

# MIOS-5250

## Intel® Atom™ N2600/D2550 Fanless Embedded Box PC with Multiple I/O Extension Module

**NEW**



### Features

- Intel® Atom™ N2600 1.6 GHz/D2550 1.86 GHz Fanless Embedded Box PC, DDR3 memory supports up to 4 GB
- Rich I/O expansion possibilities through modularized design
- Various extension modules for selection: multiple serial-port / GbE, CAN Bus, PoE
- Optimized thermal design to maximize heat dissipation
- Fast customization for module, I/O bracket, color and logo
- 12~24V / 12V only DC power input for choice
- Wire clip design to prevent adapter cable losing
- Supports iManager, SUSIAccess and embedded software APIs



SUSIAccess iManager

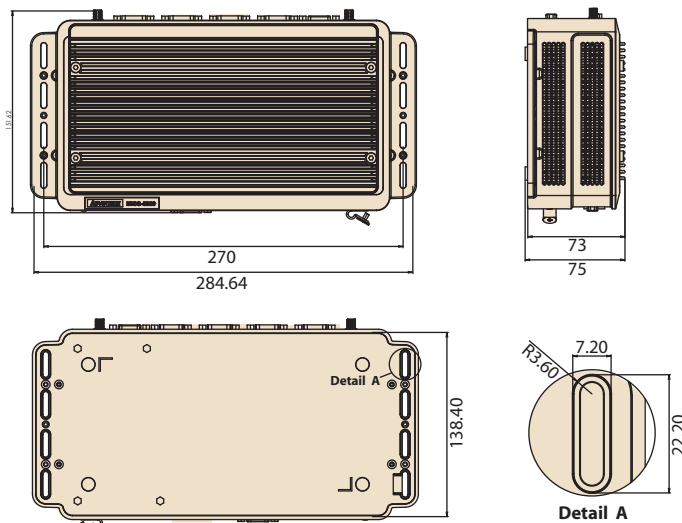


### Specifications

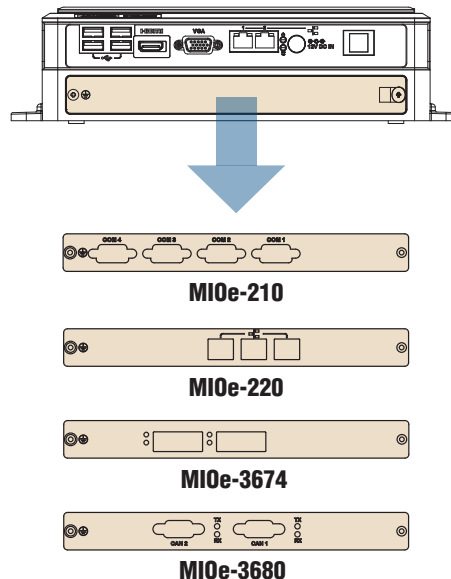
Processor System	CPU	Intel Atom Dual Core N2600 1.6 GHz/D2550 1.86 GHz
	Max. Speed	Dual Core 1.6 GHz/1.86 GHz
	L2 Cache	1 MB
	System Chipset	Intel Atom N2600/D2550 + Intel NM10
	BIOS	AMI EFI 16Mbit
Memory	Technology	DDR3 1066 MHz (D2550), DDR3 800 MHz (N2600)
	Max. Capacity	4 GB
	Socket	1 x 204-pin SO-DIMM
Graphics	Chipset	Intel Atom N2600/D2550
	Graphic Engine	DirectX 9 and OpenGL3.0 support Hardware decode H/W acceleration: MPEG2 H/W Decode/Acceleration: H.264/VC1/WMV9
	VGA	Up to 1920 x 1200
	HDMI	Supports 1920 x 1200, Max data rate: up to 1.65 Gb/s, supports HDMI v1.3 Up to 1080p support
	Dual Display	Yes, VGA + HDMI
Ethernet	GbE1	10/100/1000 Mbps Intel 82583V Ethernet controller, support Wake On Lan
	GbE2	10/100/1000 Mbps Intel 82583V Ethernet controller, support Wake On Lan
Audio	Interface	Realtek ALC892, High Definition Audio. Line-out, Mic-in, Line-in
IO Interface	Serial Ports	4 x RS-232 Ports with ESD protection : Air gap ±15kV, Contact ±8kV
	USB Interface	6 x USB ports, USB 2.0 compliant
Other	Digital IO	8-bits
	Watchdog timer	255 levels timer interval, setup by software
Internal Expansion	Mini PCIe	1 x full size Mini PCIe with SIM holder
Storage	HDD	Supports one drive bay for SATA 2.5" HDD (Compatible with 9mm height HDD)
	mSATA	1 (Support either mSATA or full size miniPCIe, selected by BIOS, default support miniPCIe)
Supported Extension Modules	MIOe-210	4 x RS232/422/485, 2 x RS422/485
	MIOe-220	3 x Intel Gigabit Ethernet
	MIOe-3674	4 x Gigabit Ethernet with PoE ports
	MIOe-3680	2 x CAN Bus
Power Requirements	Power Type	AT/ATX
	Power Input Voltage	24 V <sub>dc</sub> (Phoenix plug in rear side) / 12 V <sub>dc</sub> (DC Jack in front side)
	Minimum Power Input	12 V ~ 24 V, 3.0 A ~ 1.5 A
Power Consumption	Typical	15 Watt (with Intel Atom D2550 at 1.8 GHz)
	Max.	18 Watt (with Intel Atom D2550 at 1.8 GHz)
Mechanical	Construction	Plastic Part: PC+ABS (LG5001RFP) Chassis: SECC Bottom Cover: Aluminum Heatsink: Aluminum 6063-T5 Metal Parts: SECC
	Mounting	Din-Rail mounting, Desk/wall-mounting, VESA mounting
	Dimensions (W x H x D)	284.6 x 151.6 x 74.5 mm (11.2" x 5.96" x 2.9")
	Weight	2.3 kg (5.07 lb), with HDD, MIOe-210 and Wifi module inside)
	Operating Temperature	0 ~ 45° C (32 ~ 113° F) with 0.7m/s air flow
Environment	Storage Temperature	- 40 ~ 85° C (- 40 ~ 185° F)
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration During Operation	With SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis.
	Shock During Operation	With SSD: 10 G, IEC 60068-2-27, half sine, 11 ms duration
	EMC	CE/FCC Class A, CCC
	Safety Certifications	UL, CCC, CB

## Dimensions

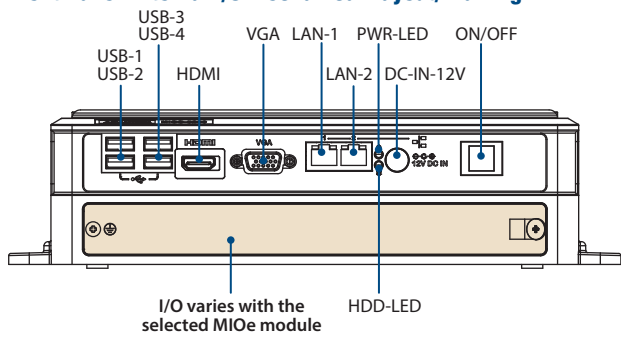
Unit: mm



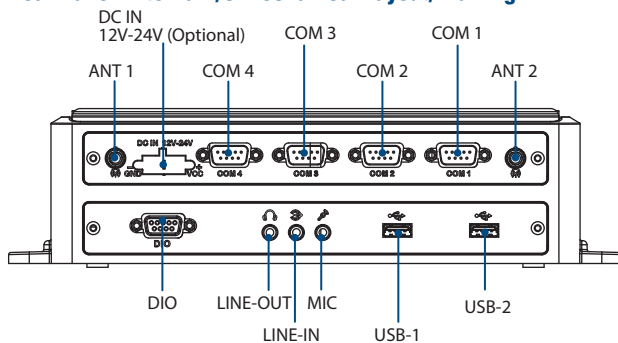
## Supported Extension Modules



### Front Panel External I/O Mechanical Layout/Drawing



### Rear Panel External I/O Mechanical Layout/Drawing



## Ordering Information

Part Number	CPU	Memory	VGA&HDMI	GbE	Audio	RS-232	RS-232/422/485	USB 2.0	SATA II	MiniPCIe	Power Connector	Power Supply voltage	Operational Temp.
MIOS-5250NS6-D0A1E	Intel Atom N2600 1.6G	SO-DIMM	Yes	2	Yes	2	2	6	1	1	DC Jack	12V	0 ~ 45° C
MIOS-5250DS8-C0A1E	Intel Atom D2550 1.86G	SO-DIMM	Yes	2	Yes	2	2	6	1	1	Phoenix Type	12V	0 ~ 45° C
MIOS-5250DS8-P0A1E	Intel Atom D2550 1.86G	SO-DIMM	Yes	2	Yes	2	2	6	1	1	Phoenix Type	12V ~ 24V	0 ~ 45° C

Note: RS-232/422/485 port is default RS-232

## Packing List

Part Number	Description
-	1 x MIOS-5250 Unit
-	1 x Start-up Manual
-	1 x China RoHS
-	Wrench, screws, thermal pads and stud pack

## Embedded OS/API

Embedded OS/API	Part No.	Description
Windows Embedded Standard 7	2070011953	WES7E MIO-5250 V5.1.4 ENG/GER/JPN/TC
Windows Embedded Standard 7	2070011955	WES7P MIO-5250 V5.1.3 EN/TC/SC/RU/FR/DE/ES/IT/JP/KR
Windows Embedded Standard		WES2009 (graphic driver support by case)
Windows Embedded Compact 7	2070012241	WEC7 MIO-5250 V1.0 ENG
VxWorks		6.9.2
Linux		Ubuntu 12.04 (graphic driver support by case)
Software API		iManager 2.0

## Optional Items

Part Number	Description
1757003659	AC-to-DC Adapter, DC19 V/3.42 A 65 W, with Phoenix Power Plug, 0 ~ 40° C for Home and Office Use
1757003995	AC-to-DC Adapter, DC 12V/5A 60W, 0 ~ 40° C for Home and Office Use
1757003996	AC-to-DC Adapter, DC 12V/5A 60W, Phoenix Power Plug, 0 ~ 40° C for Home and Office Use
1702002600-01	Power cable 3-pin 183 cm, USA type
1700018704	Power cable 3-pin 180 cm, UK type
1700018705	Power cable 3-pin 183 cm, Europe type
1700000237-01	Power cable 3-pin 183 cm, PSE type
1700001947	Power cable 2-pin 180 cm, USA type (For adapter 1757003659)
1700001948	Power cable 2-pin 180 cm, Europe type (For adapter 1757003659)
1700001949	Power cable 2-pin 180 cm, UK type (For adapter 1757003659)
1700002141	Power cable 2-pin 180 cm, PSE type (For adapter 1757003659)
-	DIN-rail mounting kit
MIOe-210-D6A1E	MIO/ Extension module, 4 x RS232/422/485, 2 x RS422/485
MIOe-220-B3A1E	MIO/ Extension module, 3 x Intel® Gigabit Ethernet with PCIe Switch
MIOe-3680-AE	MIO/ Extension module, 2-Port CAN-Bus MIOe Module with Isolation Protection
MIOe-3674-AE	MIO/ Extension module, 4-port PoE ports MIOe Module
MIOe-PWR1-00A1E	MIO/ Extension module, 12-24V DC to DC power module