

Volume

1

FORENSIC COMPUTERS

Forensic Solid Steel Tower – Dual Opteron

QUICK GUIDE

FORENSIC COMPUTERS RESEARCH AND DEVELOPMENT

Forensic Workstation Guide

© 2007 Forensic Computers, Inc.
110 Forensic Lane, Glen Lyn, VA 24093
Phone 540.726.9530 • Fax 540.726.9530

Tableau Product Images and Technical Data courtesy of [Tableau, LLC](#)

© 2003-2007 Tableau, LLC

Tableau is a registered trademark of Tableau, LLC.

Table of Contents

CHAPTER 1

FORENSIC SOLID STEEL TOWER - DUAL OPTERON

Keyboard, Mouse & Mouse Pad	5
25-in-1 Media Reader	5
19" Monitor	6
Surge Protector	6
Manual Bag	6
CD Wallet	6
Windows XP Professional	6
Hard Drive Image	6
Norton Anti-Virus	7
Ahead Nero	7
Quick View	7
Flashlight	7

Forensic Solid Steel Tower – Dual Opteron

The Forensic Solid Steel Tower - Dual Opteron is the latest addition to Forensic Computers' line of high quality powerful forensic workstations. There are ten 5.25" external bays that allow for easy upgrades and the flexibility to configure a forensic lab system to meet your needs.

Contents

The Forensic Solid Steel Tower - Dual Opteron case is a solid steel tower that is built to last. There are ten 5.25" bays in the Solid Steel Tower's case that allow for easy upgrades and the flexibility to configure a forensic lab system to meet your needs.

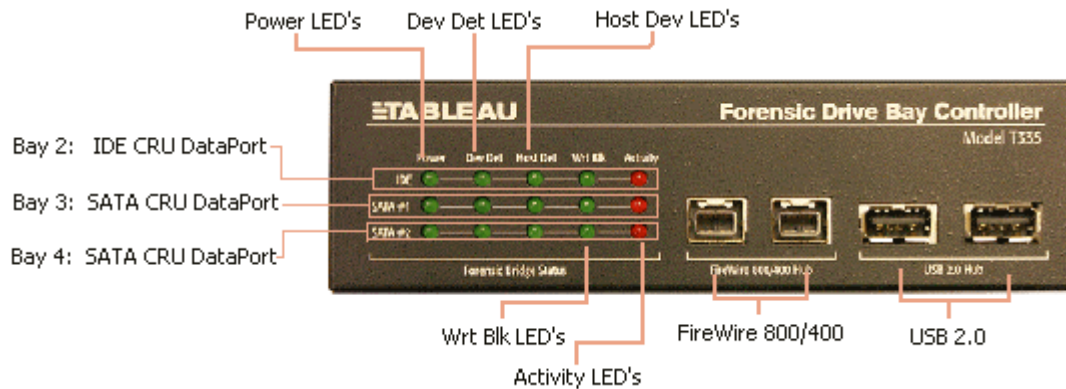
The Forensic Solid Steel Tower - Dual Opteron system has the following items: the Forensic Solid Steel Tower - Dual Opteron, the monitor, the keyboard, the mouse, the PC power cord and the Forensic Write Protection Kit. The Forensic Solid Steel Tower - Dual Opteron system utilizes CRU-DataPorts controlled by a Tableau T335 Forensic Drive Bay Controller, which allows the forensic investigator to extract a forensically sound image (or copy) of a subject hard drive.

The picture to your right is a basic diagram of the front of the Forensic Solid Steel Tower - Dual Opteron's structure. The very top section is the power panel of the Forensic Solid Steel Tower - Dual Opteron. There are two rocker switches: one on the left side for the power and one on the right side for reset. Pressing the power rocker switches will turn the system ON or OFF. In the middle of the two buttons is a set of power LED's. The dark green LED on the top indicates whether the power is on for the entire Forensic Solid Steel Tower - Dual Opteron unit. The middle yellow LED, labeled HD1, indicates whether the main hard drive containing the operating system is on. The bottom pale yellow LED is not used at all.



The Tableau T335 Forensic Drive Bay Controller is in the first bay of the Forensic

Solid Steel Tower - Dual Opteron. The Forensic Drive Bay Controller manages the following three CRU-DataPorts: the READ ONLY IDE CRU-DataPort, the READ ONLY SATA CRU-DataPort, and the READ/WRITE SATA CRU-DataPort. On the left hand side of the T335 Forensic Drive Bay Controller are the LED's. The five sets of LED's on the left hand side correspond to the three CRU-DataPorts: IDE CRU-DataPort (bay two), SATA READ ONLY CRU-DataPort (bay three), and SATA READ/WRITE CRU-DataPort (bay four). SATA #1 corresponds to the SATA READ ONLY CRU-DataPort and SATA #2 corresponds to the SATA READ/WRITE CRU-DataPort. The first row of LED's correspond to the IDE CRU-DataPort, the second row of LED's correspond to the SATA READ ONLY CRU-DataPort and the last row of LED's correspond to the SATA READ/WRITE CRU-DataPort. There are two FireWire 800/400 ports in the middle and two USB 2.0 ports on the right hand side.



The following is a table of each of the items of the Tableau T335 and a description of its purpose:

Front Element	Description
Power LEDs	The Power LED for an individual CRU-DataPort unit indicates whether the power is ON or OFF for that unit. The Power LED will be on solidly when the corresponding CRU-DataPort or drive bay is ON. If the Power LED is blinking ON and OFF, then the drive bay is OFF and the T335 Forensic Drive Bay Controller is working normally.
Dev Det LEDs	The Dev Det LEDs (Device Detection) indicate that a hard drive has been recognized by the CRU-DataPort or drive bay unit in which the hard drive has been placed.
Host Det LEDs	The Host Det LEDs (Host Detection) indicate communication between the "Host" computer (in this case the Forensic Solid Steel Tower - Dual Opteron), the T335 Forensic Drive Bay Controller and the subject hard drive which is in one of the CRU-DataPort units.

Wrt Blk LEDs	The Wrt Blk LEDs (Write Block) indicate the Tableau T335 Forensic Drive Bay Controller is in READ ONLY mode. If the individual LED is ON, then the corresponding drive bay may be used to capture a forensically sound image or copy of the hard drive that has been inserted into the drive bay CRU.
Activity LEDs	The Activity LED's indicate that host computer is communicating with the hard drive in the corresponding drive bay.
FireWire 800/400	The two FireWire 800/400 ports are NOT write-blocked, meaning that if one is using either one of the two FireWire ports to examine a hard drive, then the user can "write" to that hard drive and may corrupt evidence. The two FireWire 800/400 ports are used to attach other FireWire devices, such as the Tableau T4 Forensic SCSI Bridge.
USB 2.0	The two USB 2.0 ports on the front of the Tableau T335 are also NOT write-blocked. The USB ports are for connecting other external USB devices, such as a USB security dongle or any other device.

The next three bays (bays five through seven) contain the following (in order): a DVD-RW, a 74GB SATA Raptor hard drive in a CRU-DataPort 10 Removable tray for the operating system, and a floppy drive. Bays eight, nine and ten contain a 500 GB SATA 150 hard drive in a Super Micro RAID Cage.

Keyboard, Mouse & Mouse Pad



25-in-1 Media Reader

The 25-in-1 Media Reader provides accessibility to multiple types of media cards including CompactFlash® Card Types I & II, SmartMedia™, Secure Digital™ and others.



19" Monitor



Surge Protector

The Surge Protector has twelve electrical plugs, one IN telephone jack, two OUT telephone jacks, one IN Video connection, one OUT video connection and a RESET/OFF button.

Manual Bag

The Manual Bag includes miscellaneous documentation and CD-ROMs.

Empty Kit Bag

The kit bag is for your use to put any of the forensic items or whatever in it to carry wherever you want, (just an added little bonus for your use).

CD Wallet

In this wallet are all the device drivers and CD ROM's pertinent to your Forensic Solid Steel Tower - Dual Opteron system. The following is a list of the CD's included in your CD Wallet: Windows XP Professional, Hard Drive Image, Device Drivers, Norton Anti-Virus, Ahead Nero, and Quick View.

Windows XP Professional

The Windows XP disk is your own personal copy of the operating system that is installed on the Forensic Solid Steel Tower - Dual Opteron system. The Windows XP Professional COA for the installation is located on the rear of the Forensic Solid Steel Tower - Dual Opteron. For your protection, you might want to keep a copy of the COA or Windows key code in a safe place.

Hard Drive Image

The hard drive image disk is a copy of your individual Forensic Solid Steel Tower - Dual Opteron system. If by some chance your system has lost its operating system and you need to restore your Forensic Solid Steel Tower - Dual Opteron system, this is the disk to use. It includes an entire copy of your system as it was shipped to you.

Norton Anti-Virus

The Norton Anti-Virus disk is your individual copy of Norton Anti-Virus. If it expires, contact [Symantec](#) to download the latest anti-virus software.

Ahead Nero

Ahead Nero is the name of the CD and or DVD burning software. Instructions on how to use the software is installed on your system.

Quick View

Quick View is a software applications program that allows one to open various files from Windows, Macintosh, Internet and DOS formats. For more information on Quick View go to: [Quick View](#)

Two Screwdrivers

There are two different screwdriver sets included with the Forensic Solid Steel Tower - Dual Opteron system: the 30-piece Security screwdriver set and the Craftsman 10-in-1 Screwdriver. The 30-piece Security Screwdriver set comes with 30 different security bits for items such as: IBM PS/2 monitors, CATV and telephone equipment, and many ottV and telephone equipment, and many other Tools Bit Sets Pher items, and a screwdriver and a case to hold them in. There is a compartment in the handle of the screwdriver, in which one may store other bits. The Craftsman 10-in-1 screwdriver has four dual-headed bits in a “quick-change” bit system, in-shaft bit storage and a cushioned handle grip. One can use the Craftsman screwdriver as a Phillips (1 or 2), slotted (3/16 or 1/4 inch), Torx[®] (10 or 15), square recess (1 or 2) and also as a nut driver (1/4 or 5/16 inch).



30-piece Security Screwdriver Set



10-in-1 Screwdriver

Flashlight

The Mini Maglite Flashlight comes with a mesh belt-looped case and batteries.



Disclaimer: The inclusion of the Ultimate Write Protection Kit-Lab is per an individual quote. If the Ultimate Write Protection Kit-Lab was not ordered with your system, the following items will be included as accessories: 25-in-1 Media Reader, Keyboard, Mouse, 30-piece Security Screwdriver Set, Craftsman 10-in-1 Screwdriver, Surge Protector and mouse pad.

Glossary

A

ATA – AT Attachment is a standard interface for connecting storage devices such as hard disks and CD-ROM drives inside of personal computers.

B

C

D

DIN- the abbreviated name of the German Institute for Standardization (Deutsches Institut für Normung) and is used in the names of its standards. There are a variety of DIN connectors in existence today. The one mentioned in this text is a 5-pin DIN connector.



DIP – as in DIP Switch, is an electric switch that is packaged in a group of standard dual in-line package and is designed to be used on a printed circuit board along with other electronic components and is commonly used to customize the behavior of an electronic device for specific situations.

E

F

FireWire Symbols -



a.

b.

The above symbols represent the IEEE1394 standard. These symbols will help you identify products that are compatible with computers and cameras that use this standard. The

FireWire symbol on the left (a) is a trademark of the Apple Corporation. The i.Link symbol on the right (b) is a trademark of Sony Corporation.

G

H

Hot swapping or hot plugging is the ability to remove and replace components of a machine, usually a computer, while it is operating.

I

IDE – Integrated Drive Electronics, a synonym for an ATA storage device.

iPOD – a brand of portable media players designed and marketed by Apple Computer.

J

K

L

M

Molex[®] - A type of power connection used the computer industry, which has a plastic end attached to four wires: one yellow (12V), one red (5V) and two black (ground). There are female and male Molex[®] connectors.



N

O

P

Q

R

S

SATA – is a traditional dish from the Malaysian state of Terenngganu, consisting of spiced fish meat wrapped in banana leaves and cooked on a grill.

NO REALLY -Serial ATA, a computer bus technology primarily designed for the transfer of data from a hard disk.

SCSI – Small Computer System Interface is a standard interface and command set for transferring data between devices on both internal and external computer buses. (pronounced skuzzy)

T

U

USB – Universal Serial Bus is a serial bus standard to interface devices. It was designed for computers such as PCs and the Apple Macintosh, but its popularity has prompted it to also become commonplace on video game consoles, PDAs, cell phones and even devices such as televisions and home stereo equipment (mp3 players) and portable memory devices.

V

W

X

Y

Z