Information for i740 Users

Precision Insight, Inc.
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1. Supported Hardware
   - Intel 740 based cards.

2. Features
   - Full support for 8, 15, 16, and 24 bit pixel depths.
   - Hardware cursor support to reduce sprite flicker.
   - Hardware accelerated 2D drawing engine support for 8, 15, 16 and 24 bit pixel depths.
   - Support for high resolution video modes up to 1600x1200.
   - Support for doublescan video modes (e.g., 320x200 and 320x240).
   - Support for gamma correction at all pixel depths.
   - Fully programmable clock supported.
   - Robust text mode restore for VT switching.

3. Technical Notes
   - Hardware acceleration is not possible when using the framebuffer in 32 bit per pixel format.
   - Interlace modes cannot be supported.

4. Reported Working Video Cards
   - Real3D Starfighter AGP
   - Real3D Starfighter PCI
   - Diamond Stealth II/G460 AGP
   - 3DVision-i740 AGP
   - ABIT G740 8MB SDRAM
   - Acorp AGP i740
   - AGP 2D/3D V. 1N, AGP-740D
   - AOpen AGP 2X 3D Navigator PA740
• ARISTO i740 AGP (ART-i740-G)
• ASUS AGP-V2740
• Atrend (Speedy) 3DIO740 AGP (ATC-2740)
• Chaintech AGP-740D
• EliteGroup(ECS) 3DVision-i740 AGP
• EONtronics Picasso 740
• EONtronics Van Gogh
• Everex MVGA i740/AG
• Flagpoint Shocker i740 8MB
• Gainward CardExpert 740 8MB
• Genoa Systems Phantom 740
• Gigabyte Predator i740 8MB AGP
• Hercules Terminator 128 2X/i AGP
• HOT-158 (Shuttle)
• Intel Express 3D AGP
• Jaton Video-740 AGP 3D
• Jetway J-740-3D 8MB AGP, i740 AGP 3D
• Joymedia Apollo 7400
• Leadtek Winfast S900
• Machspeed Raptor i740 AGP 4600
• Magic-Pro MP-740DVD
• MAXI Gamer AGP 8 MB
• Palit Daytona AGP740
• PowerColor C740 (SG/SD) AGP
• QDI Amazing I
• Soyo AGP (SY-740 AGP)
• Spacewalker Hot-158
• VideoExcel AGP 740
• ViewTop ZeusL 8MB
• Winfast S900 i740 AGP 8MB

5. Configuration

The driver auto-detects all device information necessary to initialize the card. The only lines you need in the "Device" section of your xorg.conf file are:

```conf
Section "Device"
  Identifier "Intel i740"
  Driver   "i740"
EndSection
```
or let xorgconfig do this for you.
However, if you have problems with auto-detection, you can specify:

- VideoRam - in kilobytes
- DacSpeed - in MHz
- MemBase - physical address of the linear framebuffer
- IOBase - physical address of the memory mapped IO registers

6. Driver Options

- "NoAccel" - Turn off hardware acceleration
- "SWCursor" - Request a software cursor (hardware is default)
- "SDRAM" - Force the use of SDRAM timings
- "SGRAM" - Force the use of SGRAM timings
- "SlowRam" - Force the use of slower ram timings
- "Dac6Bit" - Force the use of a 6 Bit Dac (8 Bit is the default)
- "UsePIO" - Force the use of programmed IO (Memory mapped is the default)

Note: the i740 X server should automatically detect whether your card has SGRAM or SDRAM. Use the "sgram" and "sdram" options if it is incorrectly detected.

7. Known Limitations

- Certain drawing operations are very slow when using 24 bit pixel depth mode.

8. Author

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The X11R6.8 version of this driver originally came from XFree86 4.4 rc2.
The XFree86 version of this driver was donated to The XFree86 Project by:

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