```c
// NX: 2011.03.17
// FROM STM32F103C6_CAN_LOOPBACK_POLLING, FROM testCAN1_1 of ThanasisPolitis, after some effort
// testCAN1.c updated: Normal mode instead loopback, transmit only once, correct baud rate 125KHz (=8us)
// TODO: send to CAN every 10ms
// TODO: HOWTO define APB1 clock (now set to 36MHz) Try 8,16,24 MHz

// NX: 2011.03.30
//


/* Includes */
#include "stm32f10x.h"
#include "main.h"
#include "CAN1.h"
#include "board.h"

//  #define     __IO    volatile                /*!< defines 'read / write' permissions   */
    __IO unsigned long ret = 0; /* for return of the interrupt handling */
    volatile TestStatus TestRx;


void NVIC_Configuration(void);
void NVIC_SetVectorTable(uint32_t NVIC_VectTab, uint32_t Offset);

/*******************************************************************************/
void Delay(vu32 nCount)
{
  for(; nCount != 0; nCount--);
}

/**=============================================================================
**
**  Abstract: main program
**
**=============================================================================
*/
int main(void) {
    SystemInit(); //    Setup STM32 system (clock, PLL and Flash configuration)
    InitBoardCanall();
    CAN1_setup();

    CanTx(0x02,0x04,   0x11,0x22,0x33,0x44);    // [Identifier,length,data1,data2,data2,data3]
    CanTxWait();
    CanRx();

    if (CanRxValid(0x02,0x04) != FAILED) {  // NX: Valid identifier and length ?
        while (1) {                         // NX: PASSED = SLOW BLINK
                                            // NX: Here Received data have to be used
            GPIO_SetBits(GPIOC, GPIO_Pin_13);
            GPIO_ResetBits(GPIOC, GPIO_Pin_15);
            /* Insert delay */
            Delay((u32) 2000000);

            /* Toggle Leds */
```

```
55              GPIO_ResetBits(GPIOC, GPIO_Pin_15);
56              GPIO_ResetBits(GPIOC, GPIO_Pin_13);
57              /* Insert delay */
58              Delay((u32) 2000000);
59          }
60      }
61
62      /*  Infinite loop */
63      while (1) {                                 // NX: FAILLED = FAST BLINK
64          GPIO_SetBits(GPIOC, GPIO_Pin_13);
65          GPIO_ResetBits(GPIOC, GPIO_Pin_15);
66          /* Insert delay */
67          Delay((u32) 200000);
68
69          /* Toggle Leds */
70          GPIO_SetBits(GPIOC, GPIO_Pin_15);
71          GPIO_ResetBits(GPIOC, GPIO_Pin_13);
72          /* Insert delay */
73          Delay((u32) 200000);
74      }
75  }
76
77  /*
78  * @brief  Configures the NVIC and Vector Table base address.
79  * @param  None
80  * @retval None
81  */
82  void NVIC_Configuration(void)
83  {
84      NVIC_InitTypeDef NVIC_InitStructure;
85
86  /* Enable CAN1 RX0 interrupt IRQ channel */
87  #ifndef STM32F10X_CL
88      NVIC_InitStructure.NVIC_IRQChannel = USB_LP_CAN1_RX0_IRQn;
89  #else
90      NVIC_InitStructure.NVIC_IRQChannel = CAN1_RX0_IRQn;
91  #endif /* STM32F10X_CL*/
92      NVIC_InitStructure.NVIC_IRQChannelPreemptionPriority = 0;
93      NVIC_InitStructure.NVIC_IRQChannelSubPriority = 0;
94      NVIC_InitStructure.NVIC_IRQChannelCmd = ENABLE;
95      NVIC_Init(&NVIC_InitStructure);
96  }
97
98
99
100
101
```