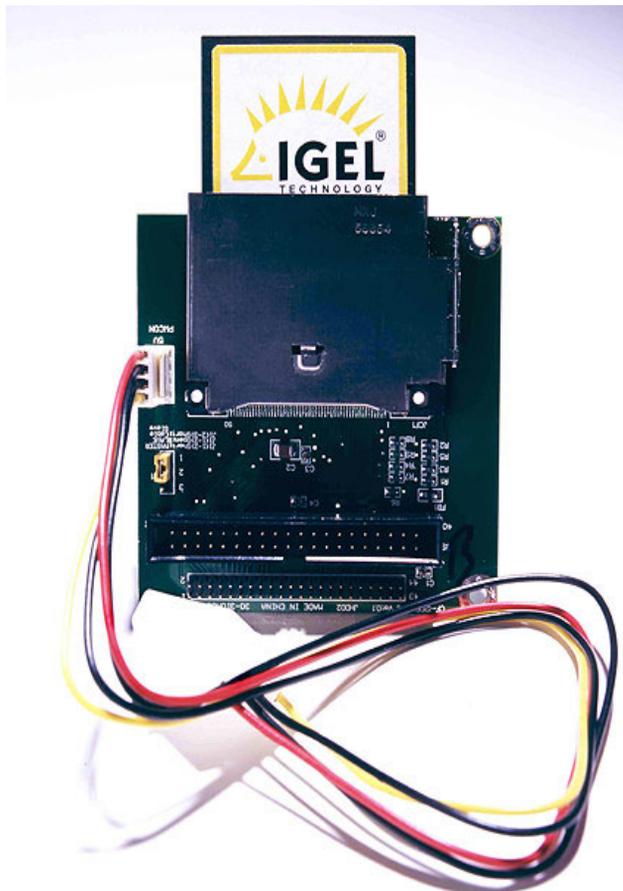




## The IGEL TC-Card

### Installation Guide

#### TC 32 LX CF and TC 64 LX CF





<b>Contents</b>	<b>Page</b>
<b>Introduction</b>	<b>2</b>
<b>PC Requirements</b>	<b>2</b>
<b>Installation</b>	<b>3</b>
<b>Mounting the TC-Card</b>	<b>4</b>
<b>Connecting the Hard Drive Cable</b>	<b>5</b>
<b>The Power Connector</b>	<b>6</b>
<b>Supported Video Cards</b>	<b>7</b>
<b>Supported Network Interface Cards (NIC)</b>	<b>8</b>



## Introduction

The TC-card from IGEL Technology offers a cost-effective entry into the world of server-based computing. Within a few minutes your old PC workstation turns into an efficient and cost-saving IGEL Clever Client. The Clever Client can then be fully managed using IGEL's Remote Management software in the same manner as IGEL's Clever Thin-Client terminals.

IGEL's TC-card replaces the PC's boot hard drive with a solid-state device that is significantly more reliable, produces no annoying whining noise, reduces power consumption (by 10 Watts or more) and reduces heat output.

## PC Requirements

Pentium I (or above) architecture Single CPU (100 MHz or better CPU recommended)

64MB RAM or greater

Supported Video Card (2MB Video RAM required, 4MB preferred) (See list on Page 3)

Supported Network Interface Card (See list on page 3)



## Installation

1. Disconnect the power from the PC and open the PC case
2. Install the TC-card in any spare expansion card mounting slot.
3. Locate the hard-drive and disconnect the IDE hard drive ribbon cable from the hard drive and connect it to the IDE hard drive connector on the TC-card.
4. Connect a 3.5" floppy-drive-style power plug to the Power connector.
5. Ensure the TC-card is jumpered for Master (M).
6. Close the case and power on the PC
7. The PC should now behave like an IGEL Clever Client. See the IGEL Clever Client user's guide for more information.

**Additional installation notes and photographs are provided on the next page**

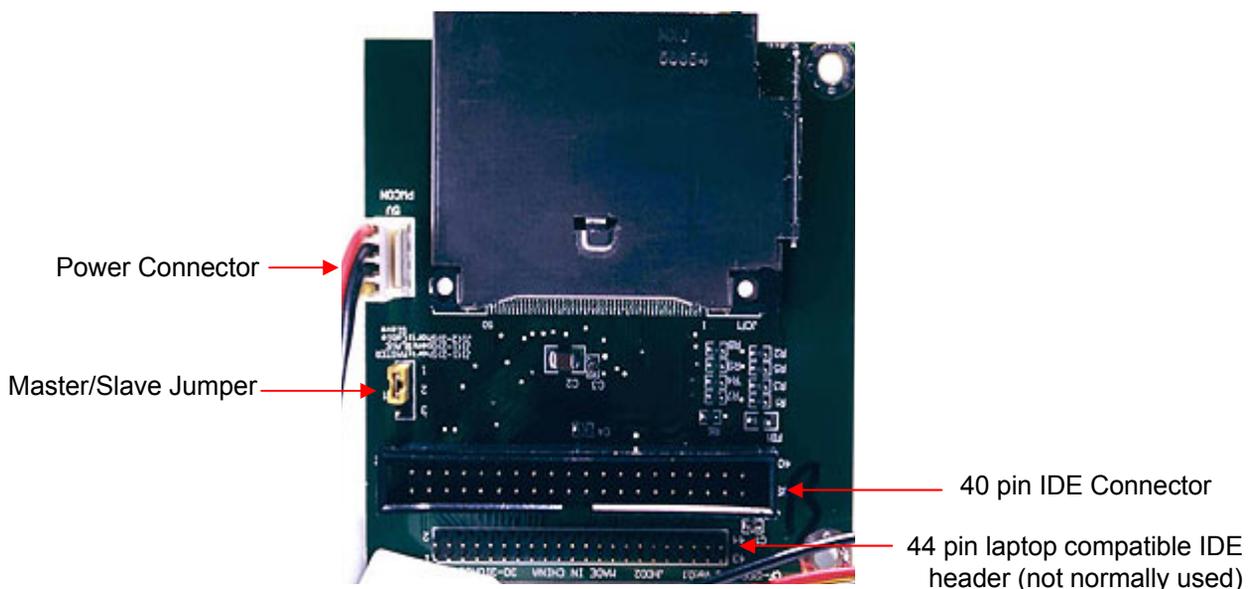


Figure 1  
Principal features of the IGEL TC-card



## Mounting the TC-Card

The TC-Card can usually be mounted in any spare card slot as shown in figure 2. Ensure the TC-card is not touching any other components or the chassis. Ensure the screw attaching the mounting bracket is tightened correctly.

There is no electrical connection to the slot, so the slot may be of any type; even slots off the motherboard may be used. If there are no mounting slots available the mounting bracket can be removed from the PCB and an alternate mounting method such as Velcro or double sided mounting tape may be used. However care must be taken to ensure the board is mounted securely and to ensure there are no electrical shorts.

Figure 2





## Connecting the Hard Drive Cable

The TC-card must be set to be master (figure 3) and be connected to the primary IDE channel. The 40 pin hard drive cable connector usually has a “key” on one side (figure 4). Ensure this mates with the notch in the 40 pin socket on the TC-Card. If the cable has no key ensure the red stripe on the cable is at the same end as pin 1 on the TC card socket. (figure 5). Any other device on the primary channel should be set to slave (rather than using “cable select”). **Note: Flashing keyboard lights indicates a problem and most often this is because the TC card is not primary master.**

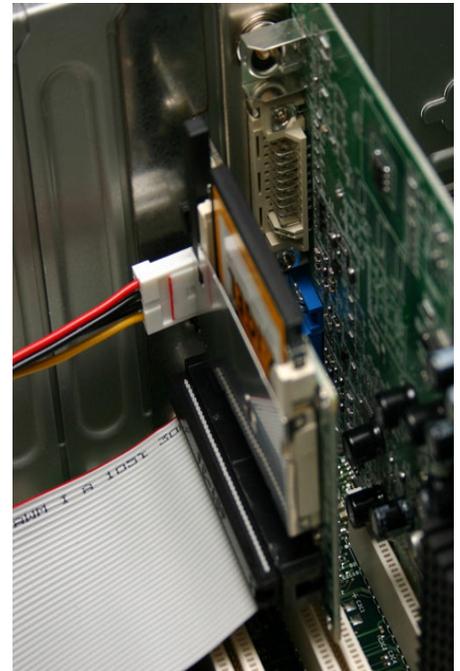


Figure 5

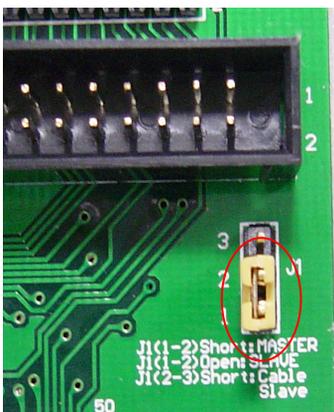


Figure 3



Figure 4



## The Power Connector

The IGEL TC-Card requires power from the small (3.5" floppy style) power connector found in most PCs as shown in figure 6 below. Most hard drives use the larger peripheral power connector as shown in figure 7 below. If the PC being upgraded has no spare small power connector, use the included adapter (Figure 8) to convert from the large power connector to the small connector.

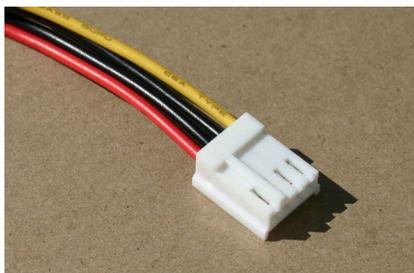


Figure 6

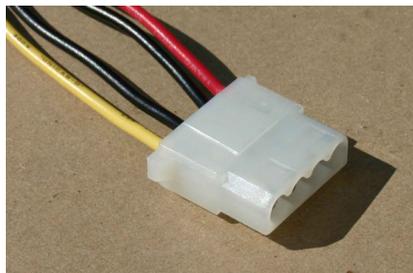


Figure 7



Figure 8



## supported video cards

The vast majority of video cards should work satisfactorily with the TC-card in VESA mode. The following specific video cards have been tested by IGEL and have been found to work satisfactorily. Should you encounter a problem with your video card, please contact IGEL for resolution.

**3DFX:** Voodoo Banshee, Voodoo3, Voodoo4, Voodoo5

**ATI:** Mach32, Mach64, 3DRage, 3DRagePro, 3DRage LT, 3DRage LT Pro, Rage XL, Rage XC, Rage IIC, Rage128, Radeon

**Cirrus Logic:** Alpine, Laguna

**Intel:** Intel i740

**Matrox:** MGA1064SG (Mystique), MGA2164W (Millennium II), G100, G200, G400, G450, and G550

**NVIDIA:** 128ZX, TNT, TNT2 (Ultra, Vanta, M64), GeForce (DDR, 256), Quadro, Quadro2, GeForce2, (GTS, Ultra, MX)

**Number Nine:** Imagine 128 T2R

**Rendition/Micron:** Verite 1000, 2100, 2200

**S3:** 64 (rev 0 and 1), Trio64, Trio64, Trio64V+, Trio64UV+, Aurora64V+, Trio64V2, ViRGE, ViRGE/VX, ViRGE/DX, ViRGE/GX, ViRGE/GX2, ViRGE/MX, ViRGE/MX+, Trio3D and Trio3D/2X, Savage3D, Savage3D/MV, Savage4, Savage2000

**SiS:** 300, 540, 630

**Silicon Motion, Inc.:** Lynx3DM

**Trident Microsystems:** TGUI9660, TGUI9680, ProVidia 9682, ProVidia 9685, 3DImage985, Cyber9397/DVD, Cyber9520, CyberBlade/i1, CyberBlade/i7

**Tseng Labs:** ET4000AX, ET4000/W32, ET4000/W32i, ET4000/W32p, ET6000 and ET6100



## Supported Network Interface cards (NIC)

Any Network Interface Card that are NE1000 or NE2000 compatible should work satisfactorily with the TC-card. The following specific NICs have been tested by IGEL and have been found to work satisfactorily. Should you encounter a problem with your NIC, please contact IGEL for resolution.

**3COM:** 3c501 (EtherLink), 3c503 (EtherLink II), 3c505 (EtherLink Plus), 3c507 (EtherLink 16), 3c509/3c529/3c579 (EtherLink III), 3c515 (Fast EtherLink ISA), 3c590/3c900 series: "Vortex" (Fast EtherLink 3c590/3c592/3c595/3c597), "Boomerang" (EtherLink XL 3c900 or 3c905), "Cyclone" 3c540/3c900/3c905/3c980/3c575/3c656), "Tornado" (3c905), "Hurricane" (3c555/3cSOHO)

**AMD:** PCnet32 PCI

**DEC:** DECchip Tulip (dc21x4x=21040/21041/21140) PCI, Generic DECchip & DIGITAL EtherWORKS PCI/EISA (DE425,434,435,450,500)

**Intel:** EtherExpress 16, EtherExpressPro / EtherExpress 10 (i82595 fx/tx), EtherExpressPro/100 (INTEL PRO/100 family = 82558 chipset)

**National Semiconductor:** DP8381x series PCI Ethernet (PureData, NetGear, Linksys and others including the 83815 chip)

**RealTek:** RTL-8139 PCI Fast Ethernet (also older 8129/8130)

**Sundance:** Alta

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