

Conception®-tXfa-v3-L-R680E

Compact system for automotive use with Intel® Core™ i CPUs up to 14th Generation and AI support

Features

- **High-Performance with Intel® Core™ i CPUs 12th/13th/14th Generation**
- **High performance GPU included (VPU and FPGA on request)**
- **Optional Wi-Fi/Bluetooth/ GNSS/LTE (5G on request)**
- **Optional QuickTray® extension for large storage**
- **Additional expansions for Ethernet, CAN, LIN®, etc. optional**
- **Perfect for In-vehicle applications (Ignition Support, Deep Sleep Mode, etc.)**



Configuration example

Further configurations on request!*

Mainboard:

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

Processor:

Intel® Core™ i 12th/13th/14th Generation up to 65 Watt TDP, Socket 1700
Chipset: Intel® R680E
Intel® Turbo-Boost: Depends on the selected configuration

Memory:

2x DDR5 S0-DIMM, max. 5600 MHz max. 64 GB

Graphic:

Onboard Intel® UHD 730/770 (depending on CPU)
AI
NVIDIA® L4 Tensor Core GPU with dedicated cooling
RT Cores, 24 GB GDDR6, PCIe x8

Drive Bays:

Internal
2x M.2 (M-key, type: 2280)
External
2x 2.5" SATA-III SSD in shuttle

I/O:

Back
2x 2.5 GBit LAN (RJ45), iAMT support
2x 10 GBit LAN (RJ45), PCIe x4 (Gen 3)
2x Display Port 1.4a
1x RS-232
1x RS-232/422/485
6x USB 3.2 (2x Gen 2, 4x Gen 1)
2x USB 2.0
3x Audio (Line-In, Line-Out, Mic)
Internal
1x LVDS / eDP
1x GPIO Header (8 Bit)

Features:

Watchdog Timer, iAMT, TPM 2.0

Power Supply:

11 ~ 30 VDC, 250/300 Watt
NL4 connector (Neutrik), four-pin with ignition pin
Efficiency >94% @ 50% load
Optional
12 ~ 48 VDC, 500/600 Watt

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.

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Additional illustrations

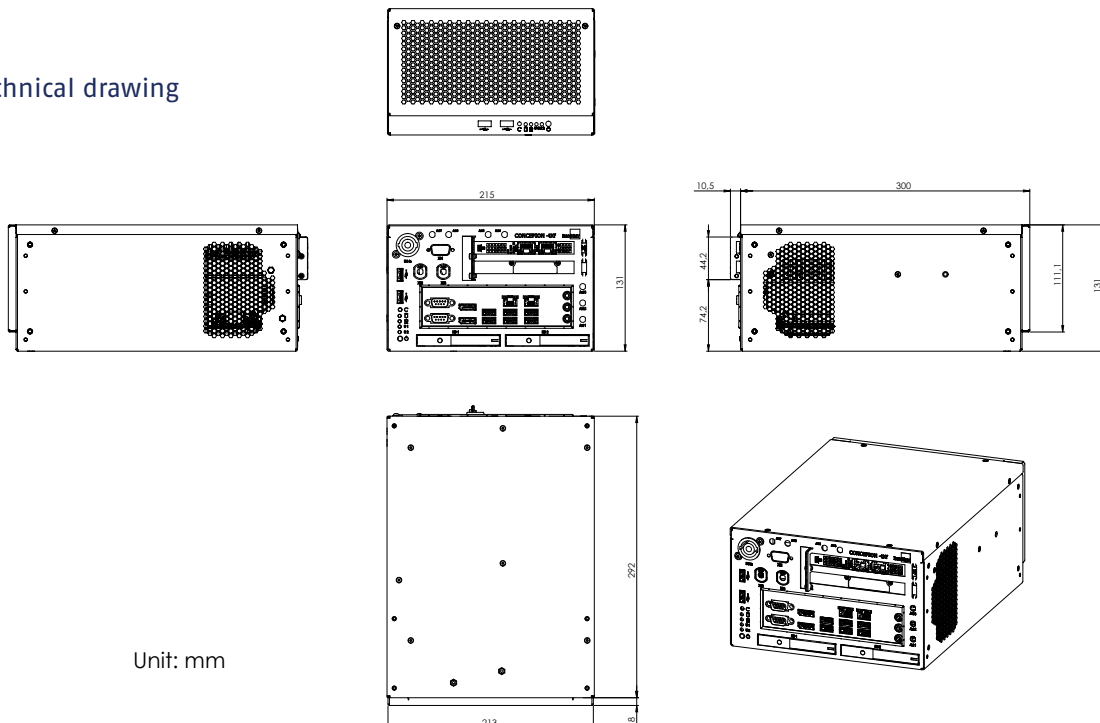


Filter cartridge
with filter mat

Optional with
Wi-Fi/Bluetooth
and GNSS/LTE



Technical drawing



InoNet Competences and Services



Consulting



Development



Testing



Customization



Manufacturing



Certifications

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