

FEATURES	BENEFITS
Standards-based, open architecture	<ul style="list-style-type: none"> Boards can be interoperable between multiple vendors' systems, giving customers more choice flexibility Efficient and economical integration Configurable to custom configurations Faster Time-to-Market—using standards-based modules rather than custom components, customers can focus on their core competence of building their next-generation application set Continuous IA roadmap provides future security
High Density	<ul style="list-style-type: none"> Demand for floor space is at an all time high. Intel's high-density SBCs can reduce the overall cost of equipment space and minimize system volume
Low power/thermals	<ul style="list-style-type: none"> Intel's Processor boards make use of innovative designs to minimize power consumption and provide superior thermal characteristics
Serviceability	<ul style="list-style-type: none"> These modular boards are active FRUs, which can easily be replaced in the field in under 5 minutes; without disrupting the other pieces of the system
High Availability	<ul style="list-style-type: none"> Intel's High Availability Single Board Computers support 99.999 percent uptime, which is becoming increasingly important to customers. This is provided by redundant power supplies, CPUs, hard drives, etc. The RSS capabilities, which allow hot-swappable boards with minimal impact on applications or calls on other boards, also help provide this redundancy
IPMI Management	<ul style="list-style-type: none"> Allows operators to remotely monitor system health, individual sensor data, FRU data and exert power-up/down control. Enables full management of all IPMI-based SBCs and peripherals in a platform

PROCESSOR BOARD COMPARISON

PRODUCT NAME	ZT 5502A-1B	ZT 5503	ZT 5541	ZT 5550	ZT 5523	ZT 5504
Board Size	6U	6U	6U	6U	6U	6U
Board Type	System Master	System Master	Peripheral Master	RSS High Availability	System Master	System Master
# Skus	1	2	2	2	2	3
# CPUs	1	1	1	1	2	1
CPU	Intel® Pentium® III, LP 500 MHz	Intel Pentium III, 850 MHz	Intel® Pentium®, LP 500 MHz (1B) or Intel Pentium III, LP 700 MHz (1D)	Intel Pentium III, LP 500 MHz	Intel Pentium III, 733 MHz (1A) or Intel Pentium III, 866 MHz (1B)	Intel Pentium III, 850 MHz
CPU Type	Low-Power BGA2	BGA2	Low-Power BGA2	Mobile Module	FC-BGA	BGA2
PICMG 2.16 Compatible	No	No	No	No	No	Yes
FSB	100 MHz	100 MHz	100 MHz	100MHz	133 MHz	100 MHz
CompactPCI Bus Interface	64-bit/33 MHz	64-bit/33 MHz	64-bit/33 MHz	64-bit/33 MHz	64-bit/33 MHz (1B) or 64-bit/66 MHz (1A)	64-bit/33 MHz
Memory	256MB ECC SDRAM	512MB or 1GB ECC SDRAM	256MB ECC SDRAM	256MB ECC SDRAM	1GB ECC SDRAM	512MB or 1GB ECC SDRAM
Flash	4 Mbytes, On-board	4 Mbytes, On-board	4 Mbytes, On-board	4 Mbytes, On-board	4 Mbytes On-board	4 Mbytes, On-board
Hard Drive	10GB	10GB	10GB	10GB	10GB	10GB
PMC Slots	1	1	1	1 (1F)	None	1
Video	On-board (CHPS69000)	On-board (CHPS69000)	On-board (CHPS69000)	AGP Mezzanine	On-board (CHPS69000)	On-board (CHPS69000)
Chipset	440BX	440GX	440BX	440BX	ServerWorks Serverset III LE	440GX
Management Controller	No	No	No	No	No	IPMI-Based BMC

Front Panel I/O

Serial Ports	1	1	1	2	2	1
USB Ports	1	2	1	2	1	2
PS/2	1	0	1	1	1	0
Ethernet	1	2	1	2	2	2
VGA	1	1	1	Mezzanine	1	1
Companion RPIO	ZT 4805	ZT 4804/ZT 4806	ZT 4805	ZT 4802/ZT 4804 / ZT 4806	ZT 4804/ZT 4806	ZT 4807

Chassis Compatibility

ZT 5082C	Yes	Yes	Yes	No	Yes (1B Only)	No
ZT 5083	No	No	Yes	Yes	No	No
ZT 5084	No	No	Yes	Yes	No	No
ZT 5087	No	Yes	Yes	No	Yes (1B Only)	No
ZT 5090	No	No	No	No	No	Yes

Extended OS Support

Red Hat Linux*	Yes	Yes	Yes	Yes	Yes	Yes
VX Works*	Yes	Yes	Yes	Yes	Yes	Yes
Windows* 2000	Yes	Yes	Yes	Yes	Yes	Yes
Windows NT*	Yes	No	Yes	Yes	No	No

The Embedded Intel® Architecture Divison Chassis Family

Intel anticipates customer needs with modular, standards-based building block platforms featuring high availability, hot swap, and computer telephony capabilities, and NEBS-compliant designs. Intel's chassis are designed to support appropriate processor board applications thus ensuring more rapid time-to-market for customers.

High Availability Chassis—ZT 5083 and ZT 5084

Intel's ZT 5083 and ZT 5084 high availability (HA) CompactPCI platforms provide a carrier-grade computing system for demanding mission-critical applications. They support five-nines (99.999 percent) availability with built-in redundancy for active system components including system-slot CPU boards, power supplies, and alarming. All components are hot-swappable. Intel's HA platforms are ideal for telecom applications requiring high system availability such as enhanced services, media gateway and broadband access servers, or any critical computing platform destined for the central office.

General-Purpose Chassis—ZT 5082 and ZT 5087

The ZT 5082 and ZT 5087 are both ideal development platforms for Telecom applications that need high slot counts and integrated cooling solutions. The ZT 5082 is a 10U chassis with 425W of power and an integrated cooling system. The ZT 5087 is a 4U chassis with 600 total Watts of power in an N+1 redundant configuration supporting an H.110 cPCI backplane. Both products can meet the needs of telecom equipment providers that need a platform to support high-performance processors in products such as media servers and gateways, softswitches, cellular base station controllers, broadband access controllers, cable modem headends, and DSL access multiplexers.

Packet Switch Backplane Chassis (PICMG 2.16 Compliant)—ZT 5090

The newest addition to the CompactPCI specification, PICMG 2.16, blends the benefits of CompactPCI with the broad acceptance of Ethernet to provide an economical, scalable path to the next-generation Internet and voice communications network. Backplane interconnect speeds are user-definable and scalable from 10 Mbps to 2000 Mbps per node slot, allowing customers to start with a lower-cost, lower-speed set of components and upgrade as needed. The ZT 5090 4U General Purpose Packet Switch Platform is one of several telecom building blocks from Intel, providing OEM equipment designers with standards-based development solutions built on the PICMG 2.16 specification. This high-density CompactPCI platform features seven compute board slots and an eighth slot reserved for an integrated layer 2/3 Ethernet switch, transversely mounted in a 4U enclosure, making it ideal for carrier-grade telecom and Internet applications.

PLATFORM/CHASSIS COMPARISON

PRODUCT NAME	ZT 5082C	ZT 5083	ZT 5084	ZT 5087	ZT 5090
Chassis Height	10U	15U	10U	4U	4U
Platform Type	CompactPCI Development Platform	HA, Redundant System Slot Development Platform	HA, Redundant System Slot Production Platform	CompactPCI Production Platform	PICMG 2.16 Development Platform
Chassis Dimensions	160mm X 80mm	160mm X 80mm	160mm X 80mm	160mm X 80mm	160mm X 80mm
Total Slots	8	14	14	8	8
SBC Slots	8	12 Peripheral slots, 2 RSS	12 Peripheral slots, 2 RSS	7	8 (1 switch)
PICMG 2.16 Compatible	No	No	No	No	Yes
NEBS LEVEL*	Meets or exceeds GR-63-CORE and GR-1089-CORE	Meets or exceeds GR-63-CORE and GR-1089-CORE	Designed to Meet GR-63-CORE and GR-1089-CORE	Designed to Meet GR-63-CORE and GR-1089-CORE	Designed to Meet GR-63-CORE and GR-1089-CORE
Bus Segmentation	[8] 33MHz, 64-bit	[7,7]-RSS 33MHz, 64-bit	[7,7]-RSS 33MHz, 64-bit	[7] 33MHz, 64-bit	[4,4] 66MHz, 64-bit
H.110	YES	YES	YES	YES	YES
System Management	No	SMBus-based System Alarm via System Master Boards	SMBus-based System Alarm via System Master Boards	SMBus-based Alarming via the Media Carrier Alarm Board	IPMI-based Chassis Management Module
Total Power	425W	450W	450W	400W	750W
AC/DC Input	AC	AC/DC	AC/DC	AC/DC	AC/DC
Power/SBC Slot	45W	25W for Peripheral Boards	25W for Peripheral Boards	40W	45W
Airflow	Front to Rear	Front to Rear	Front to Rear	Side to Rear	Side to Rear
Components					
Power	One 425W ATX Supply	N+1, N=3 (150W each)	N+1, N=3 (150W each)	N+1, N=2 (200W each)	N+1, N=2 (250W each)
Cooling	1 tray, 2 fans	N+1, N=3 Fans	Card Cage: N+N, N=2 Power Supplies: 1	1 tray, 2 fans	1 tray, 2 fans
Chassis Mgmt Modules	No	2 RSS System Master Boards	2 RSS System Master Boards	1 Media Carrier Alarm Board	1 CMM
Ethernet Switches	0	0	0	0	1
Power Inputs	1 IEC-320 AC input	2 IEC-320 AC inputs, 2 DC Terminal Blocks		1 DC terminal block or 1 IEC-320 AC input	1 DC terminal block or 1 IEC-320 AC input
Media Bay	CD-ROM, Floppy Drive, HDD	2 CD-ROMs	2 slimline CD-ROMs	CD-ROM, HDD	No

*The platform meets or exceeds the following Network Equipment Building System (NEBS) Level 3 requirements:

GR-1089-CORE EMC Section 2 and 3, Electromagnetic Compatibility

GR-63-CORE, Physical Protection, section 4.1, 4.3, 4.4 (Earthquake Zone 4, Equipment Handling, Temperature, Humidity, Altitude)

The Embedded Intel® Architecture Division Component Family

Intel is pleased to provide a complete family of packet switched backplane (PICMG 2.16 specification-compliant) building blocks including a general-purpose platform, system master processor board, PICMG 2.9 specification-compliant chassis management module, rear-panel transition boards and 10/100 Ethernet switch. These building blocks support management and switching and can be augmented by EID's selection of off-the-shelf backplanes, rear-panel transition boards, and power supplies which can further promote customer design goals.

PRODUCT NAME	ZT 4802A	ZT 4804B	ZT 4805A	ZT 4806A	ZT 4807A
Production Release Date	Shipping Now	Shipping Now	Shipping Now	Shipping Now	Shipping Now
Board Size	6U	6U	6U	6U	6U
PICMG 2.16 Compatible	No	No	No	No	Yes
Interfaces					
Ethernet	0	2	2	2	2
Serial Ports	0	2	2	2	2
PS/2	0	2	1	2	1
VGA	1	0	1	0	1
USB	0	0	1	0	2
Parallel Port	0	0	1 (internal)	0	0
Floppy Drive Connector	0	1 (internal)	1 (internal)	1 (internal)	1 (internal)
IDE Connector	0	1 (internal)	2 (internal)	1 (internal)	1 (internal)
PC Speaker Interface	0	0	1 (internal)	0	1 (internal)
Power Connector for external interfaces	0		1	0	1
CompactFlash Connector	0	0	1 (internal)	0	1 (internal)
SMBus interface for alarm control	0	2 x 8-bit registers	0	0	0

United States and Canada

Intel Corporation
Robert Noyce Building
2200 Mission College Boulevard
P.O. Box 58119
Santa Clara, CA 95052-8119
USA
Phone: (408) 765-8080

Europe

Intel Corporation (UK) Ltd.
Pipers Way
Swindon
Wiltshire SN3 1RJ
UK
Phone:
England (44) 1793 403 000
Germany (49) 89 99143 0
France (33) 1 4694 7171
Italy (39) 02 575 441
Israel (972) 2 589 7111
Netherlands (31) 20 659 1800

Asia Pacific

Intel Semiconductor Ltd.
32/F Two Pacific Place
88 Queensway, Central
Hong Kong SAR
Phone: (852) 2844-4555

Japan

Intel Kabushiki Kaisha
P.O. Box 300-8603 Tsukuba-gakuen
5-6 Tokodai, Tsukuba-shi
Ibaraki-ken 300-2635
Japan
Phone: (81) 298-47-8511

South America

Intel Semicondutores do Brazil
Av. Dr. Chucri Zaidan, 940, 10th floor
Sao Paulo
Brazil
Phone: (55) 11 3365 5500

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