While studying B Tech 8051 is the controller used in the course syllabus.

While 8051 is very fundamental and helpful to understand the basics, it is quite old and not always industry relevant.

With whatever talks, I had with people working in the industry most work on ARM-based processors, so I decided to start learning ARM Cortex-M.

It's said to learn something, the best way is to make it. After a lot of exploring I decided what better way to learn ARM than go for a development board. This would expose us to most of the interfaces of the controller while also providing us with exposure to essential skills like schematic design, PCB manufacturing and SMD soldering.

There are a lot of development and evaluation boards but they were not aimed to supplement the uC course at bachelor level, where the students are beginners with none to little experience.

My intention with this board something with separate breakouts for various interfaces like I2C, SPI and also peripherals using those, eg LED drivers, sensors, RTC.

This board will be highlighting various sections, ICs used.

Of all the various choices of CortexM controllers and parameters used to decide, we prioritised on ease of availability and good documentation bringing it down to either STM32F4xx or STM32F1xx.