

AmiGameBoy

COLLABORATORS

	<i>TITLE :</i> AmiGameBoy		
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Chapter 1

AmiGameBoy

1.1 AmiGameBoy Emulator.

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                                     <-----=>
AmiGameBoy Emulator v0.85β
      (Preview Version)
<-----=>
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Greetings

1.2 AmiGameBoy Emulator.

Note from Author:

After of some time i can back with a new version of this emulator.

I am the author of AmiMSX2 Emulator and i started AmiGameBoy like a curiosity, NOT seriously.

I found hardware information about Game Boy in a CD of MSX, i read this information and thought: "I can use my Z-80 emulation and Video Emulation systems for emulate a fast Game Boy"

Ok! One week for make Z80A compatible with Game Boy Z80 and memory mapping and other one for make AmiGameBoy v0.8

I used AmiMSX2 menu for Game Boy, winning a lot of time!!!

Yeeeeaaahhhh, AmiGameBoy run very fast and screen refresh is always in real time!!! (ONE frame)

I thought: "I can use my Z-80A emulation for make a Master System and Game Gear emulator!!!"

Ok! BUT, where find hardware information? Oh NO! i found Nothing.

Well, now i go to disassemble some games of Master System with some debugger of MSX (emulated with AmiMSX2!!!)

All right. Two weeks ago i released a fast Master System and Game Gear emulator.

My friend uploaded these two emulators to internet and him was bombarded with a lots of great e-mails asking for future versions.

Well, I have done the most difficult, but i have the experience of make an emulator. This needs a lots of time and dedication. In consequence i need make AmiGameBoy Shareware.

This is the last version freeware of AmiGameBoy.

Next version will be a DEMO version with time-limit.

After of make AmiGameBoy i will think for continue and finish AmiMasterGear.

Ok! Enjoy this very-little preview version.

Juan Antonio Gómez

Barcelona, April 2th, 1997

PS:

80% of this software is result of my hard work making AmiMSX2 Emulator.

PS2:

Sorry my bad English. Thanks.

1.3 AmiGameBoy Emulator.

Introduction:

This is a Game Boy emulator for Amiga computers.

This is only a PREVIEW version, i am optimizing video routines and designing the interrupt emulation system with screen changes in real time.

The 'modified' Z-80 is not totally checked with the GameBoy memory mapping.

Sound emulation is not finished.

But the emulator work well with some software.

Well, this is all by now.

Wait for future versions, and please, don't use drugs.

1.4 AmiGameBoy Emulator.

Requirements:

- Amiga AGA computer.
- MC68020+ (and 100% compatible with MC68030/MC68040/MC68060)
- PAL, NTSC or compatible monitor.
- asl.library
- stc.library (Only for Stone Cracker decrunch support)

Requirements for real emulation:

- MC68020 at 28Mz or MC68030 at 25Mz.
- 1Mb of real fast32bit memory.

1.5 AmiGameBoy Emulator.

Instructions:

These options don't work in this version.

* Load/Save Frozen:

Creates snatshops of your game.

* Edit Palette:

Edit your own palette.

* Cheat mode:

Find and set cheat addresses of your games.

* Save VRAM:

Saves Game Boy VRAM as an IFF-ILBM.

* Save Prefs:

It will save actual preferences in S:AmiGameBoy.prefs

* Black Border:

Borders of Game Boy will be black.

* No illogical moves:

Left and Right at once or Up and Down at once in Joy-reads are not accepted.

* Ask for Reset:

Ask always before Power On a Cart.

* Auto Load RAM-Battery:

It will Read RAM-Battery (Cart.sav) when you insert a cart.

* Auto Save RAM-Battery:

It will Save RAM-Battery (Cart.sav) when you Re-insert another cart or Quit emulator.

* Ask for Save RAM-Battery.

It will ask you for save RAM-Battery.

* Overwrite:

It will Ask you before delete a file.

* Use Unpack.library.

For unpack compresses files.

* Use xpk for save.

For Save all files compressed with xpk.

1.6 AmiGameBoy Emulator.

Joy-Control:

In future versions it will be totally configurable:

Keyboard Only: (This keys work in all Joy-Control modes)

ESC = Exit to menu.
Del = Select
Help = Start
Left Amiga = Button A
Left Alt = Button B
Space = Button B
Cursors = Up/Down/Left/Right
Left Mouse = Select
Right Mouse = Start

Amiga JoyStick or compatible Joypad:

Fire = Button A
Second Fire = Button B (If exists) [pin 9]
Third Fire = Start (If exists) [pin 5]

Use keyboard keys for other buttons

CD32 Joypad:

Play Button = Exit to menu
Green Button = Select
Yellow Button = Start
Red Button = Button B
Blue Button = Button A
Reward Button = Button B
Fastward Button = Button A

1.7 AmiGameBoy Emulator.

DISCLAIMER

The author don't take responsibilities of a bad use of this software.

Game Boy is a registered trademark of Nintendo Corporation.

Devpac III © HiSoft.

GadToolsBox © Java Development.

Stc.library © StoneWare SoftWorks. (By Jouni Korhonen)

Wzonka-Lad © Ville Helin.
AmiMSX2 Emulator © RED Soft S.L. (By Juan Antº Gómez Gálvez)
fMSX Amiga Emulator © Hans Guijt.
VirtualGameBoy © Marat Fayzullin.

1.8 AmiGameBoy Emulator.

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You can contact me via e-mail writting to my friend Skid/Ozone\$^3\$:

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AmiGameBoy is 100% programmed and designed by Juan Antº Gómez.

All graphics and icons are drawn by Multivac.

Special Thanks to Skid/Ozone\$^3\$ for search hardware information for me and all your helps!!!!

1.9 AmiGameBoy Emulator.

Technical datas:

AmiGameBoy is 100% programmed in optimized MC68020 assembly language.

80% of coding and design is totally based in AmiMSX2 Emulator.

Developed using an Amiga 1200+Bizzard 1220+2Gb Hard Disk.

Programmed using Devpac III

GUI created with GadToolsBox.

4987 lines of GameBoy emulation code.
2113 lines of menu code.
6078 lines of GadToolsBox generated code.

13187 lines (90381 lines with macros expanded)

100% compatible with 020,030,040 and 060.

1.10 AmiGameBoy Emulator.

Game Boy Emulation:

This is only a preview version. A lots of things are not finished.

Z-80 processor:

All works correctly except this:

- Flags N and H are not emulated. (but uses a special system for a right emulation of DAA instruction)
- SP register cannot read from ROM!
- SP register cannot write in hardware registers,

The AMIGA can NEVER crash!

Video Emulation:

This version refresh all graphics and Sprites every Vertical Interrupt.
Emulation is always in one frame. (100% identical to a real Game Boy)

Second palette of Sprites is not emulated.
Priority between Sprites and Background is not emulated.
Sprites priorities are not emulated.

Game Boy System:

Only emulated Vertical Interrupt.
Timer and Serial not emulated.
Raster register emulated, but not 100%.
DMA transfer emulated.

Sound Emulation:

Only emulated first three channels.
This emulation is not finished.

About other GameBoy Emulations.

After of make AmiGameBoy i found another Game Boy emulators:

- VirtualGameBoy
- Wzonka-Lad

VGB works very well and compatible but very slow. It is a UNIX-port programmed by Marat Fayzullin.

Wzonka-Lad is programmed in 100% asm and it is multitask. It is programmed by Ville Helin. It is very compatible and run faster than VirtualGameBoy, but the reason of to be Multitask and system-friendly makes that it run more slow than AmiGameBoy.

Huummm, it remenver to me fMSX of Hans Guijt against AmiMSX2...

AmiGameBoy is 100% programmed and designed for work with Amiga AGA hardware directly, without use AmigaOS. The Video quality of AmiGameBoy is 100% to a REAL Game Boy console.

This version is a super preview. I can make a Game Boy Emulation as good as AmiMSX2 emulates a MSX2 computer.

1.11 AmiGameBoy Emulator.

Future:

Ok! Now i will dedicate all my time in finish AmiGameBoy Shareware.

Next version will be v0.9, This version will emulate 100% a Game Boy, but this emulation will work only 5 minutes with one game. You will mush register for obtain Unlimited time version.

Register will be \$20 US Dollars via modem, or \$25 by post. But if you are a Registered user of my AmiMSX2 Emulator it will cost minus.

Actualizations of AmiGameBoy will be always free.

AmiGameBoy will be capable of:

- All interrupts emulated.
 - All Screen changes in real time (palete,scroll,etc...)
 - 100% Screen priorities and colours emulated.
 - Speed will be faster than this version.
 - Support for frozen games (snatshops)
 - Support for Backed RAM-Battery.
 - Cheat mode. (like AmiMSX2)
 - All sound channels emulated.
 - xpk support.
-

- Save GameBoy VRAM like a IFF-ILBM. (Background/Window/Sprites)
- Edition of Palette of Background/Window/Sprites pal 0 and 1)

I will work in future versions for make AmiGameBoy compatible with non-PAL/NTSC frequencies. But it never will be Multitask.

AmiGameBoy always will run with AGA.

But naturaly, it won't emulate 100% a GameBoy, but in this case you mush wait for future versions.

Yeeaaaahhhh!!!! this is too work but i am a expert!!! look AmiMSX2...

After of make AmiGameBoy i will think for finish AmiMasterGear.

1.12 AmiGameBoy Emulator.

Greetings:

Special Greetings to the best Spanish group: Ozone\$^3\$

Multivac for your Icons and graphics.

Skid/Ozone\$^3\$ for Modem support!!!

Roderick Mouthaan and Philippe Bezon for be good friends.

Manuel Hiniesta for be my best friend.

Pascal Willano for help me to make my emulators compatible with 040.

Sergi Martínez for your help in AmiMSX2.

My sister for annoy.
