

```
    return calc_temp;
}

/*!
 * @brief This internal API is used to calculate the pressure value.
 */
static uint32_t calc_pressure(uint32_t pres_adc, const struct bme680_dev *dev)
{
    int32_t var1;
    int32_t var2;
    int32_t var3;
    int32_t pressure_comp;

    var1 = (((int32_t)dev->calib.t_fine) >> 1) - 64000;
    var2 = (((var1 >> 2) * (var1 >> 2)) >> 11) *
        ((int32_t)dev->calib.par_p6) >> 2;
    var2 = var2 + ((var1 * (int32_t)dev->calib.par_p5) << 1);
    var2 = (var2 >> 2) + ((int32_t)dev->calib.par_p4 << 16);
    var1 = (((var1 >> 2) * (var1 >> 2)) >> 13) *
        ((int32_t)dev->calib.par_p3 << 5) >> 3 +
        (((int32_t)dev->calib.par_p2 * var1) >> 1);
    var1 = var1 >> 18;
    var1 = ((32768 + var1) * (int32_t)dev->calib.par_p1) >> 15;
    pressure_comp = 1048576 - pres_adc;
    pressure_comp = (int32_t)((pressure_comp - (var2 >> 12)) * ((uint32_t)3125));
    if (pressure_comp >= BME680_MAX_OVERFLOW_VAL)
        pressure_comp = ((pressure_comp / var1) << 1);
    else
        pressure_comp = ((pressure_comp << 1) / var1);
    var1 = ((int32_t)dev->calib.par_p9 * (int32_t)((pressure_comp >> 3) *
        (pressure_comp >> 3)) >> 13) >> 12;
    var2 = ((int32_t)(pressure_comp >> 2) *
        (int32_t)dev->calib.par_p8) >> 13;
    var3 = ((int32_t)(pressure_comp >> 8) * (int32_t)(pressure_comp >> 8) *
        (int32_t)(pressure_comp >> 8) *
        (int32_t)dev->calib.par_p10) >> 17;
```