



# RETRO GAMES ON THE GO!

#### WHAT IS AN "FPGA"?

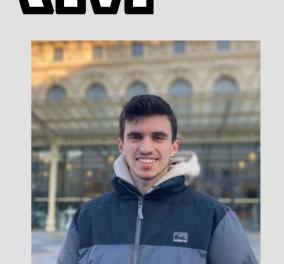
FPGAs (Field Programmable Gate Arrays) are a type of integrated circuits, whose defining characteristic is their ability to be freely reconfigured and reprogrammed as many times as necessary, even after manufacture. This grants them a high level of versatility in terms of what tasks they are able to accomplish and make them a viable option in many use cases.

#### WHY MAKE AN "FPGA"-BASED CONSOLE?

Given that we wanted to create a console that was able to play retro games in a way as faithful to the originals as possible, it's not suprising that a versatile device capable of being changed to imitate the original machine (hardware emulation) comes in very handy. Thanks to the FPGA, our console can offer a near perfect replica of the original experience, without any added performance requirements, an issue associated with the more common methods of emulation.

## THE TEAM





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### WHY RETRO GAMES?

Many studies have shown that videogame preservation is in a rather grim state, with many games having little to no legal means of being played outside of owning the original hardware, which is becoming more and more difficult to find and maintain. H.D.E.C, by providing a faithful and more easily repairable alternative, can help diminish this problem. When asked about their interest in older games, many people in the gaming community answered that they either already actively played or that they would if there was a straight forward way to do so (these results are available on our website). We hope to appeal to these people by creating a portable and user friendly way of playing these games.

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