HOT-603

AMD K-6 Processor Based

PCI Main Board

User's Guide

Shuttle

JVROM1
12V 5V

USB

AMD

Winbond
W83977FA

J USB1

JVBAT1

Key-board

J1

CN5

Power-Supply

FDC

PRINT

COM2

COM1

JV1

ISA-Slots

PCI-Slots

IDE2 IDE1

AMD AMD-K6

HOT-603

JC1

SIM-Sockets

JPW1

FAN1

JP4

DIM-Sockets

CPU-Socket 7

Socket 7

AMD
AMD-595
AMD-595AC
E 9712 C
© AMD 1997

JV3
VCC2

JV4
VCC3

JV2
3.3V
3.45V

IR1
C-IR

JP3 JP2 JP1

SPEAK G-LED KEYLOCK   F-IR   RST HDLED J-PO PW-BT

PWRBTN1

J5   J4   J3   IR2 J2 HD1 JPON1

HOT-603 Installation guide

1) CPU configuration according to the tables. The voltage instructions of the CPUs may be changed at a later date without prior notification by the manufacturer.
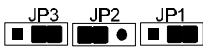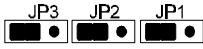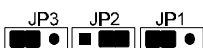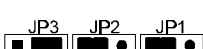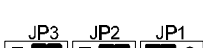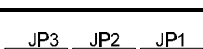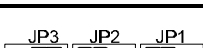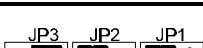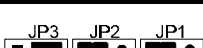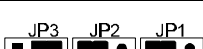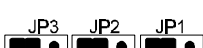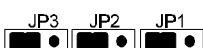
   Example 1: Four-Pin-Jumper:
   Pin 2 & 4 are closed by jumper cap.

   Example 2: Six-Pin-Jumper.
   Pin 3 & 4 are closed by jumper cap.

2) Memory-Configuration: the 72pin sockets can be filled with pairs of same Fast-Page-Mode- and/or EDO-modules in sizes of 4, 8, 16, 32 and 64 MB (60 or 70 ns). The 168pin sockets can be equipped with one or two DIMM-modules in size of 8, 16, 32, 64 or 128 MB (FPM, EDO or SDRAM). Do not populate both 5V SIMM modules and 3.3V DIMM modules at the same time!

3) AT and ATX Power Supply connectors are both available on HOT-603 Main Board.

4) Power on the computer and press <DEL> immediately will allow you to enter BIOS setup program.

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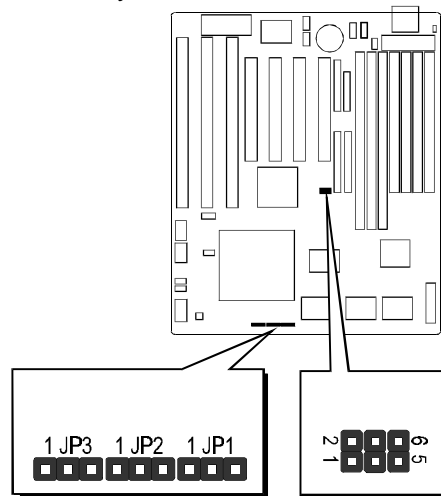
CPU Clock Configuration

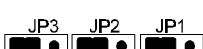| Processors	JC1	System Clock / Multiplier	Multiplier JP3 / JP2 / JP1
AMD-K6 266 MHz		66 MHz x 4	
AMD K6 233 MHz Pentium MMX 233 MHz		66 MHz x 3.5	
AMD-K6 200 MHz AMD-K5 PR200 Pentium MMX 200 MHz Pentium 200 MHz Cyrix/IBM 6x86MX PR233		66 MHz x 3	
Cyrix/IBM 6x86L P200+ Cyrix/IBM 6x86 P200+		75 MHz x 2	
AMD-K6 166 MHz AMD-K5 PR166 Pentium MMX 166 MHz Pentium 166 MHz Cyrix/IBM 6x86MX PR200		66 MHz x 2.5	
AMD-K5 PR150 Pentium MMX 150 MHz Pentium 150 MHz Cyrix/IBM 6x86MX PR166		60 MHz x 2.5	
Pentium 133 MHz Cyrix/IBM 6x86L P166+ Cyrix/IBM 6x86 P166+		66 MHz x 2	
Pentium 120 MHz Cyrix/IBM 6x86L P150+ Cyrix/IBM 6x86 P150+		60 MHz x 2	
Cyrix/IBM 6x86 PR133+		55 MHz x 2	
Cyrix/IBM 6x86 P120+		50 MHz x 2	
AMD K5 PR100/PR133 Pentium 100 MHz		66 MHz x 1.5	
AMD-K5 PR90/PR120 Pentium 90 MHz		60 MHz x 1.5	
AMD-K5 PR75 Pentium 75 MHz		50 MHz x 1.5	

CPU Voltages Configuration

Voltage			CPU Type	Jumper-Setting			
Type	Vcore	Vio		JPW1	JV3	JV4	JV2
Single	3.52V	3.52V	3.52V AMD K5 ABx Pentium P54C VRE Cyrix/IBM 6x86				
	3.3V	3.3V	Pentium P54C STD Cyrix/IBM 6x86				
Dual	3.2V	3.3V	AMD-K6 233 / 266 MHz				
	2.9V	3.3V	AMD-K6 166 / 200 MHz				
	2.8V	3.3V	Pentium P55C MMX Cyrix 6x86L Cyrix 6x86MX				
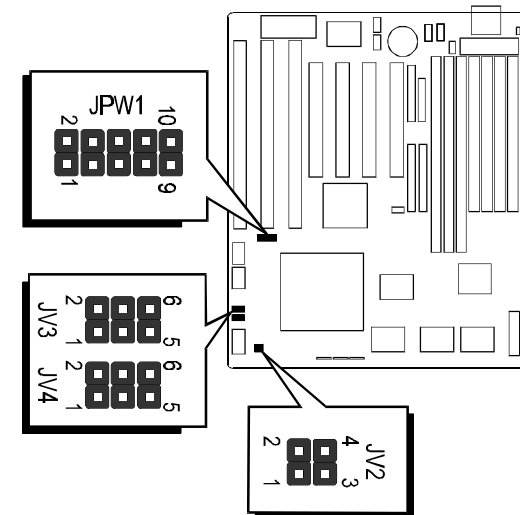
Power Supply Type Select

Power Supply Type	Outline	JV1	J1
12-Pin AT Type			
20-Pin ATX Type			

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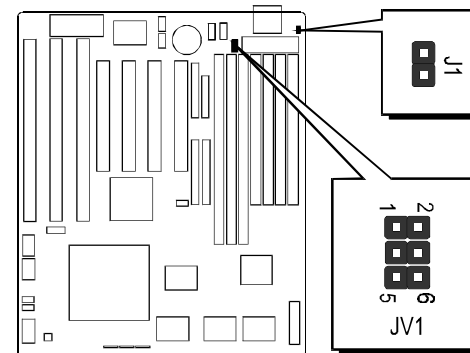
HOT-603 Specification

CPU Function

- ❑ AMD K5 processors : PR75 ~ PR200
- ❑ AMD K6 processors : 166 ~ 266 MHz
- ❑ Pentium processors P54C : 75 ~ 200 MHz
- ❑ Pentium processors P55C (MMX) : 166 ~ 233 MHz
- ❑ Cyrix/IBM 6x86/L, 6x86MX processors : P120 ~ P233

Chipset

- ❑ AMD-640 Chipset

- ❑ Provides four 72-pin SIMM sockets for 5V EDO and Fast Page Mode SIMMs. Supports 4MB, 8MB, 16MB, 32MB, 64MB 72-pin SIMMs ranging from 8MB to 512MB.

- ❑ Provides three 168-pin DIMM sockets for 3.3V Sync. DRAM, EDO or Fast Page Mode DIMMs. Supports 8MB, 16MB, 32MB, 64MB, 128MB 168-pin DIMMs.

Cache Memory

- ❑ Integrated L2 write-back cache controller
  - 1024KB direct Mapped Pipeline Burst Cache

Power Management Function

- ❑ Provides four power management modes : Full on, Doze, Standby, and Suspend

- ❑ Supports Microsoft APM

- ❑ Provides EPMI (External Power Management Interrupt) pin

Expansions

- ❑ 32-bit PCI bus slot x 4

- ❑ 16-bit ISA bus slot x 3

- ❑ 2-channel PCI IDE port
  - Support up to 4 IDE devices
  - Supports "Ultra 33 " synchronous DMA mode transfer up to 33 MBytes/sec
  - PIO Mode 4, DMA Mode 2 transfers up to 22 MB/sec
  - Integrated 8 x 32-bit buffer for PCI IDE burst transfers

- ❑ One floppy port

- ❑ One parallel port
  - Supports **SPP** (PS/2 compatible bidirectional Parallel Port), **EPP** (Enhanced Parallel Port), and **ECP** (Extended Capabilities Port) high performance parallel port.

- ❑ Two serial ports
  - Supports 16C550 compatible UARTS.
  - Supports IrDA (Infra-red) communication.

- ❑ One PS/2 mouse port

- ❑ Two USB (Universal Serial Bus) ports

System BIOS

- ❑ Award PnP Bios v4.51PG
  Bundled with Symbios Login (NCR) SDCM V4.0 SCSI Bios

Board Design

- ❑ AT form factor, Dimension 220mm x 280mm