Top 20 automatic data capture suppliers

After a challenging 2009, the ADC market bounced back in 2010 and looks strong moving forward.

By Bob Trebilcock, Executive Editor

In 2010, the automatic data capture (ADC) business bounced back from the recession.

The total market for industrial ADC solutions, those solutions used in factories, warehouses and logistics applications, came in at roughly $10.6 billion in 2010, according to Massachusetts-based VDC Research Group. That's up about 17% from the $8.8 billion spent on industrial ADC in 2009.

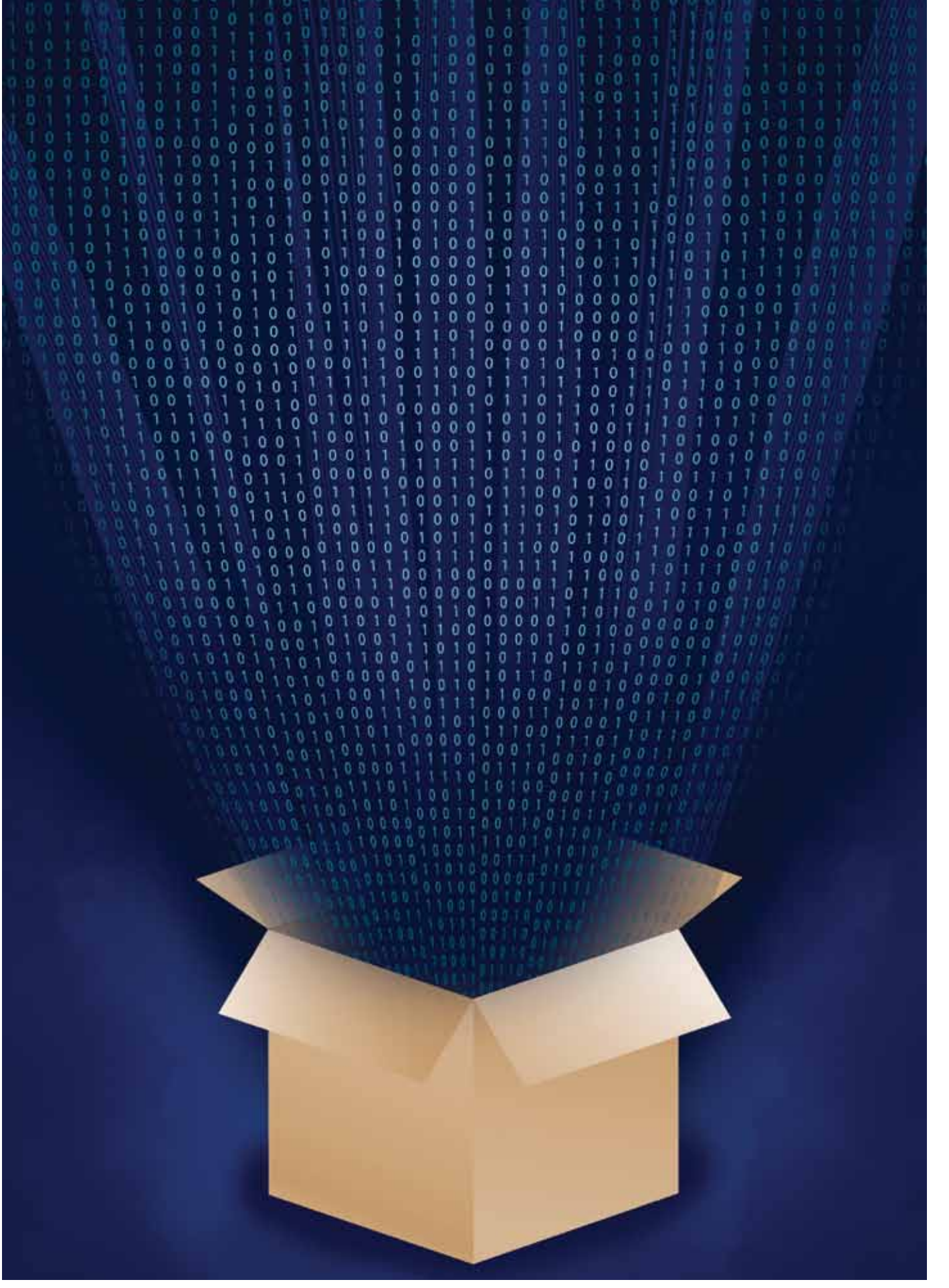
At least for now, 2011 is expected to be another good year, according to Drew Nathanson, VDC's vice president of AutoID. VDC projects the industry to approach $12 billion in 2011 and grow at a compound annual growth rate (CAGR) of 16.6% through 2015, when it is expected to reach $22.867 billion.

The ADC market includes handheld and stationary bar code scanning and imaging devices, bar code printers, consumables like bar code labels and RFID tags, RFID solutions for the supply chain and ruggedized mobile computing solutions for the factory and warehouse. VDC's figures above do not include consumables associated with automatic data collection, such as bar code labels.

Driving that growth is a combination of geography and technology adoption. "We're seeing growth in emerging markets like Brazil and Mexico, Eastern Europe and Asia," Nathanson says, pointing out that the market in China grew 20% off a decent-sized install base. There has also been significant growth in the adoption of imaging technology for 2D bar codes and RFID.

VDC's projections are supported by surveys the firm has done on ADC budgets from end users. "While end user budgets for bar code systems declined by 53% in 2009 as a result of the recession, we're now seeing increased ADC budget allocation in every primary vertical market," says Tom Wimmer, VDC's practice director for AIDC and RFID. The data suggested an 8.5% increase in budget allocations for 2010—and real results were even better—and an approximately 30% increase in 2011.

The 2010 market leaders included familiar faces: Once again, Motorola led with an estimated $1.228 billion in revenue, a 12.5% increase over 2009. Zebra Technologies placed second with $526 million. The top five spots were rounded out by Datalogic with $403.5 million, Honeywell with $380 million, and Intermec



Top 20 ADC suppliers by revenue ($ millions)

Rank	Company	Total 2010 revenues	North American Headquarters	Web site	Bar code printers	Handheld scanners	Stationary scanners	RFID	Mobile computers
1	Motorola	$1,227.9	Schaumburg, Ill.	www.motorolasolutions.com		x	x	x	x
2	Zebra	$526.5	Vernon Hills, Ill.	www.zebra.com	x			x	
3	Datalogic	$403.5	Hebron, Ky.	www.datalogic.com		x	x	x	x
4	Honeywell	$380	Morris Township, N.J.	www.honeywell.com		x	x		x
5	Intermec	$377.5	Everett, Wash.	www.intermec.com		x	x	x	x
6	SATO	$234.7	Charlotte, N.C.	www.satoamerica.com	x			x	
7	TEC	$181.4	Atlanta, Ga.	www.tecamerica.com	x			x	
8	Avery Dennison	$151.2	Pasadena, Calif.	www.averydennison.com	x			x	
9	Psion	$143.7	Hebron, Ky.	www.psion.com/us		x		x	x
10	Hewlett-Packard	$136.4	Palo Alto, Calif.	www.hp.com	x				x
11	Denso	$125.7	Long Beach, Calif.	www.denso-adc.com		x			
12	LXE*	$123.1	Norcross, Ga	www.lxe.com		x	x	x	x
13	SAVI	$118.9	Sunnyvale, Calif.	www.savi.com				x	x
14	Printronix	$98.8	Irvine, Calif.	www.printronix.com	x				
15	Vocollect*	$97.7	Pittsburgh, Pa.	www.vocollect.com					x
16	Datamax-O'Neil	$83	Orlando, Fla.	www.datamaxcorp.com	x				
17	SICK	$80.4	Minneapolis, Minn.	www.sick.com		x	x		
18	Opticon	$75.4	Renton, Wash.	www.opticon.com		x			x
19	Casio Computer	$71	Dover, N.J.	www.casio4business.com		x			x
20	Talla-Tech	$70.9	Tallahassee, Fla.	www.elbitsystems.com		x			x

*Acquired in 2011
Source: VDC Research

(which dropped from the No. 3 spot to No. 5) with $377.5 million. Intermec didn't have a bad year: Revenues were up from $365 million in 2009. Rather, Datalogic and Honeywell performed better.

With business on the ropes, most major players focused on maintaining the status quo; there were no major mergers or acquisitions in 2010, and no real departures from technologies or markets. There have been two significant acquisitions in 2011 that will impact next year's numbers and standings: Intermec acquired Vocollect, the leader in voice recognition technology in March 2011, and Honeywell added EMS Technologies, the parent company of LXE, to its portfolio in June. Depending on how Intermec and Honeywell absorb the new companies, those acquisitions could alter the leader board next year.

Collecting the data

This is *Modern's* 10th-annual look at the leading manufacturers of ADC hardware and solutions. Because the industry includes public and private companies, this is the third year in a row that we asked VDC Research Group to compile the data: Since they are covering this technology every day, they are closer to the market.

To make our list, companies must sell in North America, though the chart includes worldwide revenues. *Modern* does not include resellers, systems integrators or other companies that do not manufacture ADC hardware. Since our readers are primarily focused on supply chain solutions, we do not include companies whose primary focus is the retail checkout counter or non-industrial settings, like hospitals, libraries or resorts. Nor do we include companies that only manufacture consumables like bar code labels and RFID tags.

While the overall market for ADC solutions totaled $10.6 billion, each of the industry segments experienced their own dynamics last year that may have been different from the overall market.

Mobile computing

The market for ruggedized mobile computers reached $2.655 billion in 2010, a 14.5% increase over 2009, says David Krebs, vice president of VDC's mobile and wireless computing practice. Those figures include handheld/PDA devices, wearable mobile computers, and lift truck-mounted devices used on the plant or DC shop floor or in port and yard applications.

Krebs estimates the overall market for mobile computing devices will grow by a compound annual growth rate of 9.4%, reaching 4.16 billion by 2015.

The primary driver in 2010 was pent up demand. Warehousing, transpor-

tation and logistics projects were an important part of that story. "There was some growth from new facilities and investments and the retail sector saw a big rebound," says Krebs. "But the most important factor was projects that had been postponed and got the green light."

Trends Krebs is watching include:

- The extension of the warehouse into the transportation management space and the retail store as companies focus on a closer tie between inventory levels in the store and the warehouse.
- The emergence of new form factors, especially outside the four walls of the plant and warehouse. "The classic brick is still the preferred device for the plant and warehouse," Krebs says. When you look at the transportation space, there is a desire to be more portable, ergonomic and lighter weight."
- While enterprises are extending mobile solutions to more workers, Krebs is not seeing a big migration to smart phones or tablets or operating systems from Android, at least in industrial settings. "At the end of the day, these are slow-moving markets," Krebs says.

As for acquisitions, Honeywell's purchase of EMS gives it more access to the warehousing and distribution market, an area where it lagged the competition, according to Krebs. "Honeywell is strongest in retail, transportation and health care," he points out. "LXE is a long-standing provider of wireless computing with a strong customer base and partner channel."

Scanning and printing

Bar code-related hardware, including printers and scanners, is possibly the most mature of the ADC technology segments. After a disappointing 2009, those markets posted impressive gains last year. Handheld scanners jumped 18.1% to $770.3 million, while the market for industrial fixed scanners increased by 18.3% to $809.1 million, according to Wimmer.

Meanwhile, the market for industrial printers, which includes bar code printers and the RFID printer/encoder market, improved by 13.8% to $1.863 billion.

Wimmer sees growth continuing, with five-year compound annual growth rates of between 6.7% (printers) to 9.1% (handheld scanners).

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—Drew Nathanson, VDC

Similar to last year, the brightest spot is in the 2D and camera-based imaging space, which Wimmer sees nearly doubling by 2015. "The demand for 2D imaging is expected to outpace all other bar code technologies through 2015," Wimmer says. It's being driven by a number of factors including:

- increased requirements to encode more information,
- rising demand to embed scanning functionality into other devices, such as smart phones, tablet PCs, lottery and gaming systems, kiosks and even electronic voting machines,
- the desire to extend data capture platforms and their value propositions, and
- a need to support linear and 2D codes as a means to have a more robust solution and a future-proofed system.

As for mergers in the space, Wimmer says the acquisition of Vocollect should reinforce Intermec's go-to-market strategy. "Intermec's value proposition has always been that they are the one-stop-shop for your ADC needs, covering everything from printers to networking gear. The one technology they did not have was voice," says Wimmer.

RFID

RFID remains the fastest growing of the ADC segments, expanding by 19.6% to $4.523 billion in 2010. The market is expected to post compound annual growth rates of 25%, topping out at $13.838 billion by 2015, according to Nathanson.

The most important RFID story may not be the growth in numbers, but where and how RFID is now being used in an industrial setting. Instead of tagging cartons and pallets to track goods through the warehouse, the action has shifted in several key ways.

"In the retail market, about 80% of the activity is in the retail store," says Nathanson. Major retailers, he adds, are tagging items in the store to get a more precise handle on inventory on the shelves than they get tracking point of sale information. That may explain why Wal-Mart ordered nearly 19,000 handheld RFID units. In the future, Nathanson expects to see tagging moved to the point of manufacture, similar to bar code labeling.

In addition, RFID is being used to authenticate products. In Korea, for instance, there is a mandate to have 50% of pharmaceuticals tagged with RFID by the end of 2012. But RFID is also being used to authenticate Chilean sea bass, liquor and cigarettes in some countries. "Talk to customers, and authentication and anti-counterfeiting are two of the most desired applications for RFID," says Nathanson.

Finally, RFID technology is being embedded into other scanning engines as well as tools, parts and components for tracking purposes. That includes products as diverse as a scalpel or other medical device in a surgical kit to work in process on the manufacturing floor to the 3,000+ tags Boeing expects to put on a commercial aircraft. "RFID is becoming part of a broader overall solution package and not just tracking cartons and pallets," says Nathanson. "The supplier community is doing a great job of providing solutions to help them get there." □