INDUSTRY-LEADING SYSTEM BOARD TECHNOLOGY

Distinguishing TYAN from the competition is simple - engineering, time-to-market and quality. With local design centers located worldwide, TYAN engineers work closely with key suppliers and customers to provide high-quality designs and exceptional time-to-market advantages. To insure the highest levels of quality, all TYAN products are designed and manufactured in ISO9001/9002 certified facilities, and are covered by our industry-leading manufacturer's warranty.

TYAN Computer Corporation designs, develops and manufactures innovative Internet platforms for high-performance, mission-critical computing environments. Our award-winning product line includes a wide variety of single, dual, and multi-processor platforms that are perfectly suited to meet the performance requirements of today's most demanding server, workstation and desktop applications.

ABOUT TYAN

TYAN Computer Corporation, founded in 1989 by long-time Intel and IBM executive Dr. T. Symon Chang, designs, manufactures and markets advanced system board technology. Our products are sold to OEMs, Systems Integrators, VARs and Resellers worldwide. Over the last decade, TYAN has consistently been one of the fastest growing technology companies in the United States. TYAN was named to the prestigious INC 500 in 1997 and 1998 (19th fastest growing U.S. company in 1997). TYAN was also ranked by Deloitte & Touche as one of the USA's "Fast 500", as well as one of Silicon Valley's "Fast 50" companies in 1998. For more information, visit us on the World Wide Web site at: http://www.tyan.com

TYAN

TYAN Computer Corporation 3288 Laurelview Court Fremont, CA 94538 High Performance Barebone System

TYAN

B2094T15 Transport GS10

> #D 1532-100 Revision 1.00

User's Manual



Transport GS10

1 1 1

B2094T15

Revision 1.00

Copyright © TYAN Computer Corporation, 2003. All rights reserved. No part of this manual may be reproduced or translated without prior written consent from TYAN Computer Corp.

All registered and unregistered trademarks and company names contained in this manual are property of their respective owners including, but not limited to the following:

TYAN, Transport GS10 B2094T15 are trademarks of TYAN Computer Corporation. Intel, Xeon, and combinations thereof are trademarks of Intel Corporation. Phoenix BIOS are trademarks of Phoenix Technology.

Microsoft, Windows are trademarks of Microsoft Corporation.

IBM, PC, AT, PS/2 are trademarks of IBM Corporation.

Promise is a trademark of Promise Technology.

ATI, ATI RAGE is a trademark of ATI Technologies Incorporated.

Winbond is a trademark of Winbond Electronics Corporation.

Portable Document Format (PDF) is a trademark of Adobe Corporation.

Information contained in this document is furnished by TYAN Computer Corporation and has been reviewed for accuracy and reliability prior to printing. TYAN assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TYAN products including liability or warranties relating to fitness for a particular purpose or merchantability. TYAN retains the right to make changes to product descriptions and/or specifications at any time, without notice. In no event will TYAN be held liable for any direct or indirect, incidental or consequential damage, loss of use, loss of data or other malady resulting from errors or inaccuracies of information contained in this document.



		Safety Flecaudons	4		
1	Introduction5				
	1.1	Before You Begin			
		Unpacking			
	1.2	Product Description			
	1.3	Specifications			
	1.4	System View			
		Front View			
		Rear View	9		
2	Cab	oinet Installation	11		
		System Assembly Flowchart			
	2.1	System Assembly			
		Opening the Cover			
		Installing the CPU			
		Installing System Memory	15		
		Installing a Hard Disk Drive	16		
		Installing a Riser Card	17		
	2.2	Rack Mounting	18		
		Cabinet Slides and Ears	18		
		Cabinet into the Rack	20		
		Locking Tab	20		
3	Sett	ing Up the System	21		
	3.1	System Requirements			
	3.2	Placing the System			
	3.3	Making the Connection			
	3.4	Configuring the System			
		Before You Begin			
		Using the LCD Console			
		Setting the Configuration	24		
		Setting Up With the Web Browser			
	3.5	Rebooting the System			
	3.6	Powering Down the System			
	3.7	Linux RedHat Installation Notes	27		

4	Cor	nfiguring the System	29	
	4.1	BIOS Setup Program	29	
		Starting BIOS Setup	2	
		Main Menu	30	
		Advanced Menu		
		Security Menu		
		Power Menu		
		Boot Menu		
		Exit Menu	3.	
	4.2	Jumper Settings		
5	Installing Software Drivers			
	5.1	Installation Instructions for Windows	34	
	5.2	Installation Instructions for Linux RedHat	36	
		LCD Driver		
		RAID (Redundant Arrays of Inexpensive Disks) Driver	36	
6	Exr	Expanding the System		
	6.1	Opening the Cover		
	6.2	Installing an Expansion Card	4(
	6.3	Adding a Secondary Hard Disk Drive	41	
	6.4	Adding a Secondary Hard Disk Drive	47	
		With a Secondary Hard Disk Drive Installed	43	
		Without a Secondary Hard Disk Drive Installed	44	
7	Using RAID			
	7.1	About RAID		
	7.2	Creating an Array		
		Creating an Array for Performance (RAID 0)	47	
		Creating a Security Array (RAID 1) with New Drives	47	
		Creating a Security Array (RAID 1) With an Existing Data Drive		
		and a New Drive	47	
	7.3	Viewing Drive Assignments	48	
	7.4	Changing the Array		
		Deleting an Array	49	
		Rebuilding a Mirrored Array	49	
8	Appendix			
		Caution Texts Concerning Lithium Batteries		
		Technical Support		

Safety Precautions

- Use the type of power indicated on the marking label.
- Ensure electrical circuits are not overloaded; consider the nameplate ratings of all the connected equipment and ensure you have over current protection.
- Do not disable the power cord ground feature. This equipment was designed to connect to a grounded (earthed) power outlet. The grounding plug is an important safety feature.
- Ensure that the power outlet is located or installed near the equipment and is easily accessible.
- Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
- Ensure the ambient temperature around the equipment (which may be higher than the room temperature) is within the limits specified in section 1.3.
- Slots and openings in the cabinet are provided for ventilation. Do not block or cover these openings. Do not push objects of any kind into cabinet slots or openings.
- Do not allow USB devices to be hot plugged during installation of the Linux operating system.
- Use the command 'expert' to start Linux installation during 'boot:' when prompted, if you want to use the RAID function on your system. Insert the RAID driver diskette for Linux when prompted into the USB floppy drive, and follow the onscreen instructions to complete the installation process.

1 Introduction

This chapter introduces the features and functions of the product.

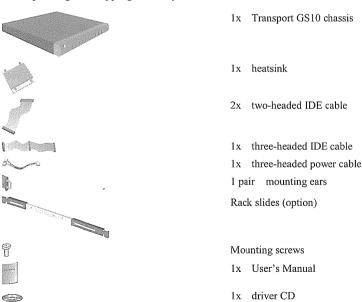
1.1 Before You Begin

This manual provides hardware-related information of the system for administrators who use it to develop and host web sites. The administrators should be familiar with operating systems and web browsers.

Depending on the model purchased, your system may come with pre-installed software. For software information, refer to the documentation accompanying the software.

Unpacking

After unpacking the shipping carton, you should find these standard items:



Inspect all the items. If any item is damaged or missing, notify your dealer immediately.

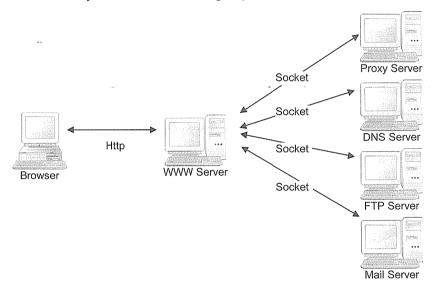
Keep the shipping carton and packing materials in case you need to ship or store the computer in the future.

1x software driver floppy disk for RAID

Product Description

Congratulations on purchasing the system. It is a server appliance providing a dedicated webhosting platform, pre-packaged in an industry standard 1U rackmount enclosure.

With appropriate application software, the system offers a full suite of Internet services including web publishing, file transfer and email services. And through a browser, the administrator can easily maintain the server through any client device.



Specifications

NOTE: Specifications are subject to change without notice.

Processor

- Single socket 478
- Intel® Pentium 4 processor up to 3.06 GHz
- Supports 400/533 MHz FSB

Chipset

- Intel 845E MCH
- MCH + ICH-4
- NS PC87366 Super I/O chip

Memory

- Dual channel memory bus
- Two 184-pin DDR DIMM slots
- DDR 200/266 support
- Up to 2 GB of unbuffered DDR
- Supports non-ECC/ECC type memory modules

Expansion Slot

32-bit/33MHz PCI v2.2 slot

Integrated PCI Graphics

- ATI® Rage[™] XL PCI graphics controller
- 8 MB frame buffer of video memory

External I/O Ports (Rear)

- One 9-pin UART serial port
- One VGA port
- Two RJ-45 LAN connectors
- Two USB 2.0 ports

Front Panel Features

- LED Indicators
 - Power
 - LAN 1 and LAN 2 Link/Activity
 - HDD
- LCD interface
 - 2 x 16 digits
 - Connected via COM2
 - Four direction buttons plus one "Select" and one "Cancel" button

Networking

- Two 10/100Base-TX Ethernet LAN ports (Intel 82551QM controller)
- Supports TCP, UDP, IPv4 Checksum offload

Storage Interface

- Integrated two master IDE RAID controller (Promise PDC20276)
- Supports RAID level 0. 1

Storage Capacity

Up to two IDE drives

Integrated Hardware Monitoring

- Integrated in Super I/O
- CPU temperature and voltage monitoring
- CPU and system fan speed monitoring and control
- 3 x 3-Pin header for system fans

BIOS

- Phoenix BIOS on 4 MB Flash (FWH)
- ACPI 1.0b / APM 1.2
- Detect function of H/W monitoring
- Auto configuration of IDE hard disk types
- Quick boot and multiple boot options
- LAN remote boot (PXE) support
- Power Management: S1 and S5-type

Environment

- Operating temperature: 0 °C (32 °F) to 40 °C (104 °F)
- Operating humidity: 0 % to 80 % non-condensing

Cabinet Form Factor

- Sub-1U rack-mountable chassis
- Dimension: W16.7 x D15.3 x H1.7 inch W424 x D387.7 x H43.5mm
- Weight: 7 kg

Power Supply

ATX12V 250W with PFC

Accessory

· One 32-bit single PCI riser card

Regulatory

- FCC Class A (Declaration of Conformity)
- CE (Declaration of Conformity)