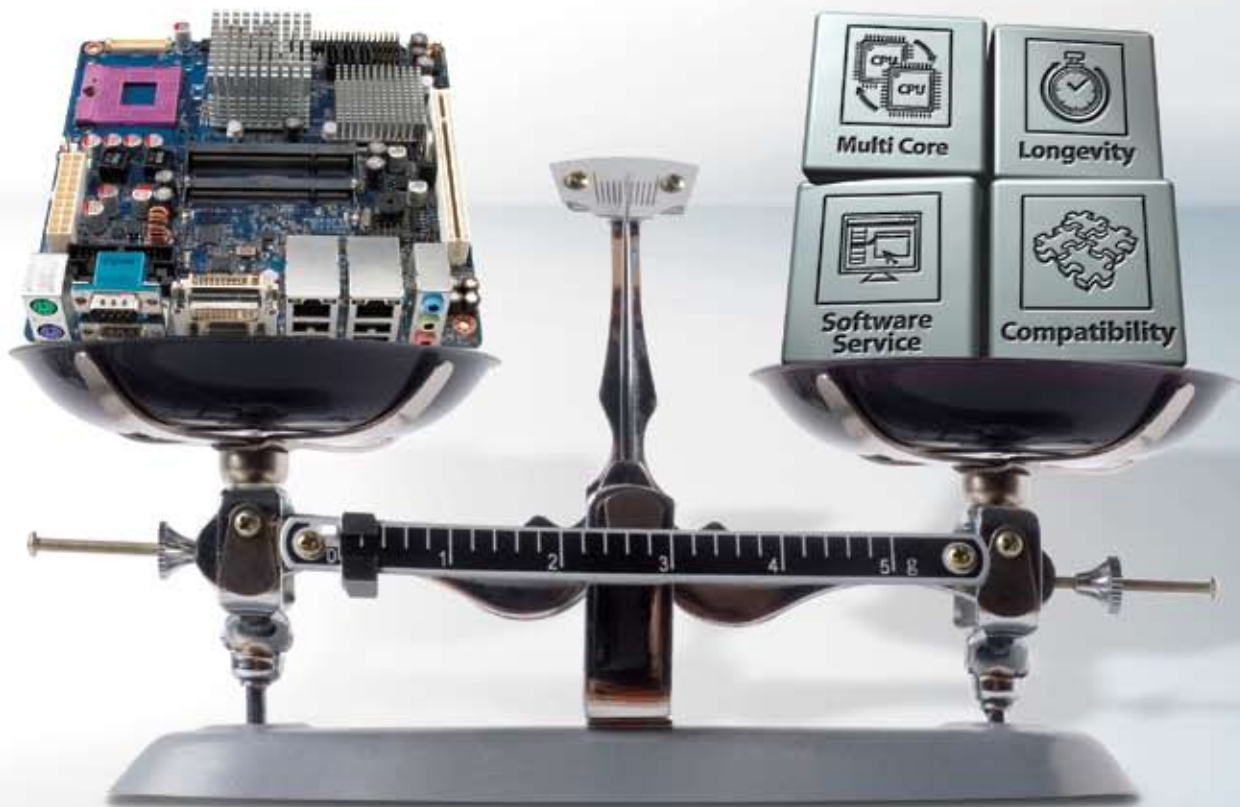


Industrial Motherboards for Critical Missions

Performance, Reliability, Longevity,
Embedded Software Services



- ✓ Mini-ITX Motherboards
- ✓ MicroATX Motherboards
- ✓ Full-sized ATX Motherboards



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One-stop Shopping for Complete Systems

Chassis Selections

- Complete product coverage from slim 1U to 7U rackmount and wallmount chassis
- Designed for mission-critical, non-stop applications



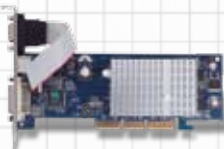
Riser Card Selections

- 1U to 2U riser card for low profile chassis
- Supports different expansion slots for PCI and PCI Express cards



Graphic Card Selections

- **Longevity:** 3+ years life cycle support
- **Dual Display:** Flexible display modes meet various application requirements
- **Fanless Design:** Higher reliability, low noise



Display Solutions

- Full integration flexibility
- Proven compatibility with Advantech CPU cards
- Project lifetime care support



Regional Service & Customization Centers

China Kunshan
86-512-5777-5666

China Dongguan
86-769-8730-8088

Taiwan Taipei
886-2-2792-7818

Netherlands Eindhoven
31-040-267-7000

USA Milpitas, CA
1-408-519-3800

Worldwide Offices

Greater China

China	
ePlatform	800-820-2280
eAutomation	800-810-0345
Beijing	86-10-6298-4346
Shanghai	86-21-3360-8989
Shenzhen	86-755-8212-4222
Chengdu	86-28-8545-0198
Hong Kong	852-2720-5118
Taiwan	
ePlatform	0800-777-111
eAutomation	0800-55-77-99
Taipei (ePlatform)	886-2-2792-7818
Taipei (eAutomation)	886-2-2218-4567
Taichung	886-4-2378-6250
Kaohsiung	886-7-229-3600

Asia Pacific

Japan	
ePlatform	0800-500-1055
eAutomation	0800-500-1077
Tokyo	81-3-5212-5789
Osaka	81-6-6267-1887
Korea	
Seoul	080-363-9494
	82-2-3663-9494
Singapore	
	001-800-9898-8998
	65-6442-1000
Malaysia	
Kuala Lumpur	00-800-9898-8998
Penang	60-3-8075-7035
	60-4-397-3788
	60-4-397-4188
India	
Bangalore (ePlatform)	1800-425-5070
Chennai (eAutomation)	91-80-2337-4567
	91-44-4230-3878
Australia	
Melbourne	1300-308-531
Sydney	61-3-9797-0100
	61-2-9482-2999
Thailand	
Bangkok	66-2-248-3140

Europe

Europe	
Customer Care Center	
ePlatform	00800-2426-8080
eAutomation	00800-2426-8081
Germany	
Munich (European Head office)	49-89-12599-0
Düsseldorf (eAutomation)	49-211-97477-0
Amberg (Design Center)	49-9621-9732-100
France	
Paris (ePlatform)	33-1-41-19-46-66
Grenoble (eAutomation)	33-4-76-70-47-00
Italy	
Arezzo (ePlatform)	39-0575-98661
Milano (eAutomation)	39-02-9544-961
Netherlands	
Breda (ePlatform)	31-76-523-1270
Roosendaal (eAutomation)	31-165-550-505
United Kingdom	
Berkshire	44-1344-989500
Czech	
Brno (Design Center)	420-543-213-396
Poland	
Warsaw (Service Center)	48-22-33-23-730
Russia	
Moscow	8-800-555-01-50
	7-495-232-1692

Americas

North America	
ePlatform	1-888-576-9668
eAutomation	1-800-205-7940
Cincinnati, OH (Industrial Automation)	1-800-800-6889
	1-513-742-8895
Irvine, CA (Embedded & Industrial Computing)	1-800-866-6008
	1-800-557-6813
Milpitas, CA (eServices & Applied Computing)	1-949-789-7178
	1-408-519-1788
Brazil	
São Paulo	0800-770-5355
	55-11-5592-5355

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Please verify specifications before quoting. This guide is intended for reference purposes only.

All product specifications are subject to change without notice.

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Industrial Motherboards

Advantech provides complete industrial motherboards that adhere to a variety of form factors from full-sized ATX to MicroATX and Mini-ITX. These motherboards are highly integrated and deliver advanced features like multi-core processing and PCI Express technology. They are suited for demanding industrial applications that require seamless upgrades, long-term support, proven reliability and strict revision control.

Advantech Motherboard Features



Full product range in standard form factors



Strict revision control



Long-term support of 3+ years



One stop shopping for chassis and peripherals



Proven reliability

Embedded BIOS Services

- **BIOS Features Set**

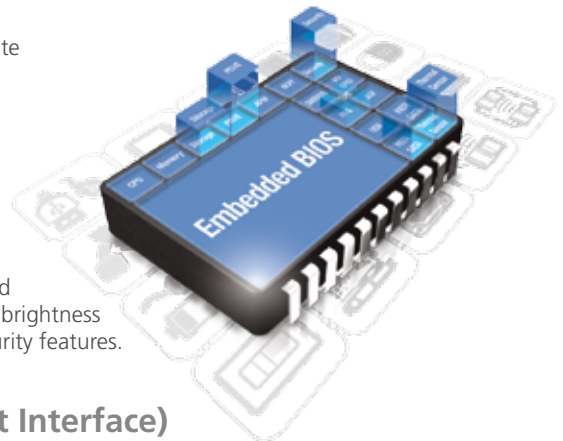
Advantech provides precise BIOS customizations, helping customers create unique BIOS solutions and differential products. Multiple options and extensions let you customize your products to a wide range of designs and target markets.

- **BIOS Core Modularization**

A highly modular core architecture allows customers to configure BIOS features for specific vertical demands. This can significantly reduce BIOS development time to reach the market quicker.

- **BIOS Customization Services**

Advantech BIOS customization service helps customers create unique and differential embedded products, for example: fast boot, OEM logo, LCD brightness control, optional ROM, multiple Super IO, embedded controller and security features.



API Library: SUSI (Secure and Unified Smart Interface)

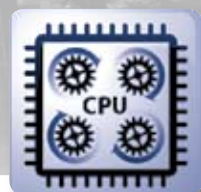
Advantech SUSI is a set of user friendly, intelligent and integrated application programming interfaces. It makes Advantech's embedded platforms easier and simpler to adopt and operate in accordance with customers' application requirements.

SUSI contains five categories of features: Power Saving, Hot-Key, Brightness Control, Monitoring and Security



High Performance AIMB with Scalability

Advantech high performance motherboards are built for demanding applications. These motherboards offer a wide range of computing capabilities and feature the latest multi-core processors. AIMB motherboards also offer RAID for storage & backup, dual lan, and massive expandability to satisfy your diverse needs for today and in the future.



Quad-core, high-speed



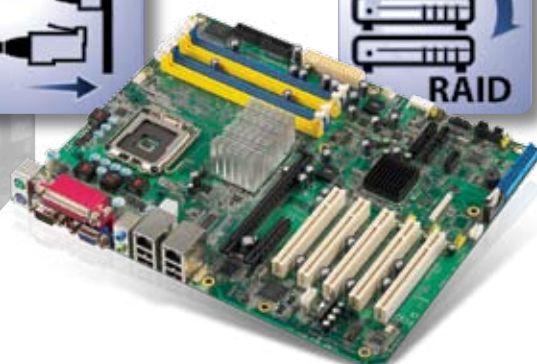
Dual LAN



Expandability



Terabyte storage & backup



Model Name	AIMB-764	AIMB-763	AIMB-564	AIM-562
Form Factor	ATX	ATX	Micro ATX	Micro ATX
CPU Type	Intel LGA775 Core 2 Quad/Core 2 Duo/ Pentium 4/Celeron	Intel LGA775 Core 2 Duo/Pentium 4/ Celeron	Intel LGA775 Core 2 Quad/Core 2 Duo/ Pentium 4/Celeron	Intel LGA775 Core 2 Duo/Pentium 4/ Celeron
System Chipset	Q965/ICH8 DO	945G/ICH7R	Q965/ICH8 DO	945G/ICH7
Front Side Bus	FSB 533/800/1066 MHz	FSB 533/800/1066 MHz	FSB 533/800/1066 MHz	FSB 533/800/1066 MHz
System Memory	DDR2 533/667/800 SDRAM Max. 8 GB	DDR2 533/667 SDRAM Max. 4 GB	DDR2 533/667/800 SDRAM Max. 8 GB	DDR2 533/667 SDRAM Max. 4 GB
Graphic Controller	Intel GMA 3000	Intel GMA 950	Intel GMA 3000	Intel GMA 950
Video Memory	Shared Memory Max. 256 MB	Shared Memory Max. 224 MB	Shared Memory Max. 256 MB	Shared Memory Max. 224 MB
Watchdog Timer	System Reset Programmable 1 ~ 255 sec/min	System Reset Programmable 1 ~ 255 sec/min	System Reset Programmable 1 ~ 255 sec/min	System Reset Programmable 1 ~ 255 sec/min
SSD	-	-	-	-
VGA/LCD/DVI/TV-out	VGA	VGA	VGA	VGA
Audio	Mic-In, In-Out	Mic-In, Line-In, Line-Out	Mic-In, Line-In, Line-Out CD-Audio In, 6 jacks	Mic-In, Line-In, Line-Out CD-Audio In, 6 Jacks
Ethernet	Dual LAN	Dual LAN	Single LAN	Single LAN
Drives	1 x IDE/ 5 x SATA	1 x IDE/ 4 x SATA	1 x IDE/ 7 x SATA/1 x eSATA	1 x IDE/ 4 x SATA
Parallel	Yes	Yes	Yes	Yes
Serial	1 x RS-232, 1 x RS-232/422/485	3 x RS-232, 1 x RS-232/422/485	1 x RS-232	2 x RS-232
USB	10 x USB 2.0	8 x USB 2.0	10 x USB 2.0	8 x USB 2.0
IrDA	-	-	-	-
Expansion Bus	1 x PCIe x16, 1 x PCIe x4, 5 x PCI	1 x PCIe x16, 1 x PCIe x1, 5 x PCI	1 x PCIe x16, 2 x PCI, 1 x PCIe x4	1 x PCIe x16, 2 x PCI, 1 x PCIe x1
Miscellaneous	-	-	Support TPM (Optional) Support IEEE 1394	Support TPM (Optional)



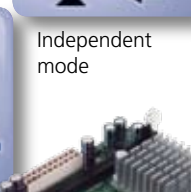
Multi-display Graphics AIMB with Pervasive I/O

High-quality graphics and smooth visual performance are the main features of these motherboards. Dual display output via VGA, TV-out, DVI or LVDS provide plenty of configuration possibilities. And, rich I/O connectivity facilitates better system integration with a variety of peripheral devices for the lowest total cost of ownership.

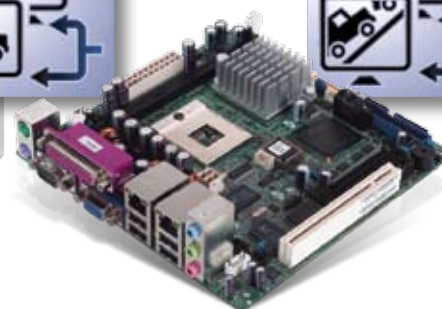
Mirror mode



Independent mode



Spanned mode



Model Name	AIMB-556	AIMB-552	AIMB-240	AIMB-221
Form Factor	Micro ATX	Micro ATX	Mini-ITX	Mini-ITX
CPU Type	Intel socket 478 Core 2 Duo/Celeron M	Intel socket 478 Pentium M/Celeron M or on board Celeron 600 MHz/1 GHz	Intel socket 478 Pentium 4/Celeron	AMD S1g1 Mobile Turion/Sempron
System Chipset	GME965/ICH8M	910GML or 915GME/ICH6M	852 GME/ICH4	M690E/SB600
Front Side Bus	FSB 533/800 MHz	FSB 400/533 MHz	FSB 400/533 MHz	Hyper Transport 800 MHz
System Memory	DDR2 533/667 SDRAM Max. 4 GB	DDR2 400/533 SDRAM Max. 2 GB	DDR 266/333 SDRAM Max. 1 GB	DDR2 533/800 SDRAM Max. 4 GB
Graphic Controller	Intel GMA X3100	Intel GMA 900	Intel 852GME GMCH integrated Extreme Graphics 2 controller	ATI Radeon X1250
Video Memory	Shared Memory Max. 384 MB	Shared Memory Max. 128 MB	Shared Memory Max. 64 MB	Shared Memory Max. 512 MB
Watchdog Timer	System Reset Programmable 1 ~ 255 sec/min	System Reset Programmable 1 ~ 255 sec/min	System Reset Programmable 1 ~ 255 sec/min	System Reset Programmable 1 ~ 255 sec/min
SSD	-	Compact Flash Type II	Compact Flash Type II	Compact Flash Type II
VGA/LCD/DVI/TV-out	VGA, LVDS, TV-Out	VGA, LVDS, DVI	VGA, LVDS, DVI, TV-Out	VGA, LVDS, HDMI
Audio	Mic-In, Line-Out	Mic-In, Line-Out	Mic-In, Line-In, Line-Out	Mic-In, Line-In, Line-Out
Ethernet	Dual LAN	Dual LAN	Dual LAN	Dual LAN
Drives	1 x IDE/ 3 x SATA	1 x IDE/ 2 x SATA	2 x IDE	1 x IDE/ 4 x SATA
Parallel	Yes	Yes	Yes	Yes
Serial	3 x RS-232, 1 x RS-232/422/485	8 x RS-232, 2 x RS-232/422/485	5 x RS-232, 1 x RS-232/422/485	5 x RS-232, 1 x RS-232/422/485
USB	8 x USB 2.0	8 x USB 2.0	6 x USB 2.0	8 x USB 2.0
IrDA	-	-	Yes	-
Expansion Bus	1 x PCIe x16, 1 x PCIe x4, 2 x PCI	3 PCI	1 x PCI, 1 x Mini PCI	1 x PCI, 1 x Mini PCI
Miscellaneous	Support 8-bit GPIO	-	Support 8-bit GPIO	Support TPM (Optional) Support 8-bit GPIO

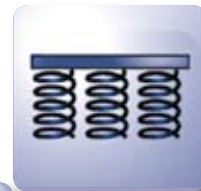
Fanless AIMB with Energy Efficiency

Advantech energy saving motherboards feature rich functionality and reliable performance. The fanless design with low power consumption enhances system reliability and reduces component failure and maintenance. They are ideal platforms for emerging applications in which compact size and power efficiency are required.

Anti-dust



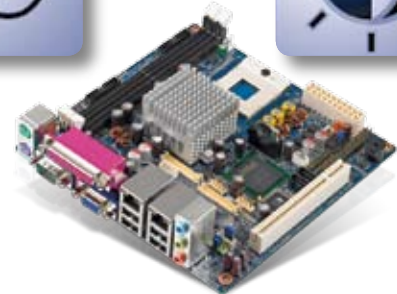
Anti-vibration



Reliability



Low noise



Dual
LVDS



Model Name	AIMB-256	AIMB-252	AIMB-251	AIMB-220
Form Factor	Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX
CPU Type	Intel socket 478 Core 2 Duo/ Celeron M or on board Core 2 Duo 1.06 GHz	Intel socket 478 Pentium M/ Celeron M or on board Celeron 600MHz/ 1GHz	Intel Celeron M 600MHz	AMD Geode LX800
System Chipset	GME965/ICH8M	910GML or 915GME/ICH6M	852GM/ICH4	Geode LX800 CS5536
Front Side Bus	FSB 533/800 MHz	FSB 400/533 MHz	FSB 400 MHz	FSB 133 MHz
System Memory	DDR2 533/667 SDRAM Max. 4 GB	DDR2 400/533 SDRAM Max. 2 GB	DDR 266/333 SDRAM Max. 1 GB	DDR 333 SDRAM Max. 1 GB
Graphic Controller	Intel GMA X3100	Intel GMA 900	Intel 852GM GMCH integrated Extreme Graphics 2 controller	AMD Geode LX800 integrated
Video Memory	Shared Memory Max. 384 MB	Shared Memory Max. 128 MB	Shared Memory Max. 64 MB	Shared Memory Max. 32 MB
Watchdog Timer	System Reset Programmable 1 ~ 255 sec/min	System Reset Programmable 1 ~ 255 sec/min	System Reset Programmable 1 ~ 255 sec/min	System Reset Programmable 1 ~ 255 sec/min
SSD	Compact Flash Type II	Compact Flash Type II	Compact Flash Type II	Compact Flash Type II
VGA/LCD/DVI/TV-out	VGA, LVDS, DVI	VGA, Dual LVDS(Optional)	VGA, LVDS, DVI, TV-Out	VGA, LVDS/TTL
Audio	Mic-In, Line-In, Line-Out	Mic-In, Line-In, Line-Out	Mic-In, Line-In, Line-Out	Mic-In, Line-In, Line-Out
Ethernet	Dual LAN	Dual LAN	Single LAN	Dual LAN
Drives	1 x IDE/ 3 x SATA	1 x IDE/ 2 x SATA	2 x IDE	1 x IDE
Parallel	-	Yes	Yes	Yes
Serial	4 x RS-232	4 x RS-232, 1 x RS-232/422/485	3 x RS-232, 1 x RS-232/422/485	4 x RS-232
USB	10 x USB 2.0	8 x USB 2.0	6 x USB 2.0	6 x USB 2.0
IrDA	-	-	Yes	Yes
Expansion Bus	1 x PCI	1 x PCI	1 x PCI, 1 x Mini PCI	1 x PCI, 1 x Mini PCI
Miscellaneous	Support TPM (Optional) Support 8-bit GPIO	Support 16-bit GPIO	Support 16-bit GPIO	Support 16-bit GPIO