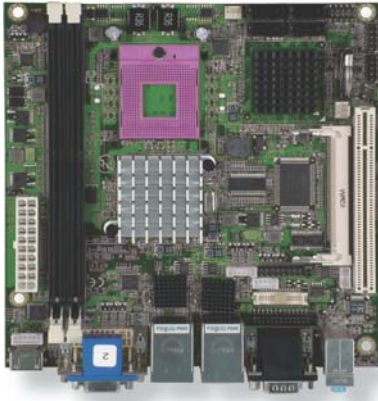


# IP-M45A1

Mini-ITX Socket P (Penryn/Merom) Intel Core™ 2 Duo, Celeron Processor Industrial Motherboard with CRT/LCD/DVI/TV-out/HDMI, Audio and Dual GbE LAN



## Features

- Highest Performance in Intel's Mobile Platforms
- Variety Video Interface for Vision Applications
- Additional Mini PCI Socket for PCI Expansion
- Highly Integrated Communication Interfaces
- Extended Operating Temp.: -20 ~ 70°C

## System

<b>CPU</b>	Socket P (Penryn/Merom) Intel Core™ 2 Duo, Celeron processor Recommended: Penryn code processor (T9600/T9400) Merom code processor (T7500/T7300/T7100) Celeron processor (575/550/530)
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<b>Memory</b>	2 x 240-pin DDRII DIMM 667/800MHz up 4GB
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<b>Chipset</b>	Intel GM45 + ICH9M
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<b>BIOS</b>	AMI Flash BIOS
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<b>ATA/IDE</b>	4 x Serial ATA ports with 300MB/s HDD transfer rate
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<b>Watchdog Timer</b>	255-level reset
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## I/O

<b>Serial Port</b>	1 x RS-232 port 1 x RS-232/422/485 selectable port
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<b>Parallel Port</b>	SPP/EPP/ECP mode
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<b>USB Port</b>	8 x USB 2.0 ports
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<b>KB/MS</b>	1 x PS/2 Keyboard and Mouse (by 6-pin wafer)
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<b>Expansion Bus</b>	1 x 32-bit/33MHz PCI slot 1 x Mini PCI socket
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<b>HDMI</b>	1 x HDMI Type A connector
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<b>DVI</b>	1 x DB24 female connector
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<b>GPIO</b>	Onboard 8-bit GPIO 4 in/4 out
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## Ethernet

<b>Chipset</b>	2 x Realtek RTL8111B GbE LAN
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## Audio

<b>Codec/Interface</b>	Realtek ALC888 Codec, support Mic-in/Line-in/Line-out (default w/o Line-in)
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## Display

<b>Graphics Chipset</b>	Intel Gen5.0 integrated graphics engine with 10 fully programmable cores
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<b>Graphics Interface</b>	CRT support up to 1920 x 1440
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	LVDS support 24-bit up to 1920 x 1200
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	DVI support 12-bit up to 1600 x 1200
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	TV-out support NTSC/PAL up to 1024 x 768
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	Support HDMI up to 1600 x 1200
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	Dual independent display achievable up to 1600 x 1200
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## Mechanical & Environmental

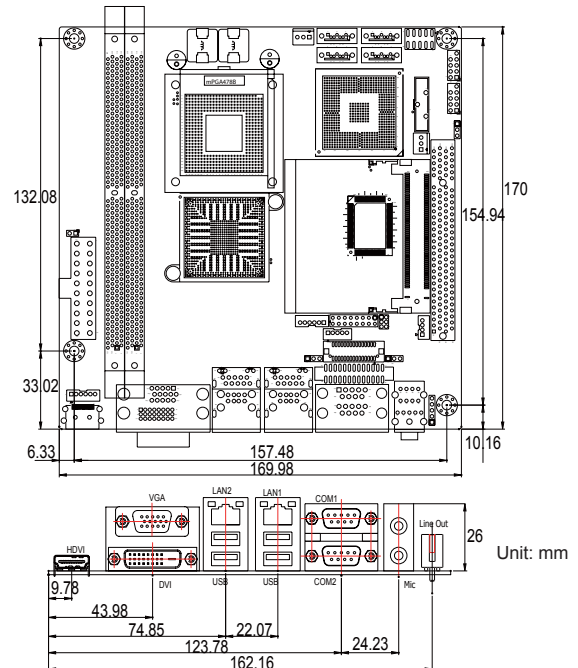
<b>Power Type</b>	ATX 2.0 (ESP type, 20-pin)
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<b>Operating Temp.</b>	-20~70°C (-4~ 158°F)
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<b>Operating Humidity</b>	0 ~ 95% (non-condensing)
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<b>Dimensions (L x W)</b>	170 x 170 mm (6.7" x 6.7")
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## Dimensions



## Ordering Information

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<b>CK - 06-4500-00</b>	Cable kit
<b>T9400</b>	Intel Socket P Core™ 2 Duo 2.53G FSB1066MHz 6M Cache
<b>T7500</b>	Intel Socket P Core™ 2 Duo 2.2G FSB800MHz 4M Cache
<b>Celeron 575</b>	Intel Socket P Celeron 2.0G FSB667MHz 1M Cache
<b>Celeron 550</b>	Intel Socket P Celeron 2.0G FSB533MHz 1M Cache

All specifications are subject to change without notice.