

Prelab 02

1. What is the purpose of the NVIC peripheral?

It's closely coupled with the CPU, and enables low latency interrupt processing and efficient processing of late arriving interrupts.

2. What is the difference between interrupt tail-chaining and nesting?

Interrupt tail-chaining handles multiple interrupts in order of hardware priority. Nesting handles multiple interrupts as well, but it "pauses" the context of lower-priority tasks and allows higher priority ones to interrupt the lower ones.

3. In what file are the CMSIS libraries that control the NVIC?

core_cm0.h

4. What is the purpose of the EXTI peripheral?

The extended interrupts and events controller (EXTI) manages the external and internal asynchronous events/interrupts and generates the event request to the CPU/Interrupt controller and a wake-up request to the Power manager.

5. What is the purpose of the SYSCFG pin multiplexers?

They select the pins that connect to the limited input lines to the EXTI.

6. What file has the defined names for interrupt numbers?

stm32f0xb.h

7. What file has the Vector table implementation?

startup_stm32f072xb.s