Chapter 2 FEATURES

2.1 Specifications

. Support 386DX 25/33/40MHz (PQFP)
. Support 32/128 KB cache memory
. Support 1 MB up to 64 MB DRAM on board with mixed type 256KB/1MB/4MB/16MB DRAM
. Support Shadow RAM for system and video BIOS (C,D,E segments)
. Support Hardware / Software turbo switch for selective system speed
. Support 387DX/Cyrix 87DLC
. Support six ISA slots
. Board size : 17cm x 22cm

2.2 Hardware Description

2.2.1 CPU

The ALI 386DX uses a 386DX microprocessor running at 25/33/40 MHz. The CPU has a number of feature that consists a substantial leap in processing power and capability over the 80286 standard used in AT type micro-computer.

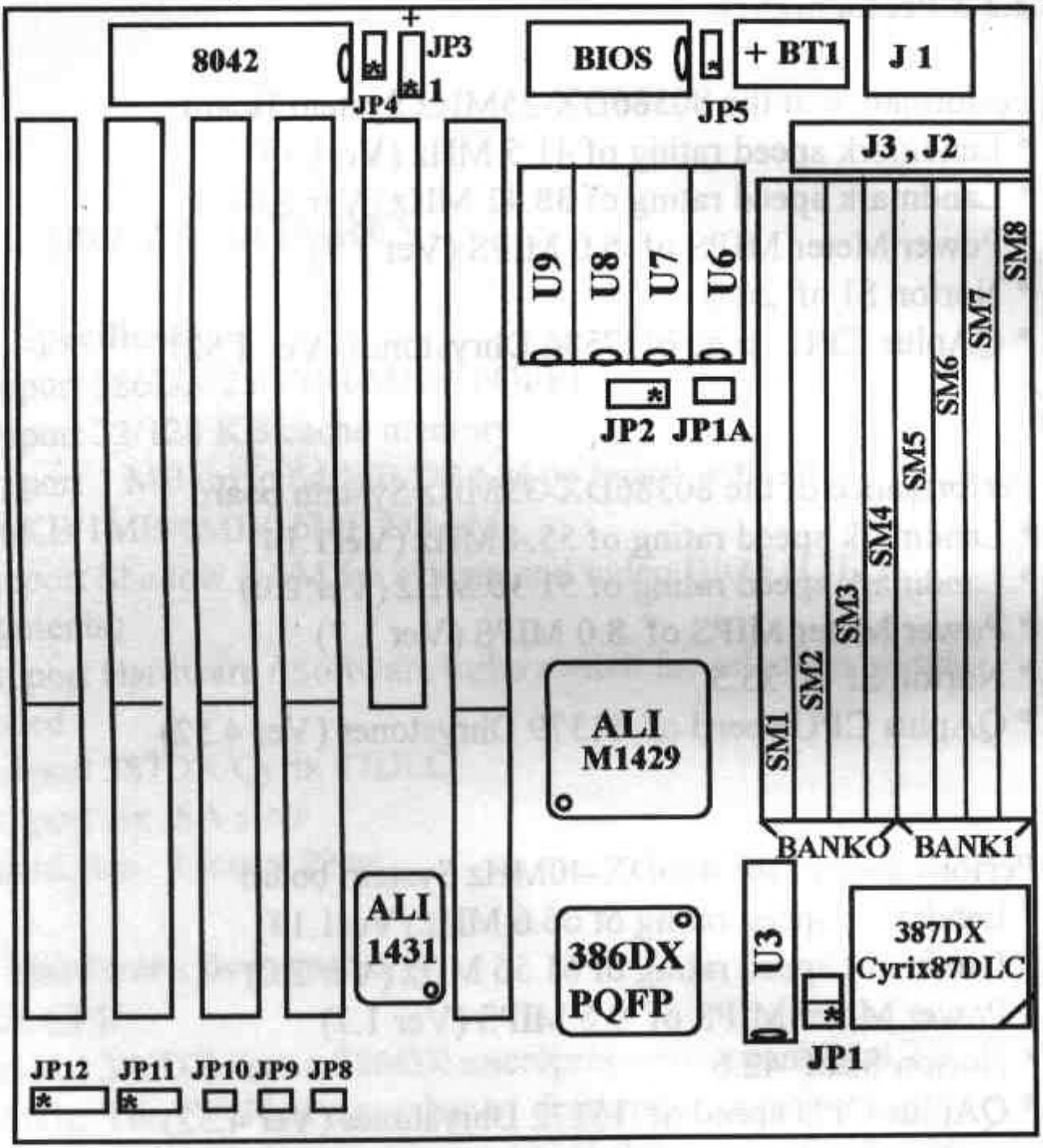
2.2.2 Chipset

The ALI386DX uses ALI M1429 & M1431 two chips

* ALI M1429 : CPU/Cache/DRAM controller & Internal RTC Clock Generator
* ALI M1431 : Includes Three 74151 & Four 74245 Buffer Control

CHAPTER 3. INSTALLATION

3.1 Layout Reference



JP8 TBSW
JP9 TBLED
JP10 RESET
JP11 SPEAKER
JP12 KEYLOCK

3.1.1 ALI386DX Jumper Setting

. J1 : KEYBOARD CONNECTOR.
. J2,J3 : POWER CONNECTOR
. JP3 : EXTERNAL BATTERY CONNECTOR
. JP8 : TURBO SWITCH CONNECTOR
. JP9 : TURBO LED CONNECTOR
. JP10 : RESET CONNECTOR
. JP11 : SPEAKER CONNECTOR
. JP12 : FRONT PANEL CONNECTOR

JUMPER

1. JP4: DISPLAY TYPE SELECTOR

	MONOCHROME	COLOR
JP4	1-2	2-3

3. JP1 ,JP1A ,JP2 : CACHE SIZE SELECTOR
PLEASE SEE CHAPTER 4 SECTION 1.2 FOR DETAIL

3. JP5 : BATTERY SELECTOR
1-2 : RTC DISCHARGE
2-3 : NORMAL

Chapter 4 OPERATION

4.1 Memory Configuration

This section provides the information of how to install the DRAM and Cache RAM. Improper installation of DRAM or Cache RAM will cause the system shutdown. The ALI386DX system board can support up to 64MB on board DRAM and 128KB Cache RAM.

4.1.1 Installation of DRAM

There is no jumpers for the DRAM configuration. The BIOS will test the DRAM type and size automatically. What you need to do is just plug in the SIMM DRAM. There are two banks of Memory (Bank0 - Bank1) on the system board, Each Bank consists of 4pcs of SIMM DRAM. The SIMM DRAM can be 256K x 9, 1M x 9, 4M x 9 or 16M x 9 module. Follows are the combination of the SIMM DRAM

BANK1 SM8 - SM5	BANK0 SM4 - SM1	Total
-	256KB	1 Meg Byte
256KB	256KB	2 Meg Byte
1 MB	256KB	5 Meg Byte
-	1 MB	4 Meg Byte
1 MB	1 MB	8 Meg Byte
4 MB	1 MB	20Meg Byte
-	4 MB	16Meg Byte
4 MB	4 MB	32Meg Byte
-	16 MB	64Meg Byte

4.1.2 Cache RAM Configurations

The ALI386DX system is very flexible in configuration of the Cache RAM. The Cache RAM size can be 32KB ,128K. Following tables are the jumper setting and Cache RAM location for different Cache RAM size.

NOTE: PLEASE DON'T CHANGE OR REMOVE THE DE
-FAULT JUMPER SETTING BY YOURSELF, CO
-NTACT YOUR DEALER FOR DETAIL FIRST.

Jumper Setting

	CACHE SIZE	
	32K	128K
JP1	OPEN	1-2,3-4
JP1A	OPEN	SHORT
JP2	2-3	1-2

(1) 32KB Cache RAM

Bank 0 (U6,U7,U8,U9) : 8KX8 SRAM 4pcs
Tag RAM U3 : 8KX8 SRAM 1pcs

(2) 128KB Cache RAM

Bank 0 (U6,U7,U8,U9) : 32KX8 SRAM 4pcs
Tag RAM U3 : 32KX8 1pcs