



Project:	BSEC 1.x
Release Title:	BSEC_1.4.8.0
Date:	08-7-21
Release Type	New version of BSEC

1. Scope:

Development of software components required for BME680

2. Features/Changes Implemented:

Version	Changes
BSEC 1.4.8.0	<ul style="list-style-type: none">• enable high power mode with temperature & humidity offset & sensitivity compensation of IAQ calculation• add lib for Linux gcc, Windows gcc, macOS• libs for with/without FPIC options in gcc for ARMv8 and Cortex_A7• provide example code in Github link
BSEC 1.4.7.4	<ul style="list-style-type: none">• Extended BSEC working range down to temperatures up to -40°C• Removed lib compiled by MPLAB
BSEC 1.4.7.3	<ul style="list-style-type: none">• Bugfix in state file: Added 2 more parameters to state file so that it is not set incorrectly with update subscription
BSEC 1.4.7.2	<ul style="list-style-type: none">• Added release for compiler IAR version 8• Removed unexpected "bsec_datatypes_hidden.h" file• Added both hard and soft FPU version for cortex m4 with GCC compiler• Added lib compiled by maplab with compiler xc16
BSEC 1.4.7.1	<ul style="list-style-type: none">• Added new outputs (see bsec_datatypes.h)• Simulate data sets from multiple sensors using 1 BSEC instance (see "2.8 Simulate multiple sensors using single BSEC instance" in integration guide)• Added Arduino library to log BME680 data without the need of BSEC (bme680_data)• Enable LP ODR for Temperature, Pressure, Humidity while IAQ is in ULP (example: basic_config_state_ULP_LP)
BSEC 1.4.6.0	<ul style="list-style-type: none">• New ULP+ feature for additional measurements on demand,• Improved behavior on dynamic changes in LP mode,• BSEC lite version with reduced memory requirements included,• size of state string defined, size of config string reduced,• Option to (temporarily) disable baseline tracker for special applications,• Documentation & code improvements.
BSEC 1.4.5.1	<ul style="list-style-type: none">• Improved humidity compensation,• Improved accuracy status,• Additional config strings included,• Fixed accuracy / IAQ value after initialization,• Code optimization.
BSEC 1.3.4.1	-/- (initial release)



3. Features/Changes not implemented:

- No item

4. Release Package list (files in the packages):

The following are the Release items included in this release:

- BSEC binaries
- Integration Guide
- BSEC Binary Size Information
- Config String for different settings

5. Known Issues, concerns and workarounds

- Not system tested in all target microcontroller platforms

6. Change Requests (if applicable)

- Not Applicable

7. Testing

- System testing performed

8. Additional Information

- Config string is not mandatory for LP and ULP mode.