coreboot - Bug #80

Screen garbled in Seabios, does not boot, Kernel panic (X60)

10/15/2016 06:41 PM - Daniel Kulesz

Status:	New	**Start date:**	10/15/2016
Priority:	Normal	**Due date:**	
Assignee:		**% Done:**	0%
Category:		**Estimated time:**	0.00 hour
Target version:			

Description

I tried updating from Coreboot-4.4 to current HEAD on my Thinkpad X60. The build went fine, but afterwards:

- screen was partly disorted / garbled (big green artifacts in the bottom part)
- first attempt to boot resulted in kernel panic
- could get machine to boot only after rebooting and then it booted normally

Downgraded now to 4.4, and things are working okay again.

History

#1 - 10/21/2016 09:24 PM - Daniel Kulesz

I had the same issue with the official 4.5 release. Then I switched off the following option:

Display => Keep VESA framebuffer

Since then, everything is back to normal. However, in 4.4 it used to work with the option enabled (just double-checked), so I would consider this a regression.

#2 - 10/22/2016 08:09 PM - Arthur Heymans

Could you see if commit 9c5fc62f9 "nb/i945/gma.c: use IS_ENABLED instead of #if, #endif" was in your git tree that you flashed? This breaks native graphic init, but is fixed in https://review.coreboot.org/#/c/17075/ .

#3 - 11/18/2016 12:04 PM - Daniel Kulesz

Sorry, didn't see your comment. Since the commit is merged, I will try with the current master and report back.

#4 - 11/18/2016 03:41 PM - Daniel Kulesz

- File IMG_20161118_161249.jpg added

I retried in master as of cd2afc0df034670a83479aded514b22b99124cf5. Here is what changed:

- again, first attempt to boot after flashing resulted in kernel panic (blinking scroll lock led)
- the issue that the device does not boot up at the first time got better. Lockup during boot happens only occasionally but is not easily reproducible.
- however, the device sometimes does not init correctly (empty screen, backlight on)
- when using the "Keep VESA framebuffer" option, the screen is still garbled during bootup, and also when booting into text-based Payloads such as meminfo or memtest86+. Memtest86+ itself does not report any memory issues (when running coreboot without the VESA option since no output is visible when activated).

I am attaching pictures for some of the symptoms.

#5 - 11/18/2016 03:42 PM - Daniel Kulesz

- File IMG_20161118_132934.jpg added

- File IMG_20161118_142310.jpg added

#6 - 11/18/2016 03:42 PM - Daniel Kulesz

- File IMG_20161118_161249.jpg added

- File IMG_20161118_161220.jpg added

#7 - 11/18/2016 03:43 PM - Daniel Kulesz

Btw.: It's a X60s, not a regular X60.

#8 - 11/19/2016 06:11 PM - Arthur Heymans

I don't seem to have these issues on my x60. Linux can be unhappy if gpu was not initiated properly.

Could you include a cblog?
Would also be nice if you could bisect this issue, if you say this is a regression.

#9 - 04/14/2017 12:42 PM - Daniel Kulesz

I tried on current master, and there the issue is still present. I am trying to recover from this issue - until then, I will not be able to provide cblog.

#10 - 04/14/2017 01:02 PM - Daniel Kulesz

- File config.txt added

- File config.short.txt added

- File cbfs.txt added

- File coreboot_console.txt added

- File coreboot_timestamps.txt added

- File kernel_log.txt added

- File payload_config.txt added

- File revision.txt added

- File rom_checksum.txt added

Here are the logs.

#11 - 04/14/2017 01:04 PM - Daniel Kulesz

One more thing I noticed in the VESA "broken" Mode:

If I hit "Esc" in Seabios after cold boot and choose the boot device, the system will always hang. If I do not hit Esc but let it continue booting, the Linux kernel will succeed in initializing the graphics most of the time. Some timing issue?

Files

config.txt	18.2 KB	10/15/2016	Daniel Kulesz
IMG_20161118_161249.jpg	177 KB	11/18/2016	Daniel Kulesz
IMG_20161118_132934.jpg	192 KB	11/18/2016	Daniel Kulesz
IMG_20161118_142310.jpg	168 KB	11/18/2016	Daniel Kulesz
IMG_20161118_161220.jpg	127 KB	11/18/2016	Daniel Kulesz
IMG_20161118_161249.jpg	177 KB	11/18/2016	Daniel Kulesz
cbfs.txt	1020 Bytes	04/14/2017	Daniel Kulesz
config.short.txt	444 Bytes	04/14/2017	Daniel Kulesz

coreboot_console.txt	36 Bytes	04/14/2017	Daniel Kulesz
config.txt	18.8 KB	04/14/2017	Daniel Kulesz
coreboot_timestamps.txt	39 Bytes	04/14/2017	Daniel Kulesz
payload_config.txt	1.59 KB	04/14/2017	Daniel Kulesz
revision.txt	173 Bytes	04/14/2017	Daniel Kulesz
kernel_log.txt	61.1 KB	04/14/2017	Daniel Kulesz
rom_checksum.txt	53 Bytes	04/14/2017	Daniel Kulesz