

PiBox - Action Item #128

Add support for hardware accelerated X.org

07 Nov 2012 21:41 - Hammel

Status:	Closed	Start date:	07 Nov 2012
Priority:	Immediate	Due date:	
Assignee:	Hammel	% Done:	100%
Category:	04 - Root File System	Estimated time:	0.00 hour
Target version:	0.9.0		
Severity:	02 - High		
Description			
Not sure if this support already exists. If not, fallback to software enabled or perhaps frame buffer driver.			

Associated revisions

Revision fc47d0e6 - 19 Jan 2014 09:42 - Hammel

RM #128: Added hardware accelerated X.org driver to build. Driver is not stable so it's not being used yet.

Revision 8e366487 - 19 Mar 2014 19:00 - Hammel

RM #128: fbturbo seems to work better with the new 3.10.y kernel than it did with 3.2.27 so I've made it the default.

History

#1 - 09 Nov 2012 07:02 - Hammel

- Priority changed from Immediate to Normal
- % Done changed from 0 to 50
- Severity changed from High to Medium

There is no hardware accelerated X for Raspberry Pi at this time.

I updated the xorg.conf file and switched the xinitrc to blackbox. X now starts correctly using the fbdev driver.

I'll leave this one open until a hardware accelerated driver arrives.

#2 - 10 Feb 2013 14:46 - Hammel

- Severity changed from Medium to 03 - Medium

#3 - 09 Mar 2013 15:53 - Hammel

- Target version changed from 0.3.0 to 1.0 - Atreides

#4 - 10 Nov 2013 16:16 - Hammel

- Target version changed from 1.0 - Atreides to 2.0 - Harkonnen

#5 - 06 Jan 2014 20:53 - Hammel

There appears to be a hardware accelerated driver now that is a drop in replacement for the xf86-video-fbdev driver I'm currently using.

See <https://github.com/ssvb/xf86-video-fbturbo>

#6 - 10 Jan 2014 09:56 - Hammel

- *Priority changed from Normal to Urgent*
- *Target version changed from 2.0 - Harkonnen to 0.8.0*

#7 - 18 Jan 2014 16:47 - Hammel

- *Status changed from New to In Progress*
- *% Done changed from 50 to 70*

Built a buildroot package for it and did a test build. Builds okay with mods for buildroot xorg config (xf86driproto).

Tested on hardware and it comes up fine. Verified it was working in Xorg.log.0. Not sure if 3D is working but 2D acceleration should be there. Don't see great difference in starting surf, however. It still runs slow.

Need to verify complete and current buildroot build works with new package. Then I can check in updates for the new driver, including updating the xorg.conf to use it.

#8 - 19 Jan 2014 09:24 - Hammel

Left the driver running overnight and found that the display was partially unrefreshed. Hitting a keystroke (shift key) refreshed it.

#9 - 19 Jan 2014 09:43 - Hammel

Pushed updates upstream.

#10 - 19 Jan 2014 09:43 - Hammel

- *Target version changed from 0.8.0 to 1.0 - Atreides*

Pushing this to later release to give driver time to become more stable.

#11 - 14 Mar 2014 14:49 - Hammel

- *Target version changed from 1.0 - Atreides to 0.9.0*

Moving to 0.9 to test updates to the driver with newer kernel/gcc/glibc and roots.

#12 - 17 Mar 2014 19:03 - Hammel

- *Priority changed from Urgent to Immediate*
- *Severity changed from 03 - Medium to 02 - High*

#13 - 18 Mar 2014 19:43 - Hammel

Building for 3.10.y - there are currently no updates to the project so this is the same code that was less stable than the standard fbdev with the 3.2.27 kernel.

Also, there is an [alternative X.org driver](#) with additional information on using it at [eLinux.org](#).

#14 - 18 Mar 2014 19:47 - Hammel

Doh - the driver was already enabled and built. It just wasn't used in the xorg.conf. I've switched to it and will let it sit for a while to see what happens.

#15 - 18 Mar 2014 20:04 - Hammel

After one screen blanking, a keypress brought it back without problem. I'm going to reboot and test if the keyboard is available on first boot (instead of requiring an Xorg restart) and then let it sit overnight and see if its still okay in the morning.

#16 - 18 Mar 2014 20:06 - Hammel

Xorg still requires a restart on first boot with fbturbo and 3.10.31+.

Leaving overnight to see if driver is okay after long time unattended.

#17 - 19 Mar 2014 19:01 - Hammel

- *Status changed from In Progress to Closed*

- *% Done changed from 70 to 100*

Seems to still be working just fine. I've made it the default for now.

Closing issue. If the driver causes problems I can reopen it.