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// Initializes the MCU's RS232 communication at SERCOM4.
// 9600 baud, LSB first, 8 bits, no parity bit, 1 stop bit
// PB09 = Rx, PB08 = Tx
//
// Warnings          : none
// Restrictions      : none
// Algorithms        : none
// References        : none
//
// Revision History   : Initial version
//
//*****
/* initialize UART4 to transmit at 9600 Baud */
extern void UART4_init(void) {
    REG_GCLK_PCHCTRL2 = 0x00000040;
    REG_SERCOM4_USART_CTRLA |= 1; /* reset SERCOM4 */
    while (REG_SERCOM4_USART_SYNCBUSY & 1) {} /* wait for reset to complete */
    REG_SERCOM4_USART_CTRLA = 0x40106004; /* LSB first, async, no parity,
    PAD[1]-Rx, PAD[0]-Tx, BAUD uses fraction, 8x oversampling, internal clock */
    REG_SERCOM4_USART_CTRLB = 0x00030000; /* enable Tx, Rx, one stop bit, 8 bit */
    REG_SERCOM4_USART_BAUD = 52; /* 1000000 / 8 / 9600 = 13.02 */
    REG_SERCOM4_USART_CTRLA |= 2; /* enable SERCOM4 */
    while (REG_SERCOM4_USART_SYNCBUSY & 2) {} /* wait for enable to complete */
    ARRAY_PORT_PINCFG1[8] |= 1; /* allow pmux to set PB08 pin configuration */
    ARRAY_PORT_PINCFG1[9] |= 1; /* allow pmux to set PB09 pin configuration */
    ARRAY_PORT_PMUX1[4] = 0x33; /* PB08 = Tx, PB09 = Rx */
}

//*****
//
// Function Name      : "UART4_write"
// Date               : 4/8/2020
// Version            : 1.0
// Target MCU         : SAML21J18B
// Target Hardware    : none
// Author             : Brandon Cheung, Ishabul Haque
// DESCRIPTION
```