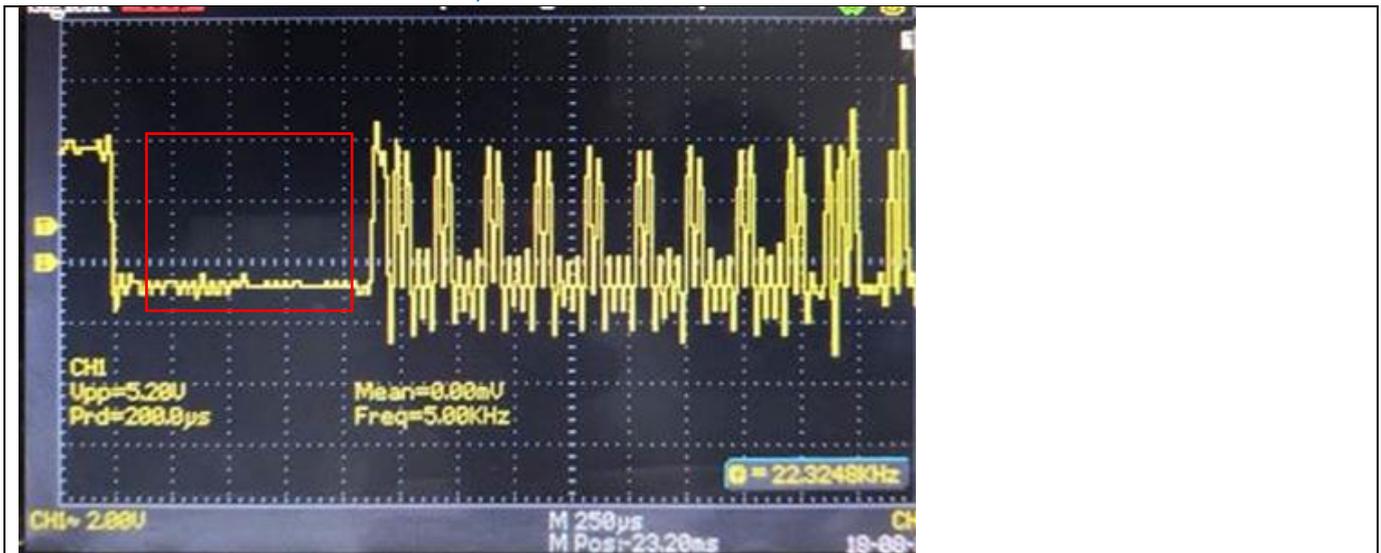


USART reception error when its receive side remains low

Questions:

When the USART receive side is low level in idle state, that is, there is a period of low-level interval at the start of each frame, as shown below:



The USART receive side being low prior to USART enable would cause MCU to receive 0x00 (receive error) as long as USART is enabled.

Answer:

After USART enabled, wait until the first abnormal data 00 is received and then discarded before enabling interrupt to obtain subsequent data.

```
/* configure usart3 param */
usart_init(USART3, 115200, USART_DATA_8BITS, USART_STOP_1_BIT);
usart_receiver_enable(USART3, TRUE);
usart_enable(USART3, TRUE);

while(usart_flag_get(USART3, USART_RDBF_FLAG) == RESET);
/* receive the first data */
first_data = usart_data_receive(USART3);
usart_flag_clear(USART3, USART_RDBF_FLAG);

/* enable usart3 interrupt */
usart_interrupt_enable(USART3, USART_RDBF_INT, TRUE);
```

Type: MCU applications

Applicable products: AT32F403

Main function: USART

Minor function: None

Document revision history

Date	Revision	Changes
2022.2.16	2.0.0	Initial release

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