

Partner Tech Adds AI to Self-Checkout Systems with Intel® Core™ Processors

Customers increasingly choose convenience of self-checkout systems (SCO). Partner Tech's Starling, Alfred and Paula provide intelligent, secure and configurable systems for all store sizes



Self-checkout (SCO) point-of-sale (POS) systems have rapidly evolved from a convenience feature into a standard expectation across nearly every retail segment. For shoppers, the appeal is simple: greater control, faster transactions, and the ability to move through stores at their own pace.

As consumer behavior shifts toward frictionless experiences, self-checkout continues to see strong adoption across grocery, mass retail, convenience, home improvement, and specialty categories. Surveys consistently show that a growing portion of customers - especially digital-first shoppers - actively choose stores with reliable SCO options because it shortens wait times and reduces perceived effort.



Mobile-enabled shoppers, accustomed to scanning and paying on their phones, watches and other devices, further accelerate demand for automation at physical POS touchpoints. The expansion of compact, modular self-checkout stations is also making it easier for retailers of all sizes to deploy solutions without reconfiguring floor space. As a result, self-checkout is now a core part of the in-store customer journey.

Self-Checkout Shaped by AI

AI is reshaping the self-checkout experience once again. With computer vision and machine learning capabilities, self-checkout (SCO) systems are becoming faster and more intuitive. AI-powered item recognition reduces manual scanning and misreads, automatically identifying products including produce without requiring shoppers to hunt through menus. Real-time weight checks, pattern detection, and anomaly alerts ensure accuracy while minimizing interruptions. This automation not only speeds up each transaction but also reduces the likelihood of bottlenecks during busy periods.

Security is another major area transformed by AI. Advanced algorithms can distinguish between accidental scanning errors and intentional misuse, allowing retailers to reduce shrink while minimizing obtrusive security measures. Intelligent monitoring can flag unusual activity, confirm correct item placement, and verify high-value transactions while still keeping the shopper experience positive. In parallel, AI-based loss-prevention tools are helping retailers to lower operational risk and reduce the need for associate oversight.

These advancements make modern SCO a win-win for both shoppers and retailers: customers enjoy a faster, more seamless checkout experience, while retailers benefit from increased throughput, improved accuracy, and stronger security. Partner Tech, an Intel® Industry Solutions Builders Partner, has built its SCO product family with the processing power to deliver the most advanced features and high performance.

Partner Tech's Modern, Scalable SCO Family

The Partner Tech AI-powered SCO systems deliver performance, flexibility, and reliability with three different SCO options in the family; Starling, Alfred and Paula. This product family offers models for small retailers all the way to large retail chains.

Powered by 11th Gen Intel® Core™ processors and 12th Gen Intel® Core™ processors, and in Q2, 2026, the option of Intel® Core™ Ultra Processors (Series 1), Partner Tech offers a family of modern, scalable SCO solutions built to meet the needs of retailers both large and small. All three models run Windows 11 IoT Enterprise LTSC (64 bit) or Linux Ubuntu 22.04.

All three SCO systems feature a high-brightness 15.6 inch or 21.5-inch multi-touch PCAP display. They can also be configured to accept all payment types from cash to credit cards to emerging contactless options.

Each system can be equipped with a security scale in the bagging area to prevent theft. An integrated tri-light pole clearly indicates lane availability or problem status, and can be upgraded with an optional security camera, enabling AI-powered theft prevention and item recognition. This not only boosts throughput but also reduces errors and the need for manual interventions. All of the systems support electronic article surveillance (EAS) tag deactivation.

Partner Tech's SCO solutions run the Otter software and are POS software agnostic, which allows for easy integration with retailers' current POS software. Partner Tech offers an API toolkit for integration with POS software, loyalty systems, and other ISV solutions.

All three SCO systems offered by Partner Tech help boost checkout efficiency. The mobile attendant application enables one employee to assist multiple customers at once, increasing overall capacity and streamlining operations.

Partner Tech's SCO family includes:

Starling is Partner Tech's full-feature SCO solution, designed for use in large grocery stores and by retailers with large basket counts.

Alfred is a flexible and modular SCO solution that combines grocery store features and performance in a compact universal tabletop form factor. The system is customizable and modular to fit the needs of each customer in a space-saving form factor.

Paula is a space-saving, all-in-one tabletop SCO solution for convenience stores and other smaller stores that want to offer self-checkout.

The system's durable, lockable housing holds a high-performance barcode scanner and a 3-inch receipt printer, ensuring reliable and fast performance in any retail environment.



Figure 1. Partner Tech's complete SCO product family.

Otter SCO Software Delivers AI-based Point of Sale Features

Partner Tech also offers a complete AI-powered SCO software platform called Otter that runs on all of the company's SCO terminals.

Otter is engineered to provide customers fast checkout and a user-friendly experience, while reducing theft and staff interventions. Otter can be tailored to the precise needs of a variety of retailers, including grocery, convenience, gift shop, liquor, pharmacy, and other specialty retail stores. Some of the product features available through Otter include:

- Customizable GUI interface
- Centralized setup and configuration
- Weight and picklist management
- Scanner and scale controls
- POS-supported payments, including cash, credit card, and contactless payments
- LED tri-light with security camera
- Otter mobile attendant for supervision of multiple checkout lines at once

Otter supports central weight management which avoids weight discrepancies at check-out, reducing the number of staff interventions.

Otter software uses AI and computer vision to help process unpackaged items such as produce, bakery goods or bulk products that can be a challenge for customers at self-checkout. With Otter Picklist Assistant, the retailer can use AI to recognize unpackaged items more quickly and accurately. The system uses computer vision to instantly identify produce, eliminating the need for the customer to scroll through menus or use search bars. The smart security camera can also be used for automatic age verification. If the retailer's state and local governments do not allow AI-based age verification, Partner Tech offers multiple other age verification options.

AI is also used to predict fraud and theft at the self-checkout. Otter Crime Predictor uses computer vision to alert the attendant to possible theft scenarios via the Otter Mobile Attendant. This goes beyond the theft prevention capability of today's weight-based systems. The system also helps to prevent barcode switching, non-scanned items or non-paid for items. Real-time alerts are sent to staff for immediate action.

SCO Performance Powered by Intel

All three of the Partner Tech SCO systems come with a choice of a 15.6" or a 21.5" all-in-one POS terminal. The SCO needed

to drive the larger high-resolution display utilizes the 12th Gen Intel® Core™ i3-1215U processor, the 12th Gen Intel® Core™ i5-1245U processor, or the 12th Gen Intel® Core™ i7-1265U processor.

Systems with the smaller display utilize the 11th Gen Intel® Core™ i3-1115G4 processor or 11th Gen Intel® Core™ i5-1145G7 processor, or the 11th Gen Intel® Core™ i7-1185G7 processor.

All of the systems have the option to use Intel® vPro™ to enhance security and remote manageability. Intel vPro provides remote management of the kiosks, even when they are turned off or unresponsive. Security features built into Intel vPro include hardware-based authentication and protection against threats.

Intel® Core® processors integrate multi-core architectures, enabling simultaneous execution of multiple tasks, which significantly enhances performance.

The Partner Tech SCO systems bring a hybrid architecture and built-in AI acceleration that make self-checkout faster, smarter, and more secure. The CPU's combination of Performance-cores and Efficient-cores optimizes multitasking—handling computer vision, barcode scanning, and payment processing simultaneously without lag.

Starling Put to Test in 1,200-Store Deployment

A neighborhood grocery chain in Central Europe selected the Starling system to expand its self-checkout capabilities throughout its 1,200 stores. To date, they have 1,450 Starling units deployed across 700 stores.

The supermarket chain's management was facing rising labor costs and could not find enough qualified staff. For customers, this meant long lines at the 3-4 cashier-operated checkout lanes open in most stores.

The grocery chain chose the Starling because Partner Tech could customize the system to meet its needs. Use of the AI-based Picklist Assistant for effortless produce selection was a must. Expanding the AI functionality to include computer vision also enabled the security feature that is reducing SCO-related shrink.

Early data from the first Starling deployments show that the company is meeting its goals with SCO growing to 60% of transactions chain wide. These stores have between one and four SCO lanes. Staff intervention rate is less than 3% and produce selection time was cut in half to four seconds.¹

After seeing these results, the chain is excited to deploy Starling units to all of its stores.

¹ Intel does not control or audit third-party data. You should consult other sources to evaluate accuracy.

Conclusion

Just like this grocery chain, retail stores across the globe are turning to SCO or expanding its presence to offer a customer experience that is more efficient. Partner Tech's Starling, Alfred and Paula offer customers a family of products that can meet retailers' needs and demands in a small footprint. Powered by Intel Core processors, these systems can offer real-time AI performance and feedback.

Learn More

[Starling](#)

[Alfred](#)

[Paula](#)

[Intel® Core™ Processor Product Page](#)

[Intel® Industry Solutions Builders](#)



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