ATXS-5000P
Long Life Quad Core
Industrial Server Board

Revision A

Quick Start Guide

Intel® Xeon Quad Core E5300

Embedded Processors

Intel 5000P Chipset

Warranty

The product is warranted against material and manufacturing defects for two years from date of delivery. Buyer agrees that if this product proves defective Chassis Plans is only obligated to repair, replace or refund the purchase price of this product at Chassis Plans' discretion. The warranty is void if the product has been subjected to alteration, neglect, misuse or abuse; if any repairs have been attempted by anyone other than Chassis Plans; or if failure is caused by accident, acts of God, or other causes beyond the control of Chassis Plans. Chassis Plans reserves the right to make changes or improvements in any product without incurring any obligation to similarly alter products previously purchased.

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Products returned for repair must be accompanied by a Return Material Authorization (RMA) number, obtained from Chassis Plans prior to return. Freight on all returned items must be prepaid by the customer, and the customer is responsible for any loss or damage caused by common carrier in transit. Items will be returned from Chassis Plans via Ground, unless prior arrangements are made by the customer for an alternative shipping method.

To obtain an RMA number, call us at (858) 571-4330. We will need the following information:

Return company address and contact
Model name and model # from the label on the back of the board
Serial number from the label on the back of the board
Description of the failure

An RMA number will be issued. Mark the RMA number clearly on the outside of each box, include a failure report for each board and return the product(s) to our San Diego, CA facility:

Chassis Plans
10123Carroll Canyon Road
San Diego, CA 92131
Attn: Repair Department

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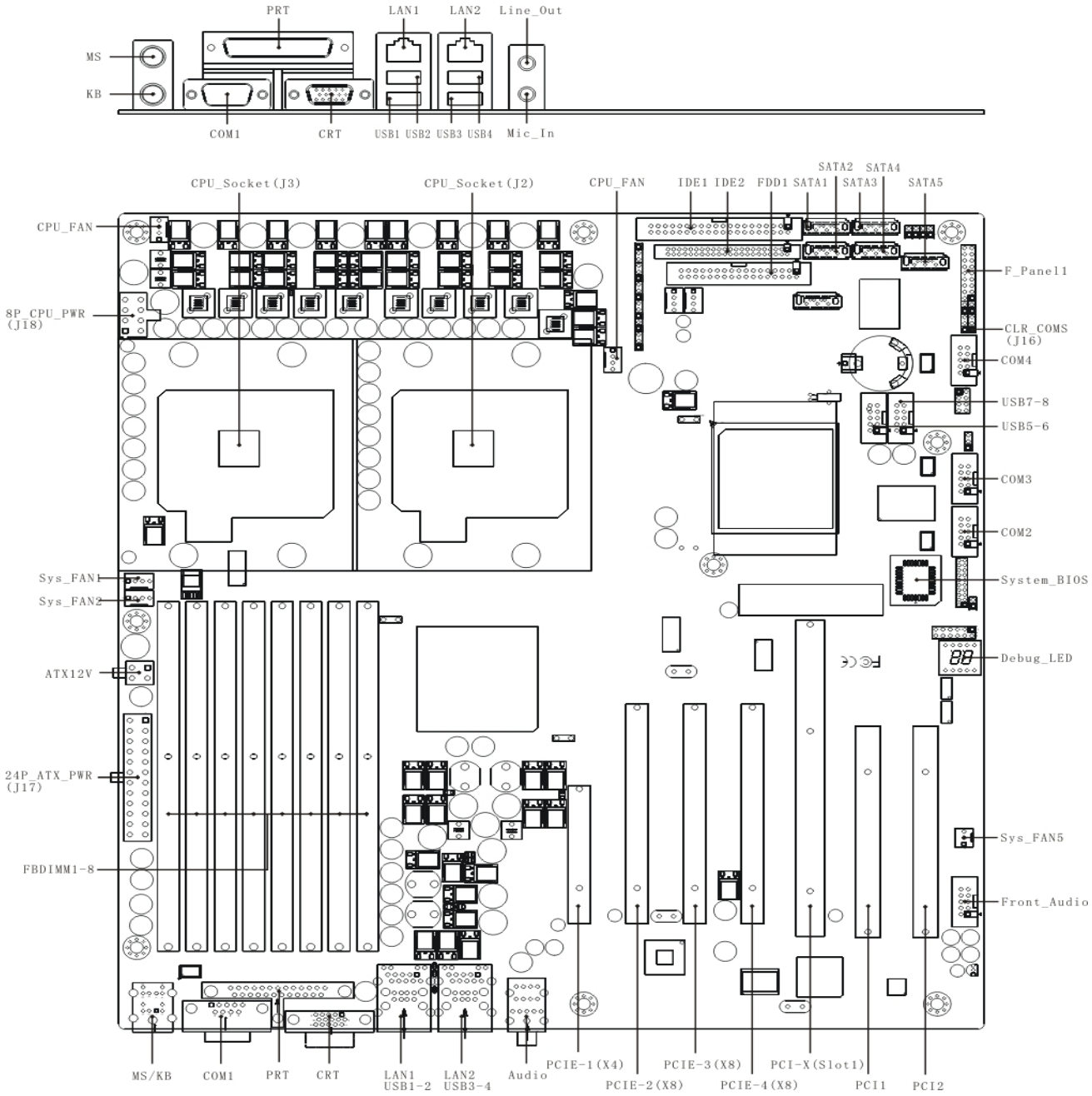
Board


PRT
LAN1
LAN2
Line_Out
MS
KB
COM1
CRT
USB1 USB2 USB3 USB4
Mic_In
CPU_Socket(J3)
CPU_Socket(J2)
CPU_FAN
IDE1 IDE2 FDD1 SATA1 SATA2 SATA3 SATA4 SATA5
F_Panel1
CLR_COMS (J16)
COM4
USB7-8
USB5-6
COM3
COM2
System_BIOS
Debug_LED
Sys_FAN5
Front_Audio
8P_CPU_PWR (J18)
Sys_FAN1
Sys_FAN2
ATX12V
24P_ATX_PWR (J17)
FBDIMM1-8
MS/KB
COM1
PRT
CRT
LAN1 USB1-2
LAN2 USB3-4
Audio
PCIE-1(X4)
PCIE-2(X8)
PCIE-3(X8)
PCIE-4(X8)
PCI-X(Slot1)
PCI1
PCI2

Connectors & Interfaces

Connectors	Label	Connectors	Label
CPU1 Socket(LGA771)	**J3**	Primary IDE Connector	**IDE1**
CPU2 Socket(LGA771)	**J2**	Secondary IDE Connector(44P)	**IDE2**
FBD-DDR2 Slot1(White)	**FBDIMM1**	FBD-DDR2 Slot2(Black)	**FBDIMM 2**
FBD-DDR2 Slot3(White)	**FBDIMM 3**	FBD-DDR2 Slot4(Black)	**FBDIMM 4**
FBD-DDR2 Slot5(White)	**FBDIMM 5**	FBD-DDR2 Slot6(Black)	**FBDIMM 6**
FBD-DDR2 Slot7(White)	**FBDIMM 7**	FBD-DDR2 Slot8(Black)	**FBDIMM 8**
PCI-e X4 Slot	**PCIE_1**	PCI-e X8 Slot	**PCIE_2**
PCI-e X8 Slot	**PCIE_3**	PCI-e X8 Slot	**PCIE_4**
PCI-X 133MHz64bit Slot	**Slot1**	PCI Slot1	**PCI1**
SATA Port1	**SATA1**	PCI Slot2	**PCI2**
SATA Port2	**SATA2**	SATA Port3	**SATA3**
SATA Port4	**SATA4**	SATA Port5	**SATA5**
SATA Port6	**SATA6**	Floppy Connector	**FDD1**
Ethernet Connector 1	**USB_RJ45_LED1**	USB Port 1, 2 Connector	**USB_RJ45_LED1**
Ethernet Connector 2	**USB_RJ45_LED2**	USB Port 3, 4 Connector	**USB_RJ45_LED2**
CRT Connector	**J19**	USB Port 5, 6 Connector	**F_USB1**
COM1	**COM1**	USB Port 7, 8 Connector	**F_USB2**
COM2	**COM2**	AUDIO Connector(Rear)	**J7**
COM3	**COM3**	AUDIO Connector(Front)	**Front_AUDIO1**
COM4	**COM4**	CPU1 FAN Connector	**CPU0_FAN1**
Printer Port Connector	**LPT1**	CPU2 FAN Connector	**CPU1_FAN1**
Keyboard/Mouse Connector	**MKB1**	System FAN1 Connector	**SYS_FAN1**
System BIOS	**U23**	System FAN2 Connector	**SYS_FAN2**
System FAN4 Connector	**SYS_FAN4**	System FAN5 Connector	**SYS_FAN5**

CPU Power Connector	**J18**	Front Panel Control	**F_PANEL1**
ATX12v Connector	**ATX12V1**	LAN LED Indicator	**LAN_LED1**
ATX Power Connector	**J17**	Internal Battery	**BT1**
Post Code LED	**LED1**	Power LED Connector	**PWR_LED**
Front Post Code LED	**F_LED**	LPC Debug Port	**SIO_HD1**
Speaker	**Buzzer1**	On Board VGA Enable	**JP4**

Jumper Setting

1. CMOS Clear

CLR_CMOS1	Options	Settings
	Normal	Short 2-3 (Default)
	Clear CMOS	Short 1-2

2. Force System PWR On

JP15	Options	Setting
	Force Power on	Short
	Normal	Open(Default)

3. COM4 Function Selection

	JP9	JP10	JP11	J24
RS232(Default)	Close	Open	Open	Close(1-2,3-4,5-6,7-8)
RS422	Open	Open	Close	Open
RS485	Open	Close	Close	Open

4. Power Selection for IDE2

JP3	Options	Settings
	+3.3V	Short 2-3
	+5V	Short 1-2(Default)

5. BIOS Write Protection

JP14	Options	Setting
	Write Protection Enable	Short
	Normal	Open(Default)

6. On Board VGA Disable/Enable

JP4	Options	Setting
	Enable On Board VGA	Short(Default)
	Disable	Open

Header Pin Description

1. Front Panel: F_Panel1

Pin	Description	Pin	Description
1	HDD LED +	2	Power LED +
3	HDD LED -	4	Power LED -
5	System Reset -	6	Power Button -
7	System Reset +	8	Power Button +
9	VCC	10	NC
11	NC	12	NC
13	5VSB	14	NC
15	SMBDATA	16	GND
17	SMBCLK	18	Intrude_Det

2. Front COM Port: COM2-4

Pin	Description	Pin	Description
1	DCD (Data Carrier Detect)	2	DSR (Data Set Ready)
3	RXD (Receive Data)	4	RTS (Request to Send)
5	TXD (Transmit Data)	6	CTS (Clear to Send)
7	DTR (Data Terminal Ready)	8	RI (Ring Indicator)
9	Ground	10	NC

3. Front USB - F_USB1, F_USB2

Pin	Description	Pin	Description
1	VCC	2	VCC
3	USB0 -	4	USB1 -
5	USB0 +	6	USB1 +
7	Ground	8	Ground
9	NC	10	Ground

4. IDE Port - IDE1/IDE2

Note: IDE1 and IDE2 share one IDE channel. IDE1 and IDE2 connectors can support one IDE device per connector. One device will be configured as master, and the other configured as slave.

5. Front Audio Header: Front_Audio1

Pin	Description
1	MIC Left
2	GND
3	MIC Right
4	Present
5	SPK_R
6	Mic_JD
7	Sense
8	NC
9	SPK_L
10	SPK_JD

FBD DIMM Configuration

Note: Insert the DIMMs into the Memory Sockets in pairs, starting with DIMM slot 1A, which is close to the North Bridge, or following the configuration table below. Populating DIMM modules with same size and same type will increase the system performance. Some OS can not support more than 4GB memory space.

Number Of DIMMs	1A CON1	1B CON2	2A CON3	2B CON4	3A CON5	3B CON6	4A CON7	4B CON8	Optimal
1 DIMM	Ok								Yes
					Ok				Yes
2 DIMMs	Ok	Ok							
					Ok	Ok			
	Ok		Ok						
	Ok				Ok				Yes
					Ok		Ok		
4 DIMMs	Ok	Ok	Ok	Ok					
	Ok	Ok			Ok	Ok			Yes
					Ok	Ok	Ok	Ok	
	Ok		Ok		Ok		Ok		Yes
6 DIMMs	Ok	Ok	Ok	Ok	Ok		Ok		Yes
	Ok		Ok		Ok	Ok	Ok	Ok	Yes
8 DIMMs	Ok	Ok	Ok	Ok	Ok	Ok	Ok	Ok	

CPU Installation

Note: Please remove the power cord before adding, removing or changing any hardware components.

Make sure that the two Xeon CPUs you want to install are the same type and speed.

Make sue that ATX power (J17)/ATX12V power (ATX12V1)/CPU power (J18) are all connected to the Power Supply before powering on the system.