

User manual [TVA20ANFBN, TVA20ANFNN]

The device is a single-die wireless local area network (WLAN) and Bluetooth (BT) combo solution to support IEEE802.11 b/g/n WLAN standards and BT 3.0 enabling seamless integration of WLAN/BT.

The RF platform of GEN11 supports highly integrated LTE/UMTS/GSM-transceiver, with all necessary features to enable multi mode, multi band car telematics applications. It incorporates a fully integrated dual mode receiver, multi band TX outputs, TCVCXO control, a measurement interface, Qualcomm(Transceiver / Modem) compliant high speed data and control interface, a multi mode timer unit and all necessary front end signals for the complete RF Engine control. Overall the GEN11 directly supports RF engines with up to GSM bands, WCDMA bands and LTE bands.

1. Feature [WLAN/BT]

- QCA6564A-1: Supports low power PCIe (w/L1 sub-state) interfaces for WLAN and UART/PCM interface for BT.
- Supports BT 3.0[BDR/EDR]
- Supports 20 MHz at 2.4 GHz

2. Antenna requirement [WWLAN]

This device contains BEJGEN11NAN[FCC ID], 2703H-GEN11NAN[ISED ID] as WWAN module. All the configuration related to the module comply module requirement with following antenna gain.

- An antenna may be connected to FAKRA connector within following condition.
- This product has been tested with antenna and cable configuration listed below. Host manufacturer shall use antenna and cable that has gain less or equal to the configuration.
- Antenna gain calculated with cable loss and gain shall not be greater than final antenna gain listed below.

Test Item	Frequency (MHz)	Final Antenna Gain (dB i)
GSM 850	836.6	-6.15
GSM 1900	1 850.2	-7.09
WCDMA 2	1 852.4	-7.09
WCDMA 4	1 712.4	-8.05
WCDMA 5	826.4	-6.15
LTE 2	1 850.7	-7.09
LTE4	1 710.7	-8.05
LTE 5	824.7	-6.15
LTE 12	699.7	-6.29
LTE 13	779.5	-6.46
LTE 17	706.5	-6.32

FCC Part 15.21 statement

Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

FCC Part 15.19 statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure (MPE)

This equipment complies with FCC and IC RF Radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Cet équipement est conforme à l'exposition de FCC et IC rayonnements RF limites établies pour un environnement non contrôlé. L'antenne pour ce transmetteur ne doit pas être même endroit avec d'autres émetteur sauf conformément à FCC et IC procédures de produits Multi-émetteur. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.

IC Warning

"This device complies with Industry Canada licence-exempt RSS standard(s)." Operation is subject to the following conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas provoquer de brouillage, et (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.