

MLB-3002

Embedded System supporting MXM Graphics Module with 8th/9th Generation Intel® Core™ i7/i5/i3 in LGA1151 Socket

Compliant with IEC 60601-1 / IEC 60601-1-2

NVIDIA Ampere
GPU READY



 NVIDIA QUADRO
CERTIFIED

EMBEDDED

Features

- ADLINK MXM Graphics module support (Type A/B, up to 120W)
- 8th/9th Gen Intel® Core™ i7/i5/i3, Celeron® processor
- Dual SODIMMs for up to 64GB DDR4 non-ECC memory (dependent on CPU)
- DisplayPort (2 from CPU, 4 from MXM)
- 1x M.2 E key supporting 1630 or 2230 for Wi-Fi/Bluetooth module, 1x M.2 B key supporting 2242 or 2280 for SATA storage module
1x M.2 M key supporting 2242 or 2280 for SATA/PCIe x4 storage module
- Reliable Molex type 12V DC-in connector
- 1x Intel® i219-LM and 3x Intel® i210-AT
- 2x PCIe Gen3 x4 expansion slot for Full Height Half Length add on card, each slot is 25W power budget and additional Molex 4 pin power cable (12V/1.5A and 5V/2A) support

Software Support

- Win10 IoT Enterprise SAC 64bit
- Ubuntu 18.04.1 LTS 64bit

Optional Accessories

- CPU cooler: 32-20378-0000-A0
- CPU cooler bracket 32-50015-0100-A0
- MXM cooler for P1000/P2000: 32-20797-0200-A0
- MXM cooler for RTX5000: 32-20839-1000-A0
- MXM cooler for T1000: 32-20830-0200-A0
- MXM cooler for RTX3000: 32-20823-1100-A0
- 12V/240W adaptor: 31-62164-0010-A0
- 12V/500W adaptor: 91-95296-001E
- 12V/150W Medical grade adapter
- 12V/220W Medical grade adapter
- Wall Mount Bracket 34-34546-0000-A0 2pcs
- Wifi Kit INTEL AC9260 Non-VPRO 991-95266-0020

Specifications

Model	MLB-3002				
MXM Support	EGX-MXM-P1000	EGX-MXM-P2000	EGX-MXM-T1000	EGX-MXM-RTX3000	EGX-MXM-RTX5000
Processor	Intel® Core™ i7-9700E, 2.6GHz, 12M Cache, 65W TDP, LGA1151, DDR4 2666MHz support (8C/8T) Intel® Core™ i7-9700TE, 1.8GHz, 12M Cache, 35W TDP, LGA1151, DDR4 2666MHz support (8C/8T) Intel® Core™ i5-9500E, 3.0GHz, 9M Cache, 65W TDP, LGA1151, DDR4 2666MHz support (6C/6T) Intel® Core™ i5-9500TE, 2.2GHz, 9M Cache, 35W TDP, LGA1151, DDR4 2666MHz support (6C/6T) Intel® Core™ i3-9100E, 3.1GHz, 6M Cache, 65W TDP, LGA1151, DDR4 2400MHz support (4C/4T) Intel® Core™ i3-9100TE, 2.2GHz, 6M Cache, 35W TDP, LGA1151, DDR4 2400MHz support (4C/4T) Intel® Core™ i7-8700, 3.2GHz, 12M Cache, 65W TDP, LGA1151, DDR4 2666MHz support (6C/12T) Intel® Core™ i7-8700T, 2.4GHz, 12M Cache, 35W TDP, LGA1151, DDR4 2666MHz support (6C/12T) Intel® Core™ i5-8500, 3.0GHz, 9M Cache, 65W TDP, LGA1151, DDR4 2666MHz support (6C/6T) Intel® Core™ i5-8500T, 2.1GHz, 9M Cache, 35W TDP, LGA1151, DDR4 2666MHz support (6C/6T) Intel® Core™ i3-8100, 3.6GHz, 6M Cache, 65W TDP, LGA1151, DDR4 2400MHz support (4C/4T) Intel® Celeron® G4900, 3.1GHz, 2M Cache, 54W TDP, LGA1151, DDR4 2400MHz support (2C/2T) Intel® Celeron® G4900T, 2.9GHz, 2M Cache, 35W TDP, LGA1151, DDR4 2400MHz support (2C/2T)				
Chipset	Intel® Q370 Chipset				
Memory	Non-ECC DDR4 2666/2400MHz, 2x SO-DIMM, up to 64GB (dependent on CPU)				
I/O Interfaces					
Display	6x DisplayPort (2 from CPU, 4 from MXM)				
Ethernet	1x GbE (Intel® i219-LM), 3x GbE (Intel® i210-AT)				
Serial Ports	1x RS-232/422/485, 1x RS-232				
USB	6x USB 3.2 Gen1x1 ports, 2x USB 2.0 ports				
M.2	1x M.2 E key supporting 1630 or 2230 for Wi-Fi/Bluetooth module, 1x M.2 B key supporting 2242 or 2280 for SATA storage module 1x M.2 M key supporting 2242 or 2280 for SATA/PCIe x4 storage module				
Digital IO	1x DI/DO with 4 in, 4 out				
Audio	Mic-in, L/R speaker-out (6W + 6W)(Optional)				
TPM 2.0	Yes				
eSIM	Optional				
Expansion slot	2x PCIe Gen3 x4 expansion slot for Full Height Half Length add on card, each slot is 25W power budget and additional Molex 4 pin power cable (12V/1.5A and 5V/2A) support				
Storage					
SATA	2x SATA 6Gb/s, one SATA power connector 2x SATA 6Gb/s signals via M.2 M & B key connector Intel® RST RAID Support				
Mechanical					
Dimensions	235 x 182 x 130mm (W x D x H, without foot pads)				
Mounting	Optional wall-mount bracket				
Power Supply					
DC Input	DC 12V input (Molex DC-in jack)				
AC Input	Optional: 240W (12V/20A) AC/DC adapter Optional: 500W (12V/41.7A) AC/DC power supply unit Optional: 150W (12V/12.5A) AC/DC Medical grade adapter Optional: 220W (12V/18.34A) AC/DC Medical grade adapter				
Environmental					
Operating Temperature	0°C to 40°C				
Storage Temperature	-20°C to 70°C				
Humidity	5% to 95%, non-condensing				
Vibration	Operating vibration: 2Grms, 5-500Hz, 3 axes, Package (NON-OP) vibration: 3.44Grms, 10-1000Hz, 3 axes (W/MXM, W/SSD)				
EMC	EN55032/35, CE, FCC				
Safety	UL/cUL and CB (62368-1:2014)				
Medical Grade	Compliant with IEC 60601-1:2005 + A1:2012 + A2:2020 (3.2 edition) / IEC 60601-1-2:2014 + A1:2020 (4.1 edition)				