and log files can be sent directly to Zeus on interesting scenes recording.
- 08. Remote OTA logging and trigger condition configuration.
- Powerful QML & JavaScript scripting supported.
- Built in GDPR safe algorithms to mask vehicle license plates and pedestrian faces in the log.

- Cropping of large log files directly on the disk. Enables transfer of important file fragments at low cost and high speed.
- 12. Massive computing power with Intel Xeon and Core i7/i5.
- 13. Up to 64 GB RAM to run powerful applications.
- Supports 10 Gb Ethernet for highband recording.
- 15. Time synchronization based on IEEE Std 802.1AS for synchronous recording and clustering of systems.
- 16. Extended operating temperature range.
- 17. Extension for PCIe plugin cards for CAN/CANFD/FlexRay/10 Gigabit ethernet and LVDS cameras.

# Technical specifications

#### System

Processor: 8 cores 9th/8th Gen Intel® Xeon®/

Core™ i7/i5 Processor Chipset: Intel® C246

BIOS: AMI SIO: IT8786E

Memory: 2 DDR4 2666MHz SO-DIMM, up to 64GB

#### I/O Interface

Serial: 4 COM RS-232/422/485 (ESD 8KV)

**USB**: 4 USB 3.1

Isolated DIO: 16 Isolated DIO: 8 DI, 8 DO

LED: Power, HDD

SIM Card: 1 internal SIM Card Socket

#### Expansion

#### Mini PCIe:

- 1 Full-size for PCIe/USB/Internal SIM Card
- 1 Full-size for PCIe/USB/mSATA

#### PCIe: 4 PCIe Slots:

- 2 PCIe x16 slot with PCIe x8 signal
- 1 PCIe x16 slot with PCIe x4 signal
- 1 PCle x16 slot with PCle x1 signal

SUMIT A, B: 2 SUMIT Slot (Optional)

#### Graphics

Graphics Processor: Intel® UHD Graphics 630

Independent Graphics 1: By request Independent Graphics 2: By request

Interface: Multiple independent displays:

- DVI-D: Up to 1920 x 1200 @60Hz
- 2 DisplayPort : Up to 4096 x 2304 @60Hz
- By requested Graphics Card

#### Storage

SATA: 2 SATA III (6Gbps) support S/W RAID 0, 1 mSATA: 1 SATA III (Mini PCIe Type, 6Gbps) Storage Device: · 2 internal 2.5" SSD/HDD bracket

#### Power

Power Input: 9V to 55V. DC-in

Power Interface: 4-pin Terminal Block Remote Switch: 2-pin Terminal Block

#### Audio

Audio Codec: Realtek ALC892, 5.1 Channel HD Audio

Audio Interface: 1 Mic-in, 1 Line-out

#### Others

TPM: Infineon SLB9665, LPC Interface

Watchdog Timer: Reset: 1 to 255 sec./min. per step Smart Management: Wake on LAN, PXE supported HW Monitor: Monitoring temperature, voltages. Auto throttling control when CPU overheats.

#### Software Support

OS: Linux (Ubuntu pre-installed)

#### Mechanical

**Dimensions:** 242.7mm x 208.9mm x 369.2mm (9.56" x 8.22" x 14.54")

Weight: 9.0 kg (19.8 lb)

Mounting: Wallmount by mounting bracket

#### **Environment**

**Operating Temperature:** 

-25°C to 60°C (-6°F to 140°F)

StorageTemperature: -40°C to 85°C (-40°F to 185°F) Humidity: 5% to 95% Humidity, non-condensing

Relative Humidity: 95% @ 60°C

**Shock/Vibration:** - IEC 61373 : 2010 **EMC:** CE, FCC, EN50155, EN50121-3-2