

## Conception®-tXf-L-v3 - 12. Gen.

Compact, actively cooled system for use in edge intelligence and automotive environments with AI support

### Features

- High-Performance with Intel® Core™ i CPUs 12<sup>th</sup> Generation
- High performance GPU included (VPU and FPGA on request)
- Edge Intelligence Gateway
- Optional Wi-Fi/Bluetooth/GNSS/LTE, on request 5G
- Special cooling concept
- Robust full-industrial components for 24/7 operation
- Two additional 2.5" shuttles
- Perfect for In-vehicle applications

### Configuration example

Further configurations on request!\*

#### Mainboard:

Industrial Mainboard (mini-ITX), 24/7 operation, long-term available

#### Processor:

Intel® Core™ i 12<sup>th</sup> Generation up to 65 Watt TDP, Socket 1700 (On request: 13<sup>th</sup> Generation)\*\*  
Chipset: Intel® Q670E  
Intel® Turbo-Boost: Depends on the selected configuration

#### Memory:

2x DDR5 S0-DIMM, max. 4800 MHz max. 64 GB

#### Graphic:

Onboard Intel® UHD 730/770 (depending on CPU)  
KI  
NVIDIA® A2 TENSOR CORE GPU with dedicated cooling  
10 RT Cores, 16GB GDDR6, PCIe x8 (On request: NVIDIA® L4 Tensor Core GPU)\*\*

#### Drive Bays:

**Internal**  
1x M.2 (M-key, type: 2242/2260/2280)  
1x USB 3.2 (Gen 1)  
**External**  
2x 2.5" SATA-III SSD in shuttle

#### I/O:

**Back**  
1x 1 GBit LAN (RJ45)  
1x 2.5 GBit LAN (RJ45), vPro support  
2x 10 GBit LAN (RJ45), PCIe x4 (Gen 3)  
1x HDMI  
3x Display Port 1.4 (up to 8k)  
1x RS-232/422/485  
1x RS-232/422/485 (optional)  
1x USB-C 3.2 (Gen 2)  
3x USB 3.2 (2x Gen 2, 1x Gen 1)  
6x USB 2.0  
2x PS/2 (mouse and keyboard)  
2x Audio (line-in, line-out)  
**Internal**  
1x LVDS / eDP  
1x GPIO Header (8 Bit)

#### Power Supply:

11 ~ 34 VDC, 250/300 Watt, M4-ATX for NL4 connector (Neutrik) four-pin with ignition pin  
Efficiency >94% @ 50% load  
**Optional**  
16 ~ 30 VDC, 400 Watt, HDPLEX

#### Mechanical:

**Chassis**  
Robust 1 mm galvanized sheet steel with powder coating (On request: Intrusion Detection)\*\*  
**Dimensions (W x H x D)**  
215 x 131 x 303 mm  
**Cooling**  
Active, 2x 80 mm fans  
Filter cartridge incl. mat  
**Mounting**  
Wallmount, Desktop, 19" compatible (On request: two systems side by side)

#### Communication:

**Wi-Fi/Bluetooth (optional)**  
Intel® M.2 Module  
802.11ax Dual Band 2x2 160MHz  
Bluetooth® 5.1  
**GNSS/LTE (optional)**  
Support for GPS, GLONASS, BeiDou, Galileo, QZSS  
Micro SIM slot for 3G/4G (On request: 5G with additional antennas)\*\*

#### Environment:

**Operating Temperature**  
0° ~ 55° C  
**Storage Temperature**  
-20° ~ 70° C  
**Relative Humidity (operation)**  
10 ~ 90 % (non condensing)  
**IP Protection**  
IP20

#### Operating System:

Microsoft® Windows® 10/11, Linux®

\* The final configuration must take care of the power and cooling capacity of the power supply and the system fans.

\*\* New feature after redesign



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## Additional illustrations



Filter cartridge with filter mat

Optional with Wi-Fi/Bluetooth and GNSS/LTE



Technical drawing

Unit: mm

### InoNet Competences and Services

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**Consulting**
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InoNet Computer GmbH  
Wettersteinstraße 18  
82024 Taufkirchen, Germany  
[www.inonet.com](http://www.inonet.com)