```c
/***********************************************************************
 *
 *                  BMS_CAN Header
 *
 ***********************************************************************
 * FileName:        BMS_CAN.h
 * Processor:       PIC18F45K80
 * Complier:        Microchip C18 v3.41
 * Company:         KIT - CN - IPE
 *
 * Author          Date          Comment
 *~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
 * Reiling V.       23.04.2012   Release
 **********************************************************************/

#ifndef BMS_UI_CAN_H        // To avoid duplicate inclusion
#define BMS_UI_CAN_H


/***********************************************************************
 *
 * General purpose typedef's
 *
 **********************************************************************/
typedef union _CAN_CONFIG
{
  struct
  {
    uint8_t   SlaveNo;
    uint8_t   BRP;
    uint8_t   PROPSEG;
    uint8_t   PHSEG1;
    uint8_t   PHSEG2;
    uint8_t   SJW;
    uint8_t   PHSEG2_MODE;
    uint8_t   BUS_SAMPLE_MODE;
    uint8_t   WAKEUP_MODE;
    uint8_t   FILTER_MODE;
  };
} CAN_CONFIG;


typedef union _CAN_MAILBOX
{
  struct
  {
    uint8_t   BOX_No;
    uint32_t  CAN_Id;
    uint8_t   DLC;
    uint32_t  ACCEPTANCE_FILTER;
    int8_t    dataC[8];
  };
} CAN_MAILBOX;
```

```
/**************************************************************          /**************************************************************
 *                                                                       *
 *                     Defines                                           *                     Defines
 *                                                                       *
 **************************************************************/         **************************************************************/
#define CAN_OK            1                                              #define CAN_OK            1
#define CAN_NOK           0                                              #define CAN_NOK           0
#define CAN_Tx_TimeOut    50                                            #define CAN_Tx_TimeOut    50



/**************************************************************          /**************************************************************
 *                                                                       *
 * external Globals                                                      * external Globals
 *                                                                       *
 **************************************************************/         **************************************************************/
extern uint16_t    gVoltage;                                            extern uint16_t    gVoltage;
extern int16_t     gCurrent;                                            extern int16_t     gCurrent;
extern uint32_t    gOffset;
extern uint8_t     gCounter;                                            extern uint8_t     gCounter;
extern CAN_CONFIG  gCAN_CONFIG;                                         extern CAN_CONFIG  gCAN_CONFIG;



/**************************************************************          /**************************************************************
 *                                                                       *
 * Funktions Prototypen                                                  * Funktions Prototypen
 *                                                                       *
 **************************************************************/         **************************************************************/
int8_t CAN_Init           ( CAN_CONFIG  *config );                      int8_t CAN_Init           ( CAN_CONFIG  *config );
int8_t CAN_Init_Mailbox   ( CAN_MAILBOX *mbox);                         int8_t CAN_Init_Mailbox   ( CAN_MAILBOX *mbox);
int8_t CAN_Write          ( CAN_MAILBOX *mbox, uint8_t *dataC );        int8_t CAN_Write          ( CAN_MAILBOX *mbox, uint8_t *dataC );

int8_t CAN_Write_UI       ( void );                                    int8_t CAN_Write_UI       ( void );
int8_t Load_Mailbox       ( uint8_t SlaveNo );                          int8_t Load_Mailbox       ( uint8_t SlaveNo );


#endif                                                                 #endif
```