

HX401

OnLogic Helix 401 Intel Alder Lake (12th Gen) Industrial Edge Computer

The Helix 401 offers scalable, high-performance processing and accelerated graphical display functionality to simultaneously drive multiple 4K displays, making it the ideal fanless computer for many Automation and IIoT applications.

onlogic.com/hx401



NEXT GENERATION PROCESSING

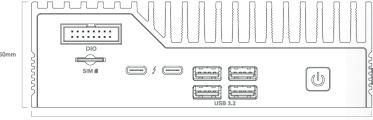
Helix 401 is configurable with a range of Intel® 12th Generation processors. DDR5 memory provides increased bandwidth and reduced latency while consuming less power. Onboard Intel Iris® Xe graphics deliver up to 2.47x faster performance and quad 4K display capabilities.

POWERFUL, COMPACT, FANLESS COMPUTING

Multiple mounting options including wall, VESA or DIN Rail, provide installation flexibility. The fanless Helix 401 chassis is purpose-built to draw heat away from internal components and dissipate the heat from the system's sub-28W processor uniformly over carefully engineered cooling fins.

DATA INTERFACES AND EXPANSION

The front and back of the Helix 401 offer various options to connect to devices using USB 3.2, USB 4, dual DisplayPort and Dual LAN. An onboard M.2 slot provides the system with additional storage and connectivity capabilities.





160mm



System	
Processor Generation	12th Gen Alder Lake
Processor Socket	LGA 1700
Graphics / GPU	Intel Iris XE (for i5 and i7)
Memory Type	DDR5
Memory	Up to 64 GB
Memory Speed	4800 MHz
Memory Slot Count	2
Number of Displays Supported	4

Front I/O	
USB	4x USB 3.2 Gen 2 2x Thunderbolt 4
DIO	1x DIO port Punch out
Power	1x Power Button (LED backlit)
Other	3FF-Sim slot (Mapped to the B-Key)

Rear I/O	
Ethernet	2x Gb LAN ports
Display	2x Full size DisplayPort 1.4
Other	Terminal Block Option (12~24 V input) 2x Antenna punch outs 1x Serial/CAN Punch out Barrel Jack with 12~24 V input

Expansion & Features		
Expansion & Storage	1x M.2 2280/60/3042 B-Key (PCIe Gen 3 x1, USB 3.0, SATA III) 1x M.2 2230 E-key (Wi-Fi) (PCIe x1/ USB 2.0) 1x M.2 2280 M-key (PCIe Gen 4 x 4, SATA III)	
LAN Controller	Intel I210-IT Gbe Intel I219 GbE	
Features	Wide Power Input	

Mechanical	
Dimensions (WxHxD)	160 x 50 x 123 mm
Case Type	Fanless
Case Material	Aluminum & Steel
Mounting Options	DIN-mount VESA-mount Wall-mount
Expected Life Cycle	5 Years
Hardware Type	Edge Devices and IoT Gateways

Environmental & Regulatory		
Operating Temperature	0°C to 50°C	
Certifications	FCC 47 CFR Part 15 CE UKCA UL/ETL Listed configurations available CB scheme Additional Safety and EMC certifications pending WEEE Directive (2002/96/EC) ErP Directive (2009/125/EC) Low Voltage Directive (2014/35/EU) Electromagnetic Compatibility Directive (2014/30/EU) Radio Equipment Directive (2014/53/EU) - For configurations with wireless transmitters RoHS 2 (2011/65/EU) ROHS 3 (2015/863/EU) REACH RCM VCCI-CISPR-32 EN 50121-3-2 EN 55035 EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-8 EN 61000-4-8 EN 61000-4-8 EN 61000-4-8 EN 61000-4-9 EN 61000-4-11 IEC 60945 BIS BSMI CCC - Pending ETSI EN 301 489-1 ETSI EN 301 489-1 ETSI EN 301 489-1 UL/IEC 60950-1 CB Scheme UL/IEC 62368-1 CB Scheme EN 6061-1-2	

Other	
Warranty	2 Year Limited Warranty on parts and services



HX401 Dimensional Drawings

Intel® 12th Gen Alder Lake Industrial Edge Computer

All measurements in mm

