Title: Application Constraints using AS8202NF Timer Interrupt

Subject: Hardware Bug

Description:

Timer Interrupt of Timer 1 and Timer 2 is raised one macro tick too late.

Detailed Description:

If the set value n of the Timer Field 0/1 is reached by the global time, a timer 0/1 interrupt is expected. Due to a hardware implementation bug these interrupts are raised not at global time n but at global time $n+1$ macro ticks.

Conclusion, Work-around:

The behaviour has **no** impact on the protocol functionality, these timers are not used by the TASM software or any hardware unit itself.

Following constraints exist for the host application:

A host application or task scheduler must consider the delay of one macro tick and must set the value of the timer to $n-1$ if an interrupt at global time n should be raised.

Reference:

This issue is tracked in the TTTech-internal issue tracking system as *issue10011*.