

MORPHIC APPROVAL JUSTIFICATION

This document describes how the Summit WLAN/BT module is implemented in Nordic ID Morphic mobile computer for FCC/IC approvals.

1. DEVICE NAME & MODEL

Trade name: Nordic ID Morphic

Model: 811-4A

2. WLAN + BT MODULE

WLAN/BT functionality in Nordic ID Morphic (Model 811-4A) is based on FCC/IC certified Summit WLAN/BT module SDC-SSD40NBT (FCC ID: TWG-SDC SSD40NBT, IC ID: 6616A-SDC SSD40NBT).

The module is used without any modifications in Nordic ID Morphic design, only the used antenna is different compared to the antennas used in the Summit module certification process. See antenna specifications.

Thus we apply approval using limited (radiated only) testing for Nordic ID Morphic hand terminal.

Planned label to be used with the terminal:



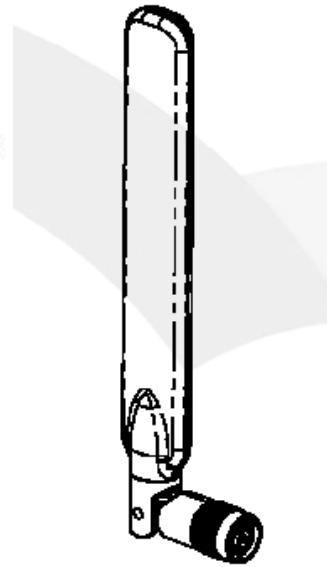
3. ANTENNA SPECIFICATIONS

A. ANTENNA FOR FCC/IC CERTIFICATION USED BY SUMMIT

Dual Band Swivel Mount Dipole RP-TNC Blade 2.40-2.50/4.90-5.90 GHz	R380500314 Series : ANTENNA
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ELECTRICAL SPECIFICATIONS

Frequency :	2.40-2.50/4.90-5.90 GHz
Nominal Impedance :	50 Ω
VSWR :	2:1 Max
Gain (Radiating element) :	1.6/5.0 dBi ± 1 dB
Radiation Pattern	
HPBW in Horizontal Plane :	360 ° ± 2 °
Ripple level in Horizontal Plane :	±3 dB Max
HPBW in Elevation	
Low Band :	85 °
High Band :	30 °
Polarization :	Linear Vertical
Connector type :	Reverse Polarity TNC
Cable type :	RG316



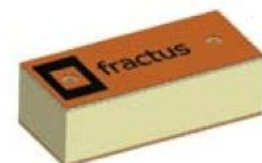
B. ANTENNA USED BY NORDIC ID

Fractus® Compact Dual-band Reach Xtend™ Chip Antenna

P/N: FR05-S1-NO-1-004

Technical Features	802.11 b/g/n	802.11 a/n
Frequency Range	2.4-2.5 GHz	4.9-5.875 GHz
Peak Gain	1.77 dB	4.9 dB
VSWR	< 2:1	< 2:1
Average Efficiency	70%	73.7%
Radiation Pattern	Omnidirectional	
Weight (aprox.)	0.1 g	
Temperature	-40 to +85° C	
Impedance	50 Ω	
Antenna Dimensions (L x W x H)	7 mm x 3 mm x 2 mm	

7 mm x 3 mm x 2 mm (image)



TOP