

Chapter 1

Introduction

Overview

P6I440FX-DP Commander IV green mainboard provides a highly integrated solution for fully compatible, high performance PC/AT platforms, feature the industry standard “ATX” form factor and supports up to two Intel Pentium®Pro processors. Flexible main memory size can be installed from 8MB up to 1024MB(1GB)DRAM, so as to give full play to the advantages of the Intel Pentium®Pro processors. The mainboard offers a wide range of interface to support integrated on-board IDE and on-board I/O function.

The current Green function is divided into three phases: Doze, Standby and Suspend.

Key Features

- | | |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| CPU | - Supports single/dual Intel Pentium®Pro processors at 150/166/180/200MHz |
| | - Supports 60MHz/66MHz bus speed |
| | - CPU core frequency = System Clock x2,x2.5, x3, x3.5, or x4. |
| | - CPU Core supply voltage supplied by VRM can be adjusted from 2.1V to 3.5V by a set of jumpers or automatically selected by CPU VID |
| Chipset | - Intel® 440FX chipset |
| System memory | - Supports 8x72 pin SIMM modules |
| | - 64-bit data path for flexible memory size from 8MB up to 1024MB DRAM on board |
| | - Supports both Fast Page mode and Extended Data Output (EDO) DRAM |
| | - Supports memory Parity checking function |
| On-board IDE | - Supports two PCI PIO and Bus Master IDE ports. |
| | - Supports up to Mode 4 Timing |
| | - Supports 2 Fast IDE interfaces for up to 4 IDE devices including IDE hard disks and CD-ROMs |

Introduction

- Green function** - Supports three green modes: Doze, Standby and Suspend
- On-board I/O** - Use NS Plug & Play I/O chip PC87307
 - One floppy port supports up to two 3.5" or 5.25" floppy drives 360K/720K/1.2M/1.44M/2.88M format
 - Supports LS-120 floppy disk drive file access
 - All I/O ports can be enabled/disabled by BIOS setup
 - Two high speed 16550 compatible UARTs (COM1/COM2/COM3/COM4 selectable) with 16-byte send/receive FIFOs and support MIDI mode
 - One enabled parallel port at I/O address 378H/278H/3BCH with additional bi-direction I/O capability and multi-mode selection(SPP/EPP/ECP) (IEEE1284 compliant)
 - Provides protection circuit to prevent damage to the parallel port when a connected printer is powered up or operated at a higher voltage
- Advanced Feature** - System monitor (monitoring system voltages and temperature)
 - On board PS/2 mouse and PS/2 keyboard socket
 - Two USB ports
 - Provides Anti-Virus function
 - Provides Infrared interface
 - Supports Windows 95 Software Power-Down
 - Supports External Modem Ring Power-On
- BIOS** - Licensed advanced AWARD BIOS, supports Flash ROM BIOS, Plug and Play ready. Built-in NCR[®] 53C810 BIOS
 - Supports IDE CD-ROM or SCSI bootup
- Expansion slots** - 3 x ISA slots and 5 x PCI slots*
- Board size** - 305 mm x 250mm

“*”: It's not recommended to plug in two PCI master cards on PCI1 & PCI5 slots simultaneously, because PCI1 slot and PCI5 slot share same IRQ resource.

Hardware Settings

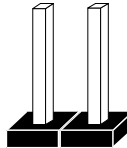
There are some hardware settings on the board. They specify configuration options for various features. The settings are made using something called a “jumper”. Jumpers on the system board provide information to your operation about installed options and system settings. A jumper is a set of two or more metal pins in a plastic base attached to the main-board. A plastic jumper “cap” with a metal plate inside fits over two pins to create an electrical contact between them. The contact establishes a hardware settings such as installing the CPU.

NOTE: When you open a jumper, leave the plastic jumper cap attached to one of the pins so you don’t lose it.

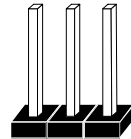
Jumpers and caps



Jumper cap



2-pin jumper



3-pin jumper

Graphic symbol

To rapidly give user a effective and direct way to set jumpers for your system, there are some diagrams used in the following chapters. All kind of jumper setting modes are simplified as the following relevant graphic symbols:



Jumpper closed symbolises as:



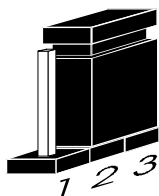
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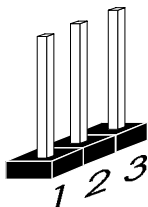
Jumper opened symbolises as:



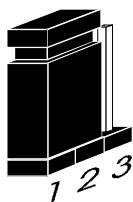
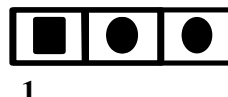
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Closed pin-2 and pin-3 of a jumper symbolises as:



Opened all pins of a jumper symbolises as:



Closed pin-1 and pin-2 of a jumper symbolises as:

