Release Note

Topic **u-blox Connectivity Software 2.0.0 for NINA-W13**
UBX-18067167
Author Erik Carlberg
Date 5 December 2018

Contents

1 Firmware

1.1 General Information

1.1.1 Scope

This release note describes the u-blox connectivity software version 2.0.0 for the NINA-W13 Wi-Fi module. It covers the changes compared to the u-blox connectivity software version 1.0.1.

1.1.2 Related documentation

Document	UBX number	Audience	Updates
AT Commands manual	UBX-14044127	Public	With the AT commands for NINA-W13 v2.0
NINA-W13 Data Sheet	UBX-17006694	Public	Updated with v2.0 features
NINA-W13 Product Summary	UBX-16029109	Public	Updated with v2.0 features
NINA-W13 Getting Started	UBX-17041605	Public	Updated with v2.0 features

Document	UBX number	Audience	Updates
NINA-W1 series System Integration Manual	UBX-17005730	Public	Updated with v2.0 features

1.1.3 Released software image

The NINA-W13 software image is available on the product resources page of the NINA-W13 series at u-blox.com. The table below lists the binary and configuration files included in the package.

File	Description
NINA-W13X-SI-2.0.0-208.txt	u-blox connectivity software signature. Required for the secure boot.
NINA-W13X-SW-2.0.0-208.bin	Software binary
NINA-W13X-CF-1.0.json	Manifest that defines the memory addresses for the different binaries

1.1.4 Released software tools

1.1.4.1 s-center

s-center version 4.7 is released in conjunction with the new software for NINA-W13. It is required to use s-center version 4.7 or later to flash the version 2.0.0 NINA-W13 software.

1.2 New features and improvements

1.2.1 Wi-Fi Access Point

Access Point functionality with up to four connected Stations is supported.

1.2.2 802.11d functionality

Wi-Fi Station 802.11d functionality, including global access to Wi-Fi channels 12 and 13 outside countries where these channels are restricted, is implemented in this software version.

1.2.3 RMII interface

Support for Ethernet over the RMII interface has been included in this software version.

1.2.4 Bridge functionality

Bridge is a way to connect different network interfaces to each other. The user can bridge between Wi-Fi Station, Wi-Fi Access Point and Ethernet.

1.2.5 Retrieve beacon information

Wi-Fi Access Points can transmit beacons with vendor specific information elements. The possibility to retrieve the data contained in the beacon has been added.

1.2.6 Wi-Fi Enterprise security

Support for client authentication using PEAP and EAP-TLS methods is included. The feature covers both Station and Access Point mode. To further strengthen the authentication procedure there is a validation procedure of the remote server certificate before sending any credentials over the link.

1.2.7 Point-to-Point Protocol (PPP)

PPP is a protocol for IP communication from the host, over Wi-Fi, through a gateway to an internet server. The host will send Ethernet frames over the UART or RMII interface.

1.3 Solved issues

Area	Description	Reference
General	3 Mbit baud rate not stable and should be avoided	TE_NINA_ESP_FW-741
General	Start-up time of the module after reset can be up to 4.8 seconds, if Wi-Fi is enabled	TE_NINA_ESP_FW-426
Wi-Fi	Cipher information not provided when doing scan	TE_NINA_ESP_FW-105

1.4 Known limitations

Area	Description	Reference
Wi-Fi	AT+UWSCANIE doesn't report vendor specific Microsoft OUI (00:50:F2) IEs	TE_NINA_ESP_FW-809
Wi-Fi	When scanning for a specific SSID with AT+UWSCANIE, the report may include other networks as well	TE_NINA_ESP_FW-810
General	Reading back a default TCP peer that is set up with a hostname will return the wrong IP address. The same applies when using +UDLP to list peers until the TCP peer has been connected.	TE_NINA_ESP_FW-921

1.5 Changed default configuration

When updating the NINA-W13 connectivity software from v1.0 to v2.0, any settings or configurations stored in the local module memory will be erased.