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XenoGC Full Source Code
https://www.gc-forever.com/forums/viewtopic.php?f=15&t=439

Re: XenoGC Full Source Code
by **yamaharacer**

the original xenogc also uses atmega 8l so yes you need a atmega 8l or find a 5v power source on the pcb.

Re: XenoGC Full Source Code
by **Eliot**

I have not managed to run my ATMEGA8L.
The programming is going well, avrdude says it is OK.
I programmed my ATMEGA8L with the file "XenoAT.1.05.hex" from the archive
I tested the following fuisibles but it did not work:
- lfuse->0xE4 hfuse->0xD8
- lfuse->0xC4 hfuse->0xD9

when I plug my ATMEGA8L in my dvd reader, the original games will launch but not the backup disc.
When i press START, nothing happens

What to do? connect a LED into my ATmega ?

Re: XenoGC Full Source Code
by **emu_kidid**

If nothing happens then the ATMega is not working properly.

Re: XenoGC Full Source Code
by **Eliot**

I'm using a Wiikey.
I connect like the picture is what my diagam is good?

Re: XenoGC Full Source Code
by **Hucklebuck**

> *Eliot wrote:*
> I'm using a Wiikey.
> I connect like the picture is what my diagam is good?

Does using a Wiikey offer any additional functions to the Gamecube or is it just a good substitute for Xeno?

Re: XenoGC Full Source Code
by **infact**

It is only the same atmega8l, but not the same firmware. But you can flash the xeno firmware to the wiikey chip, so it will just work like a xeno.

Re: XenoGC Full Source Code
by **Eliot**

It will but, for my wiikey, it does not work. 😳.
I will retry the next weekend;)

Re: XenoGC Full Source Code
by **disaster3ad**

It's possible that i'm wrong with C4 byte, but i've tried both lf=c4,hf=d9 and lf=e4,hf=d9 and it works.
When i've changed hf to d8 it didnot work at all.
Here is a command line to programm chip (using avrdude):
avrdude -p m8 -c sp12 -U flash:w:XenoAT.1.05.hex -U lfuse:w:0xC4:m -U hfuse:w:0xD9:m -U lock:w:0xCF:m -v -v

By the way, i'm using atmega8-16au with diy pcb.

Connecting the LEDs may be helpfull...

Re: XenoGC Full Source Code
by **Dragoon**

I ask User82 to post how he did it, because he got it up and working 😁

Re: XenoGC Full Source Code
by **yamaharacer**

does anyone know how to implement sdload into the xenogc source code?

Re: XenoGC Full Source Code
by **KirovAir**

> *yamaharacer wrote:*
> does anyone know how to implement sdload into the xenogc source code?

Are we even able to compile the source code yet?

Re: XenoGC Full Source Code

> **Darkmystery wrote:**
> Are we even able to compile the source code yet?

partially 😎

Re: XenoGC Full Source Code

I assume the Chip doesn't have cheat support does it?

Re: XenoGC Full Source Code

Nope but you can burn an action replay backup (or use the original) and use AR

Re: XenoGC Full Source Code

It's been some time since the last post here. Has anyone been able to compile this with a completely Open Source library (liboGC)? I am interested in making my XenoGC load something from the SD Card (eventually) but I don't want to start mucking with source if I can't compile to test the results.

Re: XenoGC Full Source Code

> **andzlay wrote:**
> My favourite part of the log is:
>
> > <@costis> if so, that guy stalked me and found a ton of my e-mail addresses
> > <@costis> and spammed shit to me
>
> 🍀
>
> But what is this gclib we have here in the thread?

I have taken some time to look through the XenoGC Source and the GCLib that is attached in this thread.

I've come to the conclusion that the the GCLib in this thread is, indeed, Costis' GCLib (See the opening comments such as "GC_Debug.c by Costis\n\nVersion 1.0"). I've also been looking through the XenoGC Map files and found that the GCLib the Xeno Author used was compiled from source and that source bears an uncanny resemblance to Costis' GCLib. This is based on the file structure having huge similarities (file naming conventions) and even some of the functions having identical names to Costis' GCLib (See xenoflash.map:67 "GC_VIDEO_INIT" which is used in DvdTest\Main.cpp:1278, etc.).

Someone please correct me if I'm wrong, but I think we "only" need to get our hands on a more recent copy of Costis' GCLib in order to compile the programs associated with the XenoGC. This would be a huge boon to the community!

Now, does anyone know of a good way to get in contact with Costis? 🤭

Re: XenoGC Full Source Code

They wrote their own library. Maybe they borrowed some parts from Costis' library, but extended that.

I have their GC_dvd.c file, which was given by them to emu_kidid and is included in the gcos sources.
Believe me, it is not the same file Costis' wrote.

It is also not impossible to adapt their source code and get it to compile with devkitppc + libogc. The code is documented and not difficult to understand.

(If I only had more time for this kind of stuff... 😕 But I will help you were I can)

Re: XenoGC Full Source Code

Another problem is that if you compile with libOGC you'd find the code size will explode and become too large to fit 😳

it's using gcos/tmbinc ipl replacement code base in a lot of places as I knew the author liked it cause it was easily modified for his purposes.

infact, I'm with you on that.. wish I had the time I used to have for this kind of stuff (back when I was at university :p)

Re: XenoGC Full Source Code

Hello

This might be a little offtopic but is there another way to use the flasher DOL to flash the XenoGC to 2.0 without the need of bridging the GND to any of the XenoGC letters? I am not sure how it works, but maybe using uldorel to disable the chip before it starts to flash?

Thank you.

Re: XenoGC Full Source Code

Alberto, not to my knowledge. That is a function of the ATMega8L on the XenoGC and that specific pin (I believe it's the reset pin) triggers something in the Xeno.

One feature I would like to implement in an updated Xeno firmware is the ability to trigger the reset from the Uploader (XenoFlash.dol) but I am not at that point yet. (This would still require an update though, it would just be additional functionality.

Another update vector could be to upload the updated firmware to the ATMega by an ISP Programmer (for a cheap programmer use an Arduino with the ArduinoISP sketch) but this would still require some soldering.

I hope this is helpful!

Re: XenoGC Full Source Code

by **megalomaniac**   Posted: **Sat Sep 17, 2011 8:12 pm**

> *albertocastillo2001 wrote:*
> Hello
>
> This might be a little offtopic but is there another way to use the flasher DOL to flash the XenoGC to 2.0 without the need of bridging the GND to any of the XenoGC letters? I am not sure how it works, but maybe using uldorel to disable the chip before it starts to flash?
>
> Thank you.

The purpose of connecting ground to the XENO letters is to put the chip in a reset state to allow writing update files. The flasher/software will detect the status of the chip to ensure it is in RESET status else nothing can be written..

> *dantheman2865 wrote:*
> Alberto, not to my knowledge. That is a function of the ATMega8L on the XenoGC and that specific pin (I believe it's the reset pin) triggers something in the Xeno.
>
> One feature I would like to implement in an updated Xeno firmware is the ability to trigger the reset from the Uploader (XenoFlash.dol) but I am not at that point yet. (This would still require an update though, it would just be additional functionality.
>
> Another update vector could be to upload the updated firmware to the ATMega by an ISP Programmer (for a cheap programmer use an Arduino with the ArduinoISP sketch) but this would still require some soldering.
>
> I hope this is helpful!

RESET on the Atmega can only be achieved thru a hard wired connection. No command line functions will allow the chip to go into a true reset status..

There is an issue with using an ISP to flash updated files...
the xeno board was not designed to allow dual interface to an IPS connection while also being connected (soldered) to the GC. Doing so will cause failure of the chip to boot and the ISP will fail to establish communication to the chip. Modification to the Xeno board will be required to allow both 1. permanent GC connection & 2. ISP communication..

however, to use the xenoflasher.dol the chip must be put into reset status by physical connection of ground to reset pin..

Re: XenoGC Full Source Code

by **albertocastillo2001**   Posted: **Mon Sep 19, 2011 12:01 pm**

Hello

Thanks for your reply.

Anybody knows which bugs have been fixed between the 1.0 and the 2.0 version? Besides the Shell to load multigame discs
I've read somewhere years ago that somebugs were corrected but it didn't mention them

Thank you.

Re: XenoGC Full Source Code

by **albertocastillo2001**   Posted: **Mon Sep 19, 2011 5:01 pm**

The XenoGC installation I have done is a bit messy to risk adding two more solder points. I am not good at soldering (but I should learn, all this stuff is very interesting)

Maybe I could solder a cable to GND in an alternative point which is far, but I am not sure which. By the way, there are some holes on the drive board that seem to do connection once a cable is inserted on them. Has anybody tried?

Thank you.

Re: XenoGC Full Source Code

by **megalomaniac**   Posted: **Tue Sep 20, 2011 3:04 am**

the Xeno or Atmega8 (Xeno clone) can be upgraded/downgraded (or initial programming for Atmega) using the various xenoflash.dol's included in the source..
In order to put the microcontroller in program(write) mode, RESET pin (1) must have constant contact with GND during the write process.

The printed letters "XENO" are in contact with RESET therefore connecting any of those letters with GND will put the chip in program mode. The letters are quite big and make for easy soldering of a wire lead. Also GND can found anywhere on the GC, such as the metal cage around the optical drive which also makes for easy soldering.

These two leads should be connected to an on/off switch rather than a reset (push) switch.
ON = leads have contact
OFF = no contact

<u>Three versions of the Xenoflash.dol exist.</u>
xenoFlash.1.01.dol = v1.01
xenoFlash.1.04b.dol = v1.04b
xenoflash.dol = 1.05 (2.0)

When the dol starts it will indicate:

> Set Flash switch to [ON] position now
> then press A to begin flashing

After pressing A it will perform a flash erase and a flash write. When the process is completed, reboot and set switch to [OFF] . The software does not perform error checking to confirm if the switch is in the right position, nor will it indicate if the microcontroller is in programming mode.

I have successfully written all three versions using the xenoflasher.
here are a few pics:
xenoFlash.1.01.dol

xenoFlash.1.04b.dol

xenoflash.dol
yes, the pic shows 1.04 beta but it loads 1.05

Re: XenoGC Full Source Code
by **megalomaniac**

There are some hidden commands which are not displayed in the v1.05 flashloader....
so dont push random buttons...
A = flash erase, flash write
X = read flash
Y = reset flashloader (reload app)
Z = flash erase
Start = Boot into GCOS (included in xenoflasher.dol)