

## ADLE3900HDC 3.5" SBC

Intel® 3900-Series Atom



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

#### TECHNICAL SPECIFICATIONS

| FEATURES                         | FUNCTIONS   |
|----------------------------------|---|
| Intel E3900-Series<br>Processors | Intel <sup>®</sup> E3950 - QC, 1.6-2.0 GHz, 2MB, 12W TDP<br>Intel <sup>®</sup> E3930 - DC, 1.3-1.8 GHz, 2MB, 6.5W TDP |
| Input Power                      | 20 - 30VDC<br>Galvanic Isolation = 1500Vrms   |
| Memory                           | 8GB LPDDR4 (soldered onboard)   |
| Display                          | 1x DVI-D, HDMI or DP via I-PEX Connector  |
| Storage                          | 1x M.2 SATA III with USB 2.0 (Key B, 2242);   |
| I/O (Front Connectors)           | 2x GBLAN (Intel i210 Controller)<br>2x USB 3.0, 2x USB2.0   |
| Security                         | Firmware TPM 2.0  |
| Operating Temperature            | Standard: -20C to 70C<br>Extended: -40C to 85C  |
| M.2 Expansion                    | 1x M.2 with USB2.0 (Key B, 2280)  |
| I-PEX Connector                  | I-PEX Connector outputs to DP, HDMI or USB3.0   |
| Other On-Board Features          | CR2032 Battery Holder; 1x Std SATA III Port   |
| Operating System                 | Windows 10 and Linux Compatible   |

#### **DESCRIPTION -**

The ADLE3900HDC 3.5" SBC is a reduced I/O, lower cost version of the ADLE3900HD and 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 secure networking, IIoT gateway or other industrial use scenarios.

The ADLE3900HDC 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.



ADL Corporate: 4411 Morena Blvd. Suite 101 | San Diego, CA 92117-4345

**T:** 855.727.4200 (toll free) F: 858.490.0599 sales@adl-usa.com www.adl-usa.com

<sup>\*</sup>Data subject to change without notice.



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### **ORDERING INFORMATION**

| ITEM CODE                     | PART #         | DESCRIPTION  |
|-------------------------------|----------------|--|
| ADLE3900HDC-E3950             | 294824         | Intel E3950 Atom, Quad Core, 1.6-2.0 GHz, 2MB, 12W TDP   |
| ADLE3900HDC-E3930             | 294826         | Intel E3930 Atom, Dual Core, 1.3-1.8 GHz, 2MB, 6.5W TDP  |
| BOARD OPTIONS                 | PART #         | DESCRIPTION  |
| ADLE3900HDC-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 0004       |  |
| ADE33-HDIVII                  | 100-9924       | I-PEX to HDMI Cable  |
| ADL35-USB3                    | 100-9924       | I-PEX to USB3.0 Cable  |
|                               |                |  |
| ADL35-USB3                    | 100-9926       | I-PEX to USB3.0 Cable  |

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 sales@adl-usa.com
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