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// Restrictions      : none
// Algorithms        : none
// References         : none
//
// Revision History   : Initial version
//
//*****
extern void init_spi_lcd (void) {
    REG_GCLK_PCHCTRL19 = 0x00000040;    /* SERCOM1 core clock not enabled by default */

    ARRAY_PORT_PINCFG0[16] |= 1;    /* allow pmux to set PA16 pin configuration */
    ARRAY_PORT_PINCFG0[17] |= 1;    /* allow pmux to set PA17 pin configuration */
    ARRAY_PORT_PINCFG0[18] |= 1;    /* allow pmux to set PA18 pin configuration */
    ARRAY_PORT_PINCFG0[19] |= 1;    /* allow pmux to set PA19 pin configuration */
    ARRAY_PORT_PMUX0[8] = 0x22;    /* PA16 = MOSI, PA17 = SCK */
    ARRAY_PORT_PMUX0[9] = 0x22;    /* PA18 = SS, PA19 = MISO */
    REG_PORT_DIRSET1 = 0x40;    /* RS output */

    REG_SERCOM1_SPI_CTRLA = 1;    /* reset SERCOM1 */
    while (REG_SERCOM1_SPI_CTRLA & 1) {}    /* wait for reset to complete */

    REG_SERCOM1_SPI_CTRLA = 0x3030000C;    /* MISO-3, MOSI-0, SCK-1, SS-2, CPOL=1, CPHA=1 */
    REG_SERCOM1_SPI_CTRLB = 0x00002000;    /* Master SS, 8-bit */
    REG_SERCOM1_SPI_BAUD = 0;    /* SPI clock is 4MHz/2 = 2MHz */
    REG_SERCOM1_SPI_CTRLA |= 2;    /* enable SERCOM1 */
}

//*****
//
// Function Name      : "lcd_spi_transmit_CMD"
// Date              :
// Version           : 1.0
// Target MCU        : SAML21J18B
// Target Hardware    : DOG LCD
// Author            : Brandon Cheung, Ishabul Haque
// DESCRIPTION
// Sends a single 8-bit value to the DOG LCD. Value seen as a command
```