

## Information Note

**Topic** ANNA-B112 reached Engineering Sample status  
UBX-18019520

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## 1 Affected Products

Product Name	Order Number	Type No	Firmware	Remarks
ANNA-B112	ANNA-B112-00B	ANNA-B112-00B-00	0.8.0-002	

## 2 Type of Change

- Hardware modification
- Firmware update
- Documentation update
- Others, Product reached Engineering Samples status

## 3 Description of Change

### 3.1 Products reached Engineering Sample status

The ANNA-B112 module has reached Engineering Sample status. The affected products are listed in section 1. For limitations and restrictions for the Engineering Samples, see section 7.

### 3.2 Documentation updates

The following documents (either new or updated version) are now available:

- Data Sheet [1]
- System Integration Manual [2]
- Product Summary [3]
- AT commands manual [4]
- Extended Data Mode Protocol Specification [5]
- Low Energy Serial Port Service Protocol Specification [6]

## 4 Schedule

Engineering Samples are now available for shipment, and the documentation is available now.

## 5 Customer Impact and Recommended Action

- Customers who have received Prototype modules do not need to update to Engineering Samples as there are neither any hardware nor software changes.
- Please go through the revision history of the updated documents to know the changes.

## 6 Reference Documents

[1] [ANNA-B112 Data Sheet \(UBX-18011707\)](#)

- [2] [ANNA-B112 System Integration Manual \(UBX-18009821\)](#)
- [3] [ANNA-B112 Product Summary \(UBX-18006008\)](#)
- [4] [u-blox Short Range Modules AT Commands Manual \(UBX-14044127\)](#)
- [5] [Extended Data Mode Protocol Specification \(UBX-14044126\)](#)
- [6] [Low Energy Serial Port Service Protocol Specification \(UBX-16011192\)](#)

## 7 Appendix

### 7.1 Restrictions

Limitations / restrictions for the Engineering Samples:

- Samples are intended for test purposes only.
- They should not be used for product qualification.
- Type approvals are not completed.
- RF performance and frequency trimming have not been optimized.
- Product packaging is not final. Samples are not delivered in a moisture controlled environment and thus baking is required before soldering.
- u-blox connectivity software is in beta status, v0.8.0-002.
  - It is recommended that the module integrator ensures that it is possible to upgrade the software to support new functionality and bug fixes.
  - It is currently mandatory to connect an external 32.786 kHz crystal.

### 7.2 Detected Defects

Known issues in the u-blox connectivity software v0.8.0-002 (beta):

Description	Reference
Changing escape character (ATS2) requires a store and reset when “Configuration Over Air (AT+UDSF, allow remote configuration)” is enabled.	TE_NB1_FW-28
In Simultaneous Peripheral and Central role (AT+UBTLE role 3), the maximum number of simultaneous connections is limited to 7.	TE_NB1_FW-170
Creating a GATT characteristic (AT+UBTGCHA) with initial value “0F” will create a GATT characteristic without initial value.	AE_SHO-334
After entering sleep mode (AT&D3) via a transition of the DTR line, exiting exit sleep mode is only possible after 3 seconds.	AE_SHO-338
The command to read multiple GATT characteristics (AT+UBTGRM) is not functional and returns an error response.	TE_NINA_NRF_FW-254
Boot loader hangs when entering the “c” command incorrectly without any parameters.	AE_SHO-362
Limited Discoverable Mode is not limited in time.	TE_NINA_NRF_FW-616
It is not possible to wake up the module from sleep mode (AT&D4) with the DSR pin.	TE_NINA_NRF_FW-581
It is mandatory to connect an external 32.786 kHz crystal.	TE_NINA_NRF_FW-602

### 7.3 Test Status

Tested according to specification     Untested     Limited testing, see notes below

Test suite is not final.