IMPINJ RECEIVES TOP RANKING

Impinj, Inc. announced this week that the company has achieved top ranking in **ABI Research's** 2010 UHF RFID transponder IC vendor report. Recently released, the report includes ABI's independent ratings of Gen 2 RFID tag chip manufacturers for both "Innovation" and "Implementation."

"Backed by the launch of its new Monza 4 product line, IC manufacturing capacity expansion, on-going tag chip cost reduction efforts, plus the majority share position of UHF RFID tag chips sold in 2010, Impinj secured the top spots in both Innovation and Implementation, ranking first overall among its three primary competitors," said Mike Liard, research director at ABI.

Dr. William Colleran, CEO, Impinj, Inc.

According to the report, several factors contributed to Impinj's high Innovation ranking, including strong product development, significant technology leadership, effectiveness driving industry standards and active participation in RFID awareness and education efforts. Similarly, a broad set of metrics drove Impinj's top Implementation score, including the

TAGSYS RFID Offers New Market Approach

As the AIDC industry begins to experience more opportunity than any time in its history, vendors and resellers are searching for novel ways to take their offerings to market. Among those leading the way is **TAGSYS RFID**. Company CEO Alain Fanet recently announced a new business model for "e-connecting" goods using item-level RFID. In the following article, Fanet explains the model and why he believes it is a game changer.

Alain Fanet, CEO, TAGSYS RFID.

Fanet told *SCAN/DCR*, "Technology evolution brings diversity; our mission is to manage it. Our goal has been to develop standard RFID systems for managing complexity and diversity. We want to offer a scalable and flexible business intelligence platform. Henry Ford once said, 'You can have any color you want as long as it's black.' That thinking just wouldn't stand today. Standardization is a must if RFID is going to see explosive growth. But, we also have to be able to cater to specific needs of our customers. By offering subscription-based, managed services, we can utilize standardized technology behind the scene, while at the same time, offering customers solutions that meet their individual needs. And, we can keep their investment costs down.

Continuing, Fanet stated, "We have been the world's largest player in the RFID library vertical. Each library wanted its own design. TAGSYS used the same framework but added customization to suit each customer. We can't afford to create a complete new technology each time and expect to drive down adoption costs."

Before continuing, here are some facts about the France-based RFID pioneer:
■ Unique 15-year expertise dealing with complex environments

- 99+% performance and systems reliability
- Over 500 customers in 40 countries
- Delivered over 400 million tags and 150,000 readers
- One hundred employees with offices in the U.S., Europe, and Asia
- Among the leading RFID companies
- Large RFID portfolio of IP and patents
- More than 100 partners and integrators worldwide
- More than 30% of budget allocated to R&D each year.

A shift in the market?

Are customers interested in owning technology, or do they simply want to receive the benefits technology provides? The industry has come to view technology as nothing more than a vehicle for carrying information. Software is the key to getting the most benefit from technology. So, now we're back to the premise being put forth by TAGSYS. Maybe what customers really want is someone to handle all their tracking needs for them and provide them with the data they need.

"Technology evolution brings diversity; our mission is to manage it. Our goal has been to develop standard RFID systems for managing complexity and diversity. We want to offer a scalable and flexible business intelligence platform. Henry Ford once said, 'You can have any color you want as long as it's black.' That thinking just wouldn't stand today..."

**Alain Fanet, CEO,
TAGSYS RFID,**

"RFID is not just a technology," said Fanet. "It is an efficiency provider. It improves quality. It's a method of anti-counterfeiting. Supply chains are very complex. Manufacturing may occur in China, while backend operations are located in India. Actual sales may occur in the U.S. So, when you have a system like this, who pays for tracking procedures? Everyone is trying to capture value from the technology, but no one wants to bear the cost? There is a shift occurring from capturing technology value to capturing value from the use of technology—it's services."

This may sound like a simple play on words, but its meaning is worth noting. TAGSYS is offering users the chance to capitalize on RFID benefits with almost no disruption to their operations. And, users don't have to make a giant monetary investment upfront. Nor do they have to worry about technology evolution/obsolescence.

"TAGSYS has tried to create an open and modular system…a framework that allows for upgrades," Fanet explained. "Almost all changes to a system can be handled without interrupting customers' business operations.

"Modularity enables us to offer a large amount of variations with respect to the services we provide," Fanet continued. "For instance, we can provide tags or license our tag designs to customers. If they choose the latter, they can purchase tags wherever they want. We'll collect royalties. When it comes to software as a service (SaaS), there are also many options. In one scenario, customers can license software from TAGSYS and have us run it for them. Or, they can license software from our partners. In yet another scenario, they can use a subscription fee model. In this option, we run the software for them in our facility, while guaranteeing no disruptions or security breaches."

In the new TAGSYS model, users will be charged according to the size of the plan—how many stores/locations/etc. Fanet said the company will not charge on a transaction basis. "This is a chance for retailers and other companies in the global supply chain to optimize productivity without investing in actual hardware/software," said Fanet. "They can add value to their operations, with a low-risk, scalable RFID tracking system."

Lease versus subscription
When asked how their model differs from a lease, Fanet replied, "This is not a 'buy-when-done' system. It's an Internet-based service. We are providing a complete, RFID, item-level, tracking solution as a service."

Closing
"We are using our RFID experience to create best-of-class item-level tracking systems," said Fanet. "We have actual systems in use with proven technology benefits. We offer 99% reliability, and we never move on a project unless we are sure we can help the customer. We'd rather pass on a sale than risk the negative publicity from a system that doesn't do the job.

"With our latest go-to-market-strategy, we believe we can enable more companies to receive RFID benefits by lowering use costs and risks."

For more information: **TAGSYS RFID**, King of Prussia, PA, PH (408) 802-7096, Email: maria.kaganov@tagsysrfid.com. *SCAN*

---

company's number one market share, leading competitive position, and strong customer support. Impinj's Gen 2 tag chip volume far outpaces the field, establishing a majority share position.

"It's gratifying to be ranked the top UHF RFID tag chip vendor by ABI during what has been a breakout year for RFID," said William T. Colleran, Ph.D., president and CEO at Impinj. "We saw huge growth in 2010 with unprecedented demand for Monza tag chips, and we expect continued worldwide market expansion in 2011. Impinj will continue to bring innovative products to market, add capacity and work closely with our customers to maintain this leadership position." *SCAN*

AIM ANNOUNCES NEW TECH COMMITTEE CHAIRS

The board of directors of **AIM**, recently announced the election of Mr. George Wright IV, **Product Identification and Processing Systems** (**PIPS**), as TSC chair and Dr. Patrick King, **Michelin Americas**, as REG chair for 2011. Their elections fulfill the committee guideline for annual rotation of the chair position. Election of the vice chairs to rotate into the chair position for the following year will take place at the meetings in January 2011. *SCAN*

PBI Offers New Sales Data Benchmarking System

AIDC 360 to replace AIM Exchange.

You know you're getting up in years when you frequently hear yourself saying: "I remember when…." That was the case when we recently spoke with Paul Bergé, of **Paul Bergé International** (**PBI**). Bergé, a pioneer in the industry and a member of the **AIDC 100**, called us to let us in on an important announcement. PBI is picking up where **AIM** Exchange left off when it was discontinued in 2010 due to a lack of funding. Going forward, PBI will run the sales and data benchmarking program under the name AIDC 360.

Oddly, we can remember talking about the need for accurate industry statistics as long as 15 years ago. The thought at the time, by AIM Board Members (many who were CEOs of public companies), was that the investment community needed accurate numbers with regard to the size of the AIDC industry and each of its sub-sectors. Without these numbers, it makes it difficult to secure major investments in our niche.

There were, and still are, firms such as **Venture Development Corp.** (**VDC**), **ABI Research**, **Frost&Sullivan**, and others who provided market estimates. But, numbers were always suspect for a variety of reasons. First, most of the studies were

funded/commissioned by the very companies being analyzed. Many wondered if a research firm would go back to bar code vendor sponsors and tell them there market was totally stagnant—if that was the case.

Perhaps more realistically, it just seemed impossible to get accurate numbers. Public companies are forced to share their sales figures, but most private companies balk at giving up competitive data. Some smaller companies were also hesitant to share pertinent information on emerging markets for fear of having a larger vendor swoop in and take the market from them. On top of all this, the three-tiered distribution model used by most of our major players tends to skew results. A vendor sells to a distributor; a distributor sells to a VAR; a VAR sells to a user. The same product may be sold three times or more. How do you account for these variances? That was the challenge of the day back in the mid-1990s.

Paul Bergé, president, Paul Bergé International LLC / AIDC 360.

Even back then, AIM tried to do its own statistics program. Bergé reminded us that it was called the "Shoe Box" program. AIM members were encouraged to anonymously drop a slip of paper in a slotted shoe box with their sales numbers on them. According to Bergé, they're still trying to get accurate numbers.

"For five years, AIM Global has been offering its members a quarterly sales data benchmarking program," Bergé told *SCAN/DCR*. "I was the one running the program, processing the data, and producing the reports. It was called AIM Exchange. By mid 2010, this program died a death by lack of attention by AIM. With the economy just beginning to ramp up, and the lingering effects of the 2009 recession, there simply were no funds available.

"I decided to re-launch the program starting in Q1 2011, and that is what I have done," he continued. "It is called AIDC 360 because it gives a roundabout view of the AIDC market. I have, so far, received very positive reactions, and it looks like it will be a success."

More on AIDC 360

AIDC 360 is a new generation company that provides valuable market intelligence to its clients. Since 2004, Bergé has been servicing AIDC vendors. Now, operating under a new identity, AIDC 360 will support companies in their business strategies using the most up-to-date and accurate

information. Here are some fast facts about AIDC 360:

■ AIDC 360 is designed for and by manufacturers in the Automatic Identification and Data Capture industry
■ AIDC 360 Charter companies can influence the design and contents of the various programs
■ AIDC 360 is operated under FTC regulations and complies with anti-trust guidelines
■ AIDC 360 reports actual sales numbers each quarter. We do not provide forecasts
■ AIDC 360 is blind. Sales data is reported by code names but names of participating companies are mentioned in the reports
■ AIDC 360 reports are published 90 days after the end of the quarter
■ AIDC 360 avoids the common mistakes of duplication by not looking at the channel
■ AIDC 360 reports are only available to participating companies and will never be disclosed to others, including analysts and media channels.

AIDC 360's strategy is to build on its know-how and produce quarterly reports in the following market segments:

■ Bar Code Scanning
■ Mobile Computing
■ Barcode and RFID Printers
■ RFID Readers
■ RFID Tags and Inlays

"Because of **SEC** rules, all responses must be blind," Bergé told *SCAN/DCR*. "We are also required to have a set minimum of companies involved in the studies. To avoid any problems, we will not provide reports until after the close of our participants' quarters. We will begin collecting data April 1, and our first report under the new brand will come in July.

"We won't be doing any speculating—just reporting," Bergé continued. "But, we will be drilling down deeper than ever before. For instance, in the scanning sector, we will look at handhelds versus fixed scanners. We will look at laser versus imaging….standard linear versus omni-directional. No one will know where the numbers came from. And, the results will only be available to participants—no outsiders."

The subscription-based system will require a one-year commitment. The cost will be around $2,000 a quarter. That fee will drop to $500 quarterly if the customer only wants top-end numbers. Bergé said there will be discounts up to 25% for customers who want to participate in more than one category.

About Bergé

Bergé is a renowned expert in international sales & marketing of technology products and systems, including Automatic Identification and Data Capture. He started his consulting business in 1995 to assist companies in building and managing international operations. From developing market strategies and locating strategic alliance partners, to product line analysis and product search, PBI helps manufacturers establish a strong presence in international markets.

> **"....we will be drilling down deeper than ever before. For instance, in the scanning sector, we will look at handhelds versus fixed scanners. We will look at laser versus imaging….standard linear versus omni-directional."**
> **Paul Bergé, president, AIDC 360,**
> **Paul Bergé International.**

Bergé's knowledge of the AIDC market is based on 35 years of active participation in key business development roles. He is well-positioned to produce this benchmarking program that provided valuable information to product managers and business development executives for the last six years.

Closing

Before we finished our interview, Bergé told us, "Participation is getting better. The need for the type of information we provide will never go out of style. AIDC 360 is tailored for executives in business development, product management, and strategic sales."

For more information: **AIDC 360, Paul Bergé International LLC**, Cincinnati, OH, PH (513) 871-6657, FX (513) 672-9679, Email: aidc360@gmail.com, Web site: www.PaulBergeInternational.com. SCAN

Checkpoint Launches Open EPC Number Management Solution

Checkpoint Systems is well-known in the retail sector, having spent 40 years supplying RF shrink management, apparel labeling, and RFID solutions. With that in mind, it shouldn't be surprising to hear that the Thorofare, NJ-based vendor has developed a stand-alone number management solution that frees retailers and their suppliers to purchase RFID labels from any Service Bureau Provider.

Checkpoint's *Open EPC Number Management Solution* appears to solve the problem of creating/assigning sequential serialized numbers for item-level tracking in the retail sector.

Alan Sherman, director of marketing, Checkpoint Systems.

As the retail apparel industry increasingly adopts RFID-based solutions to improve inventory management, reduce out-of-stocks, reduce working capital, and increase sales, the challenge to vendors and retailers lies in managing the unique tag numbers required for every single one of hundreds of millions of items. The problem is even more challenging when suppliers (sources) are asked to tag items at the point of manufacture. Some companies may have facilities all over the globe. So, how does a company, say **Wrangler**, get the serialized numbers it needs while ensuring there is no overlap? Companies with multiple facilities may also be working with multiple label providers/service bureau providers. That's where Checkpoint's number management solution comes in.

"The source tagging trend is very important in the retail arena," said Alan Sherman, Checkpoint director of marketing. "Everyone is looking at ways to manage the challenges of making this happen. This is the time for adoption of RFID by retail, but with it comes a number of complexities."

Some basics

One of the basics of EPC number management is the Global Trade Item Number (GTIN).
GTIN facts:
■ A long, fixed number for a particular item or stock-keeping unit (SKU).
■ GS1, the international association responsible for global standards for global supply chains, created a data structure used to identify products and services.
■ A GTIN consists of 8, 12, 13 or 14 digits.
■ This number is typically encoded into a bar code commonly found on products.

Serialization facts:
■ The GTIN only identifies a product or SKU.
■ Each item must have a unique serialization number or the system will not be able to effectively distinguish one item from the next. This is the key to RFID data integrity.
■ Since the RFID tag must uniquely identify each

and every item separately, a serialized number is added to the GTIN, creating a Serialized Global Trade Item Number or SGTIN.

■ The serialization number consists of a number between 1 and 256 billion.

Consider the complexities that a vendor or retailer faces in its operations and in managing EPC numbers:

Geographic Range: Multiple facilities across the world may be manufacturing a given product

Volume: Thousands of SKUs and millions of individual items

Multiple RFID Label Suppliers: Labels can come from a variety of solution providers worldwide

Diverse Encoding Methods: Labels may be encoded in large volumes (bulk encoding), individually (label printing) or outsourced entirely (service bureau).

Despite these challenges, it is critical that EPC numbers are assigned without duplication and that all of the data is tracked accurately. Managing countless combinations of GTIN and serialized data without losing the freedom to use multiple label providers can be a daunting task. Checkpoint understands that the provision of service bureau services and consumables should be entirely separate from managing EPC numbers.

Raj Jayaraman, senior director of merchandise visibility solutions, Checkpoint Systems.

VICS Initiative

For the past year, *SCAN/DCR* has been touting the VICS Item-Level RFID Initiative as a game-changing program for RFID adoption. Checkpoint is a big supporter, as well. "VICS is driving adoption in a major way," Sherman told *SCAN/DCR*. "Item-level tracking, along with the necessary serialization, will enable retailers to look at any garment in the store, identify if it is on a rack or in a dressing room, and determine its color, size, style, etc."

Raj Jayaraman, Checkpoint senior director of merchandise visibility solutions, added, "Checkpoint is a proud member of the VICS steering committee. Retailers are less concerned about if the technology works and more on the challenges of serializing numbers. At any given time, there are hundreds of millions of items shipping around the world. Service bureau suppliers often offer number management as an add-on to the provision of tags. When a vendor or retailer obtains number management services from its service bureau supplier, the company is

locked into purchasing labels from that particular supplier. When bundled, customers lose the ability to obtain service bureau services and consumables from multiple providers."

Some clarification

At this point, we were seeing some value in the Checkpoint offering, but we still weren't clear how the company could be sure some other company couldn't be offering duplicate numbers. Jayaraman explained that everything depends on a supplier choosing to stay with one number provider. Let's say **GS1** assigns a block of numbers to **Levi Strauss**. As long as Levi Strauss works only with Checkpoint, there is no duplication because Checkpoint controls the block. Checkpoint can subdivide the block of numbers to all the service bureaus working with Levi Strauss at it worldwide facilities. The supplier is free to choose any label supplier it wants, as long as only Checkpoint is handing out the serialized numbers. The company code differentiates the serialized number from a number being used by another consumer goods supplier.

Key benefits

Checkpoint's hosted solution offers a number of key benefits:

■ Generates unique serialized EPC numbers adhering to **EPCGlobal** requirements

■ Manages and provides EPC numbers by SKU centrally and distributes them to consuming applications worldwide such as service bureaus and in-plant label printing applications

■ Provides a standard interface to communicate with external consuming applications

■ Ensures guaranteed delivery of numbers to consuming applications

■ Delivers a standards-based solution that does not depend on one single supplier's number management solution, ensuring flexibility in choice of label vendors

■ Leverages a cloud-based solution for ease of implementation and management.

■ It is built on the **Oat** Foundation Suite, one of the most mature and robust software platforms in the industry today.

Comments from the top

"We are pleased to offer apparel retailers and their suppliers the only unbundled number management, labels, and tagging solution available," noted Per Levin, Checkpoint Systems' worldwide president, merchandise visibility solutions. "By giving retailers and suppliers maximum flexibility to work with the optimal RFID suppliers, we hope to help them to manage the complexity of logistics issues with a robust, yet simple, number management solution. This approach will allow retailers and suppliers to overcome a major hurdle in embracing RFID and

harnessing its power."

"We often hear from our customers that they want multiple service bureau suppliers and don't want to be forced into buying from only one vendor," added Prasad Putta, EVP, Checkpoint Systems' merchandise visibility solutions. "Checkpoint's Open EPC Number Management solution frees apparel retailers and manufacturers from getting locked into one provider. It offers them flexibility to obtain service bureau services and consumables from multiple providers, while still ensuring unique number management."

Closing

Ending the interview, Sherman told *SCAN/DCR*, "Our initial target is brand suppliers, but we will be working with retailers, as well. The primary goal, at this point, is serializing, and the Open EPC Number Management Solution is available immediately. That said, Checkpoint does offer modules for other uses of RFID."

For more information: **Checkpoint Systems, Inc.**, Thorofare, NJ, PH (800) 257-5540, Email: Jennifer.Henry@checkpt.com. *SCAN*

Honeywell Tackles Poor Quality Bar Codes

In early January, **Honeywell Scanning & Mobility** announced the launch of its new Voyager® 1200g linear scanner. The device is designed to shorten read time, improve productivity, and minimize human error associated with manual data entry. According to Honeywell, in the retail arena, the Voyager 1200g can improve throughput, leading to a more efficient retail environment with shorter wait times, and ultimately, increased customer and employee satisfaction.

One of the best aspects of the scanner, according to Taylor Smith, Honeywell director of product management—scanning, is its ability to read poor or damaged bar codes.

Smith stated, "There are billions of bar codes scanned every day, each of which contains different characteristics that may make readability difficult. At Honeywell, we've found this to be a real pain point for our end users. The Voyager 1200g excels at reading any type of linear bar code, damaged or otherwise."

The Voyager 1200g was designed specifically with retailers and small and medium businesses (SMBs) in

mind. It provides reliability with an IP42 rating and fewer components, leading to decreased downtime and service costs. In addition, the Voyager 1200g simplifies installation by providing automatic configuration of the device based on detection of the type of interface cable, as well as the presence or absence of a stand. This unique capability, along with tool-free stand assembly, combines to deliver a great out-of-box experience for Voyager 1200g users.

Taylor Smith, director of product management, Honeywell Scanning & Mobility.

"Since the acquisitions of **Hand Held Products** and **Metrologic Instruments**, the Honeywell team has worked toward the goal of standardizing all our products on a common platform," Smith told *SCAN/DCR*. "Every new product we launch, going forward, will operate on this common platform. When customers buy our products, they'll know exactly what they are getting.

"As I said earlier, with the new Voyager 1200g, we focused on reducing errors by enabling the scanner to read challenging bar codes," Smith continued. "Each time a worker has to type in a number due to an unreadable bar code, the chance of error increases. Whether it is retail, hospitality, or manufacturing, the more codes you can scan, the more errors are reduced."

Smith told us that the Voyager 1200g has very robust software and that the company has been working on the product for more than a year.

"We wanted to improve on our connection with our customers," said Smith. "Honeywell's Remote MasterMind® (ReM) scanner management software provides a quick and convenient solution for IT administrators seeking to manage all scanners within their network from a single remote location. Configuration is a big deal. By improving on our remote management capabilities, we can reduce downtime for our customers and help them better manage their businesses."

The Voyager 1200g has the ability to read standard 1D and **GS1** DataBar™ symbologies, and functions as either a hands-free presentation or a traditional hand-held scanner. It is now shipping on a global basis.

For more information: **Honeywell Scanning & Mobility**, Skaneateles Falls, NY, PH (636) 394-4725, Email: Stephanie.Holm@Honeywell.com. *SCAN*

ISO UPDATES

Standards are constantly evolving, and sometimes it's difficult to keep up. This month, we are focusing on some of the latest news from **ISO**.

Data Structure Standards
- ISO/IEC 15418 GS1 Application Identifiers and ASC MH 10 Data Identifiers and Maintenance
- ISO/IEC 15434 Syntax for high capacity ADC media,
- ISO/IEC 15459 Unique identifiers
  Part 1: Transport units, **in revision**
  Part 2: Registration procedures, **in revision**
  Part 3: Common rules, **in revision**
  Part 4: Individual items, **in revision**
  Part 5: Returnable transport items, **in revision**
  Part 6: Product groupings, **in revision**
  Part 7: - **Withdrawn**
  Part 8: Groupings of transport items, **in revision**
- ISO/IEC 29162 Guidelines for using data structures in AIDC media, **in revision**

Security for Item Management
- ISO/IEC 29167 Air Interface for file management and security services for RFID,
  Part 1: Air Interface for security services and file management for RFID architecture—**in revision**
  Part 3: Air Interface for security services and file management for RFID at 13.56 MHz architecture— **in revision**
  Part 6: Air Interface for security services and file management for RFID at 860- 960 MHz architecture—**in revision**

Vocabulary
- ISO/IEC 19762
  Harmonized vocabulary,
  Part 1: General terms relating to AIDC
  Part 2: Optically readable media (ORM)
  Part 3: Radio frequency identification (RFID)
  Part 4: Conceptual relationship between terms
  Part 5: Locating systems

These standards are all published unless I have noted they are in revision. Further details on these can be obtained from http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_tc_browse.htm?commid=45332&published=on

Do you have a point of view? Let me know at steve@hightechaid.com. High Tech Aid specializes in standards and education, but the spectrum of services is much greater than that. When your problem needs have you overwhelmed, then you need to get help and that is why we are here. Call or email us for more information and if you want more technical information, you can visit the web site at http://www.hightechaid.com. **SCAN**

Steve Halliday, president, High Tech Aid.

Check out the www.scandcr.com Web site.