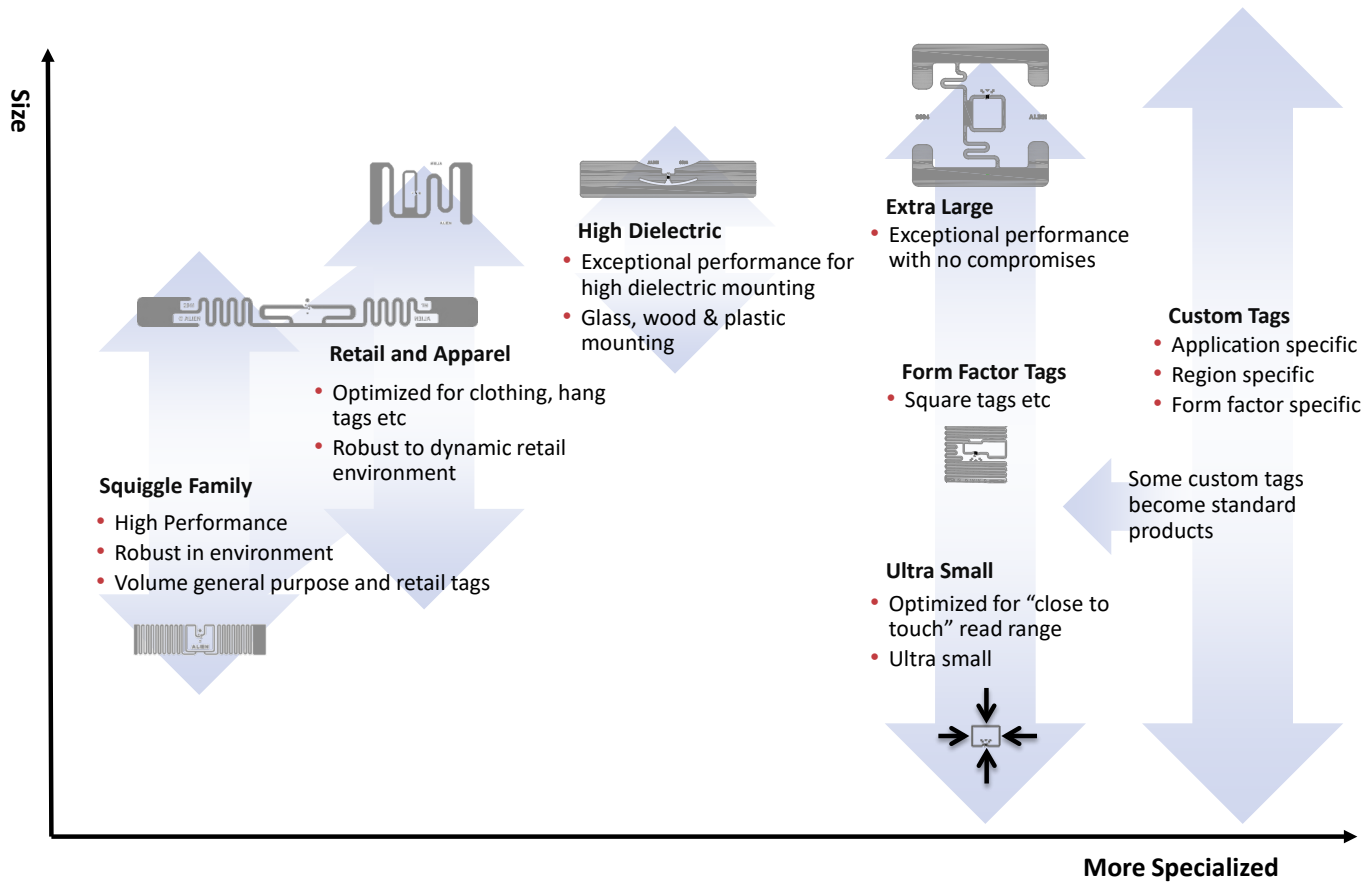




ALIEN FAMILY OF EPC GEN 2 RFID INLAYS

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**, the volume focused **Higgs™-4** or the new **Higgs™-EC** with increased range, reliability and robustness, Alien® offers a range of RFID inlays that fit a wide variety of sizes, applications, characteristics and needs.



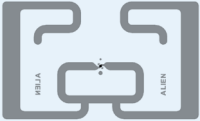


All Alien inlays are World Tag compliant, enabling operation across the diverse frequencies of the Americas, Europe, Middle East, Asia, and Africa. Some tags are world tags with specially tuned performance for optimal behavior in certain regions. See the tag matrix on the following pages. Please refer to Alien’s Higgs-3, Higgs-4 and Higgs-EC 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

Inlays: Specialized Retail

Product	Higgs-3	Higgs-4	Higgs-EC	Antenna Size ¹	Application
Spider-360 (SP) 	N/A	ALN-9726	N/A	1.97" x 1.18" 50mm x 30mm aka "30 x 50"	Retail, apparel, hang-tags, joker tags, airline baggage, labels and document tracking.
Garment Tag (GT) 	N/A	ALN-9728	ALN-9828		Retail, apparel, hang-tags, joker tags, labels and document tracking
HiScan™ (HS) 	N/A	ALN-9720	N/A	1.57" x 0.61" 40mm x 15.5mm	Specialized tag designed for the most challenging retail and apparel applications and in handheld environments.
Glint™ (GL) 	N/A	ALN-9715	N/A	1.06" x 0.38" 27mm x 9.7mm	Jewelry, Cosmetics and other smaller metal or metalized objects
Pearl™ (PE)  	NA	ALN-9716	N/A	0.87" x 0.49" 22mm x 12.5mm	

Product	Features	Benefits
Spider-360 (SP)	An orientation agnostic 30x50mm form-factor tag. Useful when end-on reads are required.	For use in applications (especially but not limited to retail and airline baggage) where orientation of the tag is of greatest concern. This tag can be read 360 degrees around the plane of the tag.
Garment Tag (GT)	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.
HiScan™ (HS)	Tuned for high-performance reading in lower-power reading environments.	Extremely high read-rates in real-life, every day retail environments (e.g. rapid handheld movement, many tags close to each other etc). Especially effective with handheld RFID readers that have low transmit power.
Glint™ (GL)	Very small non-near-field tag designed for close placement to metals or metallic surfaces.	Very small tag. Does not require a long "tail" like some other jewelry tags. Uses the close proximity to metalized objects to increase the range of the tag.
Pearl™ (PE)		Offers read/write distances in the order of feet/meters unlike other competitive tags that are near-field and only read an inch or two.

¹ Sizes are approximate. **These are inlay antenna sizes.** Tags and labels will be larger. Please refer to specific product details available on Alien's website for exact measurements - www.alientechnology.com



Inlay Application Guide:

This table is a guide to assist narrowing the inlay types that may be relevant in your application. Tags should always be tested in their application but this table should help narrow that initial selection.

	Squiggle Family					Specialized Retail					High-Dielectric / Automotive				Form-factor			
	Squiggle® (SQ)	Short (SH)	Squiglette (ST)	Squig (SG)	Doc Tag (DT)	Glint (GL)	Pearl (PE)	HiScan (HS)	GT-Tag (GT)	Spider-360 (SP)	BAT-Tag (BAT)	Wonder-Dog (WD)	G-Tag (G)	Bio-Tag (BIO)	SlimLine (SL)	2x2 (2x2)	Square (1x1)	SIT (SIT)
Higgs™-EC Model #	ALN-9840	N/A	ALN-9830	N/A	N/A	N/A	N/A	ALN-9820	ALN-9828	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Higgs™-4 Model #	ALN-9740	ALN-9762	ALN-9730 ALN-9730-E	ALN-9710	ALN-9741	ALN-9715	ALN-9716	ALN-9720	ALN-9728	ALN-9726	ALN-9770	ALN-9768	N/A	ALN-9714	ALN-9745	N/A	N/A	ALN-9713
Higgs™-3 Model #	ALN-9640	ALN-9662	ALN-9630	ALN-9610	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ALN-9654	N/A	N/A	ALN-9634	ALN-9629	ALN-9613
Retail																		
Mobile Asset Tracking*																		
Automotive																		
Pharma / Healthcare																		
Ultra compact																		
Wood/ Plastic/ Glass																		
Files/ Paper																		
General Purpose																		
Ref Design Available?	Yes	Yes	Yes	Yes	No	Yes	No	No	No	No	Yes	No	Yes	No	Yes	Yes	Yes	Yes



* Includes Consumer Electronic Devices (TV's, STB's etc)

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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, 7542008, 7531218, 7522055, 7500610, 7489248, 7453705, 7425467, 7417306, 7411503, 7385284, 7377445, 7364084, 7353598, 7342400, 7324061, 7321159, 7301458, 7295114, 7288432, 7266675, 7262686, 7260882, 7253735, 7244326, 7218527, 7214569, 7199527, 7193504, 7173528, 7172910, 7172789, 7141176, 7113250, 7101502, 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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