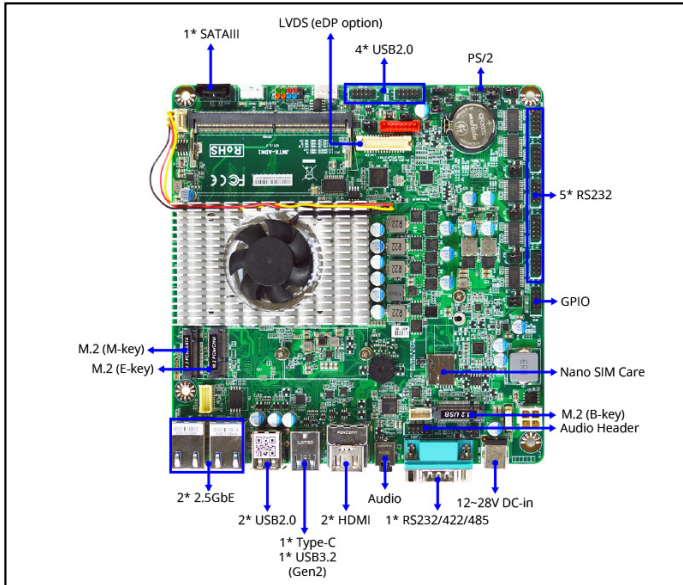


Mini-ITX Board with Intel® Processor N97, Supporting 12~28V DC Input



Features

- Powered by Intel® Processor N97 (Alder Lake-N, TDP 12W)
- Versatile display outputs: 2 x 4K HDMI 2.0b, 1 x 4K Type-C DP, and 1 x LVDS/eDP.
- Dual 2.5GbE ports for fast and reliable networking
- Storage and expansion options: 1 x SATA III, 1 x M.2 M-key, 1 x M.2 E-key, 1 x M.2 B-key
- Wide-range DC input (12~28V) with RVP, OCP, and OVP power protection
- Enhanced security with optional onboard TPM 2.0 support
- Wide operating temperature range from 20°C to 60°C

Packing List

PART NUMBER	DESCRIPTION	QTY
JMTX-ADN1 Series	JMTX-ADN1 MB	1
F04-MB-101-F	I/O Shield	1
F07-FNJMI24-F	Heatsink with Fan, 87 x 54 x 16mm	1
G01-COM-H2M22-1F	COM Port Cable, 22cm, Pitch 2.0	1
G01-SATA3-BL-1F	SATA Cable, 50cm	1
G01-PW4PS2S-322-1F	SATA Power Y cable, 5.0pitch for 32cm, 2.54pitch for 20cm	1

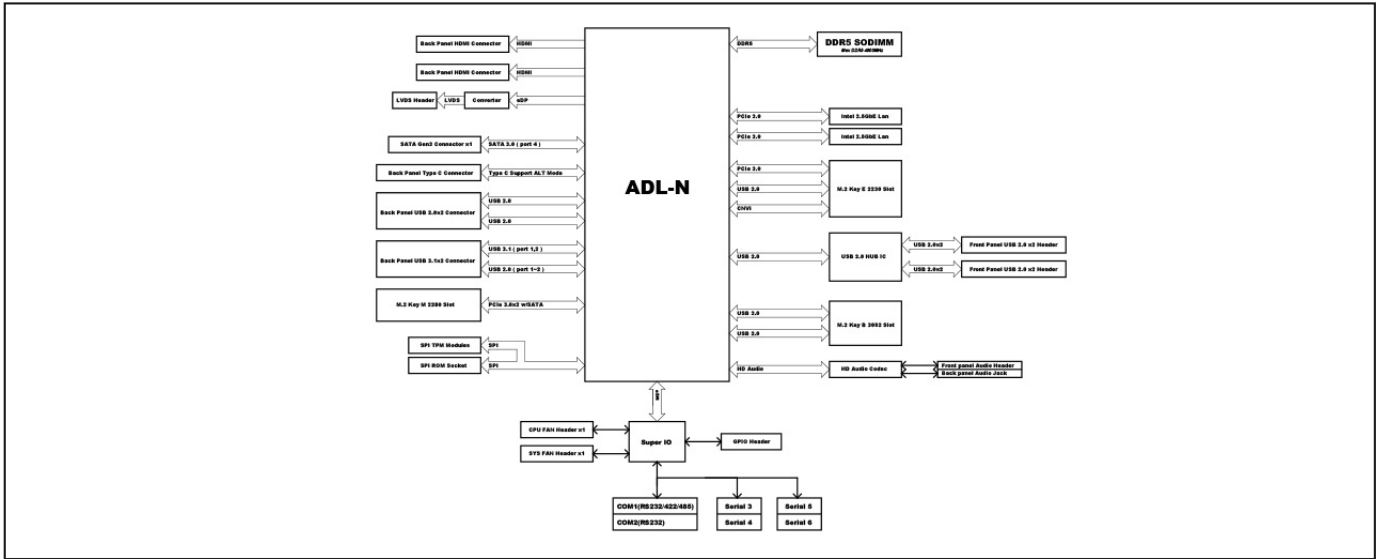
Optional Accessory

PART NUMBER	DESCRIPTION	QTY
F05-JNF9T-3F	Heatsink, 87 x 54 x 29mm	1

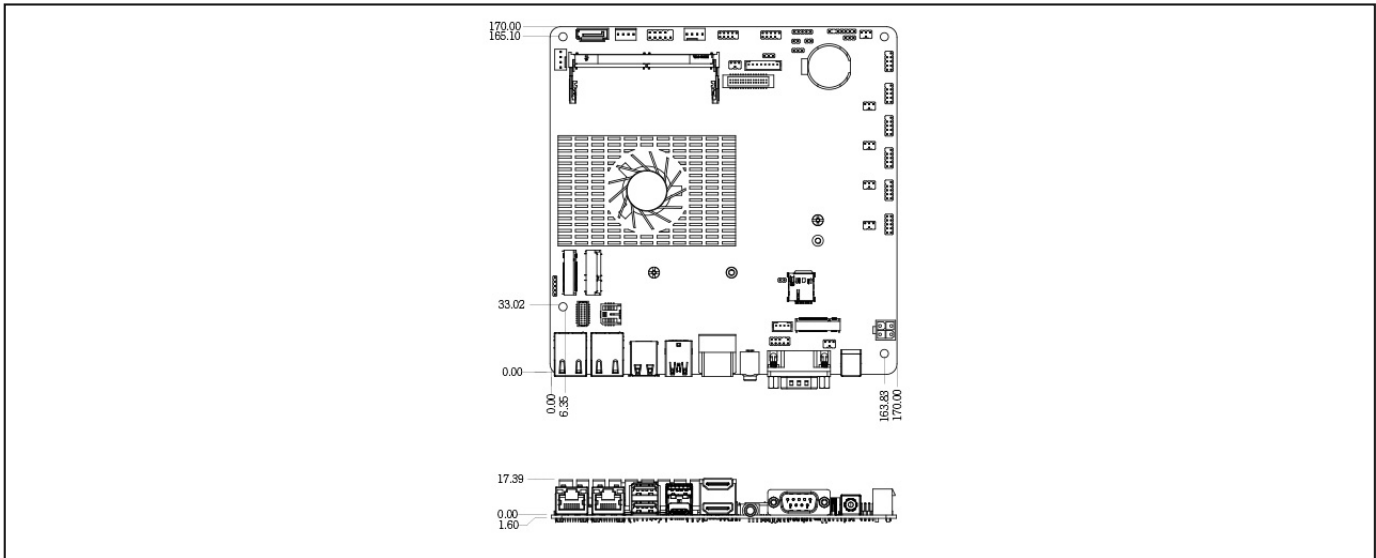
Specifications

SYSTEM	
MB FORM FACTOR	Mini-ITX
CPU	Onboard Intel® Processor N97 (Formerly Alder Lake-N, TDP 12W)
CHIPSET	Intel® SoC
MEMORY	1 x DDR5 4800MHz, Single Channel SO-DIMM, up to 32GB
BIOS	UEFI
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
SECURITY	TPM2.0
RTC BATTERY	Lithium Battery
DIMENSION (W X D)	170.0 (W) x 170.0 (D) mm (6.7" x 6.7")
OS SUPPORT	Windows® 11 (64bit) Windows® 10 (64bit) Linux
POWER	
POWER REQUIREMENT	DC-in 12~28V
POWER ON MODE	AT / ATX
CONNECTOR	DC Jack 4-pin Header
DISPLAY	
GPU	Intel® UHD Graphics
LVDS	1 x 24-bit Dual Channel LVDS (Max. Resolution: 1920 x 1080 @60Hz / Co-Lay eDP)
Type C DP	1 x Type C DP1.4 (Max Resolution: 4096 x 2160@60Hz)
HDMI	2 x HDMI 2.0b (Max Resolution: 4096 x 2160@60Hz)
MULTIPLE DISPLAY	Support 3 Displays
AUDIO	
CODEC	Realtek Audio Codec
COMBO	1 x Combo Audio Jack for Line-Out / Mic-In
AMPLIFIER	3W
LAN	
ETHERNET	2 x RJ45 for Intel® I226-V 2.5GbE
USB PORT	
USB	1 x USB 3.2 Gen 2x1 (10Gbps, Formerly USB 3.1 Gen 2) 1 x USB 3.2 Gen 2x1 Type-C (10Gbps) Support DP ALT Mode 2 x USB 2.0 Internal Header for 4 x USB 2.0
SERIAL PORT	
COM	1 x DB-9 for RS-232/422/485 with 5V/12V header Internal Header for 5 x RS-232 with 5V/12V header
INTERNAL I/O	
GPIO	8-Bit
SMBUS	Yes
FAN	1 x CPU Fan Header 1 x System Fan Header
FRONT PANEL	HDD Active LED Power On/Off Power LED Reset
STORAGE	
ADDITIONAL	1 x PS/2 1 x Audio Header
SATA	1 x SATA III 1 x SATA Power Connector
eMMC	eMMC 64GB (optional)
EXPANSION	
M.2	1 x M-Key 2242/2280 (SATA/PCIe 3.0 x2) Support NVMe 1 x E-Key 2230 (USB 2.0/PCIe 3.0 x1) Support CNVi 1 x B-Key 3042/3052 (USB 3.2/USB 2.0) for 4G/5G Module
SIM	1 x Nano SIM Card Slot
ENVIRONMENT & CERTIFICATION	
SHOCK	15G, 11ms duration
VIBRATION	1 Grms/ 5- 500Hz/ Operation
OPERATING TEMPERATURE	-20°C - 60°C (-4°F - 140°F)
STORAGE TEMPERATURE	-20°C - 85°C (-4°F - 185°F)
OPERATING HUMIDITY	10 - 90% Relative Humidity, Non-condensing
CERTIFICATION	CE/FCC Class A

Block Diagram



Dimension Unit: mm



Ordering Information

PART NUMBER	JMTX-ADN1-N97000	JMTX-ADN1-N97002	JMTX-ADN1-N97004	JMTX-ADN1-N97008
CPU	Intel® Processor N97	Intel® Processor N97	Intel® Processor N97	Intel® Processor N97
SECURITY		TPM2.0		TPM2.0
POWER REQUIREMENT	DC-in 12-28V	DC-in 12-28V	DC-in 12-28V	DC-in 12-28V
GPU	Intel® UHD Graphics	Intel® UHD Graphics	Intel® UHD Graphics	Intel® UHD Graphics
LVDS	1 x LVDS/eDP	1 x LVDS/eDP	1 x LVDS/eDP	1 x LVDS/eDP
TYPE C DP	1 x Type C DP	1 x Type C DP	1 x Type C DP	1 x Type C DP
HDMI	2 x HDMI	2 x HDMI	2 x HDMI	2 x HDMI
MULTIPLE DISPLAY	Support 3 Displays	Support 3 Displays	Support 3 Displays	Support 3 Displays
ETHERNET	2 x 2.5GbE	2 x 2.5GbE	2 x 2.5GbE	2 x 2.5GbE
USB	1 x USB 3.2 Gen 2	1 x USB 3.2 Gen 2	1 x USB 3.2 Gen 2	1 x USB 3.2 Gen 2
USB	1 x USB 3.2 Gen 2 Type C	1 x USB 3.2 Gen 2 Type C	1 x USB 3.2 Gen 2 Type C	1 x USB 3.2 Gen 2 Type C
USB	6 x USB 2.0	6 x USB 2.0	6 x USB 2.0	6 x USB 2.0
COM	5 x RS-232	5 x RS-232	5 x RS-232	5 x RS-232
COM	1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232/422/485	1 x RS-232/422/485
SATA	1 x SATA III	1 x SATA III	1 x SATA III	1 x SATA III
eMMC			eMMC 64GB	eMMC 64GB
M.2	1 x M-Key 2242/2280	1 x M-Key 2242/2280	1 x M-Key 2242/2280	1 x M-Key 2242/2280
M.2	1 x E-Key 2230	1 x E-Key 2230	1 x E-Key 2230	1 x E-Key 2230
M.2	1 x B-Key 3042/3052	1 x B-Key 3042/3052	1 x B-Key 3042/3052	1 x B-Key 3042/3052
SIM	1 x Nano SIM Card Slot	1 x Nano SIM Card Slot	1 x Nano SIM Card Slot	1 x Nano SIM Card Slot
OPERATING TEMPERATURE	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)	-20°C ~ 60°C (-4°F ~ 140°F)