Not Your Father's
POS
Printer

Imaging, graphics capabilities expand

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Epson's
TM-H600011

ONCE AMONG THE MOST BASIC pieces of equipment sold by retail VARs, receipt printers are becoming increasingly sophisticated. While there will always be a market for models that do little more than generate a simple record of POS transactions, the use of units with a myriad of enhancements clearly taking hold.

In perhaps the most significant of recent developments, Epson America has launched the TM-H6000II, the first supermarket POS printer to offer a digital check imaging function. The TM-6000II represents a new class of POS printer in that it combines slip, impact and two-color thermal printing with integrated digital imaging technology—the latter integrates electronic check conversion (ECC) and

Ithaca/ Transact has launched an "A List" program for POSjet VARs

check imaging into retailers' existing POS systems. Whenever a check is inserted into the printer, a component dubbed TransScan digitizes it and transmits its image to the back office for processing. Receipt printing occurs at a speed of 17.7 lines per second for two-color and 53 lines per second for single color.

According to Bud Weist, Epson's director of sales and marketing, System Device group the TM-6000II affords a number of unique advantages over other POS printing options. Notably, the company's line of Connect-It options renders the unit compatible with proprietary systems and best-of-breed solutions alike, enabling end-users to maximize IT investments they have already made. Support for full IBM 4610 mode emulation lets retailers upgrade printer speed and performance without buying entirely new POS systems, while support for RS-232 and bi-directional parallel interfaces, RS-485 and USB PlusPower allows merchants to select the interface that meets their current requirements, then upgrade as needs change.

Further, the printer's check imaging capability eliminates the need to purchase specialized credit authorization terminals, which usu-

ally cost $400 to $600 per register. Handling and routing expenditures associated with processing, storing and routing paper checks decrease by approximately 38 percent, with average processing cost per check decreasing from 34 cents to 21 cents. Access to complete checks, rather than MICR codes alone as with most check-scanning terminals, facilitates cash flow, increases interest income and gives retailers valuable customer information for targeting programs. ECC means merchants can identify fraudulent transactions much faster than with

DIGITAL RECEIPTS

The Association for Retail Technology Standards (ARTS) announced at the recent NRF Show in New York the availability of the IXRetail digital receipt XML schema. The digital receipt is an electronic purchase verification that can be issued by retailers, financial institutions or any other industry that provides consumers proof of purchase.

"We are extremely pleased that the value of the IXRetail digital receipt has been immediately recognized," says Richard Mader, executive director of ARTS. "AfterBOT, a member of the Digital Receipt Development Group, has announced the first implementation. In the POS and retail management areas, Sales Management Systems (SMS) has made a digital receipt feature available in its QuickSell Commerce software."

The benefits of the digital receipt are maximized by the IXRetail schema. The standard creates a single data interface for all systems serving retailers, consumers, manufacturers and third parties.

The AfterBOT ReceiptPLUS Web-service solution has been implemented at Smart & Final Stores, the 223-store warehouse grocery retailer based in Commerce, California. AfterBOT's ReceiptPLUS solution, which is the first digital receipt implementation based on the IXRetail digital receipt ARTS standard, provides retailers with the ability to create, deliver and archive digital receipts using in-store POS transaction data.

"Superior customer service is the cornerstone of our success," says Bob Graham, vice president of Store Systems at Smart & Final. "Once fully implemented, AfterBOT's innovative ReceiptPLUS solution will give our customer the ability to securely view their receipt details and related purchase information on our Web site, a unique service we are proud to be the first to provide."

Digital receipts provide benefits to all

parties in a sales transaction, proponents claim. They provide a new method of communicating with customers for marketing and targeted promotions, help reduce third-party credit charge-backs and fraudulent returns, and enable proximity payments through wireless devices such as cell phones and handheld PDAs.

In addition, the digital receipt provides manufacturers and third parties with a standard method to obtain sales information for making production and promotion cycle adjustments, streamlining warrantee and rebate claim processing, and assists in the efficient resolution of credit card purchase disputes between retailers and banks.

Interested parties can download the new specification from the ARTS Web site at www.nrf-arts.org.

traditional check conversion; average check processing time is reduced from 12 days to four days.
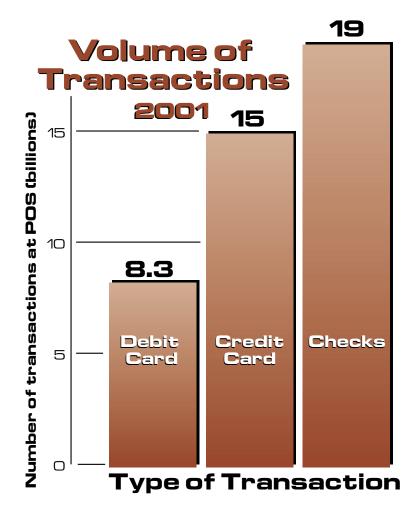
In general, hardware vendors are responding to louder cries for electronic receipt capture and storage capabilities. "Merchants want a more efficient way than paper to maintain and retrieve receipts," states George Devitt, senior vice president and chief marketing officer of Hypercom, which supplies credit authorization terminals. Hypercom has developed epicReceipts database software for uploading receipt data to a secure server. Information may also be downloaded to receipt print-ers for printing onto paper should the need arise. Both Transact Technologies, Ithaca and Citizen-CBM America report work on adding electronic journaling features to their printer lines.

GRAPHICS CAPABILITIES

Demand for printers that can generate color receipts, either with or without graphic embellishments, is also heating up. Gregg Gallagher, executive vice president, Citizen-CBM America, attributes this trend to retailers' growing recognition of the key role better-looking receipts can play in communicating with con-

Star Micronics' TSP600 thermal printer

Volume of Transactions 2001

Number of transactions at POS (billions)

	8.3	15	19
	Debit Card	Credit Card	Checks

Type of Transaction

Note: Despite the rapid growth in both debit and credit card transactions, checks are still the largest non-cash form of payment used at POS.

Source: Federal Reserve, 2001, U.S. Snapshot and Extrapolation Study

sumers. At press time, Gallagher's company was preparing to introduce the CBM1000 Type II printer, which will feature two-color thermal printing capability.

"Merchants see the use of color printing and images on receipts and combination receipt/coupons as an effective way to not only build their brand image, but to cultivate repeat business," concurs Christophe Naasz, technical sales manager, Star Micronics. Star Micronics' new TSP600 Series thermal printers, promoted as low-cost, high-speed units offering dual color printing support, print 25 or 33 lines per second at a resolution of 203 dpi they company says. LogoStore software allows for internal graphics and coupon storage.

TWO-COLOR PRINTING

Two other recent introductions to the vendor's line—the TSP700 Series and the TSP800 Series—permit two-color printing at a rate of 60 and 50 lines per second, respectively. The TSP700s can store multiple logos or

coupons, enabling store logos or coupons to be produced with every receipt even if a serial printer is being utilized. The TSP800s feature logo storage and handle paper measuring 4.4" wide for additional flexibility.

Ithaca/Transact was out of the gate early with its POSjet 1000 thermal inkjet printers, which generate two-color receipts in any combination of red, blue, green and black. Jim Stetson, senior vice president, sales and marketing, claims the products afford VARs more cost-effective two-color printing than dot-matrix and traditional thermal printers. "For

Ithaca POSjet 1500

example," Stetson asserts, "our research shows that over a five-year period, expenditures for operating a thermal inkjet printer are 10 percent to 30 percent less than thermal. Inkjet paper is half the price of thermals. The price of consumables goes down, too. Our inkjet unit can print about 7 million characters with one cartridge. A retailer would need two to three printer ribbons to perform the same operation."

Stetson adds that Ithaca/Transact distrubutes its "TCO Calculator" to help its reseller partners figure out exactly how much money retailers would save using thermal inkjet receipt printing technology, based on their individual printing requirements. The firm has also launched an "A List" program for VARs that carry the POSjet line. Under its auspices, channel players learn how to qualify prospects for color receipt printing, implement printing solutions that incorporate graphics capabilities and to convey the cost of ownership proposition to potential customers. "A List" VARs are also eligible for additional marketing assistance, special offers and leads from Ithaca/Transact in selling its POSjet products.

"Wireless applications appear on our **radar screen** on an almost daily basis."

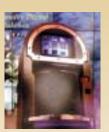## Gregg Gallagher, Citizen-CBM

THE WIRELESS WAIT

Meanwhile, interest in wireless receipt printing options continues on an upswing. "Wireless and other mobility-based applications are appearing on our radar screen on an almost daily basis," notes CBM's Gallagher. He says his firm's future plans call for addressing such a trend via a "variety of approaches"; details will be released sometime down the road.

Although all retail verticals are becoming or will become receptive to wireless receipt printing because of its usefulness in line-busting remote POS applications, the hospitality segment merits particular attention from VARs aiming to promote the technology, contends Keith McNally, senior vice president, business development at Ameranth Wireless. Ameranth's wireless printing software allows handheld computers used by wait staff for order-taking purposes to be configured to print receipts at diners' tables.

"The fact that wireless reduces [diners'] wait for receipts and [therefore] enhances operational efficiencies is part of the reason it is gaining favor among restaurateurs," McNally observes. "However, patrons—and, in turn, operators—also like it because of the security benefits [inherent in] eliminating the need for servers to walk away with peoples' credit cards in order to process the transaction and print the receipt." **RSR**