MP080 USER'S MANUAL
INTEL TRITON TX MOTHERBOARD

Foreword
========
This manual is designed to provide the basic necessary information for the
end user to understand and properly use the MP080 mainboard. The mainboard
ensures superlative performance and complete compatibilty with industry
standards, which incorporating many techincal enhancements.

Trademarks
==========
WTC is a registered trademark of Win Technologies Co., Ltd, All trademarks
belong to their registered owner.

Checklist
=========
Your MP080 package contains the following:
* MP080 mainboard
* User's manual
* HDD/FDD Cable
* Coml, Com2 and PS/2 mouse Cable
* Printer Cable

Precautions
===========
Make sure you ground yourself before handling the mainboard or other system
components. Electrostatic discharge will damage the 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 yourself before 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.

Motherboard Features
====================
* Intel 82430TX PCI chipset: 82439TX(MTXC)/ 82371AB(PIIX4)
* Supports Intel P54C/P55C(MMX), Cyrix/lBM 6x86, and AMD KS/K6(MMX)
  microprocessors
* Four high performance 32 bits PCI local bus master
* Four 16 bits ISA system bus I/O slots
* 256K/512K synchronous cache onboard
* Main xnemory (DRAM) from 4MB to 256MB, either Fast Page mode / EDO
  mode/SDRAM
* Supports Four SIMha and Two DIMM sockets
* Supports two USB (Universal Serial Bus) ports
* Enchanced IDE onboard(Ultra DMA-33)
* IR port optional
* Supports Windows 95 PnP (Plug and Play) function and PC97 for I/O
* Enhanced fast I/O (Serial port, Parallel port (ECP/EPP/SPP), FDC) onboard
* Supports ACPI function

Jumpers, DIP Switch and Connectors Reference
==

Before installing the mainboard, make sure that the jumper settings are
properly set for your configuration. The functions of the different jumpers
are respectively as follows:

```
CPU Clock Selector                            JP7, JP8, JP9
CPU /BUS Clock Ratio Selector                 SW1-6,SW1-7,SW1-8
CPU Voltage Selector                          SW1-1 · 2 · 3 · 4 · 5
Single,Dual Voltage Selector                  JP15
Flash RORI Voltage Selector                   JP12
CMOS Charge /Discharge                        JP3
Mainboard Connectors:
Hard disk Connector                           IDE 1&IDE2
Printer Connector                             PRN 1
Floppy Corlnector                             FDC 1
Serial Connector                              COMI & COM2
Universal Serial Bus Connector                USB
SMI Push Button Connector                     J7
SMI LED Connector                             J1
Hard disk LED Connector                       J3
Keylock and Power LED Connector               J6
Speaker Connector                             J4
Reset Connector                               J2
Keyboard Connector                            KB 1
PS/2 Mouse                                    MS 1
Power Supply Connector                        P1
```

```
Jumper Caps reference :
Red cap    for voltage selector
Yellow cap for Clock Selector
Black cap  for others
```

CPU Jumper Setting
==================
Before installing the CPU, make sure that the CPU VOLTAGE SELECTOR are set
properly, wrong voltage setting will damage the CPU and mainboard.

```
SINGLE VOLTAGE CPU:    JP15 ALL OPEN
DUAL VOLTAGE CPU:      JP15 ALL CLOSE
```

CPU CORE VOLTAGE REFERENCE

SW1-1	SW1-2	SW1-3	SW1-4	SW1-5	VRE
ON	ON	ON	ON	OFF	3.5V
OFF	ON	ON	ON	OFF	3.4V
ON	OFF	ON	ON	OFF	3.3V
OFF	OFF	ON	ON	OFF	3.2V
ON	OFF	OFF	ON	OFF	2.9V
OFF	OFF	OFF	ON	OFF	2.8V
ON	OFF	OFF	OFF	OFF	2.1V

CLOCK SETTING REFERENCE

JP7	JP8	JP9	FREQUENCE
1-2	1-2	1-2	50 MHz
2-3	1-2	1-2	55 MHz
1-2	2-3	1-2	60 MHz
1-2	1-2	2-3	66 MHz
2-3	2-3	1-2	75 MHz
2-3	1-2	2-3	83 MHz

CLOCK RATIO SELECT REFERENCE

SW6	SW7	SW8	P54C	P55C	
ON	ON	OFF	x2.5	x2.5	(Clock Ratio)
OFF	ON	OFF	x3	x3	
ON	OFF	OFF	x2	x2	
OFF	OFF	OFF	x1.5	x1.5	

```
Intel CPU (Single Voltage)
-------------------------                       +-------- SW1 -------+
                 JP15    JP7    JP8    JP9   1  2  3  4  5  6  7  8
PP-75      / 3.52V   OPEN    1-2    1-2    1-2   1  1  1  1  0  0  0  0
PP-90      / 3.52V   OPEN    1-2    2-3    1-2   1  1  1  1  0  0  0  0
PP-100     / 3.52V   OPEN    1-2    1-2    2-3   1  1  1  1  0  0  0  0
PP-120     / 3.52V   OPEN    1-2    2-3    1-2   1  1  1  1  0  1  0  0
PP-133     / 3.52V   OPEN    1-2    1-2    2-3   1  1  1  1  0  1  0  0
PP-150     / 3.52V   OPEN    1-2    2-3    1-2   1  1  1  1  0  1  1  0
PP-166     / 3.52V   OPEN    1-2    1-2    2-3   1  1  1  1  0  1  1  0
P54CT-180 / 3.38V    OPEN    1-2    2-3    1-2   0  1  1  1  0  0  1  0
P54CT-180 / 3.52V    OPEN    1-2    2-3    1-2   1  1  1  1  0  0  1  0
P54CT-200 / 3.38V    OPEN    1-2    1-2    2-3   0  1  1  1  0  0  1  0
P54CT-200 / 3.52V    OPEN    1-2    1-2    2-3   1  1  1  1  0  0  1  0

Note: JP15: ALL OPEN
      SW1 : 1-ON, 0-OFF

Intel CPU (Dual Voltage)
-------------------------                       +-------- SW1 -------+
                 JP15    JP7    JP8    JP9   1  2  3  4  5  6  7  8
P55C-150 / 2.8V     CLOSE   1-2    2-3    1-2   0  0  0  1  0  1  1  0
P55C-166 / 2.8V     CLOSE   1-2    1-2    2-3   0  0  0  1  0  1  1  0
P55C-200 / 2.8V     CLOSE   1-2    1-2    2-3   0  0  0  1  0  0  1  0
P55C-233 / 2.8V     CLOSE   1-2    1-2    2-3   0  0  0  1  0  0  0  0
P55C-266 / 2.8V     CLOSE   1-2    1-2    2-3   0  0  0  1  0  1  0  1

Note: JP15: ALL CLOSE
      SW1 : 1-ON, 0-OFF


AMD K5 CPU (Single Voltage)
-------------------------                       +-------- SW1 -------+
                 JP15    JP7    JP8    JP9   1  2  3  4  5  6  7  8
K5PR-75  / 3.52V    OPEN    1-2    1-2    1-2   1  1  1  1  0  0  0  0
K5PR-90  / 3.52V    OPEN    1-2    2-3    1-2   1  1  1  1  0  0  0  0
K5PR-100 / 3.52V    OPEN    1-2    1-2    2-3   1  1  1  1  0  0  0  0
K5PR-120 / 3.52V    OPEN    1-2    2-3    1-2   1  1  1  1  0  0  0  0
K5PR-133 / 3.52V    OPEN    1-2    1-2    2-3   1  1  1  1  0  0  0  0
K5PR-150 / 3.52V    OPEN    1-2    2-3    1-2   1  1  1  1  0  1  1  0
K5PR-166 / 3.52V    OPEN    1-2    1-2    2-3   1  1  1  1  0  1  1  0
K5PR-200 / 3.52V    OPEN    1-2    1-2    2-3   1  1  1  1  0  0  1  0

Note: JP15: ALL OPEN
      SW1 : 1-ON, 0-OFF

AMD K6 CPU (Dual Voltage)
-------------------------                       +-------- SW1 -------+
                 JP15    JP7    JP8    JP9   1  2  3  4  5  6  7  8
K6-166 / 2.9V       CLOSE   1-2    1-2    2-3   1  0  0  1  0  1  1  0
K6-200 / 2.9V       CLOSE   1-2    1-2    2-3   1  0  0  1  0  0  1  0
K6-233 / 3.2V       CLOSE   1-2    1-2    2-3   0  0  1  1  0  0  0  0
K6-266 / 3.2V       CLOSE   1-2    1-2    2-3   0  0  1  1  0  1  0  1
K6-233 / 2.1V       CLOSE   1-2    1-2    2-3   1  0  0  0  0  0  0  0
K6-266 / 2.1V       CLOSE   1-2    1-2    2-3   1  0  0  0  0  1  0  1
K6-300 / 2.1V       CLOSE   1-2    1-2    2-3   1  0  0  0  0  1  1  1

Note: JP15: ALL CLOSE
      SW1 : 1-ON, 0-OFF


IBM/CYRIX CPU (SINGLE Voltage)
-------------------------                       +-------- SW1 -------+
                 JP15    JP7    JP8    JP9   1  2  3  4  5  6  7  8
PR-120 / 3.52V      OPEN    1-2    1-2    1-2   1  1  1  1  0  1  0  0
PR-133 / 3.52V      OPEN    2-3    1-2    1-2   1  1  1  1  0  1  0  0
PR-150 / 3.52V      OPEN    1-2    2-3    1-2   1  1  1  1  0  1  0  0
```

```
PR-166 / 3.52V         OPEN    1-2    1-2    2-3    1 1 1 1 0 1 0 0
PR-200 / 3.52V         OPEN    2-3    2-3    1-2    1 1 1 1 0 1 0 0

Note: JP15: ALL OPEN
      SW1 : 1-ON, 0-OFF


IBM/CYRIX CPU (Dual Voltage)
--------------------------                    +-------- SW1 -------+
                       JP15   JP7    JP8    JP9    1 2 3 4 5 6 7 8
PR-120 / 2.8V          CLOSE   1-2    1-2    1-2    0 0 0 1 0 1 0 0
PR-133 / 2.8V          CLOSE   2-3    1-2    1-2    0 0 0 1 0 1 0 0
PR-150 / 2.8V          CLOSE   1-2    2-3    1-2    0 0 0 1 0 1 0 0
PR-166 / 2.8V          CLOSE   1-2    1-2    2-3    0 0 0 1 0 1 0 0
PR-200 / 2.8V          CLOSE   2-3    2-3    1-2    0 0 0 1 0 1 0 0

Note: JP15: ALL CLOSE
      SW1 : 1-ON, 0-OFF


IBM/CYRIX M2 CPU (Dual Voltage)
-------------------------                     +-------- SW1 -------+
                       JP15   JP7    JP8    JP9    1 2 3 4 5 6 7 8
MX-166/ 2.9V(133MHz) CLOSE    1-2    1-2    2-3    1 0 0 1 0 1 0 0
MX-166/ 2.9V(150MHz) CLOSE    1-2    2-3    1-2    1 0 0 1 0 1 1 0
MX-200/ 2.9V(150MHz) CLOSE    2-3    2-3    1-2    1 0 0 1 0 1 0 0
MX-200/ 2.9V(166MHz) CLOSE    1-2    1-2    2-3    1 0 0 1 0 1 1 0
MX-233/ 2.9V(188MHz) CLOSE    2-3    2-3    1-2    1 0 0 1 0 1 1 0
MX-233/ 2.9V(200MHz) CLOSE    1-2    1-2    2-3    1 0 0 1 0 0 1 0
MX-266/ 2.9V(225MHz) CLOSE    2-3    2-3    1-2    1 0 0 1 0 0 1 0
MX-266/ 2.9V(233MHz) CLOSE    1-2    1-2    2-3    1 0 0 1 0 0 0 0

Note: JP15: ALL CLOSE
      SW1 : 1-ON, 0-OFF


IDT-C6 CPU
---------                                     +-------- SW1 -------+
                       JP15   JP7    JP8    JP9    1 2 3 4 5 6 7 8
C6-150                 OPEN    2-3    2-3    1-2    1 1 1 1 0 1 0 0
C6-183                 OPEN    1-2    2-3    1-2    1 1 1 1 0 0 1 0
C6-200                 OPEN    1-2    1-2    2-3    1 1 1 1 0 0 1 0
C6-225                 OPEN    2-3    2-3    1-2    1 1 1 1 0 0 1 0
C6-240                 OPEN    1-2    2-3    1-2    1 1 1 1 0 0 0 0

Note: JP15: ALL OPEN
      SW1 : 1-ON, 0-OFF



Flash ROM Voltage Selector
==========================
JP12
1-2      5 VOLTS     FLASH ROM (SST / WINBOND / Other brand)
2-3      12 VOLTS    FLASH ROM (Intel / MX brand)

NOTE: Wrong Voltage jumper setting will danlage the flash ROM and
      mainboard.


CMOS Charge / Discharge( Reset)
==============================
JP3
1-2              CMOS CHARGE (DEFAULT)
2-3              CMOS DISCHARGE OR RESET.


IR Jumper Setting
```

```
==================
JP1       JP2
1-2       1-2      UART2 IS USED BY COMMUNICATION Port2 (COM2)
2-3       2-3      UART2 IS USED BY Infrared(IR) MOUDULE


MEMORY CONFIGURATION
====================
Memory supports from 4MB upto 256MB by using Standard,EDO or SDRAM.

MEMORY MODULE CONBINATIONS:
SIMM 1,2       SIMM 3,4       DIMM 1         DIMM 2)
(BANK 4,5)     (BANK 3, 2)    (BANK 2, 3)    (BANK 0, 1)
FREE           FREE           NA             FREE
FREE           NA             FREE           FREE
FREE           SB             SB             FREE


NOTE: "SB" means single bank RAM module (single side).
      "DB" means double bank RAM moudule(double side).
      "NA" means not accessible.

IMPORTANT: We don't recommand mixed 3V DIMM with 5V SIMM modules on the
           mainboard. The 5V SIMM data will drive 5V signal to 3V DIMM data
           port on the common memory data bus. It will cause 3V DIMM to
           degrade. This degradation will change the CMOS properties of 3V
           DIMM, and it will reduce the 3V DIMM module life cycle. If you
           really want to use 5V SIMMS and 3V DIMMs togeter, please contact
           your DRAM Vendor to confirm that 3V DIMMs mixed with 5V SIMMs
           will not damage the 3V DIMM chips, and then you can mix 3V DIMMs
           and 5V SIMMs on WIN MP080 mainboard.


MAINBOARD CONNECTORS
====================
IDE 1 & 2       HARD DISK CONNECTOR
FDC 1           FLOPPY CONNECTOR
PRN 1           PRINTER PORT CONNECTOR
COM 1 & 2       SERIAL PORT CONNECTOR
USB             UNIVERSAL BUS CONNECTOR
MS1             PS/2 MOUSE CONNECTOR
MB 1            KEYBOARD CONNECTOR
IR1             INFRARED MODULE CONNECTOR
J7              SMI SWITCH CONNECTOR
J3              HARD DISK LED CONNECTOR
J6              ]KEYLOCK & POWER LED
J4              SPEAKER CONNECTOR
J2              RESET CONNECTOR
J1              SMI LED CONNECTOR


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.
```

--- end of manual ---