

# Factor 101

## OnLogic Qualcomm® Ultra Small Form Factor Industrial Edge AI Computer

The Factor 101 is a power-efficient, compact industrial computer built around the Qualcomm QCS6490 CPU. Designed for data gateway and light machine vision applications, it features an integrated NPU for accelerated AI, 10 GbE LAN for high-speed transfer, and long lifecycle components.

[onlogic.com/store/fr101](https://onlogic.com/store/fr101)



### Accelerate Edge AI

The Factor 101 (FR101) leverages the Octa-Core Qualcomm QCS6490 CPU and Hexagon™ 770 AI engine to deliver 12 dense TOPS of performance. This integration allows defect detection or predictive maintenance models to run directly on the chip, supporting up to 5 concurrent cameras from one low-power, compact system.

### Fanless Industrial Design

Built for reliability, the FR101 uses a fanless design to prevent particle ingress and maximize uptime. The power-efficient 7W TDP eliminates the need for active cooling, enabling an ultra-small form factor. With a 0 to 50°C range and a 15-year lifecycle, it ensures long-term scalability.

### High-speed Connectivity

Equipped for high-throughput data management, the system features both 1 GbE and 10 GbE LAN ports. The 10 GbE connection optimizes the path between the processor and network to eliminate bottlenecks. Physical I/O includes 5x USB 3.0, HDMI, and 8 channel DIO for direct machine control and sensor integration.

## System

<b>Processor Generation</b>	Qualcomm QCS6490
<b>Graphics</b>	Qualcomm Adreno™ 643
<b>Memory</b>	8GB LPDDR4x RAM
<b>Number of Displays Supported</b>	1x HDMI

## Front I/O

<b>USB</b>	4x USB 3.0 Type-A
<b>Ethernet</b>	1x 1 GbE RJ45 1x 10 GbE RJ45
<b>USB-C</b>	1x USB 3.0 Type-C
<b>Display</b>	1x HDMI
<b>Power</b>	Barrel Jack Power (19V DC)

## Rear I/O

<b>DIO</b>	8 Channel DIO (4 x In / Out)
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## Side I/O

<b>Buttons</b>	1x Reset Button 1x Recovery Button 1x Function Button 1x Power Button
<b>LED</b>	Status LED

## Power Input

<b>Source</b>	Barrel Jack Power (19V DC)
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## Mechanical & Weight

<b>Dimensions (WxHxD)</b>	94 x 157 x 70.75 mm
<b>Case Type</b>	Fanless
<b>Case Material</b>	Aluminum Steel
<b>Weight</b>	530 g
<b>Mounting Options</b>	Wall Mount
<b>Expected Life Cycle</b>	5 years
<b>Hardware Type</b>	Industrial (Fanless)

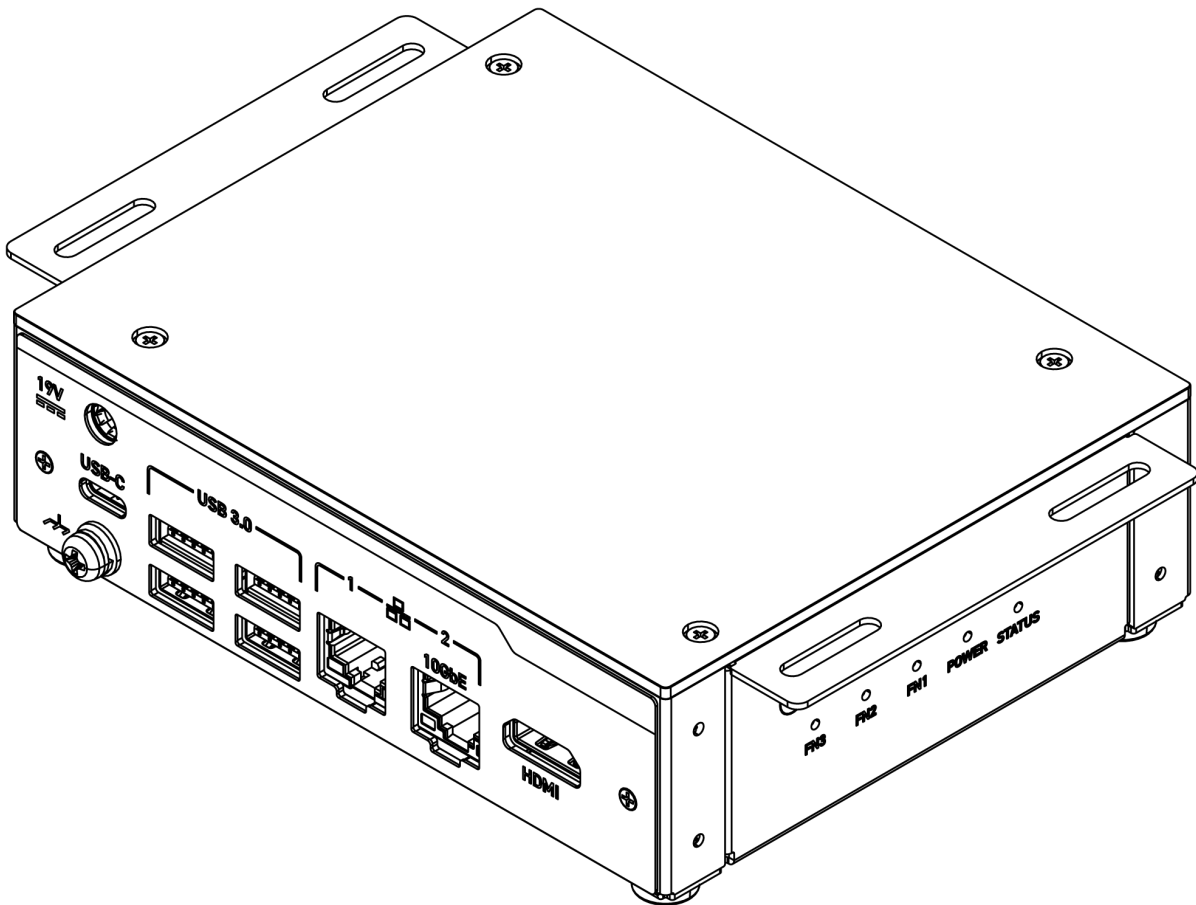
## Environmental & Regulatory

<b>Operating Temperature</b>	0° to 50°C
<b>Certifications</b>	CISPR 32/EN 55032 CISPR 35/EN 55035 FCC 47 CFR Part 15 Subpart B (Class A)
<b>Countries of Use</b>	Available countries: Americas: United States, Canada Europe: Austria, Belgium, Bulgaria, Croatia, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Liechtenstein, Luxembourg, Malta, Norway, The Netherlands, United Kingdom, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden  Other countries available, please call.
<b>Warranty</b>	2-Year Limited Warranty

## Factor 101 Dimensional Drawings

Base System - Isometric

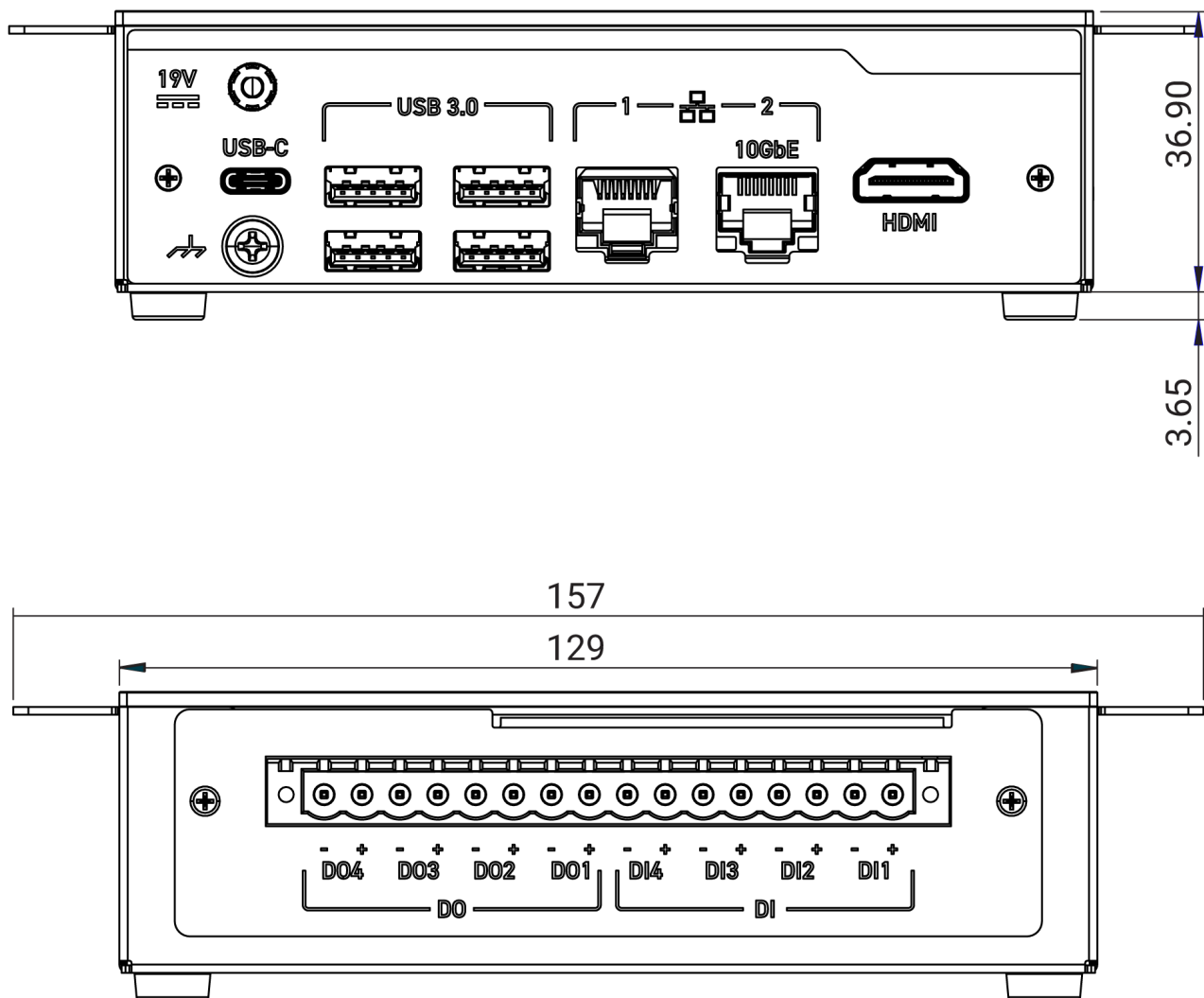
all measurements in mm



## Factor 101 Dimensional Drawings

Base System - Front and Back

all measurements in mm



## Factor 101 Dimensional Drawings

Base System - Left and Right

all measurements in mm

