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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 = 0x80;        /* PB07 = CS for BME680 */

REG_PORT_DIRCLR0 = 0x04;        //PA02 input for SW0
ARRAY_PORT_PINCFG0[2] |= 6;     //enable PA02 with pull
REG_PORT_OUTSET0 = 0x04;        //make PA02 pull-up

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 = 0x00020000; /* Master SS, 8-bit, receiver enabled */
REG_SERCOM1_SPI_BAUD = 0;        /* SPI clock is 4MHz/2 = 2MHz */
REG_SERCOM1_SPI_CTRLA |= 2;      /* enable SERCOM1 */
}

//*****
//
// Function Name      : "init_BME680"
// Date              : 5/9/20
// Version           : 1.0
// Target MCU        : SAML21J18B
// Target Hardware    : BME680
// Author            : Brandon Cheung, Ishabul Haque
// DESCRIPTION
// Software resets the BME680 and reads its memory map page and status
// register. Sets the memory map to page 1 so the BME680 is ready for
// configuration after this function.
//
// Warnings          : none
// Restrictions      : none
// Algorithms        : none
// References        : none
//

```