

MD-945-AVP

*Embedded Dual Core System
with the Acadia™ Video Processor*



MicroDISC introduces the first in a series of embedded image acquisition and processing systems targeted at markets requiring Dual Core Processing for harsh environment computing.

Designed using the **INTEL Core Duo Processor** technology and mini ITX form factor single board computer motherboards. The **MD-945-AVP** is designed to bring high end computing along with image acquisition to those application areas that require their "vision system" to be capable of operating in harsh conditions.

The included **Acadia™ Video Processor** is a state-of-the-art processing solution that performs real-time video enhancement, fusion, stabilization and mosaicking.

The **MD-945-AVP** utilizes a "fanless" heat exchange technology for removing heat from the surface of the Dual Core Processor, system chipset and Acadia™ Video Processor.

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MD-945-AVP

System Specifications

CPU Socket Socket 478

CPU Supports INTEL® Core Duo processors
Up to 2.33GHz

CPU Front Side Bus (FSB) 533Hz / 667MHz

Chipset INTEL® 945GM chipset

BIOS Award BIOS, ACPI supported

System Memory Two DDR2 sockets supports up to
4GB, DDR SDRAM, PC400/533/667 DDR SDRAM

Integrated VGA INTEL® 945GM integrated VGA for
CRT/TV out, Supports DVMT 3.0 for memory allocation

VGA Options Optional single/dual DVI cards with
connectors on card or via cable

Primary LAN ICH7M integrated 10/100 BaseT Ether -
net

Secondary LAN Marvell 88E8053 PCI Express Gigabit
Ethernet

Wireless LAN Optional 802.11 a/b/g Wireless LAN

Audio ICH7M integrated audio with AC97 codec,
Onboard NS LM4950 amplifier

Serial Ports Two RS-232 ports

Serial ATA Supports 2 ports

1394 Supports 2 ports (TI TSB43LV22)

USB (2.0) Supports 6 USB ports (4 ports + 2 ports via
pin header)

Keyboard and Mouse Connector PS/2 type

Watchdog Timer Generates system reset; 256
levels

Hardware Monitoring Built in W83627EHF;
monitors system/CPU temperature and voltage
status

Digital I/O 4 in / 4 out



Expansion Slots 1 PCI (Requires custom I/O
bracket, contact us for details.)

Acadia™ Video Processor PCI board capabilities:

- Real-time, low-latency processing
(1-2 frame delay)
- Full color, full resolution processing
- High-precision calculation — 1/10th of a pixel
or better motion estimation
- Plug and Play operation — PCI format, self-
install software CD
- Simultaneous processing of up to 2 channels
of video
- Field-hardened and tested under all lighting
conditions

(Contact us for detailed information on the
above board.)

Edge Connectors VGA CRT, PS/2 KB/Mouse Mini
DIN, two RJ-45, two 1394, SPDIF, four USB, RCA,
S-Video, COM1, COM2

Weight 8 lbs

Dimensions 13"W x 3"H x 8"D

Environmental Factors

Operating Temperature: 0°C~60°C (32°F~140°F)
Storage Temperature: -20°C~80°C (-68°F~176°F)
Relative Humidity: 10%~90% (non-condensing)

*Please contact us for ordering and pricing
information.*

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