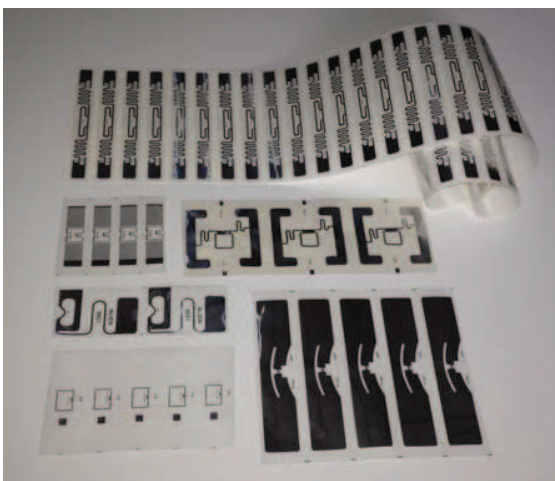
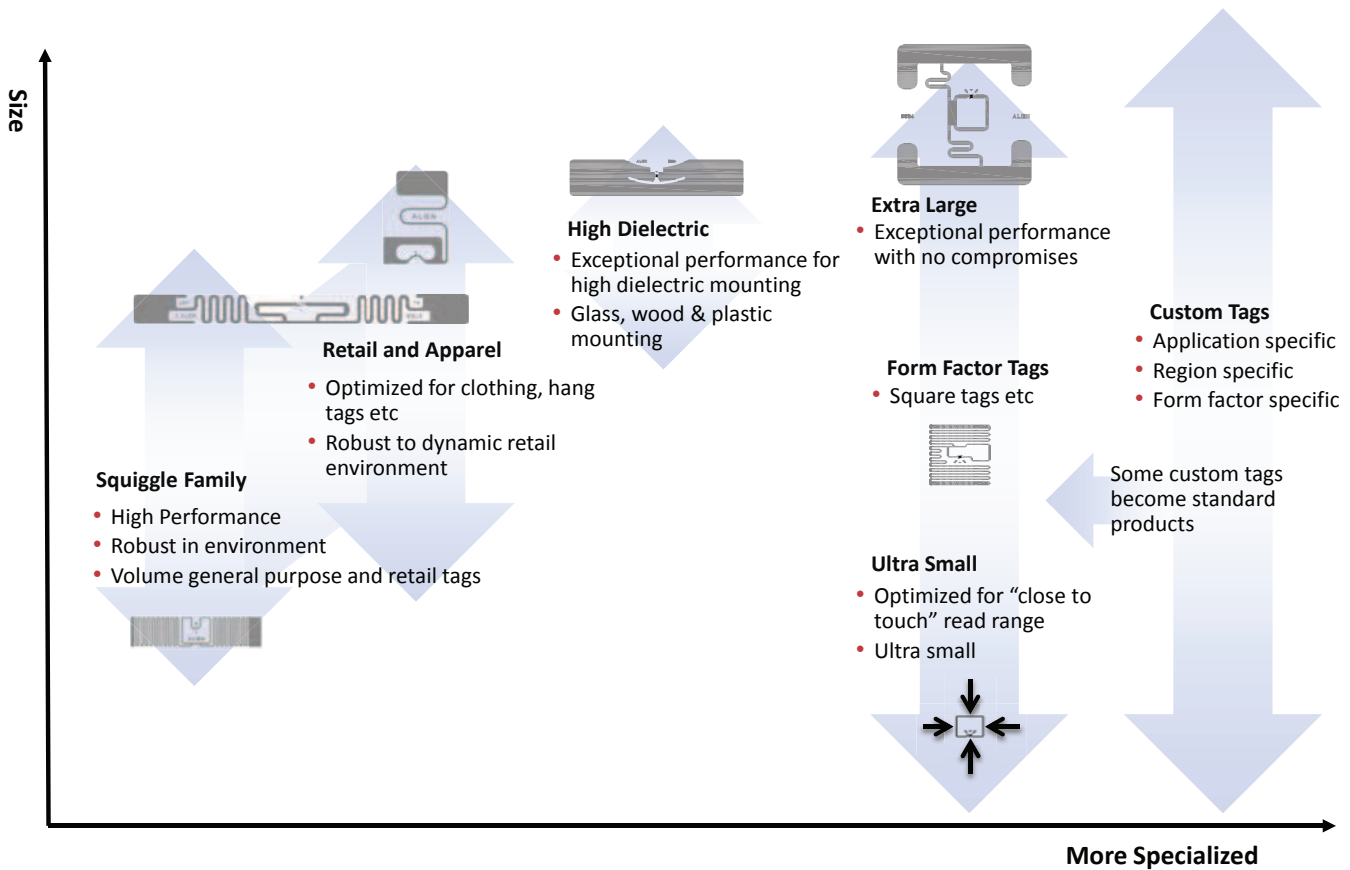




ALIEN FAMILY OF EPC GEN 2 RFID INLAYS

Alien Technology® manufactures a range of EPC Gen 2 inlays designed to deliver optimal performance in a variety of applications.

Powered either by the larger memory **Higgs™ 3 UHF RFID IC** or the volume focused **Higgs™ 4 UHF RFID IC**, Alien® offers a range of RFID inlays that fit a wide variety of sizes, applications, characteristics and needs.







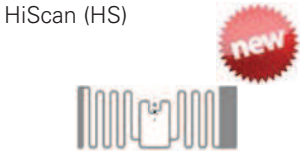
All inlays are World Tag compliant, enabling consistent operation across the diverse frequencies of the Americas, Europe, Middle East, Asia, and Africa. Please refer to Alien's Higgs-3 and Higgs-4 product overviews for details on the RFID IC capabilities.

Alien has the capability to design custom tags for appropriate volume applications (under appropriate business terms) and can offer reference designs under license.





Alien Family of EPC Gen 2 RFID Inlays

Squiggle Family

| | Higgs-3 | Higgs-4 | Approx. Size* | Application | Features | Benefits |
|---|----------|----------|------------------------------|--|--|--|
| Squiggle  | ALN-9640 | ALN-9740 | 4" x 5/8" 10cm x 1.6cm | Item/asset tracking including: pallet placards, cases, baggage, denim, poly bags, electronics, apparel tags and boxed items. | Squiggle is one of the most widely used general purpose tags. Family extends the Squiggle features into different form-factors. One of the best performing general purpose tag family on the market. Designed to work well in challenging environments. | Well proven design for a broad range of worldwide applications. Optimized for high performance in all world regions. A very robust general purpose tag (for ultimate robustness in high dielectric environments - see Aliens "G" tag). |
| Squiglette  | ALN-9630 | ALN-9730 | 3" x 5/8" 7.6cm x 1.6cm | | | |
| Short  | ALN-9662 | ALN-9762 | 3" x 1" 7.6cm x 2.5cm | | | |
| Squig  | ALN-9610 | ALN-9710 | 2" x 5/8" 5cm x 1.6cm | | | |
| HiScan (HS)  | N/A | ALN-9720 | 1.56" x 0.61" 4cm x 1.5cm | | | |

High Dielectric Family

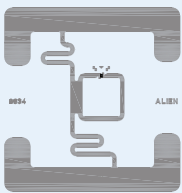






| | Higgs-3 | Higgs-4 | Approx. Size* | Application | Features | Benefits |
|---|----------|----------|---------------------------------|--|---|--|
| G Tag  | ALN-9654 | N/A | 4" x 1" 10cm x 2.5cm | High density plastic totes, windshields, batteries etc. | Exceptional performance for high dielectric mounting. | Designed for use on glass, plastics, wood or other materials normally challenging for RF. |
| BAT  | N/A | ALN-9770 | 3.25" x 1.25" 8.25cm x 3.2cm | Automotive batteries, fluid filled objects, plastic containers and metal filled objects. | Highly tuned for read rates and distances when amongst metal/water based objects contained in plastics, glass etc | Designed for high read and write performance when applied to thin high-dielectric materials especially when these dielectrics contain challenging materials like metal and water based fluids. |

* Sizes are approximate due to variations between dry, wet and label products. Please refer to specific product details available on Alien's website for exact measurements - www.alientechnology.com



Alien Family of EPC Gen 2 RFID Inlays

Form-factor/Orientation Family

| | Higgs-3 | Higgs-4 | Approx. Size* | Application | Features | Benefits |
|---|----------|----------|---|--|---|---|
| 2x2  | ALN-9634 | N/A | 2" x 2" 5cm x 5cm | Large items, baggage tagging, apparel and pharmaceutical bottles. | Highest performance in a 2" form factor. | A square form-factor for tracking of larger items. Multiple-frequency sensitivity optimized for high performance in all world regions. |
| Square  | ALN-9629 | N/A | 1" x 1" 2.5cm x 2.5cm | Item level tagging, apparel, pharmaceutical bottles and other high value consumables. | High performance when a longer tag form-factor is inappropriate. | The Square provides performance close to the 2x2 in a smaller form-factor. |
| H Tag  | ALN-9627 | N/A | 1 1/4" x 2" 3.2cm x 5cm | Labels of all kinds for hang-tags, cases, pallets etc | High performance 90° rotated dipole. | For use in less expensive label machines to avoid 90° rotation of the label during production. |
| Garment Tag (GT)   | N/A | ALN-9728 | 1.97" x 1.18" 3cm x 5cm aka "30 x 50" | Retail, apparel, hang-tags, joker tags, labels and document tracking. | 30x50mm form-factor and tuned for use in retail with packed shelves or hanging garments. | Extremely high read performance (distance/rates) in real-life, every day retail environments. Specifically designed and tested with stacked and hanging goods. |
| SIT  | ALN-9613 | N/A | 0.473" x 0.354" 0.9cm x 1.2cm | Jewelry bags, pharmaceutical vials, bottles, syringes, liquids, foods, DVD's, ISO access control or loyalty cards, fashion apparel and other anti-counterfeiting applications. | Ultra Compact without quality compromise. Near field access only. Can be used adjacent to metallic objects. | Fits very small objects normally challenging for RFID (9mm x 12mm antenna). Enables a very controlled close proximity read zone for added security. Extended read range enabled through appropriate placement to conductive surfaces. |
| Slimline (SL)  | N/A | ALN-9745 | 3.7" x 0.23" (or 0.12") 94mm x 5.8mm (or 3.05mm) | Book spines, door edges, cigarette boxes, small package labels, narrow form factor assets, shipping labels etc. | Ultra slim form-factor at 5.8mm or 3.05mm thin (3.05mm without inlay targets). | Extremely narrow form-factor enabling use where RFID is normally not possible. Approaches the well regarded Squiggle/Squiglette performance in an ultra narrow form-factor. |

* Sizes are approximate due to variations between dry, wet and label products. Please refer to specific product details available on Alien's website for exact measurements - www.alientechnology.com



Alien Family of EPC Gen 2 RFID Inlays

University of Arkansas Approved Tags:

The University of Arkansas, Walton College, Radio Compliance Lab provides an independent test facility that reviews and approves tags under the most stringent conditions. The main objective of these tests is to provide an approved list of UHF RFID inlays that the largest US retailers can rely upon to meet an aggressive set of performance metrics. This allows these well known retailers to acquire tags with the confidence that the performance will meet their needs in their real retail environment.

The tags labeled "Yes" below have been submitted and approved to the Arkansas Radio Compliance "ARC" test facility.

| Tag Name | Part Number | | U of A Approval | | | | | Cat I: |
|------------|-------------|----------|-----------------|-------------------|-----------------------|-------------------|---------------------|------------|
| | Higgs-3 | Higgs-4 | Cat A: Denim | Cat B: Polybag | Cat C: Electronics | Cat D: Hanging | Cat E: Large Box | |
| Squiggle | ALN-9640 | ALN-9740 | Yes | Yes | Yes | Yes | Yes | Yes |
| Squiglette | ALN-9630 | ALN-9730 | Yes | Yes | Yes | Yes | | Yes (9630) |
| Short | ALN-9662 | ALN-9762 | Yes | Yes | Yes | Yes | | |
| H tag | ALN-9627 | N/A | | Yes | | Yes | | |
| GT tag | N/A | ALN-9728 | Yes | Yes | | Yes | | |

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 HANDLING PRECAUTIONS Observe standard handling practices to minimize ESD.
 DISCLAIMER Application recommendations are guidelines only - actual results may vary and should be confirmed. This is a general purpose product not designed or intended for any specific application.

This product is covered by one or more of the following U.S. patents: 7967204, 7931063, 7868766, 7737825, 7716208, 7716160, 7688206, 7659822, 7619531, 7615479, 7598867, 7580378, 7576656, 7562083, 7561221, 7559486, 7559131, 7554451, 7551141, 7542301, 7535008, 7531218, 7522065, 7500810, 7489248, 7453705, 7425467, 7417306, 7411503, 7385284, 7377445, 7364084, 7353598, 7342490, 7324061, 7321159, 7301458, 7295114, 7288432, 7265675, 7262686, 7260882, 7253735, 7244326, 7218527, 7214569, 7199527, 7193504, 7173528, 7172910, 7172789, 7141176, 7113259, 7101302, 7080444, 7070851, 7068224, 7046328, 6998644, 6988667, 6985361, 6980184, 6970219, 6952157, 6942155, 6933848, 6927085, 6816380, 6780696, 6731353, 6693384, 6683663, 6665044, 6657289, 6623579, 6606247, 6606079, 6590346, 6586338, 6566744, 6555408, 6527964, 6479395, 6468638, 6420266, 6316278, 6291896, 6281038. Other patents pending.



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12 February 2013