HTPA80x64dR1 Change Notification

Rev.0: 2017.03.21Schnorr

This document is supposed to give a quick overview about changes that have been done between Sensor-Revision 0 and 1 (datasheet Rev. 2 and 3).

The following things are used for Sensor-Revision 1:

1. The electrical Offsets have to be sampled from time to time and averaged over several frames.
2. The supply voltage can be measured by the sensor itself instead of PTAT if requested.
3. The amplification can be changed from 1 to 1.25, 1.75 and 3.2 via the REF_CAL register in the MBIT_TRIM.
4. The VDDCOMP is using a gradient and offset now. Two scaling coefficients are needed.
5. ThGrad is stored as an 8 bit signed value.
6. The Tablenumber is saved as a 16 bit unsigned variable.
7. The thermal offset is scaled to the PTAT value.
8. The Look-up table is scaled with the maximum amplification. Currently the amplification of 1.25 is used and so the GlobalGain is set to roughly 40 %.