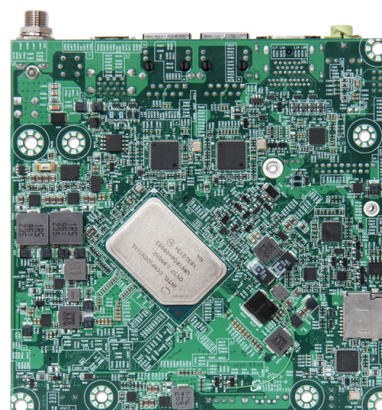
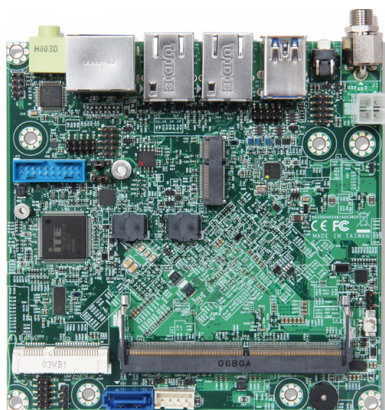


NANO-6063

Intel Atom® x6000E Series SoC based
NANO-ITX Board with Triple Display,
GbE LAN, USB 3.2 Gen 2, M.2, SATA III,
Mini-PCIe, and mSATA



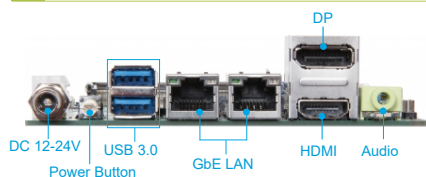
NANO-6063 is based on Intel Atom® x6000E family processor (Elkhart Lake). It supports industrial temperature range from -40°C to 85°C and can operate with TDP under 12W for fan-less applications.

The support of four USB 3.2 Gen 2 ports ensures fast data transmission with low-power consumption. Intel® I225 and I210IT Gigabit Ethernet controllers provide dual Gigabit Ethernet LAN access via the two RJ45 ports. With flexible expansions, NANO-6063 is suitable for Industrial Automation, Medical, Networking, Panel PC, Kiosk and Digital Signage applications.

FEATURES

- Intel Atom® x6000E SoC (Formerly Elkhart Lake)
- Delivers up to 32GB DDR4 3200 MT/s non-ECC SO-DIMM
- Triple Display by DP, HDMI and VGA
- High speed dual Gigabit Ethernet based on PCIe x1, high bandwidth I/O interface
- Supports Real-Time Performance: TSN, TCC
- Support a wide -40°C to 85°C industrial temperature range
- On board TPM 2.0

REAR I/O



ORDERING GUIDE

AB1-3K29Z	(R) NANO-6063. Nano-ITX ESB. Intel Elkhart Lake SoC. w/DDR4 SO-DIMM/VGA/HDMI/DP/Dual GbE LAN/micro SD
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GENERAL

Processor	Intel Atom® Dual/Quad-core x6000E family SoC (up to 12W)
BIOS	AMI UEFI BIOS
Memory	DDR4 3200 MT/s Non-ECC SO-DIMM up to 32GB
Storage Devices	- 1x SATA III port - 1x mSATA socket (Choose either mSATA or mini-PCIe by BIOS) - 1x Micro-SD socket
Watchdog Timer	Programmable by embedded controller
Hardware Monitoring	System monitor (Voltage, Fan Speed and Temperature)
Expansion Interface	- 1x M.2 Type E socket - 1x full size mini-PCIe socket (Choose either mSATA or mini-PCIe by BIOS)

I/O INTERFACE

Audio	- High Definition Audio integrated in Intel® SoC - Realtek ALC892 HDA codec - Audio jack on rear I/O with Line-out and on board pin header with Line-in, Line-out, and Mic-in
Ethernet	- Intel® I210 and Intel® I225 GbE controller - Dual RJ45 connectors on rear I/O with two LED indicators
Serial Port	1x RS-232/422/485 on board connector (selected by BIOS)
USB	- 2x USB 3.2 Gen 2 ports on rear I/O (10Gbps) - 2x USB 3.2 Gen 2 ports on board with header (10Gbps)
GPIO	8-bit configurable controlled by embedded controller
Other	TPM 2.0 on board

DISPLAY

Graphic Controller	- Intel® Gen 11 Graphics - Supports Real-time performance with Intel® Time Coordinated Computing (TCC) and Time Sensitive Networking (TSN)
Display Interface	- 1x HDMI port on rear I/O, up to 4K resolution - 1x DP port on rear I/O, up to 4K resolution - 1x VGA on board connector

Mechanical & Environment

Dimension	120mm(L) x 120mm(W) ; 4.72"(L) x 4.72"(W)
Power Supply	DC 12V input
Environment	- Operation Temperature: -40°C~85°C - Storage Temperature: -40°C~85°C - Relative Humidity: 5%~95%, non-condensing

