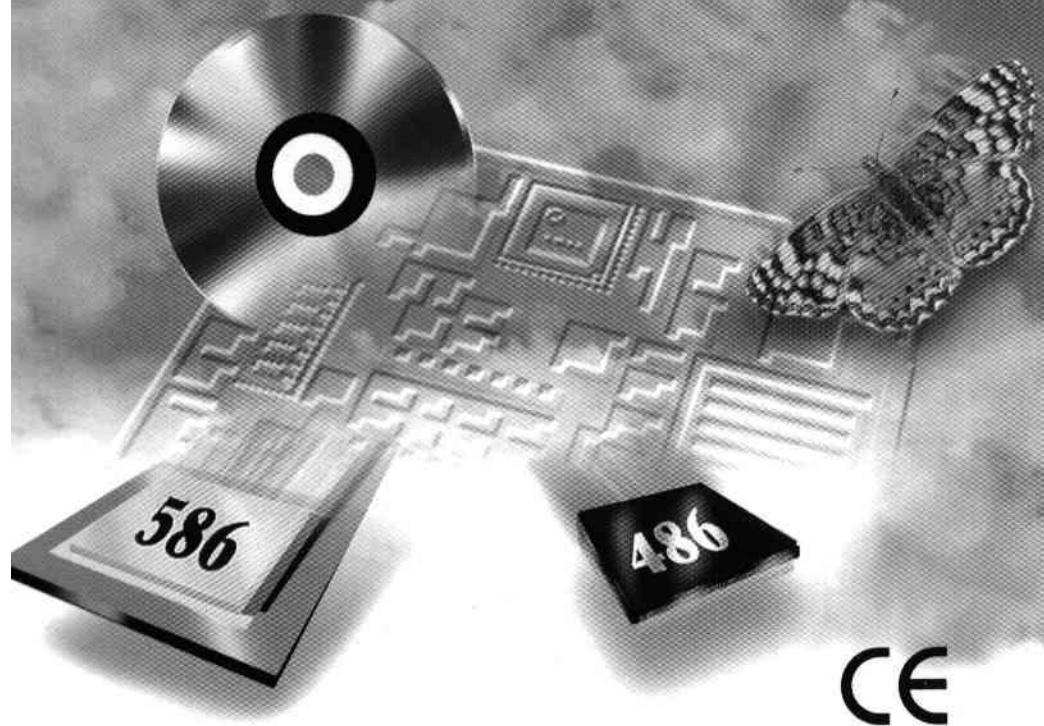


SIS 486 PCI/ISA MINI-SIZE
SYSTEM BOARD
USER'S MANUAL
(VER:B)



CE

CHAPTER 1. FEATURES

CHAPTER 1. FEATURES

1.1 SPECIFICATIONS .

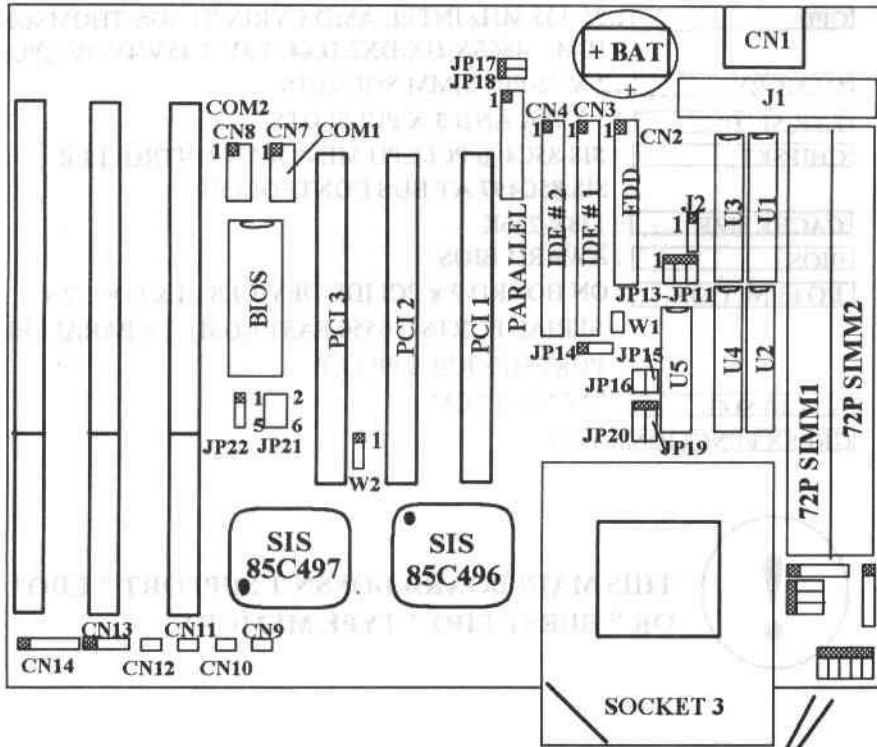
CPU	: 25-133 MHz INTEL/AMD/CYRIX/TI/SGS-THOMSON IBM... 486SX/DX/DX2/DX4, 3.3V/3.45V/4V/5V CPUs.
MEMORY	: 2 X 72-PIN SIMM SOCKETS.
EXP. SLOT	: 3 X ISA AND 3 X PCI SLOTS.
CHIPSET	: SIS 85C496 PCI/CPU MEMORY CONTROLLER. SIS 85C497 AT BUS CONTROLLER
CACHE SIZE	: 128K/256K
BIOS	: AWARD BIOS.
I/O FUNCTION	: ON BOARD 2 x PCI IDE DEVICES , 1 x FDC , 2 x SERIAL PORTS (16550 FAST COM), 1 x PARALLEL PORT DEVICE /EPP/ECP.
BOARD SIZE	: 22 CM x 17 CM.
GREEN FUNCTION	: YES



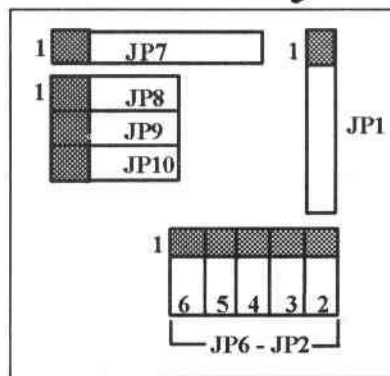
THIS MAIN BOARD DOESN'T SUPPORT " EDO" OR " BURST EDO " TYPE MEMORY.



CHAPTER 2. INSTALLATION
2.1 LAYOUT REFERENCE



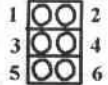
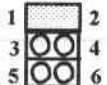
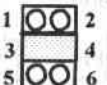
- CN9 : HDD LED
- CN10 : TURBO LED
- CN11 : TURBO SWITCH
- CN12 : RESET
- CN13 : SPEAKER
- CN14 : KEYLOCK



CHAPTER 2. INSTALLATION

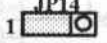
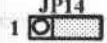

2.2 SIS 486 PI JUMPER SETTINGS

1. JP21 : CPU CLOCK SELECTOR (RED JUMPER CAP)

	(25 MHZ) 486SX/DX-25 486DX2-50,P24T-63 486DX4-75	(33 MHZ) 486SX/DX-33 486DX2-66,P24T-83 486DX4-100 AMD 5X86-133	(40 MHZ) 486DX-40 486DX2-80 486DX4-120
JP21	OFF 	1-2 	3-4 



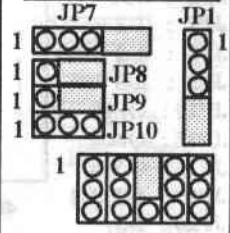
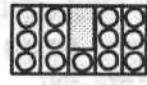
2. JP14, W1 : 3V/4V/5V CPU VOLTAGE SELECTOR

(YELLOW JUMPER CAP)

	INTEL/AMD/Cyrix/TI (3V)	Cyrix DX2-80 (4V)	ALL 5V CPU & 486 ODP /P24T-63/83
W1	JP14 : 1-2	JP14 : 2-3	W1 : ON
JP14			

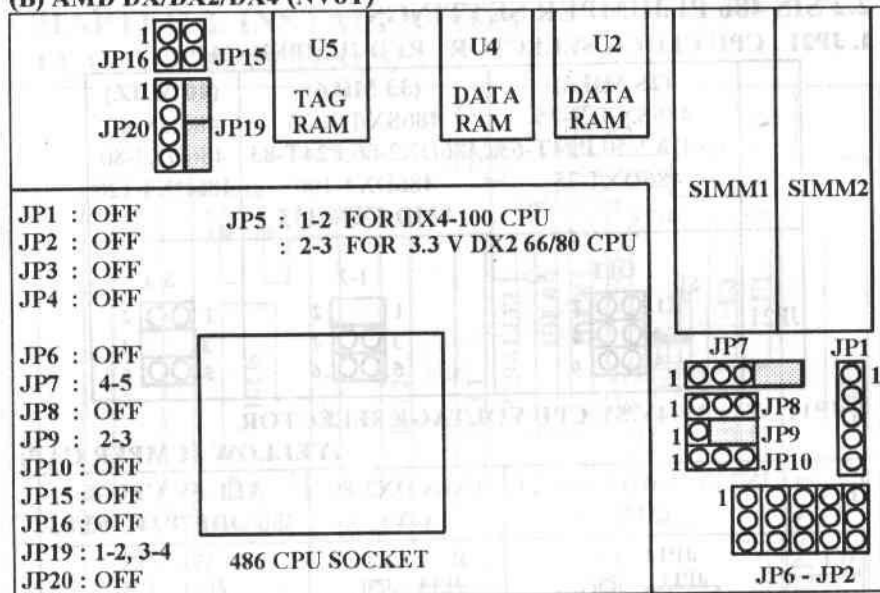
3. JP1-JP10,JP15,JP16,JP19,JP20 CPU TYPE SELECTOR

(A) INTEL-SLE 486 DX/DX2/DX4 & 486 ODP(YELLOW JUMPER CAP)

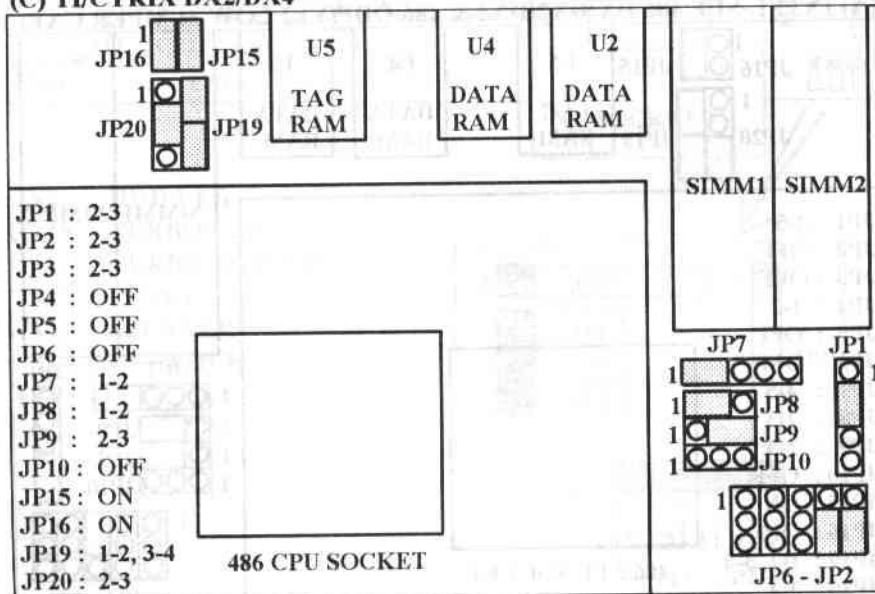
JP16  JP20 	JP15 U5 TAG RAM	U4 DATA RAM	U2 DATA RAM	SIMM1 SIMM2 	
JP1 : 4-5 JP2 : OFF JP3 : OFF JP4 : 1-2 JP5 : OFF JP6 : OFF JP7 : 4-5 JP8 : 2-3 JP9 : 2-3 JP10 : OFF JP15 : ON JP16 : OFF JP19 : 1-2, 3-4 JP20 : 3-4				 486 CPU SOCKET	 JP6 - JP2

CHAPTER 2. INSTALLATION

(B) AMD DX/DX2/DX4 (NV8T)

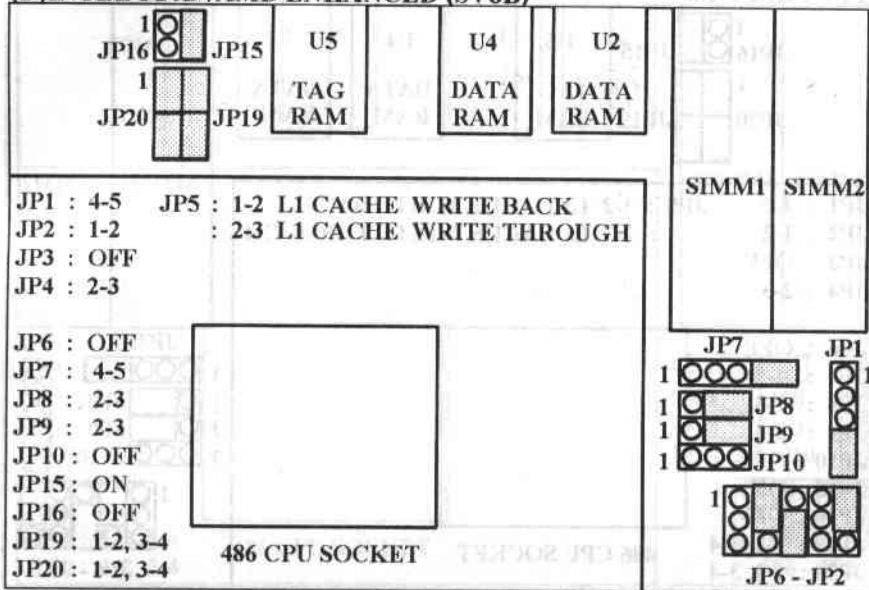


(C) TI/CYRIX DX2/DX4

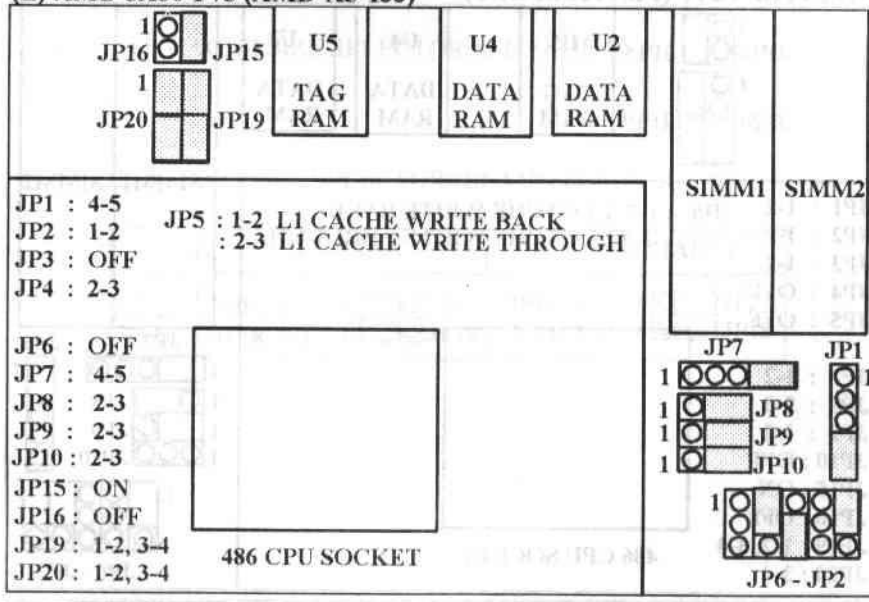


CHAPTER 2. INSTALLATION

(D) INTEL P24D /AMD ENHANCED (SV8B)

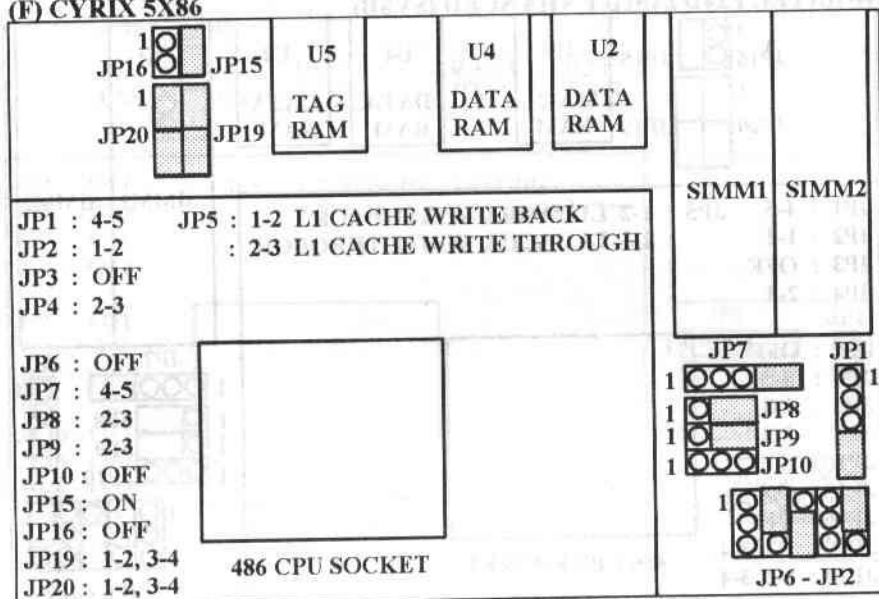


(E) AMD 5X86-P75 (AMD-X5-133)

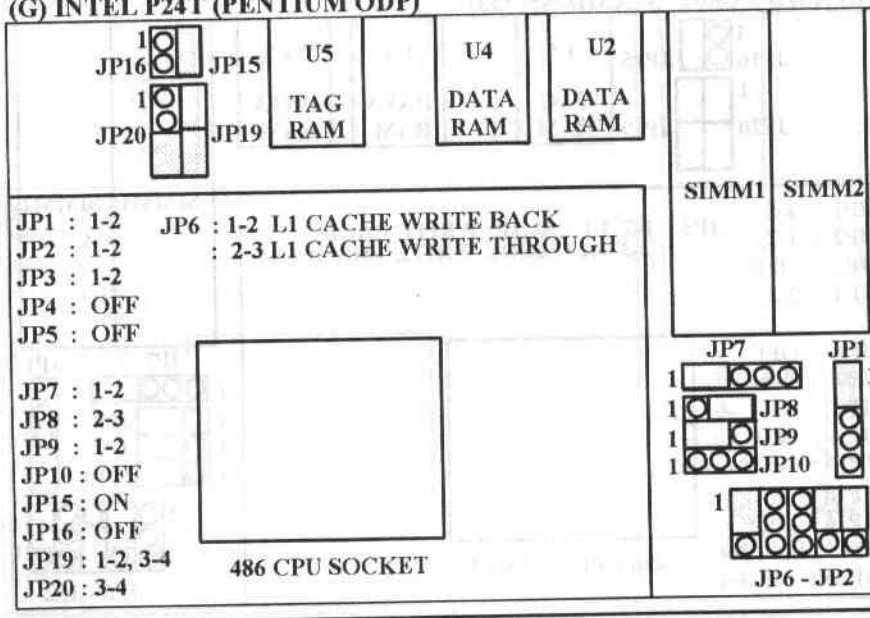


CHAPTER 2. INSTALLATION

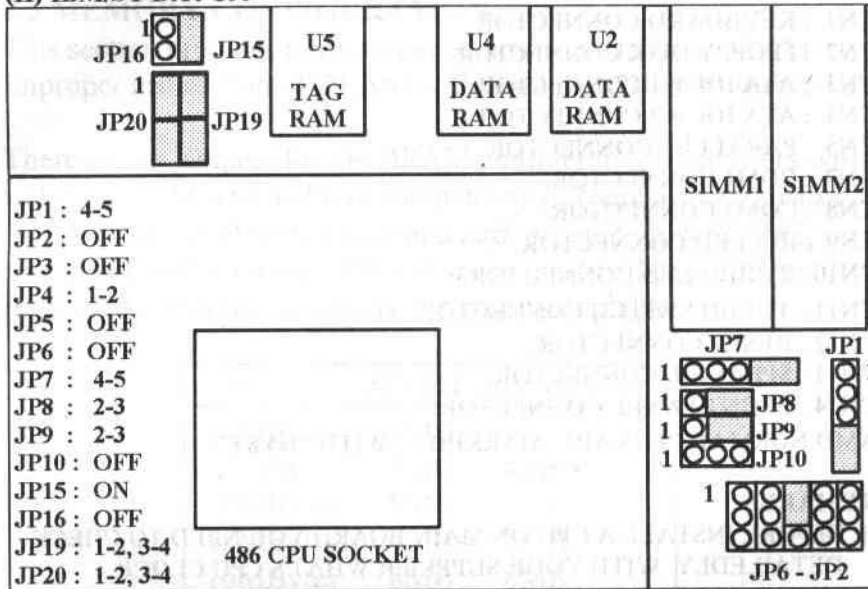
(F) CYRIX 5X86



(G) INTEL P24T (PENTIUM ODP)







(H) IBM/ST DX4-100



4. JP11-JP13: CACHE SIZE SELECTOR, SEE PAGE 10.

5. JP17, JP18 : BATTERY SELECTOR (**BLACK JUMPER CAP**)

	NORMAL	RTC DISCHARGE
JP17	JP17: 1-2  JP17	JP17: 2-3  JP17
JP18	JP18: 1-2  JP18	JP18: 2-3  JP18



CHAPTER 2. INSTALLATION

6. OTHER JUMPER SETTINGS AND CONNECTORS :

J2 : EXTERNAL BATTERY CONNECTOR.

CN1 : KEYBOARD CONNECTOR

CN2 : FLOPPY DISK CONNECTOR.

CN3 : ATA IDE # 1 CONNECTOR.

CN4 : ATA IDE # 2 CONNECTOR.

CN5 : PARALLEL CONNECTOR.

CN7 : COM1 CONNECTOR.

CN8 : COM2 CONNECTOR.

CN9 : IDE LED CONNECTOR.

CN10 : TURBO LED CONNECTOR.

CN11 : TURBO SWITCH CONNECTOR.

CN12 : RESET CONNECTOR.

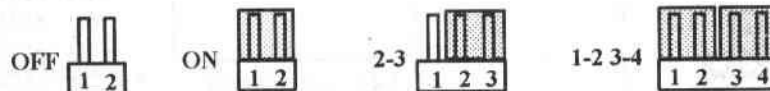
CN13 : SPEAKER CONNECTOR.

CN14 : FRONT PANEL CONNECTOR.

AMD NORMAL CPUS ARE MARKED WITH "NV8T".

REMARKS

1. BEFORE INSTALL A CPU ON MAIN BOARD, YOU NEED TO CHECK DETAILEDLY WITH YOUR SUPPLIER WHAT'S CPU CLOCK, VOLTAGE, MODEL. THEN REFER TO ABOVE JUMPER SETTINGS FROM POINT 1 TO 3 CAREFULLY. PLEASE NOTE IMPROPER JUMPER SETTING WILL CAUSE SYSTEM TO SHUTDOWN.
2. INTEL -SLE 486 DX/DX2/DX4/ODP (OVER DRIVE PROCESSOR) ARE MARKED WITH "& E XXXX" WHICH SUPPORT GREEN FUNCTION.
3. INTEL P24D CPU IS MARKED WITH "& E W XXXX" WHICH SUPPORT WRITE-BACK MODE INTERNAL CACHE AND GREEN FUNCTION.
4. P24T-63/83 ARE INTEL PENTIUM ODP CPU'S HAVE ON PACKAGE 237 PINS AND 3.3V/5V VOLTAGE REGULATION. MAIN BOARD IS SET AS "5V".
5. AMD ENHANCED "SV8B" SERIES ARE AMD'S LATEST "WRITE-BACK" TECHNOLOGY CPU'S. AMD NORMAL CPU'S ARE MARKED WITH "NV8T".
6. EXPLANATION OF JUMPER SETTING STATUS



2.3 MEMORY CONFIGURATION

This section provides information on how to install the DRAM. Improper installation of DRAM will cause the system to shutdown.

There are no jumpers for the DRAM configuration. The BIOS will test the DRAM type and size automatically. There are two -banks from SIMM1 to SIMM2 on main board. please follow SIMM1, then 2 to install memory. DRAM speed must be 70ns or faster. Both parity (x36) or non-parity (x32) are acceptable.

TOTAL	SIMM1	SIMM2
4MBytes	4MB	
8MBytes	4MB	4MB
8MBytes	8MB	---
12MBytes	4MB	8MB
16MBytes	8MB	8MB
16MBytes	16MB	---
20MBytes	4MB	16MB
24MBytes	8MB	16MB
32MBytes	16MB	16MB
64MBytes	64MB	---

2.4 CACHE RAM CONFIGURATION

The SIS 496 P.I. system is very flexible in its configuration of Cache SRAM. Please refer to the Following tables.
(BLACK JUMPER CAP)

JP11, JP12 : CACHE RAM SIZE SELECTOR

	128K CACHE RAM	256K CACHE RAM
JP11	JP11 : 1-2 JP12 : 2-3	JP11 : 2-3 JP12 : 2-3
JP12		

JP13 : TAG RAM SIZE SELECTOR

	32KX8/8KX8	16KX8
JP13	JP13 : 1-2	JP13 : 2-3

1-2 : 32K X 8/8K X 8
 2-3 : 16K X 8

(1) 128KB Cache RAM

Bank 0 (U1,U2,U3,U4) : 32Kx8 SRAM 4pcs.
 Tag RAM (U5) : 8Kx8/32Kx8 SRAM 1pc

(2) 256KB Cache RAM

Bank 0 (U1,U2,U3,U4) : 64Kx8 SRAM 4pcs.
 Tag RAM (U5) : 32Kx8/16Kx8 SRAM 1pc
