```
            , BME680_COEFF_ADDR2_LEN, dev);

        /* Temperature related coefficients */
        dev->calib.par_t1 = (uint16_t) (BME680_CONCAT_BYTES(coeff_array[BME680_T1_MSB_REG],
            coeff_array[BME680_T1_LSB_REG]));
        dev->calib.par_t2 = (int16_t) (BME680_CONCAT_BYTES(coeff_array[BME680_T2_MSB_REG],
            coeff_array[BME680_T2_LSB_REG]));
        dev->calib.par_t3 = (int8_t) (coeff_array[BME680_T3_REG]);

        /* Pressure related coefficients */
        dev->calib.par_p1 = (uint16_t) (BME680_CONCAT_BYTES(coeff_array[BME680_P1_MSB_REG],
            coeff_array[BME680_P1_LSB_REG]));
        dev->calib.par_p2 = (int16_t) (BME680_CONCAT_BYTES(coeff_array[BME680_P2_MSB_REG],
            coeff_array[BME680_P2_LSB_REG]));
        dev->calib.par_p3 = (int8_t) coeff_array[BME680_P3_REG];
        dev->calib.par_p4 = (int16_t) (BME680_CONCAT_BYTES(coeff_array[BME680_P4_MSB_REG],
            coeff_array[BME680_P4_LSB_REG]));
        dev->calib.par_p5 = (int16_t) (BME680_CONCAT_BYTES(coeff_array[BME680_P5_MSB_REG],
            coeff_array[BME680_P5_LSB_REG]));
        dev->calib.par_p6 = (int8_t) (coeff_array[BME680_P6_REG]);
        dev->calib.par_p7 = (int8_t) (coeff_array[BME680_P7_REG]);
        dev->calib.par_p8 = (int16_t) (BME680_CONCAT_BYTES(coeff_array[BME680_P8_MSB_REG],
            coeff_array[BME680_P8_LSB_REG]));
        dev->calib.par_p9 = (int16_t) (BME680_CONCAT_BYTES(coeff_array[BME680_P9_MSB_REG],
            coeff_array[BME680_P9_LSB_REG]));
        dev->calib.par_p10 = (uint8_t) (coeff_array[BME680_P10_REG]);

        /* Humidity related coefficients */
        dev->calib.par_h1 = (uint16_t) (((uint16_t) coeff_array[BME680_H1_MSB_REG] << BME680_HUM_REG_SHIFT_VAL)
            | (coeff_array[BME680_H1_LSB_REG] & BME680_BIT_H1_DATA_MSK));
        dev->calib.par_h2 = (uint16_t) (((uint16_t) coeff_array[BME680_H2_MSB_REG] << BME680_HUM_REG_SHIFT_VAL)
            | ((coeff_array[BME680_H2_LSB_REG]) >> BME680_HUM_REG_SHIFT_VAL));
        dev->calib.par_h3 = (int8_t) coeff_array[BME680_H3_REG];
        dev->calib.par_h4 = (int8_t) coeff_array[BME680_H4_REG];
        dev->calib.par_h5 = (int8_t) coeff_array[BME680_H5_REG];
        dev->calib.par_h6 = (uint8_t) coeff_array[BME680_H6_REG];
        dev->calib.par_h7 = (int8_t) coeff_array[BME680_H7_REG];
```