# AD DogBone U9 Inlay



### Zebra Advanced RFID Inlay

RFID inlays are critical to achieve the real-time visibility needed to streamline operations, minimize errors in asset-related data, as well as track, identify, and maximize asset utilization. Engineered with precision and powered by NXP's UCODE 9 chip, this inlay is designed to set new standards in performance, reliability, and versatility. The AD DogBone U9 Inlay is tailored to meet the diverse needs of modern supply chain logistics, asset tracking, and inventory management. With its exceptional read sensitivity and extended read range, it ensures rapid and accurate data capture, even in the most challenging environments. The inlay's robust design and compliance with global RFID standards make it a versatile choice for a wide array of applications, from retail and logistics to industrial and beyond. Combining advanced features, cost-effectiveness, and environmental sustainability, this inlay is the ultimate solution for organizations aiming to optimize their RFID systems and achieve unparalleled operational efficiency.



#### **DogBone shape benefits**

The DogBone shape is engineered to maximize the performance of the RFID antenna. Its design helps improve the read range and read reliability, ensuring that tags can be read accurately over longer distances and in challenging environments. The geometric configuration of the DogBone shape enhances the antenna's sensitivity, making it more responsive to RFID readers.

#### **UCODE 9 Chip**

The UCODE 9 chip integrated into the AD DogBone U9 Inlay provides high read sensitivity, ensuring reliable and accurate data capture even in challenging environments. This is particularly beneficial for applications requiring quick and consistent tag reads.

#### Zebra Certified for consistently exceptional performance

Zebra is ISO 9001 certified and uses quality processes to reduce instances of unsuccessful encoding. We pre-test labels with Zebra readers and printers to ensure industry-leading performance. Lastly, we use the same label material from order-to-order to safeguard consistency and quality.

#### **Unmatched expertise in RFID**

Zebra is your trusted expert in all things RFID. We offer end-to-end RFID solutions – including pre-tested RFID supplies made with the right materials and adhesives, along with the highest-performing inlays and chips – customized for your application. We have played a central role in pioneering RFID technologies and defining global standards since the mid-1990's, when smart-label technology first appeared. We were recognized as the #1 RFID brand by the 2018 RFID Journal's Brand Report. And we hold more than 575 RFID patents and numerous industry firsts in RFID.

AD DogBone U9 Inlay - designed to set new standards in performance, reliability, and versatility.

For more information, please visit www.zebra.com/rfidlabels

### **Specifications**

#### **Technical Information**

Chip	NXP UCODE 9
EPC Memory	128-bit
User Memory	N/A
TID	96 bit factory locked (48 bit unique)
Read Sensitivity	-23 dBm
Write Sensitivity	-18 dBm
RFID Standards	EPC Gen2v2
Read Range	Up to 19m

#### Theoretical Read Range: ETSI (865-868 MHz)1

Air	19 m
Cardboard	14 m
Fiberglass	11 m
Glass	13 m
PTFE	14 m
Polyacetyl	12 m
PVC	12 m
Rubber	11 m

#### Theoretical Read Range: FCC (902-928 MHz)1

Air	16 m
Cardboard	12 m
Fiberglass	12 m
Glass	15 m
PTFE	12 m
Polyacetyl	11 m
PVC	12 m
Rubber	12 m

#### Testing and Compliance

All inlays certified by Zebra have been pre-tested with Zebra printers and readers.

#### Material Testing in End Application

The information contained in this document is to be used for guidance only and is not intended for use in setting specifications. All purchasers of Zebra products shall be solely responsible for independently determining if the product conforms to all requirements of their unique application.

#### **Radiation Pattern**

\*\*Read range drops to 20% of maximum when inlay is perpendicular (90° and 270°) to reading antenna. To learn more about radiation pattern, visit zebra.com/rfidlabels

#### Footnotes

\*Theoretical read range data is meant to be directional. Actual performance will depend on your application and environment. Testing is recommend.



## Markets and Applications

#### Logistics

Item level labeling

#### Retail

 Case/Item level labeling

#### Transportation

Case labeling

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