



75mm x 75mm shown w/ Vertical expansion

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

- Compact 75mm x 75mm Footprint
- Low power Intel E3900-Series Atom® processors
- **15 Year Availability**
- Rugged, Soldered 4GB DDR4 Memory
- Option: -40C to 85C Screening
- Industrial-grade Power Galvanic Isolation
- COTS and Custom Expansion Options via Backside Expansion Connector
- System Design and Development Services

TECHNICAL SPECIFICATIONS

FEATURES	FUNCTIONS
Input Voltage	20 - 30VDC Galvanic Isolation = 1500Vrms
Atom Processors Available	Formerly Codenamed Apollo Lake E3950 - QC, 1.6-2.0 GHz, 2MB, 12W TDP E3930 - DC, 1.3-1.8 GHz, 2MB, 6.5W TDP
Memory	4GB DDR4 (soldered onboard)
Graphics	1x DisplayPort 4K @ 60Hz
Storage	1x M.2 SATA 3.0 Socket (Key B, 2242);
I/O (Front Connectors)	2x GBLAN (Intel i210 Controller), 1x USB 3.0, 1x USB2.0, 1x Display Port
Security	Firmware TPM 2.0
Operating Temperature	Standard: -20C to 70C Extended: -40C to 85C
Expansion Options	<ul style="list-style-type: none"> • 1x mPCIe Socket Add-On Module • Edge Connector Interfaces available = 2xPCIe, 2x USB2.0, 2x USB3.0, 1x SATA, SM-Bus, 1x Display Port
Operating System	Windows 10 and Linux

DESCRIPTION

Measuring just 75mm x 75mm, the ADLE3900SEC is an embedded SBC specially optimized for Size, Weight, and Power (SWAP) applications. Based on the E3900 series Intel Atom™ SoC, this tiny board delivers maximum performance in the smallest possible size. It features low-power quad and dual core Atom processors with integrated Intel HD Graphics engine capable of DisplayPort video output = 4K resolution at 60 Hz.

The ADLE3900SEC is rated for -40C to 85C operation with rugged options available including chamber testing, underfill, bonding, and conformal coating.

ADL Custom System Design and Development Services

The ADLE3900SEC includes a feature-rich edge-connect architecture that allows for both vertical and horizontal expansion to meet customer application-specific I/O requirements. ADLES offers a host of COTS expansion module options as well as custom board design services for applications that require it.

For further information, please contact our sales engineering team: sales@adl-usa.com.



*Data subject to change without notice.

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ORDERING INFORMATION

ITEM CODE	PART #	DESCRIPTION
ADLE3900SEC-E3950	295820	Intel E3950 Atom, Quad Core, 1.6-2.0 GHz, 2MB, 12W TDP
ADLE3900SEC-E3930	295822	Intel E3930 Atom, Dual Core, 1.3-1.8 GHz, 2MB, 6.5W TDP

OPTIONS	PART #	DESCRIPTION
ADLEPC-Power	ADLEPC-1600-PWR	AC/DC 24VDC Power Adapter
M.2 2242 SATA Modules	CALL	Standard and Industrial MLC/SLC SATA modules available.
ADLSEC-mPCIe	CALL	Call to discuss mPCIe adapter and functional requirements.
ADLSEC-BATT	101-9656	LiSOCl ₂ RTC Battery Option; Rated -40C to 85C
ADLE3900SEC-SPDR		Low-Profile Heat Spreader
Coating & Underfill	807709	Conformal Coating of CPU board & Underfill of BGA components
ADL-ET	290000	Extended Temperature Screening (-40C to +85C)