

# RFID

**Experienced, quality supply of RFID innovations,  
Technologies and products**

1500+ customers in worldwide Strong global alliances & channels

**Leader in Worldwide Volume RFID Technology**



ALISON ASIA PACIFIC LTD.

埃力生亞太有限公司

# Technology Provides:

## RFID ICS



Mass-market optimized UHF Passive EPCGlobal Gen2 and ISO/IEC 18000-6c compliant RFID transceiver chips are optimized for high performance in even the most challenging environments.

## RFID Tags & Labels



The industry's most respected tag and label solutions for a variety of applications and environments.

## RFID Readers & Antennas



Intelligent readers and antennas reduce network traffic, minimize network equipment and lower costs.

## RFID Professional Services

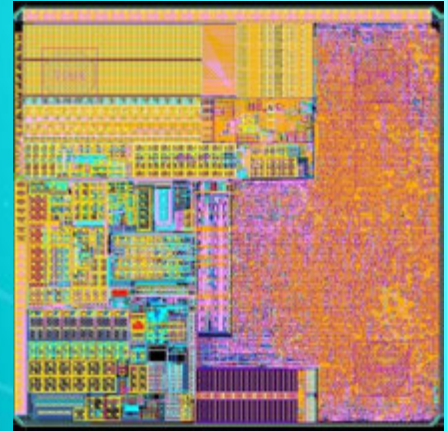


Professional services round out our offerings with custom training, best practices & support every step of the way

# RFID ICS

## The industry's most trusted passive UHF Class 1 Gen 2 RFID IC's

- Meets EPCGlobal Gen2 (V1.2.0) and ISO/IEC 18000-6C:2004/Amd 1:2006 (type C)
- Proven, real world performance
- Large memory or mass-market optimized variants

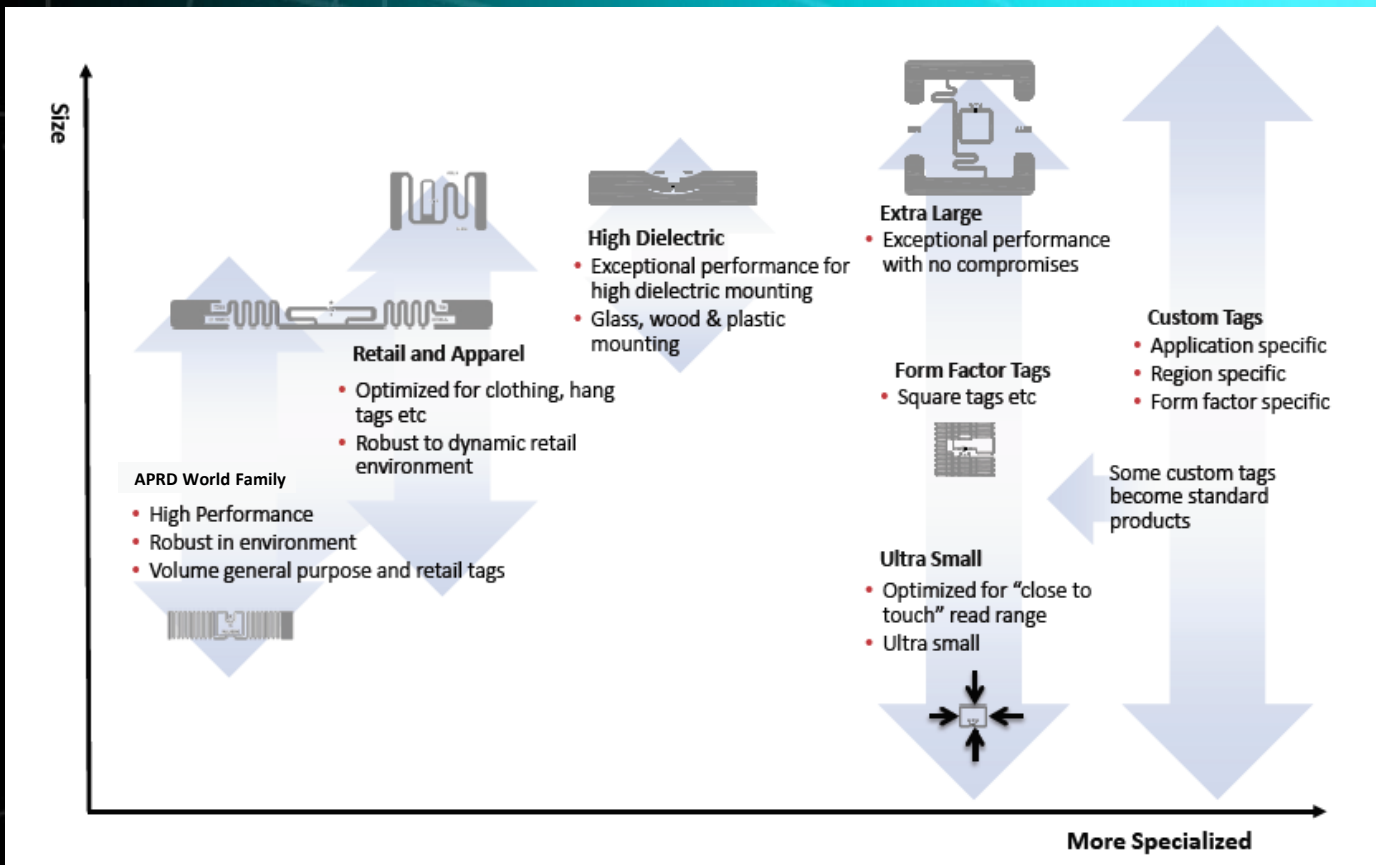


Type	Large Memory	Mass-market Optimized	Adds Reach, Reliability & Robustness
Total Memory	800 bits	512 bits	512 bits
Max EPC Bits	96-480 bits	128 bits	128 bits
Unique TID (unalterable serial number)	64 bits		80 bits
Serialization	Yes (chip and non-chip based supported)		
Read/Write Sensitivity	Very Good	Excellent	Best-in-class
Read Distance	10m (30ft)	11m (33ft)	13m (42ft)

# RFID Tags & Labels



Alison manufactures a range of EPC Gen 2 inlays designed to deliver optimal performance in a variety of applications



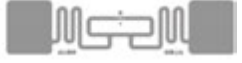




All Alison inlays are World Tag compliant, enabling operation across the diverse frequencies of the Americas, Europe, Middle East, Asia, and Africa. Some tags are world tags with specially tuned performance for optimal behavior in certain regions.







## Specification

### Inlays: APRD World Family

Product	Antenna Size	Application	Features	Benefits
<b>APRD188</b> 	3.732" x 0.319" 94.8mm x 8.1mm		one of the most widely used general purpose tags.	Well proven design for a broad range of worldwide applications.
<b>APRD189</b> 	2.756" x 0.374" 70mm x 9.5mm	Item/asset tracking including: pallet placards, cases, baggage, denim, poly bags, electronics, apparel tags and boxed items.	Family extends the APRD World features into different form-factors. One of the best performing general purpose tag family on the market.	All Alison tags are world-tags and work well in all regions. Tags denoted with an "E" on the model number (and name) are specially tuned for optimal performance in Europe (but are still world tags). A very robust general purpose tag (for ultimate robustness in high dielectric
<b>APRD190</b> 	2.756" x 0.669" 70mm x 17mm			
<b>APRD191</b> 	1.752" x 0.409" 44.5mm x 10.4mm			
<b>APRD192</b> 	3.74" x 0.32" 95mm x 8.15mm	Paper/cardboard tagging, Documents, file folders (e.g. medical, dental, legal etc.), envelopes and booklets	Dielectrically matched to papers, cardboards and similar printed stock. Extremely tolerant to close placement of multiple tags.	Allows tags to be placed on documents or files where these documents will be tightly packed together with many tags in close proximity to each other. These tags have minimal chance of shadowing (hiding each other) from the reader





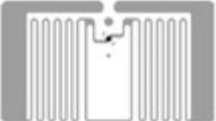
## Specification

### Inlays: High Dielectric Family / Automotive (Tires, Windshields)

Product	Antenna Size	Application	Features	Benefits
<b>APRD193</b> 	3.66" x 0.748" 93mm x 19mm	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.
<b>APRD194</b> 	3.25" x 1.25" 82.5mm x 32mm	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.
<b>APRD195</b> 	0.67" x 0.59" 17mm x 15mm	Pharmaceuticals, Healthcare, vials/ampules, small glass objects and small liquid filled objects	Small form factor, non-near field read tag and tuned for placement on glass containing water or oil based fluids.	Offers read/write distances compatible with usage in pharmaceutical production facilities and handheld reader usage for logistics and supply chain. Designed to provide 30 cm / 12" or greater read distance even when applied to vials containing water based fluids.
<b>APRD196</b> 	0.67" x 0.59" 17mm x 15mm	Pharmaceuticals, Healthcare, vials/ampules, small glass objects and small liquid filled objects	Small form factor, non-near field read tag and tuned for placement on glass containing water or oil based fluids.	Offers read/write distances compatible with usage in pharmaceutical production facilities and handheld reader usage for logistics and supply chain. Designed to provide 30 cm / 12" or greater read distance even when applied to vials containing water based fluids.

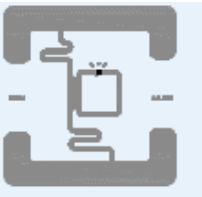

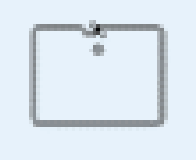

## Specification

### Inlays: Specialized Retail

Product	Antenna Size	Application	Features	Benefits
<b>APRD197</b> 	1.97" x 1.18" 50mm x 30mm aka "30 x 50"	Retail, apparel, hang-tags, joker tags, airline baggage, labels and document tracking.	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.
<b>APRD198</b> 		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.
<b>APRD199</b> 	1.57" x 0.61" 40mm x 15.5mm	Specialized tag designed for the most challenging retail and apparel applications and in handheld environments.	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.
<b>APRD200</b> 	1.06" x 0.38" 27mm x 9.7mm	Jewelry, Cosmetics and other smaller metal or metalized objects	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.
<b>APRD201</b> 	0.87" x 0.49" 22mm x 12.5mm			Offers read/write distances in the order of feet/ meters unlike other competitive tags that are nearfield and only read an inch or two.

## Specification

### Inlays: Form-factor/Orientation Family

Product	Antenna Size	Application	Features	Benefits
<b>APRD202</b> 	1.73" x 1.81" 44mm x 46mm	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.
<b>APRD203</b> 	0.89" x 0.89" 22.5mm x 22.5mm	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.
<b>APRD204</b> 	0.472" x 0.354" 12mm x 9mm	Jewelry, pharma, bottles, liquids, foods, DVD's, access control, loyalty cards, and other anti-counterfeiting applications.	Ultra Compact. Near field access only. Can be used adjacent to metallic objects.	Fits very small objects normally challenging for RFID. Close proximity read zone for added security. Extended read range enabled through appropriate placement to conductive surfaces.
<b>APRD205</b> 	3.701" x 0.228"*** 94mm x 5.8mm** **3.701" x 0.12" / 94mm x 3.05mm without inlay chip targets (not electrically significant - used for chip mounting only).	Book spines, door edges, cigarette boxes, small package labels, narrow form factor assets.	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 APRD188 /APRD189 performance in an ultra narrow form-factor.



# Reader

Our readers are built for the challenging environments . They are robust, tough and high performance even in the most challenging conditions. Advanced “filtering” and “intelligence” that competitors do not possess. This benefits you with less network traffic, fewer additional pieces of network equipment and lower setup and maintenance costs.



Product Number	APR206	APR207	APR208	APR209
Type	Enterprise (New)	Enterprise	Commercial	Commercial
Self Optimizing	Yes	No	No	No
PoE Transmit Power	World's Highest	N/A	Good	Good
Protocol	ARP (LLRP Coming Soon)	ARP/LLRP	ARP	ARP
Operating System	Linux	Linux	Linux	Linux
Memory	512 Mbytes RAM 4 Gbytes Flash	64 Mbytes RAM 64 Mbytes Flash	64 Mbytes RAM 64 Mbytes Flash	64 Mbytes RAM 64 Mbytes Flash
# of Antenna	Up to 4	Up to 4	Up to 4	1 internal smart-antenna + 1 optional external
GPIOs	4 in / 8 out (Isolated)	4 in / 8 out (Isolated)	2 in / 2 out (TTL)	2 in / 2 out (TTL)
LLRP	Coming Soon	Yes	No	No

# Reader



Product Number	APR210	APR211	APR212
Type	Handheld – WiFi b/g/n 2.4GHz, Bluetooth, Wireless, GPS	Handheld – WiFi b/g	Handheld – WiFi b/g, Bluetooth, Wireless, GPS
Operating System	Android 4.4 (Kit Kat)	Windows Mobile 6.5	Windows Mobile 6.5
CPU/Mem	Quad-Core 1.3GHz 1 GByte RAM 4 GBytes Flash	Single-Core 820MHz 256 MBytes RAM 256 MBytes Flash	Single-Core 820MHz 256 MBytes RAM 256 MBytes Flash
Antenna	min 4dBic	max 3dBic	max 3dBic
Scanner	2-D Barcode	1-D Barcode	2-D Barcode
Camera	N/A	N/A	3 Megapixel

# Antennas

Alison provides a range of circular polarized antenna designed to meet the most challenging applications. While Alison readers are designed to work with any antenna with a suitable gain, the antenna here have been specifically designed to be paired efficiently with our readers. These antenna also work with any RFID reader. The ALR-8698 is an example of an antenna that has a narrow beam and high gain that is more unusual in the industry and can offer low power readers greater performance.

Product no	APA213	APA214	APA215	APA216	APA217
Frequency	865-867MHz 902-928MHz	865-868MHz 902-928MHz	865 – 928MHz	866 – 928MHz	865- 960MHz
Gain	8.5dBic	6dBic	8.5dBic	11 dBic (FCC) 10dBic (ETSI)	8.5dBic
Size	9.84" x 9.84" x 0.55"	5.04" x 5.04" x 0.79"	10.16" x 10.16" x 1.42"		10.2" x 10.2" x 1.32"
Cable/ Connector	Inset SMA male connector		No cable / inset RTNC (i.e. any cable)		20ft (6m) w/RTNC
IP Rating	IP67				IP54

# Awards & Certifications

## EPCglobal certified



The certification mark signifies that hardware products have been tested and should operate according to EPCglobal Inc Standards, such as the UHF Generation 2 Air Interface Protocol standard ratified in December 2004



## 2014 CW 100 by Connected World Magazine

The CW 100 represents the top companies that are demonstrating significant market traction and pursuing game-changing technologies in connectivity.



## 2012 CW 100 by Connected World Magazine

The CW 100 represents the top companies that are demonstrating significant market traction and pursuing game-changing technologies in connectivity.



**Best Channel Vendors 2009 in the Data Collection Media Category by Business Solutions**



**Has been selected by RFID Journal Korea as the RFID Company of the Year**



**A winner of the 2007 “Red Herring 100 Global” Award**



**Wins Wall Street Journal Global Innovation Award.**

# Awards & Certifications



**American Business Awards Finalist the Stevies**



**Red Herring 100 Winner**

Red Herring Magazine, a leading voice for technology innovation and venture financing in the high tech world, selected Alison as a Top 100 Winner for 2007



**RFID award from Network Products Guide**

Reader won the Product Innovation



**University of Arkansas Radio Compliance Certificate of Enrollment**



**EPCglobal Inc. Test Center Accreditation Certificate**

awarded the EPCglobal Test Center Program (v.2.0) Accreditation Certificate for compliance with EPC Global Inc. performance test center specifications for certified services and core technical capabilities.



**ISO 9001:2008 Certification**



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