Columbia VP (GA-8SIML-NF7)

[+] Zoom

Contents

Specifications

- Form Factor: µATX 24.4 x 23.6 cm Form Factor
- CPU Support
  - Socket mPGA 478B
  - Supports Intel P4 FC-PGA2 (Flip-Chip Pin Grid Array), 1400 MHz to 2800 MHz
  - Warning: not all the above processors have been qualified
  - 100 MHz (x4 = 400 MHz) data bus support (Quad-Bumped technology)
  - 133 MHz (x4 = 533 MHz) data bus support (Quad-Bumped technology)
  - Support P4 Prescott 2.8 GHz FSB 533
- System Memory
  - Supports 2 memory slots
  - Serial Presence Detect (SPD) support
  - Supports a maximum memory size of 2 GB (2*1G)
  - Support only 2.5 V DIMM DDRAM configurations
  - Unbuffered type support
  - 266/333 Mhz DDR interface
- Core Logic (Chipset)
  - The SiS 651 CI IGUI HMAC 3D Graphic SDR/DDR Chipset features
    - Processor Host/Bus support (533MHz data transfer rate)
    - Supports DDR333/266 SDRAM
    - AGTL+ & AGTL compliant bus driver auto compensation
    - AGP V2.0 Compliant
    - Supports Additional AGP4X/2X interface and Fast Write Transaction
  - The SiS 962 MuTIOL Media I/O features
    - PCI rev 2.2 specification support
      - supports PCI bus at 33 MHz
      - 3 PCI bus masters slots (1 combo with CNR connector)
      - 133MByte/sec maximum throughput
    - Integrated IDE controller supporting PIO Mode 4 transfers at up to 14MB/s, Ultra ATA/33 mode transfers at up to 33 MB/s, and Ultra ATA/66 mode transfers up to 66 MB/s and Ultra ATA/100 mode transfers at up to 100 MB/s and ATA/133 mode transfers up to 133 MB/s.
    - 3 USB controllers, supporting wake-up from sleeping states S1-S3, and legacy mouse/keyboard software. Note about the USB features: There is support for 6 USB ports on the motherboard, all of which are active at the same time (thus no need for a USB selection jumper). 2 of the USB ports are on the back panel, the onboard F_USB2 header can be connected to two USB ports and the onboard F_USB1 header can be connected to two USB ports.
    - 6 USB USB 2.0
    - AC'97 link for audio and telephony CODECs (AC'97 2.2 interface)
    - SM Bus interface in post only.
    - PC2001 Compliance
- I/O controller: WINBOND W83697HF I/O Controller with the following features
  - PS/2 Keyboard and Mouse controller
  - Floppy disk controller supporting one FDD with 360K, 720K, 1.2M and 1.44M-bytes
  - 2 serial ports, both 16C550 Fast UART compatible
  - 1 Parallel port supporting SPP (Standard parallel Port), EPP (Enhanced Parallel Port), ECP (Extended Capabilities Port) modes, and BPP (Bi-directional Printer port)
  - 1 MIDI/Game port
  - Hardware Monitoring
  - Fan speed monitoring
  - Built-in case open detection circuit
  - Watchdog comparison of all monitored values

- Audio Chipset: Integrated on the SIGMATEL Technologies' Sigmatel STAC9750T -audio codec
  - DirectSound AC'97 2.2 Audio
  - Inputs and Outputs: Stereo inputs for line-in, CD audio, Auxiliary, mono inputs for microphone and TAD, MPU-401 (UART mode) interface for synthesizers and MIDI devices. Integrated game port.
  - Mixer Features: mixer with stereo for line, CD audio, auxiliary ,music synthesizer, digital audio (wave files), and mono for microphone and speakerphone.
  - Features: 3D stereo enhancement for simulated surround, Power management support.
  - SPDIF output for PCM & AC3 sound formats.
- Ethernet Controller: Realtek RTL8101(L) PCI/Mini-PCI Single-Chip Fast Ethernet Controller with Power Management10 Mbps 10 Base-T and 100 Mbps 100 Base-TX support
  - Conforms to IEEE802.3u 100Base-TX and IEEE802.3x Full Duplex Flow Control
  - 10/100 Mbps Half/Full duplex operation and IEEE802.3u auto negotiation
  - Supports Wake on LAN features
  - Remote Power On
  - Remote Wake Up
  - Advanced Configuration & Power Interface (ACPI) 2.0 & PCI Power Management Specifications 2.0 compliant
  - Supports Wake-On-LAN function and remote wake-up (Magic Packet)
  - The ethernet address, Vendor ID and Configuration register are stored in the EEPROM
  - Compliant to PC99/PC2001 standard
  - PCI 2.1 and PCI 2.2 compliant

Connectors

- 3 PCI bus masters slots (1 combo with CNR connector)
- 1 DB9 serial port COM A (COMB =>Header)
- 1 DB25 parallel port with SPP, ECP, EPP, BPP modes
- PS/2 keyboard and PS/2 mouse ports (not swappable)
- 2 USB rear connectors + 2 USB headers
- 1 mono microphone input (Mic-In) / 1 Line-In / 1 Line-Out
- 1 Aux In
- 1 RJ45 connector
- 2 IDE connectors
- 1 Floppy connector
- 1 CNR connector
- Panel connector

AMI BIOS Specifications

- Support for:
  - Plug and Play
  - Advanced Configuration and Power Interface (ACPI) 1.0
  - Advanced Power Management (APM) 1.2
  - Y2K
  - PC 2001
  - S3 mode
  - Desktop Management Interface (DMI)
- 2 Mbits flash device
- Language supported: English
- POST

Compliance

SPECIFICATION	DESCRIPTION
µATX	µATX form factor specifications
AGP	Accelerated Graphics Port
APM	Advanced Power Management BIOS interface specification
ACPI	Advanced Configuration and Power management Interface
EPP	Enhanced Parallel Port IEEE 1284 standard, Mode [1 or 2]
ECP	Extended Capabilities Port
BPP	Bi-directional Print Port
ATA-33/66 /100/133	Synchronous DMA Transfer Protocol specification (to be proposed as Ultra DMA/33 standard)
PCI 2.2	PCI Local Bus specification
Plug and Play	Plug and Play BIOS specification
USB	Universal Serial Bus specification

Motherboard Configuration

The Columbia VP motherboard has 2 jumper settings:

- Clear CMOS jumper
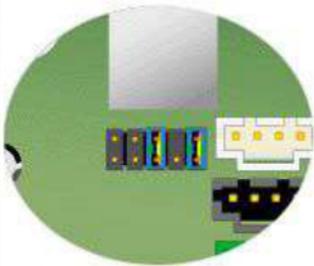- Safe Mode/recovery/Normal selection jumper

CLR_CMOS: CLEAR CMOS JUMPER	
1-2	Enable
2-3	Normal (Default)

SAVE MODE: SAFE MODE/RECOVERY/NORMAL SELECTION JUMPER	
1-2	Normal (default)
2-3	Safe Mode
removed	Recovery: BIOS recovery

F_AUDIO: FRONT PANEL AUDIO HEADER SIGNAL NAMES FROM PART NUMBER 6916700800

PIN	SIGNAL NAME	DESCRIPTION
1	AUD_MIC	Front Panel Microphone input signal
2	AUD_GND	Ground used by Analogue Audio Circuits
3	AUD_MIC_BIAS	Microphone Power
4	AUD_VCC	Filtered +5 V used by Analogue Audio Circuits
5	AUD_FPOUT_R	Right Channel Audio signal to Front Panel
6	AUD_RET_R	Right Channel Audio signal Return from Front Panel
7	HP_ON	Not connected
8	KEY	No Pin
9	AUD_FPOUT_L	Left Channel Audio signal to Front Panel
10	AUD_RET_L	Left Channel Audio signal Return from Front Panel

Note: If the front panel interface board is not connected to the front panel audio header, pins 5 and 6, and 9 and 10 should be jumpered on the front panel audio header. If these jumpers are not installed, the rear panel audio connectors will be inoperative.

Internal Connectors

DENOMINATION ON DRAWING	NAME	TYPE
ATX	Power Connector	16-pin Keyed Connector
AUX_12V	Power Connector	4-pin Keyed Connector
CPU_FAN	CPU fan connector	3-pin header (brown)
FDD	Floppy Drive connector	34-pin (2x17) Shrouded Header
IDE 1	Primary IDE connector	40-pin (2x20) header (blue)
IDE 2	Secondary IDE connector	40-pin (2x20) header (white)
PCI 1, 2 &3	PCI connectors	standard PCI expansion slots
AGP	Accelerated Graphics Port	standard AGP connector
CNR	Communications and Networking Riser	standard CNR connector
SOCKET	CPU connector	mPGA 478B socket
DDR1 & 2	DDR sockets	184-pin standard sockets
CD_IN	CD-ROM Audio Line In	4-pin header (black)
CI	Chassis Intrusion	2-pin header (white)
CLR_CMOS	Clear CMOS/Normal jumper	3-pin jumper
SAFEMODE	Safe mode/Recovery/Normal selection jumper	3-pin jumper
AUX_IN	Auxiliary In	4-pin header (white)
MODEM	Modem In	4-pin header (green)
SPDIF	SPDIF	3-pin header (black)
BATT	CMOS battery socket	
COMB	Serial port header	10-pin dual row header (- 1 key)
F_USB1	USB header	10-pin dual row header (- 1 key)
F_USB2	USB header	10-pin dual row header (- 1 key)
F_PANEL	Front panel Connector	2x5-pin header (- 1 key)
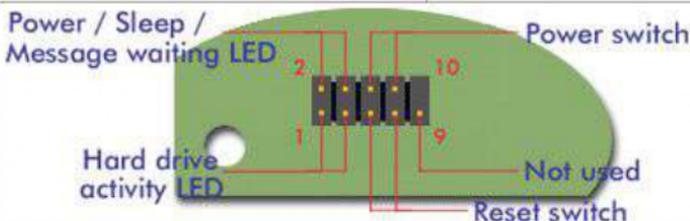
Back panel connectors

NAME	FUNCTION	TYPE
A	PS/2 Mouse port	6-pin Mini-DIN
B	PS/2 Keyboard port	6-pin Mini-DIN
H	RJ45 LAN Connector	RJ45
C	USB port 1	
D	USB port 2	
E	Printer / EPP / ECP & BPP port	25-pin SUB D
F	Serial port COMA	9-pin SUB D
G	VGA port	15-pin SUB D
K	Stereo line out	jack socket
L	Stereo line in	jack socket
M	Mono Microphone in	jack socket
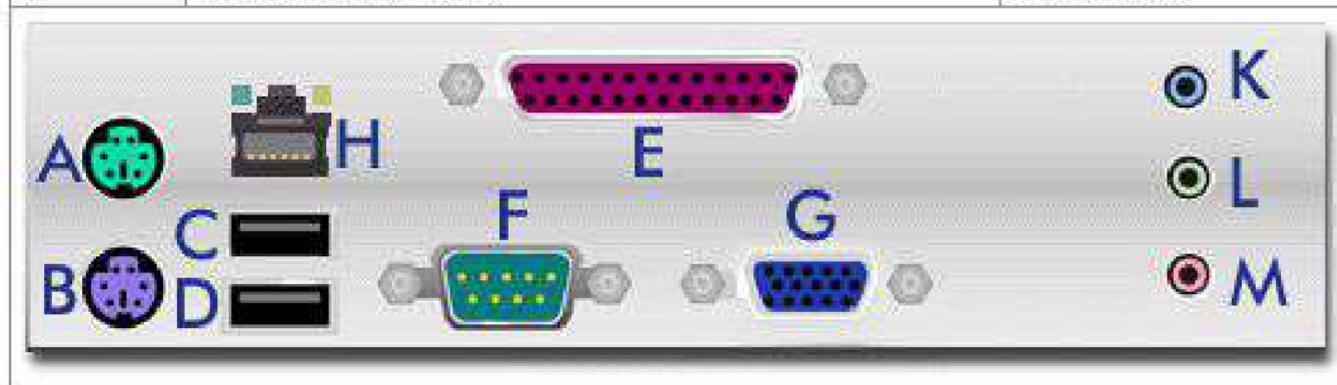
How to configure..

BIOS

▸ Columbia 5P Motherboard BIOS Release Notes

25-08-2004

▸ Columbia VP Motherboard BIOS Screens

17-08-2004

Related items

⚙ **Download**

- **SiS651C display drivers**
  Version: [6.14.10.3581] WinXP

⚙ **Support articles (FAQ)**

- **How to distinguish between Columbia 5 and Columbia 5P motherboard**