



Alien® Family of EPC Gen 2 RFID Inlays

Alien Technology® manufactures a range of EPC Class 1 Generation 2 inlays and labels that are designed to deliver optimal performance in a variety of applications.

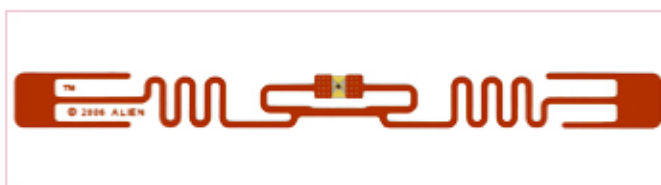
The Squiggle® (ALN-9540) is the most versatile member of Alien's family, delivering industry leading range, reliability and price for a broad range of traditional pallet and case uses as well as innovative new RFID applications. Complementing the Squiggle is the Squiggle-SH, which delivers similar performance in a 3" label size. The 2x2 inlay (ALN-9534) is a compact inlay that offers exceptional omni-directional performance and is well suited for tagging apparel and baggage. The M inlay (ALN-9554) provides a high-performance solution for tagging plastics such as tote bins and pallets. The diminutive Squiggle-SQ inlay (ALN-9529), delivers outstanding range in the item-tagging arena despite being the size of postage stamp.

All inlays are based on Alien's break through Higgs™-2 UHF RFID IC, which delivers superior sensitivity and range at the lowest per die cost in the industry. All members of the family are manufactured using Alien's patented Fluidic Self Assembly (FSA™) process, which delivers high inlay volumes at low unit costs.

Alien inlays are designed as World Tags, delivering uniform operation globally within a +/- 1.5 db band from 860 to 960 MHz. This enables the same inlay to be used successfully at the diverse frequencies of the Americas, Europe, Asia, and Africa. Alien World Tags allow companies to manufacture products on one continent and ship the worldwide utilizing a single RFID inlay type – with the inlay exhibiting uniform behavior and consistent performance globally.



Inlay Product Portfolio



Squiggle Inlay

- > World Tag: global operation 860 to 960 MHz
- > The EPC Class 1 Gen 2 price/performance benchmark
- > High-performance solution for most packaging including products containing metal and water
- > 97mm x 11mm

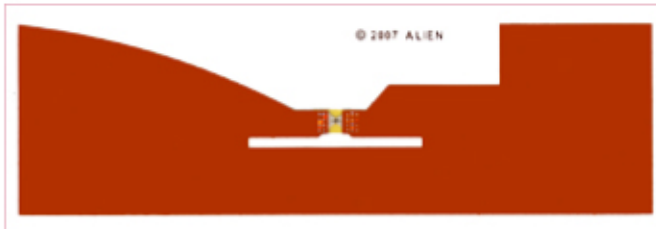


Squiggle-SH

- > World Tag: global operation 860 to 960 MHz
- > Compact design delivers Squiggle level performance
- > Ideal for 3" labels and ISO cards
- > 70mm x 19mm



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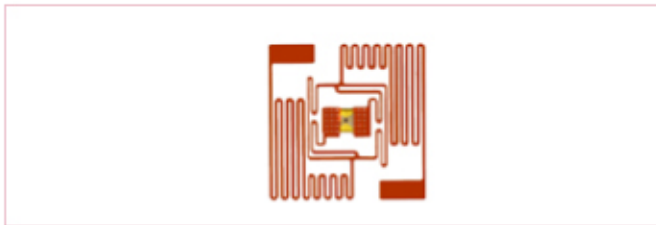
M Inlay

- > Global operation 860 to 960 MHz
- > High gain, high-performance inlay
- > Ideal for plastic totes, pallets & reusable assets
- > 94mm x 42mm



2x2 Inlay

- > Global operation 860 to 960 MHz
- > Omni-directional inlay designed for applications such as airline baggage and apparel
- > Square design enables cost effective conversion for vertical labels
- > 47mm x 42mm



Squiggle-SQ Inlay

- > Global operation 860 to 960 MHz
- > Ideal for item level tagging of plastic packaging such as pharmaceutical pill bottles and apparel hang tags
- > Near-field and far-field communication modes
- > 23mm x 23mm

Environmental

Shelf Life	2 Years
Recommended Storage	+25°C / 40% RH
Storage Limits	-25°C to +50°C 20% to 90% RH Non-condensing
Operating Limits	-40°C to +70°C 20% to 90% RH Non-condensing
Bend Diameter	> 50mm
Pressure	< 5N/mm ²
Drop Resistance	Per ASTM D5276
Write Cycles	10,000
RoHs	2002/95/EC Compliant
ESD – HBM / CDM	> 5.0kV / > 1.5kV

RFID

ISO/IEC 18000-6C	
EPC Class 1 Gen 2	
Integrated Circuit	Higgs-2
EPCglobal Certificate	9501101260000001091
Operating Frequency	840–960 MHz
EPC Size	96 Bits
Access Password	32 Bits
Kill Password	32 Bits

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