

ignion[™]

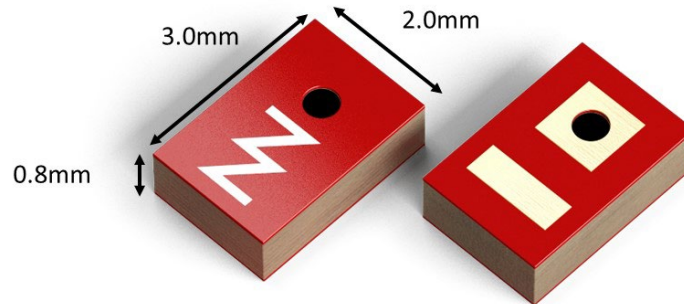
Your innovation.
Accelerated.

NANO mXTEND[™] (NN02-101)

DATASHEET

NANO mXTEND[™] (NN02-101)

The NANO mXTEND[™] antenna booster is **the smallest Virtual Antenna[™] ever**. It's the product of choice when you're looking for a reliable and repetitive antenna solution for Bluetooth and Wi-Fi and you have a strictly limited device space.



Product Benefits

- **Smallest clearance:** 5mm x 5mm.
- **Miniature:** Smallest Virtual Antenna[™] form factor of 3.0 mm x 2.0 mm x 0.8 mm.
- **Versatile:** Can be mounted either on the device corner or on the center edge.
- **Reliability:** Off-the-Shelf standard product, no antenna part customization (electronic optimization).
- **Use cases:** smart home, tracking devices, wearables, gaming devices, IoT modules.

Operation Bands Summary

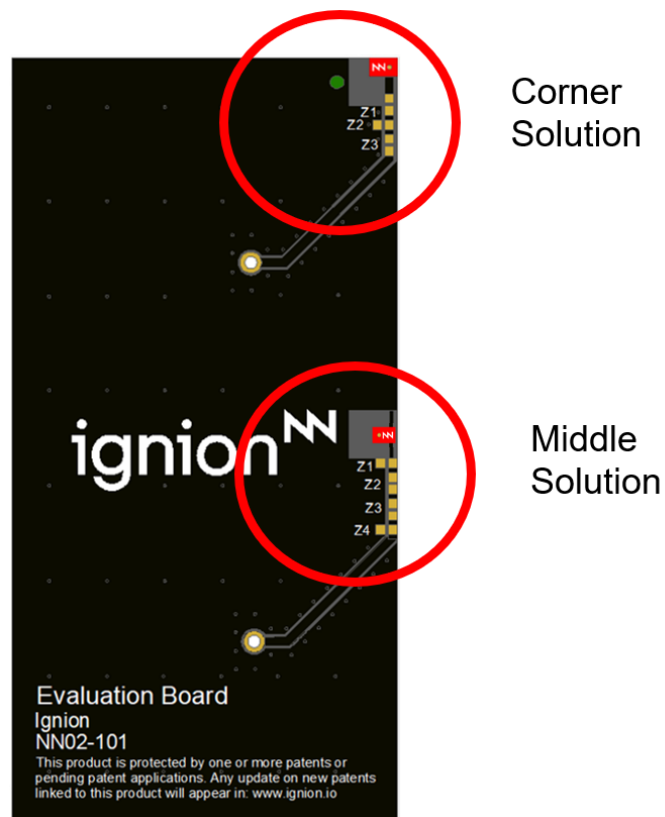
- Bluetooth and Wi-Fi (2400 – 2500MHz)

1. AVAILABLE SOLUTIONS SUMMARY

| Class | Frequency Regions | Frequency range | More detailed info |
|--------|-------------------|----------------------|---------------------------------|
| 1 Port | 1 | 2400 MHz to 2500 MHz | BLUETOOTH/Wi-Fi |

2. DETAILED AVAILABLE SOLUTIONS

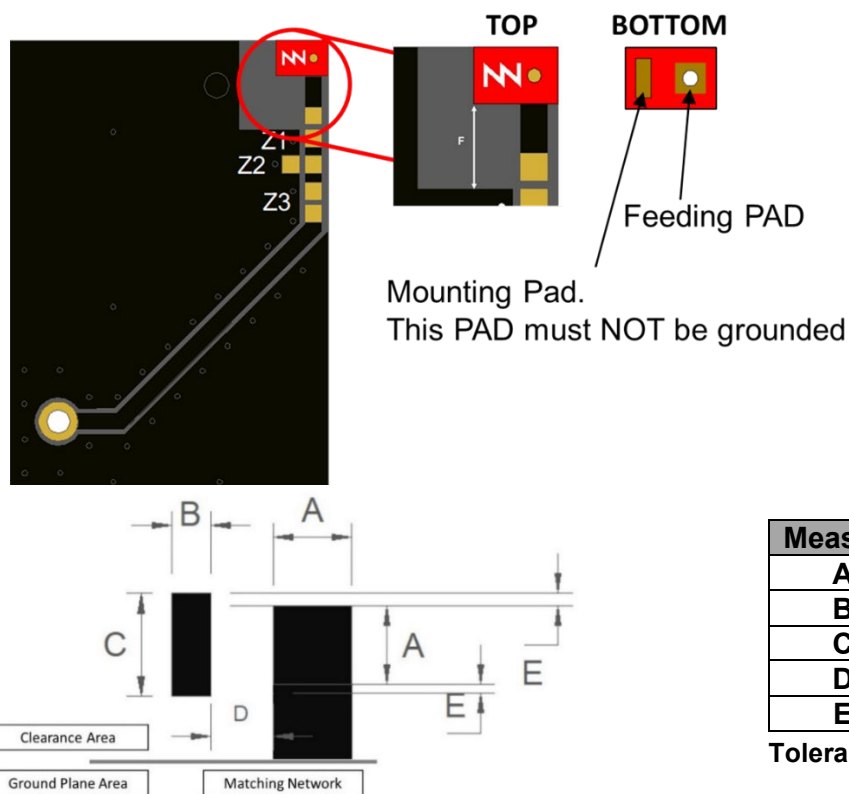
2.1 BLUETOOTH AND Wi-Fi SOLUTION



2.1.1 ANTENNA FOOTPRINT: IN THE CORNER

| Technical features | 2400 MHz – 2500 MHz |
|------------------------|--------------------------|
| Average Efficiency | >55 % |
| Peak Gain | 2.4 dBi |
| VSWR | < 2.5:1 |
| Radiation Pattern | Omnidirectional |
| Polarization | Linear |
| Weight (approx.) | 0.01 g. |
| Temperature | -40 to +125 °C |
| Impedance | 50 Ω |
| Dimensions (L x W x H) | 3.0 mm x 2.0 mm x 0.8 mm |

Technical features. Measurements from the evaluation board (80 mm x 40 mm x 1 mm).

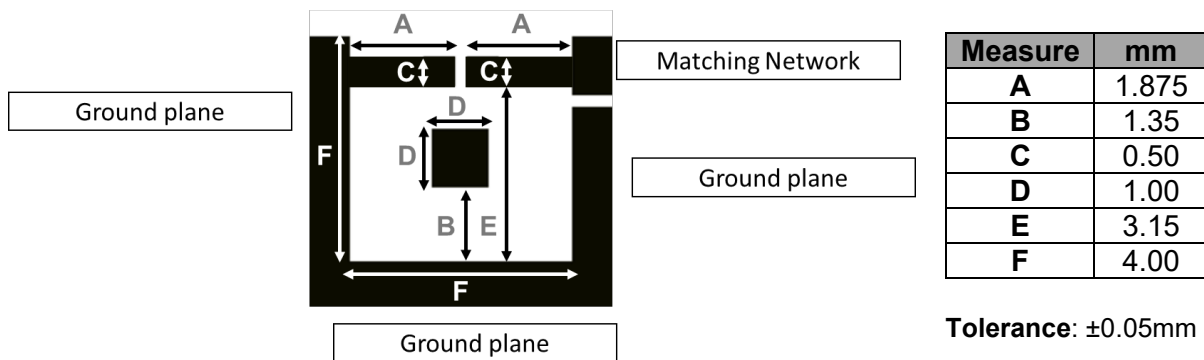
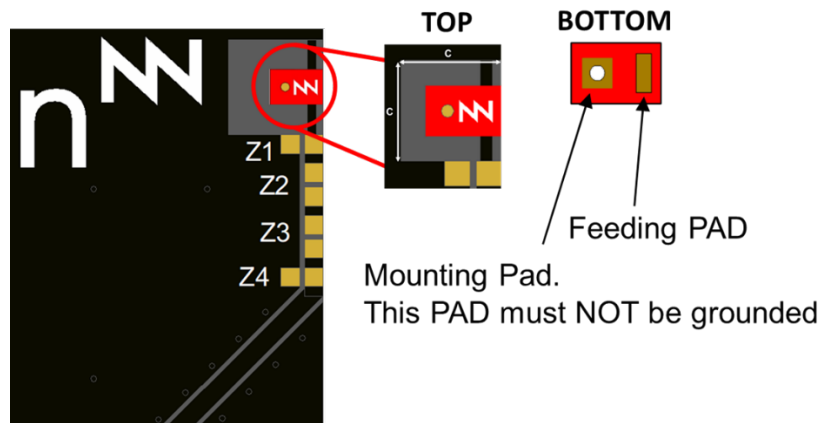


Footprint dimensions for the NANO mXTEND™ (NN02-101) antenna booster (in the corner).

2.1.2 ANTENNA FOOTPRINT: IN THE MIDDLE

| Technical features | 2400 MHz – 2500 MHz |
|------------------------|--------------------------|
| Average Efficiency | >65 % |
| Peak Gain | 2.4 dBi |
| VSWR | < 3.0:1 |
| Radiation Pattern | Omnidirectional |
| Polarization | Linear |
| Weight (approx.) | 0.01 g. |
| Temperature | -40 to +125 °C |
| Impedance | 50 Ω |
| Dimensions (L x W x H) | 3.0 mm x 2.0 mm x 0.8 mm |

Technical features. Measurements from the evaluation board (80 mm x 40 mm x 1 mm).



Footprint dimensions for the NANO mXTEND™ (NN02-101) antenna booster (in the middle).

If you need assistance to design your matching network beyond this application note, please contact support@ignion.io, or if you are designing a **different device size** or a **different frequency band**, we can assist you in less than 24 hours. Please, try our free-of-charge¹ [Antenna Intelligence Cloud](#), which will get you a complete design report including a custom matching network for your device in 24h¹. Additional information related to Ignion's range of R&D services is available at: <https://ignion.io/rdservices/>

¹ See terms and conditions for a free Antenna Intelligence Cloud service in 24h at: <https://www.ignion.io/antenna-intelligence/>

ignion[™]

Your innovation.
Accelerated.

Contact:
support@ignion.io
+34 935 660 710

Barcelona

Av. Alcalde Barnils, 64-68 Modul C, 3a pl.
Sant Cugat del Vallés
08174 Barcelona
Spain

Shenzen

Topway Information Building, Binhai Avenue,
Nanshan District, N° 3369 – Room 2303
Shenzen, 518000
China

+86 13826538470

Tampa

8875 Hidden River Parkway
Suite 300
Tampa, FL 33637
USA

单击下面可查看定价，库存，交付和生命周期等信息

[>>ignion](#)