

ADLE3800PC

Intel® E3800 Series SoC Processors

Formerly Codenamed Bay Trail

Features

- Intel® E3800 Series SoC Processors; DC/Quad
- Up to 8 GB DDR3L-1333; 1.35V SoDIMM204 Socket
- CPU TDP 8W to 10W
- Type 2 Downward-Stacking PCle/104 V2.01 with 2x Gen2 PCle x1 Lanes; LPC, SMBus, 2x USB 2.0
- 2x SATA 3 Gb/s; Shared with mSATA Socket
- 2x 10/100/1000 Mbit Ethernet LAN Port; Intel i210
- 2x RS232 COM Ports
- 8x USB 2.0 Total: 4x USB 2.0 Pin Connector, 2x PCle Connector, 1x Mini PCle Socket, 1x USB 3.0 (Backward Compatible to USB 2.0)
- 1x USB 3.0
- Onboard VGA/DVI, DisplayPort/HDMI
- Discrete 16bit GPIO Port; PCA9535BS, No Interrupt
- 7.1 HD Audio with SPDIF In/Out
- PCI Express Mini Card 1.2 Socket; Compatible with Mini PCle or mSATA Modules
- Windows 7, Windows 8, Windows 10, Linux Compatible
- 90 mm x 96 mm, PCle/104 Form Factor
- Input Power = 5VDC, 5VS (12VDC for PCIe/104 Connector)

Ordering Information

Item Code	Part #	Description
PCIe/104 Board		
ADLE3800PC-E3845	292800	Intel E3845; QC, 1.91 GHz, 2MB, 10W TDP
ADLE3800PC-E3827	292802	Intel E3827; DC, 1.75 GHz, 1MB, 8W TDP
Memory		
4GB DDR3L-1600	997600	DDR3L-1600MHz 4GB Standard Temperature
8GB DDR3L-1600	997601	DDR3L-1600MHz 8GB Standard Temperature
4GB DDR3L-1600-EX	997602	DDR3L-1600MHz 4GB Extended Temperature
8GB DDR3L-1600-EX	997604	DDR3L-1600MHz 8GB Extended Temperature
Ruggedization Options		
ADL-ET	290000	Extended Temperature Screening (-40C to +85C)
UNDERFILL	807707	BGA underfill req'd for -40C operation.
COATING	807706	Conformal Coating
UNDERFILL/BONDING/COATING	807709	Underfilling, Bonding, and Conformal Coating
Thermal Solutions		
ADLE3800PC-SP0600	292806	0.600" Heat Spreader
ADLE3800PC-SP1000	292808	1.000" Heat Spreader
ADLE3800PC-LP	292810	Low Profile Passive Heatsink
ADLE3800PC-FANSINK	292812	2" x 2" Fansink





Description

The ADLE3800PC is based on Intel's first System-on-Chip (SoC) E3800 Atom product family which is built using Intel's 22nm 3D Tri-gate process. It offers vastly superior compute performance and energy efficiency including Intel's 7th generation graphics engine for stunning graphics performance. Improved power management capabilities result in standby power measured in milliwatts with days of standby time.

The ADLE3800PC is ideal for rugged, extended temperature intelligent systems with stringent size, weight, and power (SWAP) requirements. It has a wide thermal junction temperature (Tj) ranging from -40C to +85C. Its graphics engine is capable of decoding 10 or more streams of 1080p video, has integrated hardware acceleration for video decode of H.264, MVC, VPG8, VC1/WMV9 and others standards. It also supports DirectX 11, Open GL 4.0, full HD video playback, dual display support and a maximum resolution of 2560 x 1600 @ 60Hz.

It's particularly suited for extreme environments such as industrial control and automation, in-vehicle communication and infotainment systems for commercial transportation fleets. It's superior graphics and low power also make it ideal for rugged mobile computing, portable medical devices, and mobile autonomous systems for civil, commercial and defense applications.

NEW! ADLSST System Sensor Technology Utility

The ADLSST System Sensor Technology v2.0 utility brings to the Linux environment the same type of CPU health monitor functions that have previously been readily available only in the Windows environment. Click here to download the drivers.

Data subject to change without notice.