A bachelor’s thesis on Game Boy emulation. Could be very interesting to see how they tackled memory bank controllers.

Axelzon, A., Lindgren, I., Lindh, C., Möller, D., Palmqvist, A., & Rydberg, A. (2021). *Game Boy Emulation* [University of Gothenburg/Department of Computer Science and Engineering]. <https://gupea.ub.gu.se/handle/2077/69341>

A thesis on a partial emulator for the Game Boy. Could be good to see how other people tackle certain problems.

Brassard, I. T. (n.d.). *Partial Emulation of the Nintendo Game Boy* [Bard College]. <https://digitalcommons.bard.edu/senproj_s2023/140/>

Explains the different memory banks and the switching of them in assembly. Could be useful to see how it’s done on a lower level.

Byers, B. (2019, July 22). *Gameboy DMG ROM and RAM Bank Switching*. <https://b13rg.github.io/Gameboy-Bank-Switching/>

Very important! Main goal of thesis is to write a functioning memory bank controller to run a larger game.

Byers, B. (2020, December 1). *Exploring the Gameboy Memory Bank Controller*. <https://b13rg.github.io/Gameboy-MBC-Analysis/>

A website explaining ROM and RAM banking with C++ examples of how it can be achieved. Could be useful when stuck to see what a possible way is.

codeslinger.co.uk. (2010, March 27). *Gameboy—Rom and Ram Banking.* <http://www.codeslinger.co.uk/pages/projects/gameboy/banking.html>

Thesis about how the Game Boy works. It talks a bit about the memory, so it could be a useful resource.

Ernberg, J. (2011). *The internal workings of video game consoles: The GameBoy* [Mälardalen University]. <https://www.diva-portal.org/smash/get/diva2:433485/FULLTEXT01.pdf>

A little bit of info of different memory bank controllers. Can be good to quickly find what I need, before searching more in-depth references.

gbdev. (2010, August 19). *Memory Bank Controllers*. <https://gbdev.gg8.se/wiki/articles/Memory_Bank_Controllers>

The full CPU instruction set for the Game Boy. May be less of use if the emulator where I start on has all of the instructions.

gbdev. (2021a, May 28). *CPU Instruction Set*. <https://gbdev.io/pandocs/CPU_Instruction_Set.html>

Full explanation of the memory map of the Game Boy.

gbdev. (2021b, May 28). *Memory Map*. <https://gbdev.io/pandocs/Memory_Map.html>

Talks about the Game Boy’s header, which held all of the information on how the game is meant to be run.

gbdev. (2021c, May 28). *The Cartridge Header*. <https://gbdev.io/pandocs/The_Cartridge_Header.html>

A full explanation of all the memory banks. Different pages for each controller. Very good starting point!

gbdev. (2021d, May 29). *MBCs*. <https://gbdev.io/pandocs/MBCs.html>

Probably less important, as it focuses mainly on the workings of the CPU and less on the memory control.

Gonzales, D., & Doten, I. (2015, December 4). *Game Boy Architecture*. <http://meseec.ce.rit.edu/551-projects/fall2015/1-6.pdf>

Video explaining the CPU of a Game Boy. Good for a start on the CPU, but not enough details.

JackTech (Director). (2016a, February 22). *The Game Boy, a hardware autopsy—Part 1: The CPU* (Vol. 1). <https://www.youtube.com/watch?v=RZUDEaLa5Nw>

Video in the same style as part 1, but about memory this time. Like the last one, a good starting point for memory mapping, but not enough details.

JackTech (Director). (2016b, May 24). *The Game Boy, a hardware autopsy—Part 2: Memory mapping* (Vol. 2). <https://www.youtube.com/watch?v=ecTQVa42sJc>

Gives a full technical overview of the Game Boy. Explains multiple memory bank controllers. Interesting to see the differences between them. Could be helpful to create an elegant way of creating multiple controllers and have them switch out.

Javanainen, J. (2023). *Game Boy: Complete Technical Reference* (Version 127) [PDF]. <https://gekkio.fi/files/gb-docs/gbctr.pdf>

Playlist of the creation of a Game Boy emulator using C. Can be interesting when stuck or to see what a different approach could be.

Low Level Devel (Director). (n.d.). *LLD - Gameboy Emulator Development* (1–16). <https://www.youtube.com/playlist?list=PLVxiWMqQvhg_yk4qy2cSC3457wZJga_e5>

Video explaining how Game Boy cartridges work. Probably not the most useful in terms of technical knowledge, but can be nice to watch.

Modern Vintage Gamer (Director). (2020, August 24). *How Cartridges worked on the Nintendo Game Boy | MVG*. <https://www.youtube.com/watch?v=gYQMdox5gzI>

Blog post about the Game Boy CPU and the 2 CPU’s it was based on. Good for reference on the CPU, less good for the memory that I need.

RealBoy. (2013a, January 1). *The Nintendo® Game BoyTM, Part 1: The Intel 8080 and the Zilog Z80.* <https://realboyemulator.wordpress.com/2013/01/01/the-nintendo-game-boy-1/>

More specifics on the Game Boy’s CPU. Not really the memory I need.

RealBoy. (2013b, January 2). *The Nintendo® Game BoyTM, Part 2: The Game Boy’s CPU*. <https://realboyemulator.wordpress.com/2013/01/02/the-nintendo-game-boy-part-2/>

This post talks about the rest of the Game Boy’s hardware. It includes information about memory banks, so it’s useful for my purpose.

RealBoy. (2013c, January 2). *The Nintendo® Game BoyTM, Part 3: The Rest of the Hardware*. <https://realboyemulator.wordpress.com/2013/01/02/the-nintendo-game-boy-part-3/>

A very good YouTube video about the Game Boy. Talks about the entire workings of the Game Boy. Probably the most important video on my list.

Steil, M. (Director). (2016, December 30). *The Ultimate Game Boy Talk* (1–1). <https://www.youtube.com/watch?v=HyzD8pNlpwI&ab_channel=media.ccc.de>