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CS-350

3-2 Milestone Two

How does the macro UART\_DATA\_BINARY impact the UART?

In UART2, UART\_DATA\_BINARY has been replaced with UART2\_Mode\_BLOCKING. According to the comments in the UART2.h, UART2\_Mode\_BLOCKING blocks task execution until all of the data in the buffer has been transmitted or the timeout expires. It is used with the UART2\_read and UART2\_write methods to block progression while data is being sent or waiting for data to be received.

How does the macro UART\_RETURN\_FULL impact the UART?

In UART2, UART\_RETURN\_FULL has been replaced with UART2\_ReadReturnMode\_FULL. According to the UART2.h, UART\_RETURN\_FULL (which is the default) will block task execution until the requested number of bytes have been received. It should not be used if the number of incoming data bytes are unknown (instead use UART2\_ReadReturnMode\_PARTIAL.

What driver call would you use to write 10 characters out of the UART?

For UART2 the driver call that I would use would be status = UART2\_write(uart, &input, 10, &bytesWritten);.

What is the driver call to turn off LED 0?

GPIO\_write(CONFIG\_GPIO\_LED\_0, CONFIG\_GPIO\_LED\_OFF); is the driver call to turn off LED 0.

What is the UART baud rate?

According to the UART2’s .c file the baud rate is set to 115200. According to an article on GeekforGeeks, the baud rate is the “rate at which the number of signal elements or changes to the signal occurs per second when it passes through a transmission medium. The higher a baud rate is the faster the data is sent/received.” (GeekforGeeks, 2019)

References

GeekforGeeks. (2021, October 19). Baud rate and its importance. GeeksforGeeks. <https://www.geeksforgeeks.org/baud-rate-and-its-importance/>