



ABOX-5120 – Embedded AI Box System with Intel® 12th Gen Processor

The ABOX-5120 is the latest offering in Embedded AI Box Systems, with powerful Intel® 12th Generation CPU options. Equipped with Intel® Iris Xe Graphics and up to 96EU's, this system is capable of advanced AI calculation as well as 3D hardware acceleration. The ABOX-5120 has many configuration options designed to suit any needs, making it a versatile and robust industrial solution.

SPECIFICATIONS

CPU	Intel® 12th Gen Processor
Memory Type	262-pin DDR5 4800MHz SO-DIMM
Memory Slots	2
Maximum Memory Supported	64GB
Integrated Graphics	Intel® Iris Xe Graphics
Watchdog Timer	Interval, programmable from 1 to 255 seconds
Video	1 x HDMI up to 4K @ 24Hz, 1 x mini DP up to 4K @ 60Hz, 1 x USB 3.2 Gen 1 (Type-C) up to 4K @ 60Hz (DP 1.4a)
LAN Ports	2 x Intel® I226-LM 2.5GbE
Serial ATA (SATA)	1 x SATA III (See ordering options)
Digital I/O	1 x DIO (See ordering options)
TPM	2.0 (Optional)

Extended Interface	1 x M.2 B-Key 2242/3042 PCIe Gen3 x1 w/ Nano SIM Socket, 1 x M.2 M-Key 2242 PCIe Gen3 x2, 1 x M.2 M-Key 2280 PCIe Gen4 x4, 1 x Mini-PCIe (See ordering options)
Rear I/O	1 x LAN, 1 x HDMI, 1 x Mini DP, 1 x USB 3.2 Gen1 Type-C, 2 x USB 2.0, 3 x USB 3.2 Gen 2, 2 x PoE 802.3at 60W*, 1 x DIO*, 1 x OOB*, 3 x RS-232/422/485*; *See Ordering Options
Front I/O	2 x USB 2.0, 1 x Mic-In, 1 x Line-Out
Audio	Realtek ALC888 HD Audio
Power Requirement	9 ~ 36V Lockable DC-Input Jack or Phoenix Connector (See Ordering Options)
Dimensions	SKU# A ~ D: 7.172" x 4.277" x 2.487" (182.17mm x 108.64mm x 63.16mm), SKU# E ~ I: 7.172" x 4.277" x 3.248" (182.17mm x 108.64mm x 82.50mm)
Operating Temperature	-20 ~ 60°C (-4 ~ 140°F)
Storage Temperature	-40 ~ 85 °C (-40 ~ 185 °F)
Relative Humidity	5 ~ 95% @ 40°C, non-condensing
Certification	CE, FCC Class B, RoHS
Shock	With SSD: 30G, IEC 60068-2-27, half sine, 11ms duration
Vibration	With SSD: 3G, IEC 60068-2-64, random, 5~500Hz, 1hr/axis
OS Software Supported	Windows 10, Windows 11, Linux
Global P/N / SKU	1708595

Ordering Options

ABOX-5120-A04 (SKU# 1708595A): Embedded AI Box with Intel® Core™ i7-1265UE, 16GB RAM, 512GB Storage
 ABOX-5120-A05 (SKU# 1708595B): Embedded AI Box with Intel® Core™ i5-1245UE, 16GB RAM, 512GB Storage
 ABOX-5120-A06 (SKU# 1708595C): Embedded AI Box with Intel® Core™ i3-1215UE, 16GB RAM, 512GB Storage
 ABOX-5120-A07 (SKU# 1708595D): Embedded AI Box with Intel® Celeron® 7305E, 16GB RAM, 512GB Storage
 ABOX-5120-A31 (SKU# 1708595E): Embedded AI Box with Intel® Core™

i5-1245UE, 1 x OOB (Optional), and 2 x COM, 1 x Mini-PCIe, 1 x SATA III, 16GB RAM, 128GB Storage
ABOX-5120-A35 (SKU# 1708595F): Embedded AI Box with Intel® Core™ i5-1245UE, and 3 x COM, 1 x Mini-
PCIe, 1 x SATA III, 16GB RAM, 128GB Storage ABOX-5120-A37 (SKU# 1708595G): Embedded AI Box with
Intel® Celeron® 7305E, and 3 x COM, 1 x Mini-PCIe, 1 x SATA III, 16GB RAM, 128GB Storage ABOX-5120-A50
(SKU# 1708595H): Embedded AI Box with Intel® Core™ i7-1265UE, 1 x OOB (Optional), and 2 x PoE, 1 x DIO,
1 x SATA III, Phoenix Header Power Input, 16GB RAM, 128GB Storage ABOX-5120-A51 (SKU# 1708595I):
Embedded AI Box with Intel® Core™ i5-1245UE, 1 x OOB (Optional), and 2 x PoE, 1 x DIO, 1 x SATA III,
Phoenix Header Power Input, 16GB RAM, 128GB Storage Please contact sales for alternative memory and
storage configurations.