



## **IMB-1247 – Mini-ITX Motherboard with Intel® Arrow Lake-S Core™ Ultra Processor Support**

The IMB-1247 is a Mini-ITX Motherboard with support for the Intel® Arrow Lake-S Core™ Ultra line of processors, allowing for incredible performance in a compact form factor. This board has excellent expansion options through M.2 or the PCIe Gen5 x16 slot, as well as Intel® Xe LPG integrated graphics allowing for quad-display support. The IMB-1247 is truly fast and powerful with a small footprint, making it an incredible industrial solution.

### SPECIFICATIONS

<b>CPU</b>	Intel® Core™ Ultra Processors (Arrow Lake-S), up to 65W
<b>CPU Socket</b>	LGA1851
<b>Memory Type</b>	262-pin DDR5 6400/5600MHz SO-DIMM
<b>Memory Slots</b>	2
<b>Maximum Memory Supported</b>	96GB
<b>Chipset</b>	Intel® Q870
<b>Integrated Graphics</b>	Intel® Xe LPG Graphics
<b>Watchdog Timer</b>	256 Segments, 0, 1, 2, ...255sec
<b>Video</b>	2 x HDMI TMDS, 1 x DisplayPort 1.4a++, 1 x USB4/Thunderbolt 4 (Supports DP 2.1 display output), 1 x LVDS/eDP
<b>Serial ATA (SATA)</b>	3 x SATA III (SATA3_7 shared M.2 Key M1)
<b>Storage</b>	1 x M.2 M-Key 2242/2280 PCIe Gen4 x4, 1 x M.2 M-Key 2280 PCIe Gen4 x4 (Recommend using M2X4-SATA-4P module to support extra 4 SATA ports supported by special BIOS)

<b>RAID</b>	Intel® VMD RAID 0/1/5/10* *supported by identical interface (PCIe or SATA) PCIe interface: M.2 Key B + M.2 Key M1/2 or 2*M.2 Key M SATA interface: SATA port
<b>GPIO Interface</b>	4 x GPI, 4 x GPO
<b>TPM</b>	TPM 2.0 onboard IC
<b>Extended Interface</b>	1 x PCIe Gen5 x16 (supports riser card x8/x8, x8/x4/x4), 1 x M.2 E-Key 2230 PCIe Gen4 x1, 1 x M.2 B-Key 3042/3052 PCIe Gen4 x1, 1 x SIM Socket (Connected to M.2 B-Key)
<b>Rear I/O</b>	2 x HDMI, 1 x DP, 2 x LAN, 1 x USB4/Thunderbolt 4, 5 x USB 3.2 Gen2, 1 x Mic-In, 1 x Line-Out, 2 x RS-232/422/485
<b>Internal I/O</b>	1 x USB 3.2 Gen1 header, 1 x USB 2.0 header, 2 x RS-232, 1 x GPIO header, 1 x LVDS/eDP, 1 x SATA PWR, 1 x Speaker header
<b>Audio</b>	Realtek® ALC897 HD Audio
<b>Power Requirement</b>	ATX-PWR (24+4-pin) and 12V DC-In co-design
<b>Dimensions</b>	6.7" x 6.7" (170mm x 170mm)
<b>Operating Temperature</b>	-20 ~ 70 °C (-4 ~ 158 °F)
<b>Storage Temperature</b>	-40 ~ 85 °C (-40 ~ 185 °F)
<b>Relative Humidity</b>	5 ~ 90%
<b>OS Software Supported</b>	Windows 10 64-bit, Windows 11 64-bit
<b>Global P/N / SKU</b>	2809197

## Ordering Options

IMB-1247 (SKU# 2809197): Mini-ITX Motherboard with Intel® Q870 Chipset