

PB301 (Models: 386SXIIe & 386SXIIes)

Specification

The PB 301 C.1 (20mhz) is wrongly advertised with having a maximum resolution of only 800 x 600 (256K RAM).

- **Battery** : NiCad 3.6 V rechargeable.
- **BIOS** : 128K Phoenix BIOS Phoenix 1.10.2716. To access setup, press Ctrl-Alt-S during post for setup
- **Bus Architecture** : ISA based system bus
- **Cache** : N/A
- **CPU** : 80386SX-16 MHz, 80386SX-20 MHz, 80386SX-25 MHz. Keyboard Switchable (Ctrl)-(Alt)-(-) = 8 MHz, (Ctrl)-(Alt)-(+) = 16/20/25 MHz
- **Interfaces** :
 - 1 DB-25 Parallel Port
 - 1 DB-9 Serial ports
 - 1 15 pin VGA port
 - 1 Proprietary modem connector
 - 1 15 pin game port
 - 1 PS/2 Keyboard port
 - 1 PS/2 Mouse port
- **RAM** : B.2 with 1 MB surface mount: - Standard on motherboard: 1 MB - Maximum on motherboard: 5 MB (Use 256 Kb, 1 MB 9-bit SIMMs, 80ns) (enclosed) B.2 without 1 MB surface mount: - Standard on motherboard: 1 MB - Maximum on motherboard: 16 MB (Use 256 Kb, 1 MB, 4 MB 9-bit SIMMs 80ns) C.1 with 2 MB surface mount: - Standard on motherboard: 2 MB - Maximum on motherboard: 4 MB (use 1 MB 9-bit SIMMs, 80ns)
- **Speaker** : Piezoelectric, soldered on motherboard
- **Video** : Oak Extended VGA built into motherboard 1024 x 768, 16 bit
- **Video RAM** : 256K Standard/512K Maximum

Jumpers

Notes -

When replacing the motherboard and installing or removing a modem, ensure that the JMOD connector is configured properly.

Pin one on all jumpers and connectors will always be in the direction of the compass unless otherwise marked on the diagram.

There are three revisions of the PB 301 motherboard. Revision C was the only 301 used in multimedia systems.

There are three revisions to this motherboard.

- Motherboard A -
 - Has 1MB surface mount DRAMs; CPU is 16 or 20 MHz.
 - The parity chips may not be present on some motherboards.
- Motherboard B -
 - This system does not have surface mount DRAMs and the CPU is 16 or 20 MHz.
- Motherboard C -
 - This system has 2MB surface mount DRAMs and the CPU is 16, 20 or 25MHz.

- o A 301-252 has 256k video memory. A 301-v252 has 512K of video memory in addition to a 25 MHz CPU.

Some computers have the game port jumpers reversed (1-2 Enabled 2-3 Disabled).

Built-in video is 1024 x 768 (256Kb or 512Kb)

Function	Jumper	Description
Jfdc (FDC)	1-2 2-3	Primary Address Secondary Address
Jhdc (IDE)	1-2 2-3	Primary Address Secondary Address
Jc13 (COM1/COM3)	1-2 2-3	Proprietary Modem in COM1 Proprietary Modem in COM3
Jc24 (COM2/COM4)	1-2 2-3	Serial Port is COM2 Serial Port is COM4
Jlps (LPT PORT)	1-2 2-3	Select LPT1 Select LPT2
Jlrq (LPT INT)	1-2 2-3	LPT uses IRQ5 LPT uses IRQ7
Jinlc (INTERLACED)	IN OUT	Interlaced Monitor Non-interlaced Monitor
Jmrq (MOUSE INT)	IN OUT	Mouse Port Enabled Mouse Port Disabled
Jvgas (VGA PORT)	1-2 2-3	Built-in VGA Enabled Built-in VGA Disabled
Jgams (GAME PORT)	1-2 2-3	Disabled Enabled
Jvd (DISPLAY)	1-2 2-3	Monochrome Mode Colour Mode
Jpip (PIPELINE)	IN OUT	Pipelined 80386SX Non-pipelined
Jspks (SPEAKER)	1-2 2-3	Internal Enabled External Enabled
Jbts (BATTERY)	IN OUT	Internal Enabled External Enabled

Upgrades

- **Battery** : The system can use a 3.6 volt lithium battery. To install the external battery, remove the jumper cap on Jbts. Connect the battery to connector Jbt. The positive terminal of the battery connects to pin 1, the negative to pin 4.
- **Maths Co-Processor** : An 80387SX Co-processor can be installed in socket U58, no jumpers need to be changed. NOTE: Co-processor speed must match system speed.
- **RAM** : There are 3 variations of motherboard for this system, each one with different memory configurations.
 - o **Motherboard A** : System with 1Mb surface mount DRAMs and 4 SIMM sockets. (Ver. B.2) (Supports 256Kb and 1MB 80ns SIMMs). This motherboard has a 16 MHz CPU.

- **Motherboard B** : System without surface mount DRAMs and 4 SIMM sockets. (Ver. B.2) (Supports 256kb, 1Mb, and 4Mb 80ns SIMMs).this system has a 20 MHz CPU.
- **Motherboard C** : System with 2Mb surface mount DRAMs and 2 SIMM sockets. (Ver. C.1) (Supports 1mb 80ns SIMMs only). This motherboard can have a 20 or 25 MHz CPU.
- **Video RAM** : This system is NOT VESA compatible. All variations have either 256k or 512k video memory soldered (not upgradable).