



## APPLICATIONS

- Industrial IoT Edge Devices
- Cyberthreat Security Devices
- ICS/SCADA Devices
- Rugged Industrial Systems
- Traffic Engineering
- Security Video Surveillance
- Small Scale Robotics
- Remote Datalogging
- Man-Wearable Computing

## FEATURES

- Low power Intel® E3900-Series Atom® **Formerly Codenamed Apollo Lake**
- 15 Year Availability
- Rugged, Soldered 8GB DDR4 Memory
- Option: -40C to 85C Screening
- Industrial-grade 1500Vrms Galvanic Power Isolation
- DirectX 12 and OpenGL 4.3
- Compact 102mm x 147mm footprint
- Windows and Linux Compatible

## TECHNICAL SPECIFICATIONS

FEATURES	FUNCTIONS
Intel E3900-Series Processors	Intel® E3950 - QC, 1.6-2.0 GHz, 2MB, 12W TDP Intel® E3930 - DC, 1.3-1.8 GHz, 2MB, 6.5W TDP
Input Power	20 - 30VDC Galvanic Isolation = 1500Vrms
Memory	8GB LPDDR4 (soldered onboard)
Display	1x DVI-D 1x I-PEX Connector for HDMI or DP
Storage	2x SATA III connectors
I/O (Front Connectors)	2x LAN (Intel i210 controller) 2x USB 3.0, 2x USB2.0
Onboard I/O Connectors	1x LAN (Intel i210 controller); 1x RS232; 8bit GPIO; 3x USB 2.0; I-PEX USB3.0; System (Battery, SMBus, Keyboard, Activity LEDs)
Operating Temperature	Standard: -20C to 70C Extended: -40C to 85C
Expansion	2x40p connector with 1x PCIe X1 lane
Security	Firmware TPM 2.0

## DESCRIPTION

The ADLE3900HD 3.5" SBC is based on the Intel E3900-Series SoC Atom. These processors are rated for Tj = -40C to 110C making them ideal for a variety of industrial applications such as secure networking, IIoT gateway or other industrial use scenarios.

The ADLE3900HD makes use of Intel's long-term embedded roadmap and has a planned 15 year availability. This allows for long-life customer applications such as IIoT intelligent control for ICS/SCADA, intelligent machinery, traffic engineering and others.

### Custom System Design and Development Services

ADLES offers a strong selection of small form factor SBC's with processors ranging from low-power Intel Atom to high-performance Intel Core i7/i5 processors. ADL's Engineering team boasts decades of system design experience and can customize your board features for those applications that require it.

For further information, please contact our sales engineering team: [sales@adl-usa.com](mailto:sales@adl-usa.com)



\*Data subject to change without notice.

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## ORDERING INFORMATION

ITEM CODE	PART #	DESCRIPTION
ADLE3900HD-E3950	294820	Intel E3950 Atom, Quad Core, 1.6-2.0 GHz, 2MB, 12W TDP
ADLE3900HD-E3930	294822	Intel E3930 Atom, Dual Core, 1.3-1.8 GHz, 2MB, 6.5W TDP
BOARD OPTIONS	PART #	DESCRIPTION
ADLE3900HD-SPDR		Low-Profile Heat Spreader
Coating & Underfill & Bonding	807709	Conformal Coating of CPU board, Underfill of BGA components and Bonding of high mass components.
ADL-ET	290000	Extended Temperature Screening (-40C to 85C).
CABLES AND ACCESSORIES	PART #	DESCRIPTION
ADLEPC-PWR	ADLEPC1600-PWR	AC/DC 24VDC Wall Power Adapter
ADL35-HDMI	100-9924	I-PEX to HDMI Cable
ADL35-USB3	100-9926	I-PEX to USB3.0 Cable
ADL35-DVID	100-9922	I-PEX to DVI-D Cable"
M.2 PCIe Modules	CALL	Industrial M.2 modules for 802.11, CAN, Serial COM, and many other functions available.
M.2 2242 SATA Modules	CALL	Standard and Industrial M.2 SATA modules available.