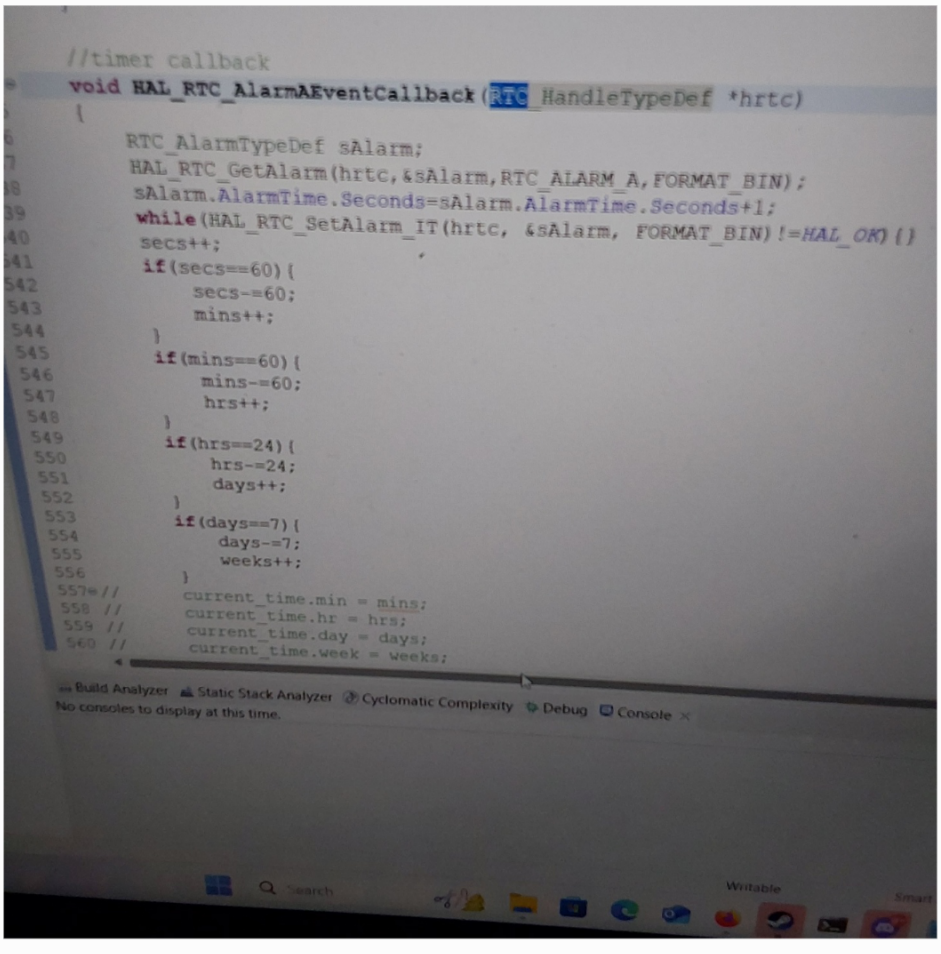
Went about programming the RTC. The RTC is needed to time everything in our system which is important as we have some time based events that will trigger.

I used ST official documentation to build the RTC timer it's a interrupt that fires and sends a new interrupt a second into the future our interrupt also edits the second and minute fields every interrupt.

Reliability was poor with this second RTC clock so morgan changed it to every minute instead

The RTC still freezes so I did some testing a modifications in the IOC file



Unseen but I left it running for two hours which is a good sign