

386 SX motherboard

GVC

INFOTEL
P. O. BOX 218
6990 U. S. RT. 36 E.
FLETCHER, OH 45326



**MOTHER
BOARD**

User Manual

Table of Contents

	Page
Section 1	
Specification	2
Section 2	
Main board Layout and Description	3
Jumper Setting	
J2: DISPLAY Adapter Set Up	4
J3: External Battery Connector	4
J9: Keyboard Lock and Power LED Connector	4
J10: Turbo LED Connector	4
J11: Turbo Switch	5
512: Speaker Connector	5
513: Reset Switch Connector	5
Memory Configuration	6
Section 3	
BIOS Setup	7

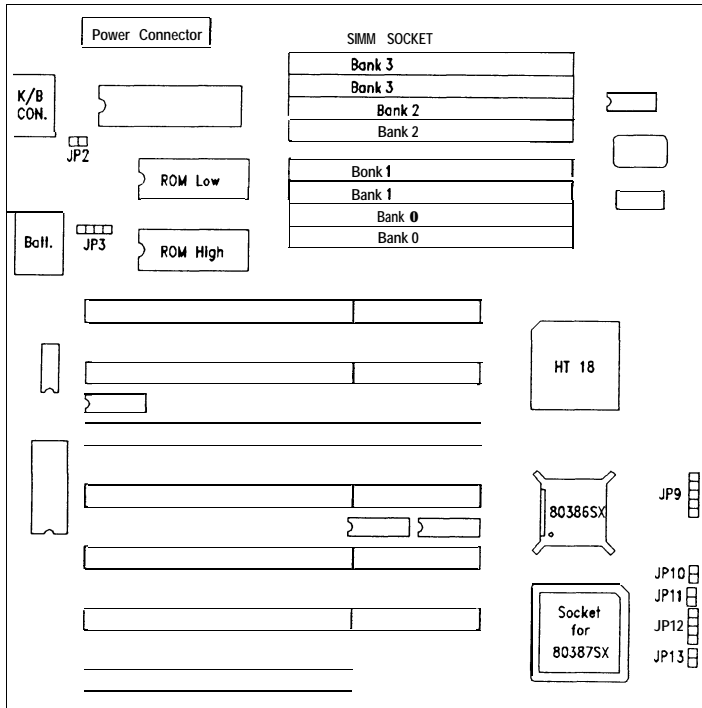
SECTION 1

SPECIFICATION

CPU	: 80386SX 16/20/25 MHz
CORPOCESSOR	: Socket for 80387SX 16/20/25 MHz
CHIPSET	: Headland HT18
BIOS	: AMI
MEMORY	: From 512KB up to 8 MB
RAM MODULE	: SIMM 256KB-8 SIMM 1MB-8
EXPANSION SLOT	: 16 Bit X 6 8 Bit X 1
SHADOWRAM	: System BIOS Video BIOS
SIZE	: Half baby size (22 X 22 cm)

Section 2

Main Board Layout and Description



JUMPER SETTING

[JP2] Mono/color switch
Open: mono

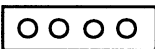


Short: color



[JP3] External battery connector

1. +VDD (Internal battery power input)
2. NC
3. GND
4. GND



1 4

[JP9] Power LED & keylock



1. LED output
2. No connection
3. GND
4. Keylock
5. GND

[JP10] Turbo LED



[JP11]



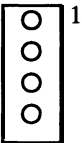
Turbo swith

Open : Speed chosen by keyboard



Short : **Low Speed**

[JP12]



Speaker Connector

1. Speaker output
2. GND
3. GND
4. +5VDC

[JP13]



Hardware reset switch

1. GND
2. Power good

MEMORY CONFIGURATION

The 386SX M/B supports 256K **and** 1M DRAM for up to 8MB total. The following table shows valid RAM combinations.

CFG	SIMM MODULES				TOTAL MEMORY
	BANK0	BANK1	BANK2	BANK3	
0	0	0	0	0	OK
1	256KX2	0	0	0	512K
2	256KX2	256KX2	0	0	1M
3	256KX2	256KX2	256KX2	0	1.5M
4	256KX2	256KX2	256KX2	256KX2	2M
5	256KX2	256KX2	1MX2	0	3M
6	256KX2	256KX2	1MX2	1MX2	5M
7	1MX2	0	0	0	2M
8	1MX2	1MX2	0	0	4M
9	1MX2	1MX2	1MX2	0	6M
10	1MX2	1MX2	1MX2	1MX2	8M
11	1MX2	1MX2	256KX2	0	4.5M
12	1MX2	1MX2	256KX2	256KX2	5M

NOTE : Use 80 nano second RAM

SECTION 3

BIOS Setup

The AMI BIOS Setup program is used to record the system hardware configuration. Follow the instruction as shown in the next pages to complete the whole setup procedure.

After power-on and memory test, please press “DEL” key, the program will go on to next screen.

Hit < DEL >, If you want to RUN SETUP.

BIOS SETUP PROGRAM - AMI BIOS SETUP UTILITIES (C)1990 American Megatrends Inc., All Rights Reserved
STANDARD CMOS SETUP
ADVANCED CMOS SETUP AUTO CONFIGURATION WITH BIOS DEFAULTS AUTO CONFIGURATION WITH POWER-ON DEFAULTS CHANGE PASSWORD HARD DISK UTILITY WRITE TO CMOS AND EXIT DO NOT WRITE TO CMOS AND EXIT
Standard CMOS Setup for Changing Time, Date,, Hard Disk Type, etc.
ESC:Exit ← → Sel F2/F3:Color F10:Save & Exit

- Note : Enter the above nine items due to user's request.
- 1, Use “ARROW” Keys and then“ENTER” to select the option you want.
 - 2, Select “WRITE TO CMOS AND EXIT” to leave from the BIOS Setup.

3-1 STANDARD CMOS SETUP

BIOS SETUP PROGRAM - STANDARD CMOS SETUP (C)1990 American Megatrends Inc., All Rights Reserved																																																							
Data (mn/date/year)	: Fri, Aug 30 1991	Base memory:	640KB																																																				
Time (hour/minute/second)	: 10 : 55 : 12	Ext. memory :	4096 KB																																																				
Daylight saving	: Disabled	CyIn	Head	WPcom	LZone	Sect Size																																																	
Hard disk C : type	: 17	977	5	300	977	17 41ME																																																	
Hard disk D : type	: Not Installed																																																						
Floppy drive A :	: Not Installed																																																						
Floppy drive B:	: Not Installed																																																						
Primary display	: Monochrome																																																						
Keyboard	: Installed																																																						
<table border="1" style="margin-left: auto; margin-right: 0;"> <thead> <tr> <th>Sun</th> <th>Mon</th> <th>Tue</th> <th>Wed</th> <th>Thu</th> <th>Fri</th> <th>Sat</th> </tr> </thead> <tbody> <tr> <td>28</td> <td>29</td> <td>30</td> <td>31</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> </tr> <tr> <td>11</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> </tr> <tr> <td>18</td> <td>19</td> <td>20</td> <td>21</td> <td>22</td> <td>23</td> <td>24</td> </tr> <tr> <td>25</td> <td>26</td> <td>27</td> <td>28</td> <td>29</td> <td>30</td> <td>31</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> </tbody> </table>							Sun	Mon	Tue	Wed	Thu	Fri	Sat	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7
Sun	Mon	Tue	Wed	Thu	Fri	Sat																																																	
28	29	30	31	1	2	3																																																	
4	5	6	7	8	9	10																																																	
11	12	13	14	15	16	17																																																	
18	19	20	21	22	23	24																																																	
25	26	27	28	29	30	31																																																	
1	2	3	4	5	6	7																																																	
<table border="1" style="width: 100%;"> <tr> <td>Month : Jan, Feb,Dec</td> </tr> <tr> <td>Date : 01,02,03.....31</td> </tr> <tr> <td>Year : 1901,1902.....2099</td> </tr> </table>							Month : Jan, Feb,Dec	Date : 01,02,03.....31	Year : 1901,1902.....2099																																														
Month : Jan, Feb,Dec																																																							
Date : 01,02,03.....31																																																							
Year : 1901,1902.....2099																																																							

ESC:Exit | ← | → | Select F2/F3 Color PU/PD:Modify

- Note :
- 1, Use "ARROW" keys to select the above items that you want to setup.
 - 2, Use "PU/PD" keys to modify setting values.
 - 3, Press "ESC" after finish setup.

3.2

BIOS SETUP PROGRAM - ADVANCED CMOS SETUP (C) 1990 American Megatrends Inc., All Rights Reserved	
Typematic Rate Programming	: Disabled
Typematic Rate Delay (msec)	: 500
Typematic Rate (Chars/Sec)	: 15
Above 1 MB Memory Test	: Disabled
Memory Parity Error Check	: Enabled
Hard Disk Type 47 RAM Area	: 0:300
System Boot Up Num Lock	: Off
Password Checking Option	: Disabled
Adaptor ROM Shadow C800,16k	: Disabled
Adaptor ROM Shadow CC00,16k	: Disabled
Adaptor ROM Shadow D000,16k	: Disabled
Adaptor ROM Shadow D400,16k	: Disabled
Adaptor ROM Shadow D800,16k	: Disabled
Adaptor ROM Shadow DC00,16k	: Disabled
Adaptor ROM Shadow E000, 64k	: Disabled
Shadow RAM Option	: Both
Wait State Selection	: 0 W/S
384 KB Memory Relocation	: Disabled

----- ESC : Exit | ← | → | Sel (Ctrl) Pu/Pd : Modify F1 : Help F2/F3 : Color -----
----- F5 : Old Values F6 : BIOS Setup Defaults F7 : Power-On Defaults -----

3.2.1

Typematic Rate Programming
Available Options are :- Disabled Enabled Press any key to continue

Default value : Disabled

3.2.2

Above 1 MB Memory Test
Available Options are :- Disabled Enabled Press any key to continue

Default value : Disabled

3.2.3

Memory Parity Error Check
Available Options are :- Disabled Enabled Press any key to continue

Default value : Enabled

3.2.4

Hard Disk Type 47 RAM Area
If BIOS shadow RAM is disabled, RAM will be used for hard disk type 47 parameter table. Available Option are :- 0:300 DOS 1 KB Press any key to continue

Default value :0:300

3.2.5

System Boot Up Num Look
Available Options are :- Off On Press any key to continue

Default value : off

3.2.6

Password Checking Option
Available Options are :- Disabled Setup Always

Default value : Disable

Disable : Password Checking does not use
Setup : Password
-Checking when enter the setup programs
Always : Password Checking when system boot or enter the setup programs
Note : First time you select this option enter the default password <AMI>, The password can't exceed 6 digits in length

3.2.7

Adaptor ROM Shadow C800,16K
Available Options are :- Disabled Enabled Press any key to continue

Default value : Disabled

3.2.8

Adaptor ROM Shadow CC00,16K
Available Options are :- Disabled Enabled Press any key to continue

Default value : Disabled

3.2.9

Adaptor ROM Shadow D000,16K
Available Options are :- Disabled Enabled Press any key to continue

Default value : Disabled

3.2.10

Adaptor ROM Shadow D400,16K
Available Options are :- Disabled Enabled Press any key to continue

Default value : Disabled

3.2.11

Adaptor ROM Shadow D800,16K
Available Options are :- Disabled Enabled Press any key to continue

Default value : Disabled

3.2.12

Adaptor ROM Shadow DC00,16K
Available Options are :- Disabled Enabled Press any key to continue

Default value : Disabled

3.2.13

Adaptor ROM Shadow E000,16K
Available Options are :- Disabled Enabled Press any key to continue

Default value : Disabled

3.2.14

Shadow RAM Option
Available Options are :- Disabled Video Main Both Press any key to continue

Default value : Both

3.2.15

Wait State Selection
Available Options are :- 1 W/S 0 w/s Press any key to continue

Default value :OW/S

3.2.16

384 KB Memory Relocation
This option is valid only when shadow RAM is disabled Available Options are :- Disabled Enabled Press any key to continue

Default value : Disabled