MP054 USER'S MANUAL
Intel FX Triton PCI/ISA MOTHERBOARD

Foreword

This manual is designed to provide the basic necessarv information for the end user to understand and properly use the MP054 mainboard. The mainboard ensures superlative performance and complete compatibility with industry standards, which incorporating many technical enhancements.

Trademarks

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Checklist

Your MP054 Cache package contains the following:

* MP054 Cache mainboard
* User's Manual.
* HDD Cable
* FDD Cable
* Serial & Printer Cable

Precautions

Make sure you ground yourself before handling the mainboard or other system components. Electrostatic discharge will damage mainboard. Note that you must take special precaution when handling the mainboard in dry or air-conditioned environments.

The precaution below is to protect the mainboard from electrostatic discharge.

* Do not remove the anti-static packaging until you are ready to install the mainboard and other system components.
* Ground vourselfbefore removing any system component from its protective anti-static packaging. To ground yourself , grasp the expansion slot covers or other unpainted portion computer chassis.
* Frequently ground yourself while working , or use a grounding strap.
* Handle the mainboard by the edges and avoid touching its components.

Mainboard Features

* Intel triton PCI chipset: 82437 (TSC)/82438(TDP)/82371FB (PIIX)
* Support P54C/P55C Microprocessor , system running up to 100 Mhz
* Support High performance 32bits PCI local bus and provide four PCI bus master
* Support four 16bits ISA system bus I/O slot
* Optional non / 256KB/512KB L2 external cache
* Direct mapped organization with write through / write back selection
* Main memory (DRAM) supprot from 4MB to 128MB
* Support Enhance IDE onboard
* PnP (Plug & Play) compatible I/O (Serial port, Parallel port, FDC ....)onboard

Jumper and Connectors Reference

Before installing the mainboard, make sure that thejumper setting are properly set for your configuration. The function of different jumpers are

respectively as follows:

CPU Internal Clock Mutiplier	JP31, JP32
CPU Clock Frequency Selector	JP23, JP24
CPU Voltage Selector	JP33, JP34
Cache Option	JP30
SRAM Voltage Selector	JP28, JP29
Flash ROM Voltage Selector	JP13
Printer Port ECP function Selector	JP5,JP6
CMOS Charge/Discharge	JP27
AT Bus Speed Selector	JP20

Mainboard Connectors

Onboard HDD LED Connector	J4
Reset Switch Connector.....	J3
Speaker Connector	J2
Keylock and Power LED Connector..	J1
PS/2 mouse Connector	MS1 & 2
Keyboard Connector	KB1
Power Supply Connector	PW1

Jumper Caps reference

Red	Jumper for	Voltage Selector
White	Jumper for	CPU Type
Yellow	Jumper for	Clock Selector
Blue	Jumper for	Cache Option
Black	Jumper for	Other

P54C CPU JUMPER SETTING

CPU SPEED CPU Clock Selector CPU Internal Clock Selector

	Yellow Jumper Cap			Yellow Jumper Cap		
	JP23	JP24		JP31	JP32	
P54C-75 Mhz	CLOSE	CLOSE	(50 Mhz)	1-2	1-2	(x1.5)
P54C-90 Mhz	CLOSE	OPEN	(60 Mhz)	1-2	1-2	(x1.5)
P54C-100 Mhz	CLOSE	CLOSE	(5O Mhz)	2-3	1-2	(x2)
P54C-120 Mhz	CLOSE	OPEN	(60 Mhz)	2-3	1-2	(x2)
P54C-133 Mhz	OPEN	CLOSE	(66.6 Mhz)	2-3	1-2	(x2)

CPU VOLTAGE SELECTOR Red Jumper Cap

JP33	JP34	
CLOSE	OPEN	3.38 Volts for Intel P54C Standard CPU 5pe
OPEN	CLOSE	3.54 Volts for Intel P54C VRE CPU Type

SRAM Configuration

SRAM Configuration is used to configure the external cache of the mainboard. External cache can be configured by using 32K*8 and 64K*8 SRAM CHIP. The size of the external cache is configured by the SRAM chip being used and the jumper setting ofthe SRAM Configuration.

256K Configuration	Blue jumper Cap	
JP30	SRAM	TAG RAM
1-2	32K*8	8K*8/16K*8/32K*8

512K Configuration	Blue jumper Cap	
JP30	SRAM	TAG RAM
2-3	64K*8	16K*8/32K*8

SRAM Voltage Selector

There are two type of SRAM can be used in this mainboard.
a. 3.3 Volts SRAM b. MIX Mode Voltage SRAM

JP28	JP29 Red jumper Cap	
1-2,3-4,5-6	OPEN	3.3 Volts SRAM
OPEN	1-2,3-4,5-6	MIX Mode Voltage SRAM

AT Bus Speed Selector Yellow jumper Cap

JP20
1-2 AT Bus Speed is PCI Clock 1/3
2-3 AT Bus Speed is PCI Clock 114

Printer Port ECP function Selector Black jumper Cap

JP5	JP6	
1-2	1-2	for ECP Mode
2-3	2-3	for NORMAL Mode

Flash ROM Voltage Selector Red jumper Cap

JP13

OPEN	EPROM	
1-2	Flash ROM 12 Volts	(Intel Brand)
2-3	Flash ROM 5 Volts	(SST Brand)

Memory Module Combinations

Bank O Socket 1 & 2	Bank 1 Socket 3 & 4	Total Memory Using Sockets 1 through 4
4MB x 2	None	8MB
8MB x 2	None	16MB
16MB x 2	None	32MB
32MB x 2	None	64MB
None	4MB x 2	8MB
None	8MB x 2	16MB
None	16MB x 2	32MB
None	32MB x 2	64MB
4MB x 2	4MB x 2	16MB
4MB x 2	8MB x 2	24MB
4MB x 2	16MB x 2	40MB
4MB x 2	32MB x 2	64MB
8MB x 2	4MB x 2	24NB
8MB x 2	8MB x 2	32MB
8MB x 2	16MB x 2	48MB
8MB x 2	32MB x 2	80MB
16MB x 2	4MB x 2	40MB
16MB x 2	8MB x 2	48MB
16MB x 2	16MB x2	64MB
16MB x 2	32MB x 2	96MB
32MB x 2	4MB x 2	72MB
32MB x 2	8MB x 2	80MB
32MB x 2	16MB x 2	96MB
32MB x 2	32MB x 2	128MB

IMPORTANT: Do not use SIMM modules with more that 24 chips per module with this mainboard. Module with more than 24 chips exceeds the design specification of the memory subsystem and will cause unreliable operation.

CMOS Charge / Discharge Black jumper Cap

CMOS Charge / Discharge is used to discharge and charge CMOS. If you discharge the CMOS all the data will be erased.

JP27	
OPEN	Charge CMOS
CLOSE	Reset CMOS

Mainboard Connectors

J1 Keylock and Power LED connector will be connected in your computer case front panel. Keylock is used to lock the keyboard. Power LED will light up when you turn on your power supply.

J2 Speaker connector will be connected in the speaker ofyoar computer case.

J3 Reset Switch connector will be connected in your computer case front panel. Resetting the system, it will restart the computer from self-test without turning off the power supply. This connection is always off position.

J4 Onboard HDD LED connector will be connected in your computer case front pannel.

MS1 PS/2 Mouse connector, this is used for PS/2 mouse. (In mainframe case)

MS2 PS/2 Mouse connector, this is used for PS/2 mouse. (External connection using cable)

KB1 Keyboard connector, this is used for inputting signal from the keyboard.

PW1 Power Supply connector is connected from the output of the power supply. Most of the power supply has two connectors which will be connected to the mainboard. Each connector has six wire , two of the wires are black. To connect to the mainboard, make sure that the black wire is in the middle. Wrong connection will cause damage to the mainboard.

AWARD BIOS SETUP

Award BIOS support plug and play function and has a built-in setup program that allows the users to modify the basic system configuration. This type of information is stored in CMOS so that it retains the setup information when the power is turned off.

1. Turn on or reboot the system. when the below message appears at the bottom of the screen during the POST (Power On Self Test) press DEL key to enter setup.

2. Press the DEL key to enter the Award BIOS program and the main menu will appear on the screen. The main menu allows you to select from ten setup functions and two exit choices.

3. For the safe, please select "LOAD SETUP DEFAULTS" for BIOS setup.