



## 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
- AHCI RAID Support
- PCIe/104 Form Factor



Preliminary

### Ordering Information

Item Code	Part #	Description
ADLN2000PC	292700	PCIe/104, Atom N2600 1.60GHz 2C4T 1MB L3
<b>Memory</b>		
DDR3-DRAM1024-S	997025	DDR3-1066 1GB Standard Temperature
DDR3-DRAM2048-S	997125	DDR3-1066 2GB Standard Temperature
DDR3-DRAM-1024-EX	997027	DDR3-1066 1GB Extended Temperature
DDR3-DRAM-2048-EX	997127	DDR3-1066 2GB Extended Temperature
<b>Options and Accessories</b>		
ADLD25PC-mPCIe	292530	PCIe Mini option
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
<b>Thermal Solutions</b>		
ADLN2000PC-SP0600	292513	0.600" Heat Spreader for ADLN2000PC
ADLN2000PC-SP1000	292514	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 performance-based, rugged, 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 dual independent displays with VGA, LVDS, DisplayPort and HDMI/DVI ports available, as well as an integrated High-Definition H.264 coder/decoder which is ideal for a variety of rugged applications which require superior graphics with low power. These include portable applications such as transceivers for tactical communication, GIS mapping, night vision applications, medical, security and surveillance, railway and other applications that rely on mobile-type 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 (i.e. Wi-Fi / Bootable Flash Drive) which supports one additional USB 2.0 port to support WiFi, bootable flash drives, 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.



## Technical Specifications

FEATURE	FUNCTION	REMARKS	OPTIONS
<b>CPU</b>			
CPU Class	Intel Atom N2600		
CPU Option / Performance (GHz) / L3 Cache	N2600 / 1.60GHz / 1MB		
Max. No. of Cores	2	CPU is 2 cores, 4 threads	
Soldered (or Socket Name)	Soldered		
<b>Chipset</b>			
North Bridge (GMCH)	N2600	GMCH functions incorporated into N2600	
South Bridge (ICH)	Intel ICH9M-E		
Super IO1	SMSC SCH3114	Hardware monitoring	
<b>Memory</b>			
Type	SODIMM204-1.5V / DDR3	DDR3 1066MHz	
Size max (MB)	2048MB		1024MB / 2048MB
<b>Graphic</b>			
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	
<b>BIOS</b>			
Power Management APM/ACPI	APM/ACPI	Power States: S0/S1/S4/S5	
Hardware Monitoring	ADL-SST API		
<b>Audio</b>			
Controller and Codec	ICH9M-E, Realtek ALC889 (HDA)	2/6/8 channel support	
<b>LAN</b>			
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	
<b>Buses</b>			
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
<b>SATA Interfaces</b>			
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)
<b>USB Interfaces</b>			
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
<b>Interfaces</b>			
COM1&2: TTL/RS232/RS485/RS422	RS232		
PS/2 Keyboard/Mouse	Yes		
Watchdog	Yes		
Specials/Options	16-Bit GPIO	Discrete port	
<b>Power Supply</b>			
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	
<b>Cooling</b>			
	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		
<b>Dimensions</b>			
	3.6" x 3.8" (90mm x 96mm)		

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