

Conception®-bX3 v2

Compact and fanless high performance embedded system for ADAS and AD development in vehicles

Features

- High performance through 9th Generation Intel® Core™ i CPUs (10th Generation on request)
- RAM up to 32GB DDR4 S0-DIMM
- Expandable by two PCIe slots
- Two 2.5" shuttles with hot-swap function
- Passive cooling
- Resistant to shock and vibration
- Configurable automotive power supply (up to 140 Watt) with lockable Neutrik connector



Picture similar

Configuration example

Further configurations on request!

Mainboard:

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

Processor:

Intel® Core™ i 9th Generation
Intel® Pentium® / Celeron®
(up to 35 Watt)
Chipset: Intel® C246
Intel® Core™ i 10th Gen. on request

Graphic:

Onboard Intel® UHD P630

Memory:

2x DDR4 S0-DIMM, max. 32GB, ECC

I/O:

2x GBit LAN (RJ45) 2x RS-232/422/485
2x RS-232 (optional)
1x DisplayPort 1.2
1x HDMI 1.4
1x DVI-D
6x USB 3.0
2x USB 2.0
3x Audio (Mic, Line-In, Line-out)

Drive Bays:

2x 2.5" (internal)
2x 2.5" (in removable frame)

Operating System:

Microsoft Windows 10

Power Supply:

11 ~ 32 VDC, M2-ATX
XLR connector (Neutrik) four pin with ignition pin

Expansions:

PCIe
2x PCIe x8 (full-height, half-length)
(The max. power loss must not exceed 50 Watt.)
M.2
1x M.2 (E-key, type:2230)
1x M.2 (M-key, type:2280)
Additional expansions for automotive applications (Ethernet, CAN, LIN®, etc.)

Mechanical:

Dimensions (W x H x D)
250 x 145 x 260 mm
Cooling
Passive

Environment:

Operating Temperature
0° ~ 45° C
Storage Temperature
-20° ~ 70° C
IP Protection
IP40

Features:

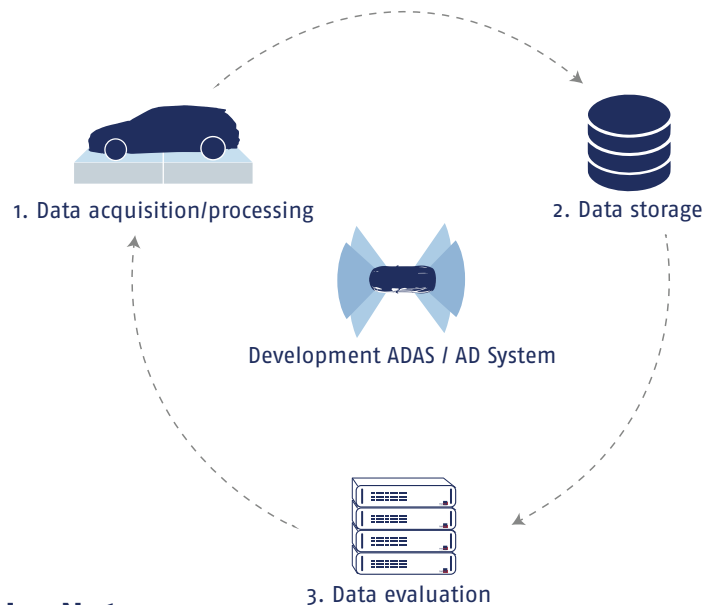
Watchdog Timer
TPM 2.0
iAMT 11.6

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.



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

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