ADLN2000PC- Intel Atom N2600, 1.60 GHz, 3.5 Watts

Features

- Intel® Atom™ Dual Core N2600 CPU, 1.60GHz
- Intel® ICH9M-E Chipset (SFF)
- Up to 2GB RAM (DDR3-1066, SO-DIMM204, 1.5V)
- Integrated Graphics with H.264 Codec
- VGA, DVI, HDMI, DisplayPort, LVDS 18/24 with Dual Display
- HDA 7.1 Sound, SPDIF In/Out
- 2x LAN 10/100/1000
- Up to 4x SATA 3G (2x onboard, 2x through PCIe/104)
- 8x USB2.0 (additional 2x via PCIe/104, 1x via PCIe Mini)
- 2x RS232 COM Ports
- Bottom-Stacking PCIe/104 type 2 Connector (PCIe v1.1)
- PCIe Mini Card Socket option (uses one PCIe x1 lane)
- AHCI RAID Support
- PCIe/104 Form Factor



Ordering Information

Item Code	Part #	Description
ADLN2000PC	292700	PCIe/104, Atom N2600 1.60GHz 2C4T 1MB L3
Memory		
DDR3-DRAM2048-S	997506	DDR3-1333 2GB Standard Temperature
DDR3-DRAM-2048-EX	997516	DDR3-1333 2GB Extended Temperature
Options and Accessories		
ADLD25PC-mPCIe	292530	PCIe Mini option (uses 1 PCIe x1 lane)
ADL-ET	290000	Extended Temp Screen (-40° to +85° C)
ADLD25PC-CK	292520	Standard Cable kit for ADLD25PC
STANDOFF-MSS	293406	.6" (15.24mm), PC/104 M3, Precision Milled Stand-Offs
STANDOFF-1"M3	293436	1" (25.4mm), PC/104 M3, Precision Milled Stand-Offs
Thermal Solutions		
ADLN2000PC-SP0600	292710	0.600" Heat Spreader for ADLN2000PC
ADLN2000PC-SP1000	292711	1.000" Heat Spreader for ADLN2000PC
For the above two Thermal Solutions, ADL Embedded Solutions recommends Stand-Off part #'s 293406 or 293436 (qty. 4 each)		
ADLN2000PC-FANSINK	292511	Heatsink / Fan combo for ADLN2000PC

Description

The ADLN2000PC features the Intel Atom N2600 dual core processor which interfaces to the ICH9M-E (SFF) chipset, and provides improved PCIe/104 type 2 peripheral connectivity for rugged performance in portable and thermally constrained applications. The N2600 processor features an Intel rated Thermal Design Power (TDP) maximum of only 3.5 Watts

The ADLN2000PC features an integrated, High-Definition graphics engine with full MPEG2 (VLD/iDCT/MC) and HW decode/acceleration for MPEG4 (AVC/H.264). It is dual-independent display capable with VGA, LVDS, DisplayPort and HDMI/DVI ports available. The ADLN2000PC is ideal for portable or embedded applications such as transceivers for tactical communication, GIS mapping, night vision applications, medical, security and surveillance, railway and other applications that rely on mobile power sources.

In addition to the wide range of rugged, extended temperature or harsh environment applications in which the ADLN2000PC can excel, it also supports a healthy set of features. These include 2xLAN ports (10/100/1000), 2x RS232 COM ports. 2x SATA with RAID support, and 8x USB2.0. Additionally, two SATA 3G and two USB 2.0 ports are available on the down-stacking Type 2 PCIe/104 connector which also includes 4 x1 PCI-Express lanes. The ADLN2000PC can be expanded by optionally adding the PCIe Mini Socket which supports one additional USB 2.0 port to support WiFi, CAN, DDC-1553 and a variety of other miniPCIe functions.

ADL Embedded Solutions offers highly effective active and passive thermal solutions designed for this product. Contact your sales representative for more information.

Data subject to change without notice.

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Technical Specifications

FEATURE	FUNCTION	REMARKS	OPTIONS
CPU			
CPU Class	Intel Atom N2600		
CPU Option / Performance (G/MHz) / L3 Cache	N2600 / 1.60GHz / 1MB		
Max. No. of Cores	2	CPU is 2 cores, 4 threads	
Soldered (or Socket Name)	Soldered		
Chipset			
North Bridge (GMCH)	N2600	GMCH functions incorporated into N2600	
South Bridge (ICH)	Intel ICH9M-E		
Super IO1	SMSC SCH3114	Hardware monitoring	
Memory			
Type	SODIMM204-1,5V / DDR3	DDR3 1066MHz	
Size max (MB)	2048MB		1024MB / 2048MB
Graphic			
Controller	CPU integrated	Intel GMA 3650, 400MHz	
CRT	Yes	1920x1200 max.	
DVI / HDMI / DisplayPort	Yes	DisplayPort 1600 x 1200; HDMI/DVI-D 1920 x 1200	HDMI or DVI-D is cabling option
LCD LVDS 18/24/36/48	18 Bit supported	1366 x 768 max res - LVDS	
BIOS			
Power Management APM/ACPI	APM/ACPI	Power States : S0/S1/S4/S5	
Hardware Monitoring	ADL-SST API		
Audio			
Controller and Codec	ICH9M-E / Realtek ALC889 (HDA)	2/6/8 channel support	
LAN			
LAN1 Controller	Intel ICH9M-E / 567 Phy	10/100/1000 Mbit, RPL/PXE/WOL support	
LAN2 Controller	Intel 82574L	10/100/1000 Mbit, RPL/PXE/WOL support	
Buses			
PCIe x1 / x4 / x16	PCIe/104 Type 2 interface (PCIe v1.1, 2.5GT/s)	Type 2 connector includes X2 USB, X2 SATA, x1 LPC	
Specials/Options	PCIe Mini V1.2	Optional - Requires one x1 PCIe lane	292530
SATA Interfaces			
SATA Channels	2 (SATA 3G)	2 additional ports on the PCIe/104 connector	RAID 0/1 (5 and 10 also available when all 4 ports used)
USB Interfaces			
USB-Channels	8 - Supports USB 1.1/2.0/Host	2 additional ports on PCIe/104, 1 additional on PCIE mini socket	Boot options: HD/FDD/CDROM/FD/ZIP
Interfaces			
COM1&2: TTL/RS232/RS485/RS422	RS232		
PS/2 Keyboard/Mouse	Yes		
Watchdog	Yes		
Specials/Options	16-Bit GPIO	Discrete port	
Power Supply			
Supply Voltage	5V, 12V, 5V-SUS	Can be configured for 5V only with certain requirements - Contact your Sales Engineer	
Power Consumption (typical*)	Less than 10W	Contact your Sales Engineer for more information on "typical" configuration	
Cooling	passive / active		
Operating Temperature (ambient)	-25 to 70 °C	ADL Embedded Solutions thermal solution recommended	
Extended Temperature	-40 to 85° C	Requires ADL-ET and Approved Thermal solution	
Storage Temp.	-40 to 85 °C		
Dimensions	3.6" x 3.8" (90mm x 96mm)		

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