

Bluegiga Bluetooth Smart (4.0) SW - Release Notes

Changes: 1.1.0 Beta 2 (Build 55) compared to Beta (Build 46)

- Packet mode option added for easing up the flow control when using BGAPI over UART (See [hardware.xml/usart](#))
- Throughput options added for higher throughput (See [config.xml/throughput](#))
- BG Script performance improved for having the faster scripts
- BG Script watchdog timer added (See [config.xml/script_timeout](#))
- Cable Replacement iPhone reference implementation included (a separate Zip file at Tech Fourn)
- New BLE SW update tool for BLE SW (a separate zip at Tech Forum), this is to be used instead TI SW update tool (SmartRF).
- User Read Response and User Write Response API's implemented.
- Various fixes done based on the feedback to Beta build (e.g, script functions like memcmp, I2C functionality)

Note: Final 1.1.0 SW release will require the Bluegiga license key at the module and this will need to be entered to the modules through the programming pins.

Known Issues with Build 55

- Multi-connection (master mode) is not fully stable in highly stressed use cases
- Calling `system_endpoint_tx` command multiple times in a row can crash the script
- C examples with BGLib not yet make compatible with 1.1.0 SW.

Changes: 1.1.0 Beta compared to 1.0.3

- Multi-connection support added to the master side (i.e., central). Verified up to 4 simultaneous connections.
- API's supporting the cable replacement use case, e.g., for enabling E2E flow control
- Chipset's PWM capability accessible via BGAPI.
- BGAPI changes for I2C usage
- Multiple new BG script features such as logical AND, WHILE loop, bit shifting.
- Flexible build-time memory management added, e.g., removing BGscript size limitation when operating with the available flash memory size
- Several smaller improvements for quality and stability.

Note: Final 1.1.0 SW release will require the Bluegiga license key at the module and this will need to be entered to the modules through the programming pins.

Changes: 1.0.3 compared to 1.0.2

- BGScript activation for BLED112 fixed.
- SetScanParameter (related to scanning window) reliability improved.

- Transitions to PM3 (power mode 3) improved for decreasing unnecessary power consumption.

Memory Limits for 1.0.x

- Combined GATT database and BGScript size is limited to 2KB flash
- 256 bytes is reserved for script buffers and variables
- 2KB GATT attribute values stored in ram
- PS - Store size is 14KB

Note: These limitations are not applicable as such to 1.1.x SW branch where the flexible build-time memory management is supported.

Changes: 1.0.2 compared to 1.0.1

- Commands returning variable length data works in BGScript.
- ADC functionality fixed if using analog pin as reference.

Changes: 1.0.1 compared to 1.0.1

SW is also released through Bluegiga tech forum

Few final fixes done.