

BK MVP4 v1.5 TECHNICAL SPECIFICATIONS

Rev. 1.1 written by David Oakley

FEATURES

MAIN / VIDEO CHIPSET

VIA Apollo MVP4

- VIA 8501 North bridge controller
- VIA 82C686A South bridge controller
- Integrated Trident 'Blade 3D' AGP 2x graphics engine
- Support for 66/75/83/95 and 100MHz FSB (Front Side BUS)
- Support for PC-100 memory up to 768MB
- Integrated AC-97 audio, Super I/O, Four USB ports and hardware monitoring
- ATA 33/66 support

ONBOARD TV ENCODER

Trident TVXpress

- PC 99 compliant
- Universal digital interface accepts YcrCb (CCIR656) or RGB (15,16 or 24-bit multiplexed) video data in both interlaced and non-interlaced formats
- TrueScale rendering engine supports underscan operations for various graphics resolutions.
- Supports NTSC, NTSC-EIA (Japan) and PAL (B, D, G, H, I, M and N) TV formats.
- Provides composite and SCART outputs
- Auto-detection of TV presence
- 9-bit video DAC outputs

ONBOARD MODEM

PCTel HSP56 MicroModem v3.03

- Dual mode V.90/56Kflex support
- PCI v2.2 compliant interface.
- ACPI supports 'On Now'
- Optional support for Caller ID
- On Chip PnP logic
- PC 99 Compliant
- PC 97 compliant audio
- Supports Windows 95/98/NT/2000 and Linux
- Supports V.90, V.34, V.32, V32bis, V.22 and V.22bis protocols.

ONBOARD SOUND

C-Media CMI8738AM

- HRTF-based 3Dm positional audio supporting DirectSound 3D and A3D interface.
- Supports rear side speakers, C3DX positional audio in 4-channel speaker mode.
- Legacy SoundBlaster 16 compatible.
- Downloadable DLS-based WaveTable music synthesizer with DirectMusic support.
- Professional digital audio interface supporting 24-bit SPDIF input and output in both 44.1KHz and 48KHz formats.
- Built-in 32ohm earphone buffer.
- Built-in PCTel HSP56 Modem interface.
- Drivers support AC3 5.1 channel interface.
- MPU-401 port.
- 16-bit full duplex CODEC for playback and recording.
- 4-channel 16-bit DAC
- 32-bit PCI bus master.

ONBOARD LAN ADAPTER

Davicom 9102A Fast PCI Ethernet adapter

- Integrated Fast Ethernet MAC, Physical Layer and transceiver.
- +3.3v power supply with +5v tolerant I/O
- PCI 2.2 compliant interface
- Independent receive FIFO and transmit FIFO
- IEEE 802.3u 100Base-TX and 802.3u 10Base-T compliant
- Full and half duplex mode support
- Supports Wake on LAN features
- High performance 100Mbps clock generator and data recovery circuit.
- Provides loopback mode for easy system diagnostics.

ONBOARD I/O PORTS

External Ports

- (1) Parallel port which supports EPP and ECP modes
- (2) USB ports
- (2) PS/2 ports
- (1) 15-pin VGA port
- All ports are PC 99 compliant for easy identification

Internal Ports

- (1) Primary EIDE controller with support for two UltraDMA 33 / 66 devices
- (1) Floppy drive controller with support for up to two drives
- (1) SPDIF digital audio connector

MEMORY CAPACITY

- (2) 168-pin DIMM slots for 3.3v SDRAM modules
- Supports a maximum of 512MB RAM

EXPANSION SLOTS

NOTE: The Book PCs (iCue BK Series) do not have any expansion slots. There are no ISA, PCI or AGP slots.

DRIVES

- Samsung 1.44MB 3 ½" drive
- 52x BTC (Top-G) CD-ROM

CASE SPECIFICATIONS

- External dimensions 30cm(L) x 27.25cm (W) x 8.25cm (H)
- External 5 ¼" drive bay occupied by the CD/DVD-ROM drive
- External customized 3 ½" floppy drive bay occupied by the floppy drive (ZIP drives will not fit)
- Internal 3 ½" drive bay (for harddrive)
- PS/2 ports (for keyboard and mouse)
- USB ports
- RJ45 Ethernet port
- Modem port for both Phone and Line
- EPP/ECP Parallel port
- (1) 15-pin VGA port
- (1) 15-pin MIDI port
- Sound ports for MIC, Line-In and Speakers
- Composite TV output
- S-Video output

POWER SUPPLY

- 100Watt 2Amp output at 50/60Hz
- Dimensions 10.25cm (W) x 6cm (L) x 7.25cm (H)
- Auto-switching

PACKAGE CONTENTS

- Case with 100W power supply
- Mainboard
- BTC 52x CD-ROM drive with 40-pin ribbon cable
- Samsung 3 ½" floppy drive with cable
- CD-ROM audio cable
- 104-key Win98 power keyboard
- 3-Button PS/2 mouse
- User's manual
- System Support CD
- Optional BIOS update on floppy diskette
- 60W Stereo speakers

JUMPER SETTINGS

CLEAR CMOS JUMPER

JBAT1	FUNCTION	SETTING
	Clear CMOS	Short pins 2-3
	Normal CMOS Setting	Short pins 1-2

CONSTANT 3V SIGNAL

NOTE: Open/Close all jumpers

J10	FUNCTION	SETTING
	Enabled	Open
	Disabled	Short

CONSTANT 5V SIGNAL

NOTE: Open/Close all jumpers

J11	FUNCTION	SETTING
	Enabled	Open
	Disabled	Short

MOTHERBOARD PINOUTS

FRONT PANEL HEADER (J3)

PIN	FUNCTION	PIN	FUNCTION
1	Ground	6	Power LED
2	Power Supply	7	HDD LED +
3	Ground	8	HDD LED -
4	Reset	9	Suspend LED -
5	Ground	10	Suspend LED +

SPDIF HEADER (J9)

PIN	FUNCTION	PIN	FUNCTION
1	AUX In Left	5	SPDIF In
2	AUX In Right	6	Ground
3	12v +	7	SPDIF Out
4	N/C	8	Ground

MODEM DAA CONNECTOR

PIN	FUNCTION	PIN	FUNCTION
1	Ground	9	Off Hook
2	AFEMCLK	10	GPIOX
3	Ground	11	RIN
4	HSPFS	12	HSPSDO
5	Ground	13	5VSB
6	MSCLK	14	HSPSDI
7	PVCC3	15	MUTE
8	PRING	16	AFERST

CD AUDIO

PIN	FUNCTION	PIN	FUNCTION
1	Left channel	3	Ground
2	Right channel	4	Ground

POWER CONNECTOR

PIN	FUNCTION	PIN	FUNCTION
1	5VSB	4	PS-ON#
2	GROUND	5	+12V
3	GROUND	6	+12V

NOTE: Color-codes for the power connector leads can be found on the yellow sticker placed on the power supply.

** Specifications and features are subject to change without notice. Amptron International is not responsible for erroneous information in this text. The information has been provided as a courtesy to our customers. For further information please contact Amptron International's Technical Support Department. This information was provided and prepared by David Oakley – Senior Support Technician, Amptron International Inc.

FREQUENTLY ASKED QUESTIONS

Question: Can I disable any of the onboard hardware (i.e., LAN, Modem, Sound, Video)?

Answer: No. Currently there is no way to disable the onboard devices.

Question: Can I increase the amount of video memory?

Answer: This motherboard shares main memory with the video system. In the BIOS you can specify 2,4, or 8MB or main memory to be shared as video memory.

Question: I tested the system with the case apart but when I close the case the system will no longer power on, why?

Answer: A lot of the time this is caused by the bottom of the floppy drive or CD-ROM drive cutting in to the power connector on the motherboard.

Question: Will this system run Linux and if so where can I find the Linux drivers?

Answer: This system is fully Linux compatible and will run most popular distributions of Linux. If you intend to use Linux on this system you should use the latest version of XFree (v3.3.6 or later). Versions of Linux that include XFree 3.3.6 or later include drivers for the onboard devices. The only Linux driver that is not included with XFree is the modem driver, which is available for downloading at the following website. <http://www.amptron.com/>

Question: Can I add an internal ZIP drive in place of the floppy drive?

Answer: No. The front panel of the case has a custom opening specifically for a floppy drive. A ZIP drive would not line-up correctly with the case's front panel.