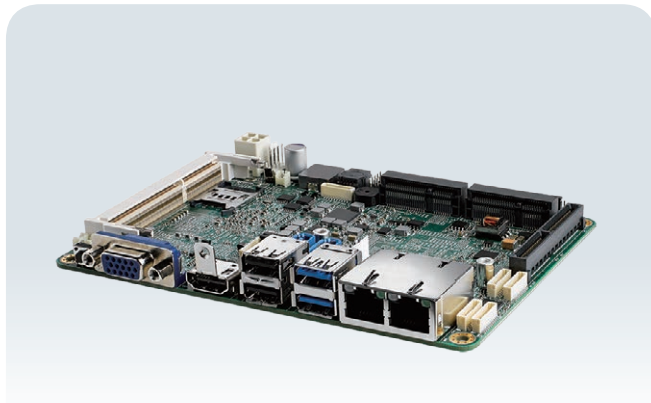


EMBC-2000

3.5" Embedded Single Board Computer with Intel Atom® x7-E3950 Processor (Apollo Lake), 2 GigE LAN, 4 COM w/2 Isolated, 6 USB, 16 GPIO, 2 Mini PCIe, 30u" Golden Finger, High Performance, Fanless, Extended Temperature



Features

- Quad Core Intel Atom® x7-E3950 SoC (Apollo Lake-I), up to 3 independent Ultra HD displays
- Supports DDR3L 1866MHz memory, up to 8GB
- Display : Lockable HDMI, VGA, 24-bit LVDS
- 2 GigE LAN support IEEE 1588 (PTP)
- 6 USB, 2 Mini PCIe, 1 SIM, 1 2.5" SSD, 1 SATA III
- 16 GPIO, 4 COM RS-232/422/485 with 2 Isolated
- TPM 2.0 supported
- 12V DC Power Input, optional supports 9V to 36V wide range DC power input
- Fanless, -40°C to 85°C Operating Temperature
- Optional for M.2, Mini PCIe or PCI/PCIE expansions



Specifications

System	
Processor	Intel Atom® x7-E3950 Processor (up to 2M Cache, 2.0GHz)
BIOS	AMI
SIO	IT8786E
Memory	1 DDR3L 1866MHz SO-DIMM, up to 8GB
Graphics	
Graphics Processor	Intel® HD Graphics 505
Interface	▪ HDMI : Up to 3840 x 2160 @30Hz ▪ VGA : Up to 1920 x 1440 @60Hz ▪ LVDS : Dual channel 24-bit, up to 1920 x 1200
Ethernet	
LAN 1	Intel® I210 GigE LAN supports IEEE 1588
LAN 2	Intel® I210 GigE LAN supports IEEE 1588
Audio	
Audio Codec	Realtek ALC892, 7.1 +2 Channel HD Audio
Audio Interface	1 Mic-in, 1 Line-out
I/O Interface	
Front I/O	▪ 2 RJ45 Connector ▪ 2 USB 3.0 Connector ▪ 2 USB 2.0 Connector ▪ 1 Lockable HDMI Connector ▪ 1 VGA Connector ▪ 1 Power Button ▪ 1 Reset Button
Internal I/O	▪ 1 ATX 4-Pin Power Connector ▪ 1 DDR3L SO-DIMM Socket ▪ 1 USB 2.0 Connector for 2 USB Port ▪ 4 COM RS-232/422/485 Connector (2 with isolation) ▪ 2 10-pin Box Header for GPIO ▪ 1 Mic-in ▪ 1 Line-out ▪ 1 LVDS Connector ▪ 1 LVDS Backlight Connector ▪ 2 Mini PCIe Connector (1 co-lay with mSATA) ▪ 1 SIM Card Socket ▪ 1 SATA Connector ▪ 1 SATA Power Connector ▪ 1 Golden Finger Socket (Optional) ▪ 1 Fan Connector ▪ 1 LPC Debug Header ▪ 1 Reset Header ▪ 1 Power Header ▪ 1 Battery Header
Storage	
SATA	1 SATA III (6Gbps)
mSATA	1 SATA III (Mini PCIe Type, 6Gbps)
Storage Device	1 2.5" SSD/HDD Bracket

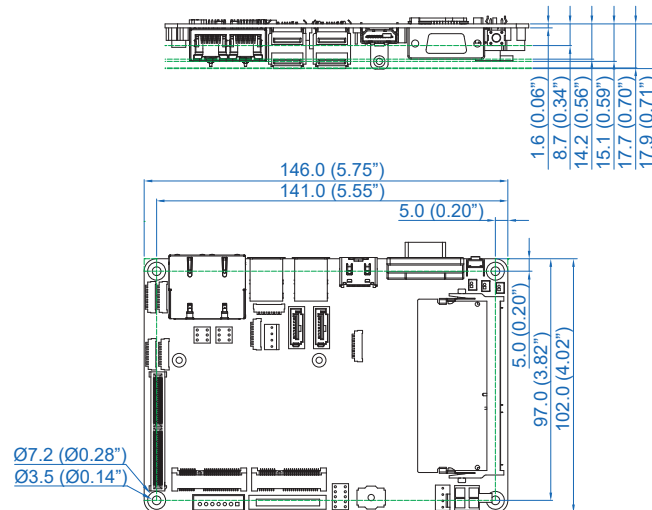
Expansion	
Mini PCIe	2 Mini PCIe Socket : ▪ 1 Mini PCIe for PCIe/USB/SIM Card ▪ 1 Mini PCIe for PCIe/USB/Optional mSATA
Power	
Power Input	▪ Single 12V DC Power Input ▪ 9V to 36V DC Power Input (Optional, via Power Module)
Power Interface	ATX Power Connector
Remote Switch	2-pin Terminal Block (Optional)
Others	
TPM	Optional Infineon SLB9665 supports TPM 2.0, LPC Interface
Watchdog Timer	Reset : 1 to 255 sec./min. per step
HW Monitor	Monitoring temperature, voltages. Auto throttling control when CPU overheats.
Software Support	
OS	Windows 10, Linux
Mechanical	
Dimensions (W x L)	146mm x 102mm (5.75" x 4.02")
Environment	
Operating Temperature	-40°C to 85°C (-40°F to 185°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% Humidity, Non-condensing
Relative Humidity	95% at 85°C
Certification	CE, FCC

Packing List

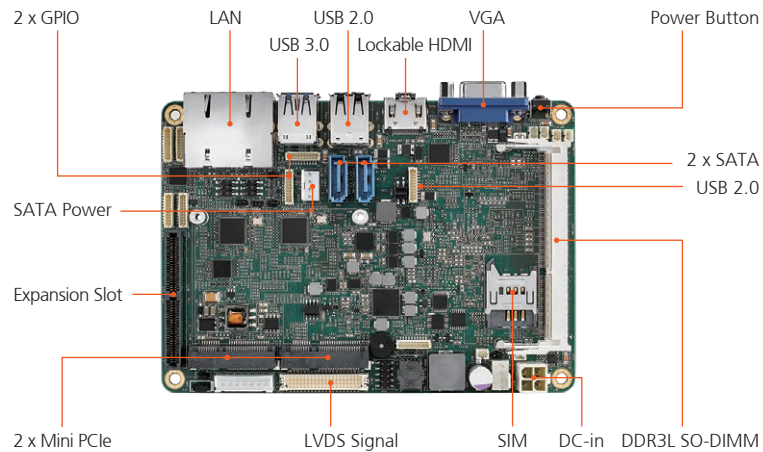
EMBC-2000 3.5" SBC		x1
Driver/User Manual DVD		x1
Cable Kit	▪ COM Port Cable x1 ▪ USB 2.0 Cable x2 ▪ Audio Cable x1 ▪ SATA Data Cable x1 ▪ SATA Power Cable x1	x1

Dimensions

Unit : mm/ inch



Top View



Order Information

EMBC-2000	EMBC-2000 SBC, Intel Atom® x7-E3950, 2 GigE LAN, 4 COM w/2 Isolated, 6 USB, 16 GPIO, 2 Mini PCIe
61-13Q1009-0DA	COM Port Cable
61-193102U-156	USB 2.0 Cable
61-13T10LM-3CG	Audio Cable
61-13B0707-386	SATA Data Cable
61-13P0430-08A	SATA Power Cable
61-13S33KM-3CG	KB/MS Cable
WPM-101	Wide-Range 9V to 36V DC-in Power Module
EMBC-2000 Heat Spreader	EMBC-2000 Heat Spreader