

ATX Motherboard for Embedded Products

FB13

RICOH

*Newest Motherboard for Dual core CPU, with a low TDP of 31W.
Enjoy the finest performance by the Pentium III class thermal design.
Intel945GM Newest Motherboard*

Intel Core Duo/Solo Support
Socket478 CPU Socket

FSB533/667MHz
BGA Package is also available

SO-DIMM
Memory socket x2

DDR2-533/667
Dual Access Support

SerialATA x 2

PCI Slot x 5

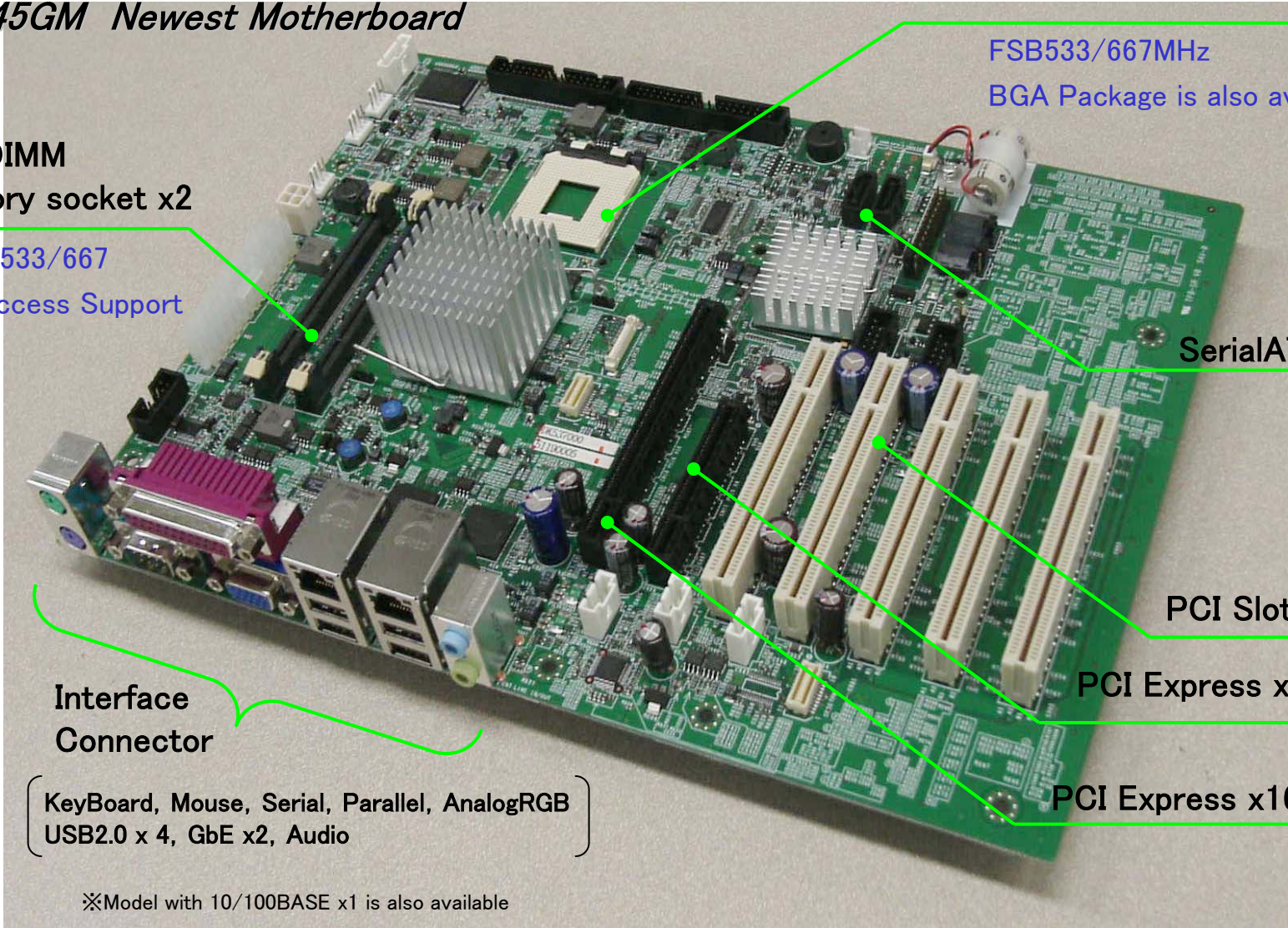
PCI Express x4 Slot x1

PCI Express x16 Slot x1

Interface
Connector

KeyBoard, Mouse, Serial, Parallel, AnalogRGB
USB2.0 x 4, GbE x2, Audio

※Model with 10/100BASE x1 is also available



Features

● Latest Chipset Intel® 945GM

Supporting Dual Core Mobile CPU [Intel® Core™ Duo] as well as the latest features such as DDR2 Memory (Dual Channel Access), PCI Express and Serial ATA (NCQ support).

BGA package CPU consumes only 7Watts of power!

● Highly expandable in the ATX form factor

Sufficient expandability with the latest low power consumption system, by using 5 PCI slots.

Enhanced 2 ports of GbE LAN controlled through the PCI Express x1 has eliminated the bottleneck strain on bus bandwidth.

● External graphic slot: PCI Express x16

In addition to chipset integrated graphics, the extended slot can be used as external video option.

● RoHS directive compliance

Corresponds to the RoHS directive enforced from July, 2006



Ricoh Company Ltd <http://www.ricoh.co.jp/fbx/>

Ricoh Electronics, Inc. <http://www.rei.ricoh.com/>

Specification (L2S Model)

CPU	Support CPU	Intel Core Duo CeleronM
	CPU Socket	Socket478 (For mobile CPU)
	FSB	533/667MHz
	Hyper-Threading	Not support
Memory	Type	DDR2-533/667
	Access Type	Dual Channel
	Registered/Unbuffered	Unbuffered
	ECC	Not support
	Number/Type of socket	2sockets/SO-DIMM
	Maximum capacity	4GB
Chipset	Intel 945GM & ICH7M-DigitalHome	
Video	Integrated in chipset	
Audio	AC'97 on-board	
LAN	GbE on-board	
External Interface	USB	4ports (USB2.0)
	AnalogRGB	1port
	Serial	1port
	Parallel	1port
	PS/2	KeyBoard,Mouse
	LAN	2ports
	Audio	Line-IN,Line-OUT
Internal Interface	PCI slot	5slots
	PCI Express x4 slot	1slot (form factor is x8)
	PCI Express x16 slot	1slot (ADD2 support)
	IDE	1ch
	FDD	1ch
	SerialATA	2ports (RAID0,1 support)
	USB header	4ports (USB2.0)
	Serial header	1port
	LVDS	1port
	Front Panel header	PowerSW,ResetSW,LED,Beep
	Audio header	Line-OUT,Mic-IN
FAN	CPU,CASE1,CASE2	
SystemMonitoring	Voltage, Temperature, FAN speed	
	WatchDog Timer	
BIOS	Phoenix	
Supporting OS	Windows2000 Professional WindowsXP Professional	
FormFactor	ATX : 305mm x 224mm	

*The specification is subject to change without notice.

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