

Preparation:

Q.1:

```
extern ARM_DRIVER_CAN Driver_CAN1;

Driver_CAN1.Initialize(NULL,NULL);
Driver_CAN1.PowerControl(ARM_POWER_FULL);
Driver_CAN1.SetMode(ARM_CAN_MODE_INITIALIZATION);
Driver_CAN1.SetBitrate(

ARM_CAN_BITRATE_NOMINAL, 125000,
ARM_CAN_BIT_PROP_SEG(5U) |
ARM_CAN_BIT_PHASE_SEG1(1U) |
ARM_CAN_BIT_PHASE_SEG2(1U) |
ARM_CAN_BIT_SJW(1U));

Driver_CAN1.ObjectConfigure(0,ARM_CAN_OBJ_RX);
Driver_CAN1.SetMode(ARM_CAN_MODE_NORMAL);
```

Q.2:

```
extern ARM_DRIVER_CAN Driver_CAN2;

Driver_CAN2.Initialize(NULL,NULL);
Driver_CAN2.PowerControl(ARM_POWER_FULL);
Driver_CAN2.SetMode(ARM_CAN_MODE_INITIALIZATION);
Driver_CAN2.SetBitrate(

ARM_CAN_BITRATE_NOMINAL, 125000,
ARM_CAN_BIT_PROP_SEG(5U) |
ARM_CAN_BIT_PHASE_SEG1(1U) |
ARM_CAN_BIT_PHASE_SEG2(1U) |
ARM_CAN_BIT_SJW(1U));

Driver_CAN2.ObjectConfigure(1,ARM_CAN_OBJ_TX);
Driver_CAN2.SetMode(ARM_CAN_MODE_NORMAL);
```

Q.3: Dans cet cas on peut utiliser une table avec des filtres pour des identifiants spécifiques.

```
Driver_CAN1.ObjectSetFilter( 0, ARM_CAN_FILTER_ID_EXACT_ADD ,
ARM_CAN_STANDARD_ID(0x161), 0) ;

Driver_CAN1.ObjectSetFilter( 0, ARM_CAN_FILTER_ID_EXACT_ADD ,
ARM_CAN_STANDARD_ID(0x0b6), 0) ;
```

Q.4:

```
ARM_CAN_MSG_INFO tx_msg_info;

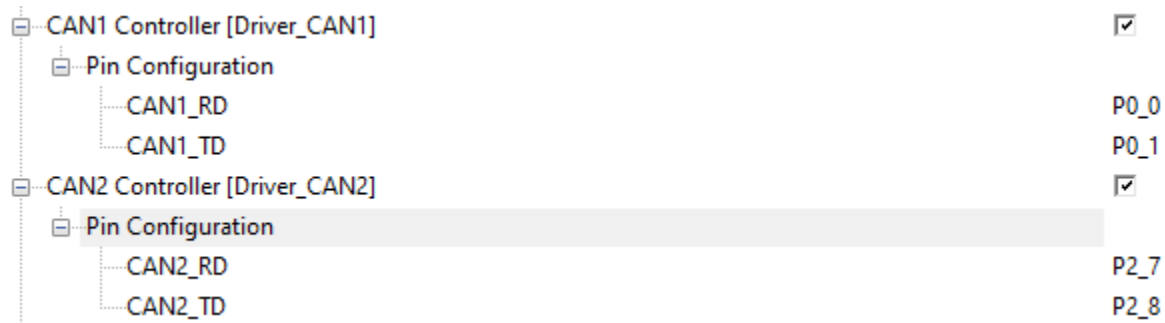
tx_msg_info.id = ARM_CAN_STANDARD_ID (0x0b6);
tx_msg_info.rtr = 0; // 0 = trame DATA
data_buf [0] = 0xFA; // data à envoyer à placer dans un tableau de char

Driver_CAN1.MessageSend(1, &tx_msg_info, data_buf, 1);
```

https://drive.google.com/drive/folders/1iqufj9sVkJt7lpXY9O_f5XWARdJt3G

https://drive.google.com/drive/folders/1iqufj9sVkJt7lpXY9O_f5XWARdJt3G

Q.5:



Q.6:

```
void CANthreadT(void const *argument)
{
    ARM_CAN_MSG_INFO tx_msg_info;
    uint8_t data_buf[8];

    tx_msg_info.id = ARM_CAN_STANDARD_ID (0x0b6);
    tx_msg_info.rtr = 0; // 0 = trame DATA
    data_buf [0] = 0xFA; // data à envoyer à placer dans un tableau de char

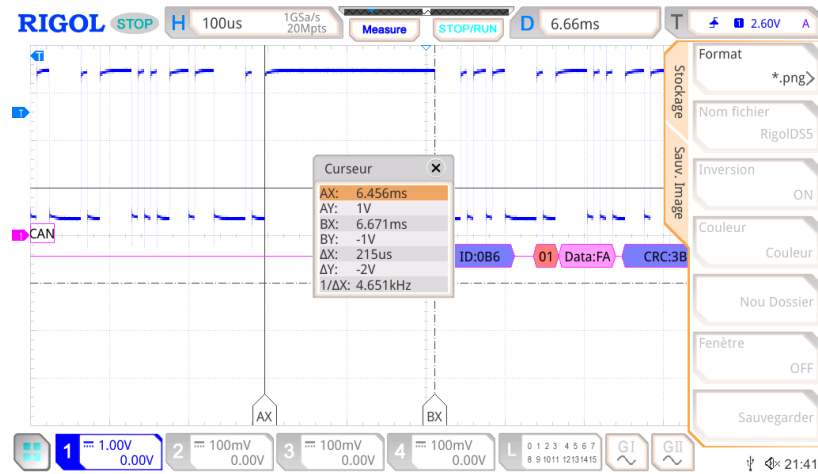
    while (1) {

        // Code pour envoyer trame Id 0x0f6
        Driver_CAN2.MessageSend(1, &tx_msg_info, data_buf, 1);
        //.....

        osSignalWait(0x01, osWaitForever); // sommeil en attente fin emission
        osDelay(100);
    }
}
```

Q.7:

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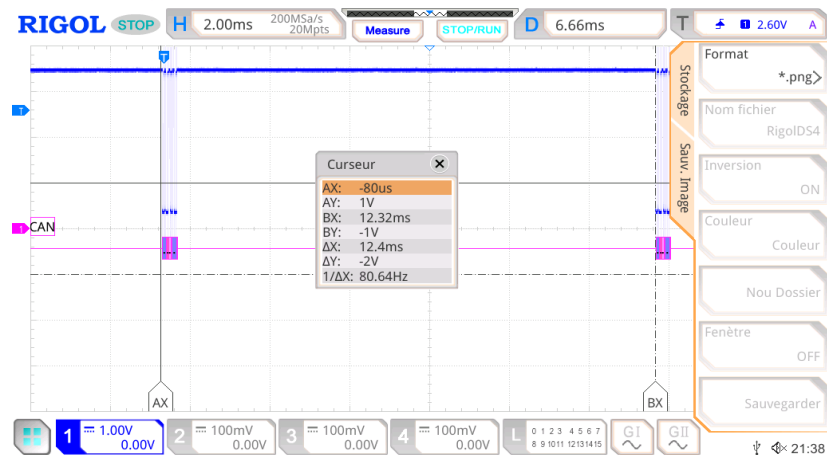


100ms = 10 Hz,

Ici, la trame est envoyée en permanence car il n'y a pas un 'ACK' pour indiquer la réception.

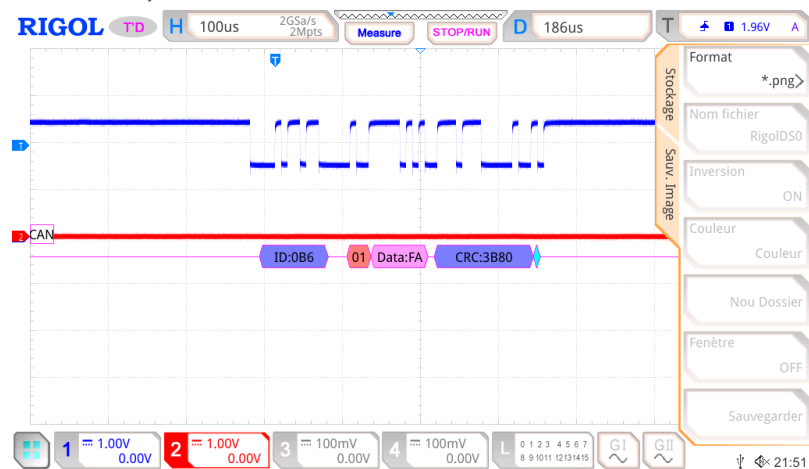
Q.8:

MSO5074 Tue February 04 21:39:31 2025



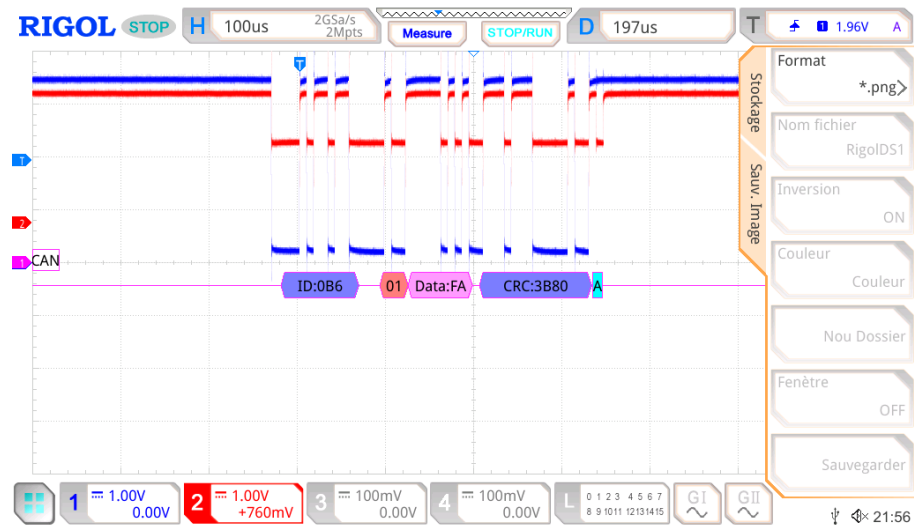
Mainenant, la trame est envoyée périodiquement.

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Q.9:

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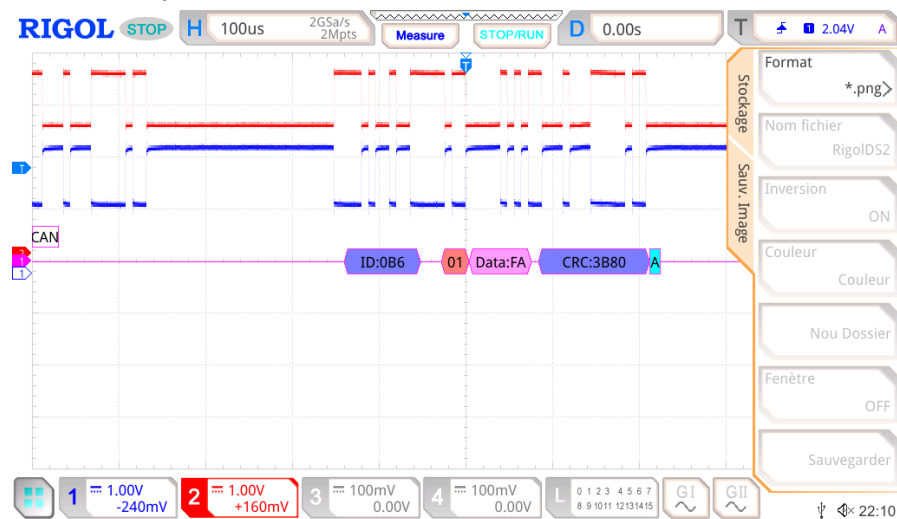
Ici CH1 = P2.8 et CH2 = Tx2

On peut voir le 'ACK' depuis le CAN1 qui vient d'écraser la valeur récessife de CAN2.

(dernier bit a 1 sur CH1, mais 0 sur CH2)

Q.10:

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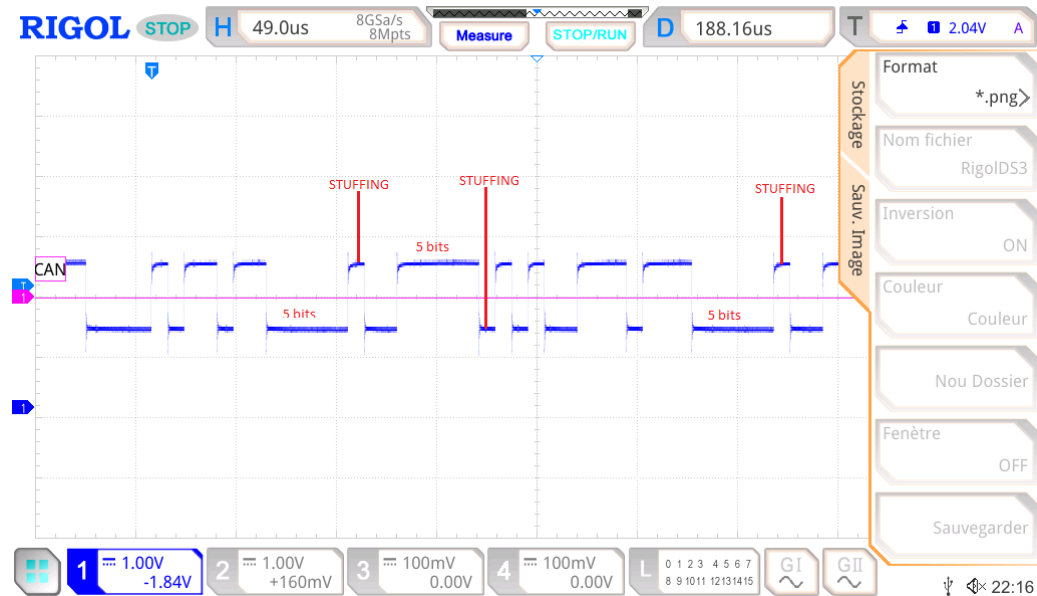


CH1 = CAN_L

CH2 = CAN_H

Q.11:

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Q.12:

Q.1:

```
// tache envoi toutes les secondes
void CANthreadT(void const *argument)
{
    ARM_CAN_MSG_INFO      tx_msg_info;
    uint8_t data_buf[8];

    tx_msg_info.id = ARM_CAN_STANDARD_ID (0x0b6);
    tx_msg_info.rtr = 0; // 0 = trame DATA
    data_buf [0] = 0xFA; // data à envoyer à placer dans un tableau de char

    while (1) {

        // Code pour envoyer trame Id 0x0f6
        Driver_CAN2.MessageSend(1, &tx_msg_info, data_buf, 1);
        //.....

        // osSignalWait(0x01, osWaitForever);          // sommeil en attente fin emission
        osDelay(100);

    }
}
```

Q.1:

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