

Information for DEC 21030 Users (aka TGA)

The XFree86 Project, Inc.
Updates for X11R6.8 by Jim Gettys

March 25th, 2004

1. DEC 21030

- The DEC 21030 is supported by X11R6.8. The driver is now partially accelerated. The built-in graphics on the Multia is supported in 8-plane mode, and PCI cards with 8 or 16 MB framebuffers are supported in 24-plane mode. TGA2 (aka PowerStorm 3D30/4D20) cards are not currently supported.

- Current Known Problems

1. Virtual desktops and multiple modelines do not work. You should specify only one modeline.
2. Hardware cursor is only supported on systems with the BT485 ramdac, ie the Multia.
3. After the server has been run using the hardware cursor, the Linux TGA console cursor (which also uses the hardware cursor) is shifted down by one pixel. This problem does not affect Linux kernels 2.2.10 and above, which do not use the hardware cursor.
4. The XAA PolySegment() method is buggy. If you experience server crashes with SIGFPE, or server hangs, try disabling it (see below).

- The following options may be specified for the 21030 driver:

BusID "PCI:?:?:?"

Currently it is necessary to specify the BusID so that the server will find the card. Check /proc/pci and look for the bus, device, and function numbers in the 21030 section. On a Multia, this should be 'PCI:0:11:0'.

MemBase 0x???????

If the server does not detect the base address of the 21030, then check /proc/pci for the 21030 and look for the "Prefetchable 32 bit memory at 0x???????" and enter this as your MemBase setting.

Option "NoAccel"

Disables acceleration.

Option "swcursor"

Disables the hardware cursor.

Option "NoXaaPolySegment"
Disables the XAA PolySegment() method.

2. Authors

- Matthew Grossman, <mattg@oz.net>
- Alan Hourihane, <alanh@fairlite.demon.co.uk>
- Martin Lucina, <mato@kotelna.sk>
- Tim Rowley, <tor@cs.brown.edu>

CONTENTS

1. DEC 21030	1
2. Authors	2