Columbia II (GA-8SIML) Ver 1.0 µATX motherboard

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Specifications

Form Factor

- µATX 24.4 x 22.9 cm Form Factor.

CPU Support

- Socket MPGA 478B.
- Supports Intel P4 FC-PGA2 (Flip-Chip Pin Grid Array), 1400 MHz to 2.533 GHz.
- 100 MHz (x4 = 400 MHz) data bus support (Quad-Bumped technology).
- 133 MHz (x4 = 533 MHz) data bus support (Quad-Bumped technology).

System Memory

- Supports 2 memory slots.
- Serial Presence Detect (SPD) support.
- Supports a maximum memory size of 1 GB (using 2×512 MB memory modules).
- Support only 2.5 V DIMM DDRAM configurations.
- Unbuffered type support.
- 266 MHz DDR interface.

Core Logic (Chipset)

- **The SiS 651 IGUI HMAC 3D Graphic SDR/DDR Chipset features**
  - Processor Host/Bus support (533 MHz data transfer rate).
  - Supports DDR 333/266 SDRAM.
  - AGTL+ and 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).
    - 133 MB/s maximum throughput.
  - Integrated IDE controller supporting PIO Mode 4 transfers at up to 14 MB/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: There is support for 6 USB ports on the motherboard, all of which are active at the same time (so no need for an USB selection jumper). Four of the USB ports are on the back panel, and the onboard F_USB2 header can be connected to two USB ports.
  - 6 USB 2.0
  - IEEE 1394a Controller integrated; up to three 1394a ports support with external 1394a PHY.
  - AC'97 link for audio and telephony codecs (AC'97 2.2 interface).
  - SMBus 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 360 K, 720 K, 1.2 M and 1.44 MB.
  - 2 serial ports, both 16C550 Fast UART compatible.
  - 1 Parallel port supporting SPP (Standard Parallel Port), EPP (Enhanced Parallel Port), and ECP (Extended Capabilities Port) modes, and BPP (Bi-directional Printer 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 STAC9750T - audio codec
  - DirectSound AC'97 2.2 audio.
  - Inputs and outputs: Stereo inputs for line-in, CD audio, mono inputs for microphone and TAD, MPU-401 (UART mode) interface for synthesisers and MIDI devices.
  - Mixer features: Mixer with stereo for line, CD audio, auxiliary, music synthesiser, digital audio (wave files), and mono for microphone and speaker phone.
  - Features: 3D stereo enhancement for simulated surround, power management support.
  - SPDIF output for PCM & AC3 sound formats.

Ethernet Controller

Realtek RTL8100(BL) PCI/Mini-PCI, Single-Chip Fast Ethernet Controller with Power Management, 10 Mbps 10 Base-T and 100 Mbps 100 Base-TX support.

- Conforms to IEEE802.3u 100 Base-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 and Power Interface (ACPI) 2.0 and 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.

BIOS Specifications

- AMI BIOS, including 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
ÅµATX	ÅµATX 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
BPP	Bi-directional Print Port
ECP	Extended Capabilities Port
ATA-33 ATA-66 ATA-100 ATA-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

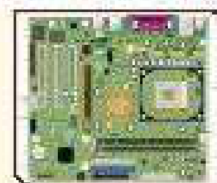## How to configure..

BIOS

▸ **Columbia II Motherboard BIOS Screens**

03-07-2002

Jumpers

▸ **Columbia II Jumpers and Connectors**
Columbia II jumpers and connectors

11-06-2002