EclaireXL - Bug #20

Bugs in DAS OMEN Demo

05/30/2017 03:39 PM - ndary

Status:	Closed		**Start date:**	05/30/2017
Priority:	Normal		**Due date:**	
Assignee:	ndary		**% Done:**	0%
Category:			**Estimated time:**	0:00 hour
Target version:				

Description		
tested the DAS OMEN Demo 1. the speech (DAS OMEN) at the 3rd part does not play 2. Music stops after a while and the DEMO Crash		
Related issues:		
Related to Feature #28: XEX boot loader replacement	**Closed**	**05/31/2017**

History

#1 - 05/30/2017 06:47 PM - foft

- Assignee deleted (foft)

#2 - 05/30/2017 06:51 PM - foft

Uh-oh, good spot. Did you check it with aspeqt too? I find that the .xex support (sdrive port) can be a bit iffy at times. I'm not sure if there are better xex loaders we can switch to?

Can someone pick this up and look into the root cause please? Then I can fix the issue with the core.

#3 - 05/30/2017 11:36 PM - ndary

- File $boot.bin added

- File picodos.sys added

i just confirmed that the problem is with the XEX loader of EclairXL, can you use the PICODOS loader from HIASOFT? from my experience it works well with most files.

#4 - 05/31/2017 08:05 AM - foft

We can try it. Do you know c? There is atari_drive_emulator.c in the firmware which has a copy of the xex loader. Its an sdrive port and I didn't ever look into the xex side much.

#5 - 05/31/2017 08:57 AM - ndary

6502 assembly only here :)

XXL posted that he can do a loader and PICODOS source is on Github

https://github.com/Masq666/PicoDOS/blob/master/picodos.asm

Nir

#6 - 05/31/2017 09:59 AM - foft

We could add another 6502 for the firmware to replace the zpu. I'd like that but don't have time to spend on that.

Quite a job though to rewrite the firmware.

It contains sd card access, fat filesystem, file browsing and a usb stack.

#7 - 05/31/2017 10:15 AM - xxl

foft wrote:

> We can try it. Do you know c? There is atari_drive_emulator.c in the firmware which has a copy of the xex loader. Its an sdrive port and I didn't

ever look into the xex side much.

Are you using this loader?

#ifdef XEX_IMAGES
// The KBoot loader was written by Ken Siders (atari@columbus.rr.com)
byte KBOOT_LOADER[] = {
0x00,0x03,0x00,0x07,0x14,0x07,0x4c,0x14,0x07,0xAA,0xBB,0x00,0x00,0xa9,0x46,0x8d,0xc6,0x02,0xd0,0xfe,0xa0,0x00,0xa9,0x6b,
0x91,0x58,0x20,0xd9,0x07,0xb0,0xee,0x20,0xc4,0x07,0xad,0x7a,0x08,0x0d,0x76,0x08,0xd0,0xe3,0xa5,0x80,0x8d,0xe0,0x02,0xa5,
0x81,0x8d,0xe1,0x02,0xa9,0x00,0x8d,0xe2,0x02,0x8d,0xe3,0x02,0x20,0xeb,0x07,0xb0,0xcc,0xa0,0x00,0x91,0x80,0xa5,0x80,0xc5,
0x82,0xd0,0x06,0xa5,0x81,0xc5,0x83,0xf0,0x08,0xe6,0x80,0xd0,0x02,0xe6,0x81,0xd0,0xe3,0xad,0x76,0x08,0xd0,0xaf,0xad,0xe2,
0x02,0x8d,0x70,0x07,0x0d,0xe3,0x02,0xf0,0x0e,0xad,0xe3,0x02,0x8d,0x71,0x07,0x20,0xff,0xff,0xad,0x7a,0x08,0xd0,0x13,0xa9,
0x00,0x8d,0xe2,0x02,0x8d,0xe3,0x02,0x20,0xae,0x07,0xad,0x7a,0x08,0xd0,0x03,0x4c,0x3c,0x07,0xa9,0x00,0x85,0x80,0x85,0x81,
0x85,0x82,0x85,0x83,0xad,0xe0,0x02,0x85,0x0a,0x85,0x0c,0xad,0xe1,0x02,0x85,0x0b,0x85,0x0d,0xa9,0x01,0x85,0x09,0xa9,0x00,
0x8d,0x44,0x02,0x6c,0xe0,0x02,0x20,0xeb,0x07,0x85,0x80,0x20,0xeb,0x07,0x85,0x81,0xa5,0x80,0xc9,0xff,0xd0,0x10,0xa5,0x81,
0xc9,0xff,0xd0,0x0a,0x20,0xeb,0x07,0x85,0x80,0x20,0xeb,0x07,0x85,0x81,0x20,0xeb,0x07,0x85,0x82,0x20,0xeb,0x07,0x85,0x83,
0x60,0x20,0xeb,0x07,0xc9,0xff,0xd0,0x09,0x20,0xeb,0x07,0xc9,0xff,0xd0,0x02,0x18,0x60,0x38,0x60,0xad,0x09,0x07,0x0d,0x0a,
0x07,0x0d,0x0b,0x07,0xf0,0x79,0xac,0x79,0x08,0x10,0x50,0xee,0x77,0x08,0xd0,0x03,0xee,0x78,0x08,0xa9,0x31,0x8d,0x00,0x03,
0xa9,0x01,0x8d,0x01,0x03,0xa9,0x52,0x8d,0x02,0x03,0xa9,0x40,0x8d,0x03,0x03,0xa9,0x80,0x8d,0x04,0x03,0xa9,0x08,0x8d,0x05,
0x03,0xa9,0x1f,0x8d,0x06,0x03,0xa9,0x80,0x8d,0x08,0x03,0xa9,0x00,0x8d,0x09,0x03,0xad,0x77,0x08,0x8d,0x0a,0x03,0xad,0x78,
0x08,0x8d,0x0b,0x03,0x20,0x59,0xe4,0xad,0x03,0x03,0xc9,0x02,0xb0,0x22,0xa0,0x00,0x8c,0x79,0x08,0xb9,0x80,0x08,0xaa,0xad,
0x09,0x07,0xd0,0x0b,0xad,0x0a,0x07,0xd0,0x03,0xce,0x0b,0x07,0xce,0x0a,0x07,0xce,0x09,0x07,0xee,0x79,0x08,0x8a,0x18,0x60,
0xa0,0x01,0x8c,0x76,0x08,0x38,0x60,0xa0,0x01,0x8c,0x7a,0x08,0x38,0x60,0x00,0x03,0x00,0x80,0x00,0x00,0x00,0x00,0x00,0x00
};
#endif

It may not work properly. I wrote a similar loader for the SIO2WiFi project, I can share it.

#8 - 05/31/2017 06:45 PM - foft

Using this one:
uint8_t boot_xex_loader[179] = {
0x72,0x02,0x5f,0x07,0xf8,0x07,0xa9,0x00,0x8d,0x04,0x03,0x8d,0x44,0x02,0xa9,0x07,
0x8d,0x05,0x03,0xa9,0x70,0x8d,0x0a,0x03,0xa9,0x01,0x8d,0x0b,0x03,0x85,0x09,0x60,
0x7d,0x8a,0x48,0x20,0x53,0xe4,0x88,0xd0,0xfa,0x68,0xaa,0x8c,0x8e,0x07,0xad,0x7d,
0x07,0xee,0x8e,0x07,0x60,0xa9,0x93,0x8d,0xe2,0x02,0xa9,0x07,0x8d,0xe3,0x02,0xa2,
0x02,0x20,0xda,0x07,0x95,0x43,0x20,0xda,0x07,0x95,0x44,0x35,0x43,0xc9,0xff,0xf0,
0xf0,0xca,0xca,0x10,0xec,0x30,0x06,0xe6,0x45,0xd0,0x02,0xe6,0x46,0x20,0xda,0x07,
0xa2,0x01,0x81,0x44,0xb5,0x45,0xd5,0x43,0xd0,0xed,0xca,0x10,0xf7,0x20,0xd2,0x07,
0x4c,0x94,0x07,0xa9,0x03,0x8d,0x0f,0xd2,0x6c,0xe2,0x02,0xad,0x8e,0x07,0xcd,0x7f,
0x07,0xd0,0xab,0xee,0x0a,0x03,0xd0,0x03,0xee,0x0b,0x03,0xad,0x7d,0x07,0x0d,0x7e,
0x07,0xd0,0x8e,0x20,0xd2,0x07,0x6c,0xe0,0x02,0x20,0xda,0x07,0x8d,0xe0,0x02,0x20,
0xda,0x07,0x8d,0xe1,0x02,0x2d,0xe0,0x02,0xc9,0xff,0xf0,0xed,0xa9,0x00,0x8d,0x8e,
0x07,0xf0,0x82 };
// relokacni tabulka neni potreba, meni se vsechny hodnoty 0x07
// (melo by byt PRESNE 20 vyskytu! pokud je jich vic, pak bacha!!!)

This (http://www.64kib.com/atarixlfpga_svn/trunk/atari_800xl/firmware/atari_drive_emulator.c) is not the latest code (need the svn branch, this is easier for me to link...), but it shows how it does the xex access.

#9 - 05/31/2017 06:48 PM - foft

I'm wondering about splitting the firmware up and running on more smaller cpus (such as 6503). e.g. one instance for drive emulation, one for the screen stuff, one for USB access. Using a single CPU there are latency concerns which got quit fiddly after USB introduction. Though I guess that is mostly solved now by the fifo setup for SIO.

#10 - 05/31/2017 07:02 PM - foft

- Related to Feature #28: XEX boot loader replacement added

#11 - 06/03/2017 12:36 PM - foft

- Assignee set to ndary

So is the one a basic on/off issue?

#12 - 06/06/2017 08:56 AM - foft

- Status changed from New to Closed

Files

dasomen2.xex	50.1 KB	05/30/2017	ndary

| $boot.bin | 512 Bytes | 05/30/2017 | ndary |
| picodos.sys | 4.83 KB | 05/30/2017 | ndary |