

电控第一次作业

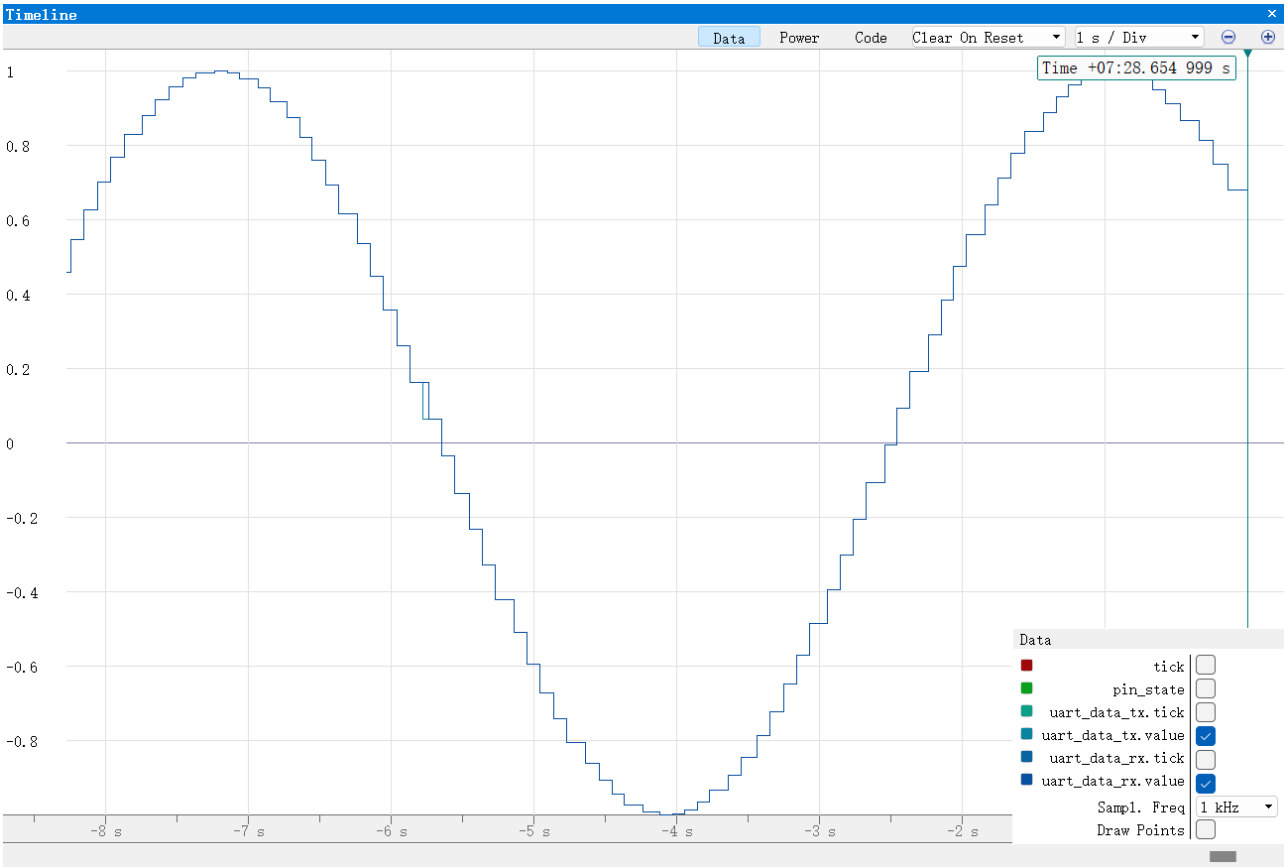
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1 点亮闪烁LED



2 串口收发





3 CAN收发

3.1 通信协议设计

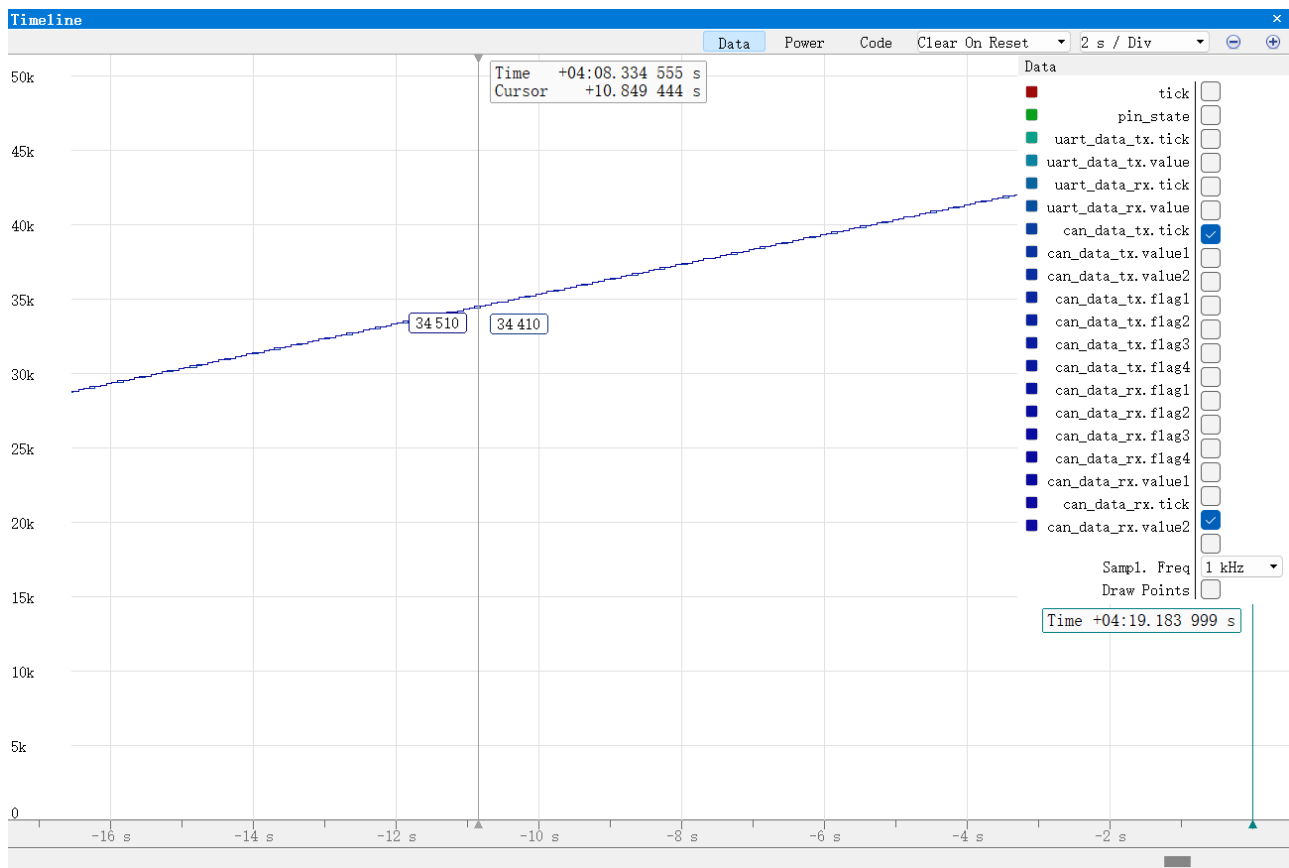
1. 帧ID: 接收的帧ID为0x100。
2. 数据结构:
 - tick: 占用4字节, 使用与串口通信相同的编码方式。
 - value1: 占用2字节, 使用与串口通信相同的编码方式 (缩放为整数)。
 - value2: 占用1字节。
 - flag1 到 flag4: 占用1个字节的低4位, 每个位代表一个布尔标志。

3.2 运行实例

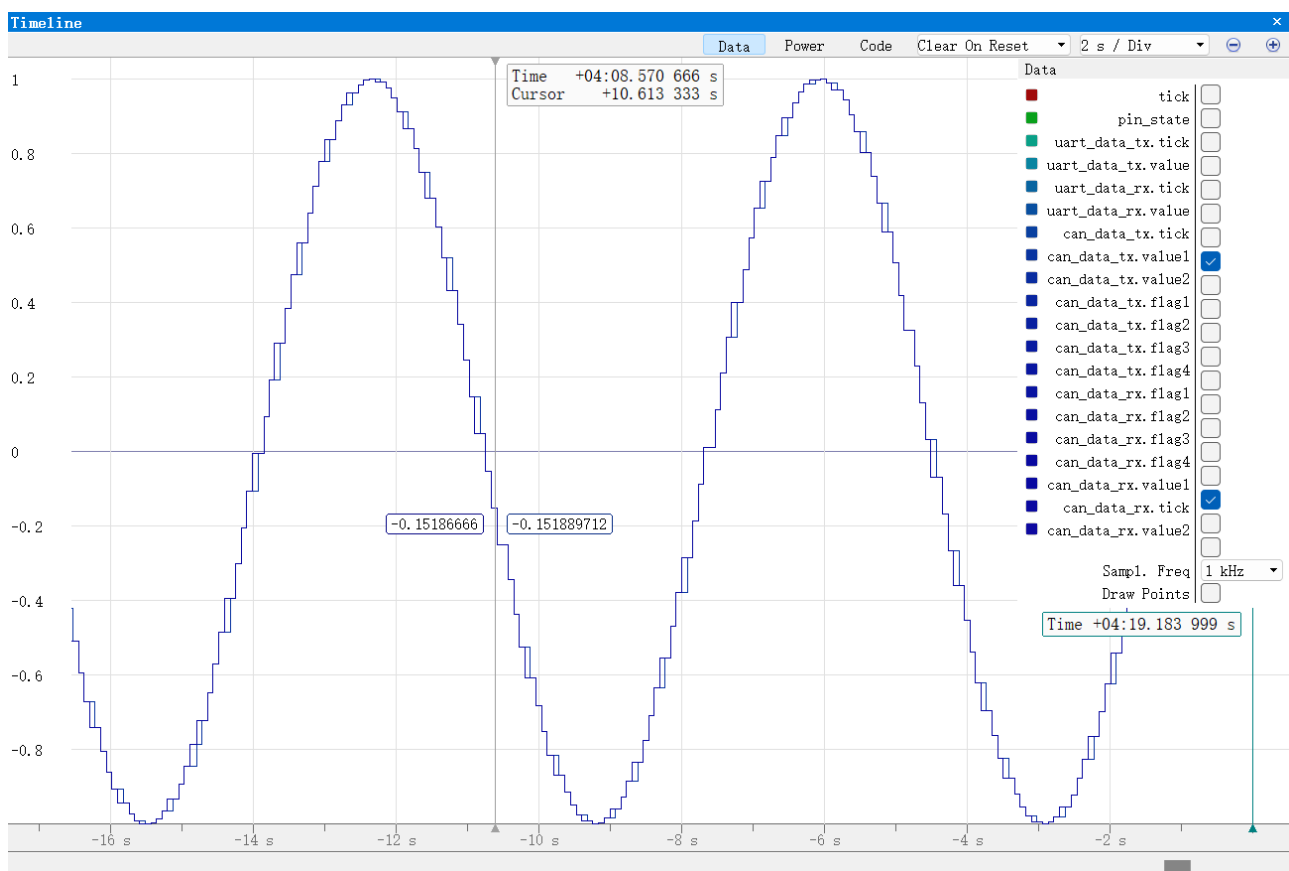
3.2.1 运行数据 (bool型数据暂未设置变化)

can_data_rx.flag1	bool	1	0	1	1	1 0	1
can_data_rx.flag2	bool	0	0	0	0	0 0	0
can_data_rx.flag3	bool	1	0	1	1	1 0	1
can_data_rx.flag4	bool	0	0	0	0	0 0	0
can_data_rx.tick	unsigned long	6 210	0	6 210	3130.48193	63 0	100
can_data_rx.value1	float	-0.0731000006	-0.999966681	0.999199986	-0.005707229	63 -0.0999000072	0.0998000056
can_data_rx.value2	unsigned char	148	0	148	117.204819	63 0	86
can_data_tx.flag1	bool	1	0	1	1	1 0	1
can_data_tx.flag2	bool	0	0	0	0	0 0	0
can_data_tx.flag3	bool	1	0	1	1	1 0	1
can_data_tx.flag4	bool	0	0	0	0	0 0	0
can_data_tx.tick	unsigned long	6 210	0	6 210	3111.20483	63 0	100
can_data_tx.value1	float	-0.0731199533	-0.999997139	0.999231637	-0.004251496	63 -0.0999415517	0.0997784659
can_data_tx.value2	unsigned char	148	0	148	117.012047	63 0	86
pin_state	enum GPIO_PinState	0	0	1	0.457831323	6 -1	1
tick	unsigned long	6 280	0	6 280	3151.18066	83 18	91

tick



value1



value2 (每0.1s自增1)

