Concepion®-hX
Particularly robust embedded PC with passive cooling for fail-safe 24/7 use

InoNet
A EUROTECH COMPANY

Features

↗ *High performance with 10th Generation Intel® Core™ i CPUs*

↗ *Resilient, fully enclosed system with no rotating parts*

↗ *Passive cooling for temperature range of -10°C ~ 55°C*

↗ *Integrated wide range power supply*

↗ *Particularly suitable for the operation of production equipment or for use in vehicles*

Configuration example
Further configurations on request!

Mainboard:
Industrial Mainboard, 24/7 operation, long-term availability

Processor:
Intel® Core™ i 10th Generation
Intel® XEON® W on request
Chipset: Intel® W480E
Intel® Turbo-Boost: Depends on the selected configuration

Graphic:
Onboard Intel® UHD 630

Memory:
2x DDR4 SO-DIMM, max. 64GB, ECC

I/O:
2x GBit LAN (RJ45)
2x RS232/422/485
6x USB 3.2
1x DisplayPort 1.2
1x DVI-D
1x HDMI 1.4b
3x Audio (Line-In, Line-Out, Mic)

Drive Bays:
1x 2.5" SATAIII SSDs (internal)

Features:
Watchdog timer
TPM 2.0
iAMT 14.0

Power Supply:
XLR connector (Neutrik) four pin with ignition pin, wide range
Voltage
6 ~ 32 VDC
Power
140 Watt
incl. external power supply unit
100 ~ 240 VAC, XLR connector

Expansions:
Internal
1x M.2 (E-key, type:2230)
1x M.2 (M-key, type:2280)
External
1x expansion slot for the use of a low-profile PCIe x8
(The max. power loss must not exceed 55 Watt.)

Mechanical:
Chassis
Robust sheet metal
Dimensions (W x H x D)
310 x 90 x 235 mm
Cooling
passive, large area heat sink

Environment:
Operating Temperature
-10° ~ 55° C**
Storage Temperature
-20° ~ 70° C
Relative Humidity
10 ~ 90 % (non condensing)

Operating System:
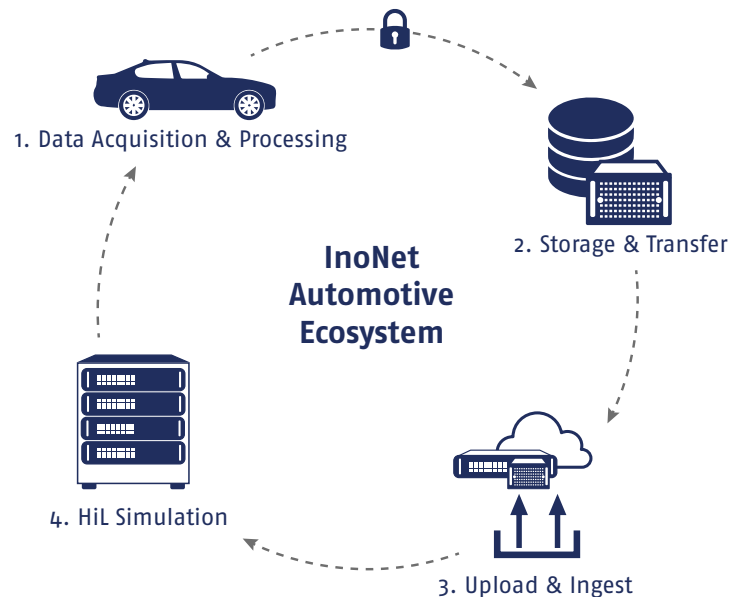Microsoft Windows 10

The InoNet Automotive Computing Ecosystem
The complete range of hardware solutions for the automotive industry

The challenge in ADAS and AD development

The development of driver assistance systems (ADAS) and autonomous driving automobiles entails an increased effort due to testing and validation of complex hardware and software with multiple test procedures. The extremely complex computational processes should be outsourced to HiL, SiL and ViL, if possible, in order to achieve faster, more cost-efficient and reproducible validation. On the way from autonomous driving level 3 to 5, the data volumes increase exponentially. In addition to this, the hardware in the vehicle is exposed to increased temperature, stronger shocks and vibrations during test operations and must withstand these environmental conditions in reliable continuous operation.

1. Data Acquisition & Processing

InoNet Automotive Ecosystem

2. Storage & Transfer

4. HiL Simulation

3. Upload & Ingest

The solution from InoNet

InoNet systems offer tremendous computing power and ruggedness to industrial standards and are optimally designed for use in vehicles. They can easily withstand increased temperatures, shocks and vibrations and are all equipped with wide-range power supplies (with ignition signal support, terminal 15). The scalable data volume make the In-Vehicle PCs ideal for high-speed data logging applications. Thanks to the use of hard disks in the removable frame as well as in the QuickTray®, data carriers can be exchanged quickly and without tools. AI applications can also be developed and tested both inside and outside the vehicle by using the latest GPU generations with the highest performance.

InoNet Competences and Services

Consulting   *Development*   *Testing*   *Customization*   *Manufacturing*   *Certifications*

UL CE
ISO 9001

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