In today’s restaurant, customer experience is top of mind. So is efficiency—and in the world of restaurants, they often go together. With industry profit margins being squeezed, high employee turnover and customer service an on-going priority, solutions that are cost-effective to implement, easy and support ongoing customer relationships are in high demand.

There are a wide range of new technology capabilities—faster processors, flat panel displays, HD video and superior analytics—that provide restaurants with new ways to integrate advanced digital capabilities into their day-to-day operations:

- Restaurant staff equipped with handheld POS systems provide an appealing and high-tech way to engage customers and bust lines.
- Digital menu boards and other forms of digital signage are replacing old fashioned printed signs—delivering almost infinite flexibility in promoting meal and snack options.
- Restaurants with 20 or more locations are legally required to post nutritional information.
- Many restaurants are turning to the latest point-of-sale (POS) solutions (replacing traditional cash registers) because they can play a central role not just in ringing up sales but also in marketing, pricing, inventory control and customer service.
- New digital security and surveillance systems help prevent theft, but can also provide important business analytics.
- New networked-attached storage (NAS) systems can lower costs and simplify information sharing.

Deploying the right technology—at the POS, in the back office, at the drive thru—is all part of today’s new Intelligent Restaurant, creating seamless interconnections between your staff, processes and customers to achieve real bottom line results.

### The Intelligent Restaurant in Action

Being successful in the restaurant business is all about getting the basics right: a convenient location, the right kind of food at the right price, a trained staff—these are all critical ingredients to restaurant success. But so increasingly are a range of customer-facing technologies.

These touchpoints—the POS system, menu boards, kiosks and more opportunities to engage the customer, gather information and share it in ways that can significantly enhance overall operations.
This is what is meant by the expression, the “Intelligent Restaurant”—it’s all about getting all of your different touchpoints working together—connected, sharing information, personalizing experiences and speeding processes:

- You want to provide loyal customers with a special discount. Use your POS system to track purchase histories and automatically extend offers to repeat customers.
- Your lunchtime crowd consists primarily of young urban professionals while your evening crowd tends to be older. Program your signs and menu boards with intelligent promotions catering specifically to each audience.
- Take advantage of tighter coordination between orders at the point of sale (including online orders) and the kitchen to enhance inventory tracking: reduce out-of-stocks, limit spoilage, help manage labor and support a better presentation of freshly prepared items.
- Use security cameras to help monitor for theft or malicious activity, but also use the video footage for heat mapping (getting accurate counts on patrons) and employee training.
- Rely on self-ordering kiosks and mobile POS solutions to keep lines and wait times to a minimum—while tracking all of the orders on back office servers as part of overall inventory adjustments.

Restaurant Solutions

Point-of-Sale

Today’s point-of-sale (POS) systems do much more than just ring up orders. They integrate with systems for accounting, inventory management, pricing, purchasing and more, helping to streamline a wide array of restaurant functions, such as:

- Rewarding loyal customers.
- Tracking what was paid/sold to help drive better deals with suppliers.
- See how trends, performance and other metrics are impacting the bottom line.

POS capabilities can be implemented on tablets, smartphones and other mobile devices. Touch-screen capabilities and enhanced software interfaces specifically designed for restaurants all add to the functionality.

Digital Signs

Flat panel displays featuring digital content have eclipsed traditional printed posters and menus in restaurants. The ease of updating content, the ability to show HD graphics and video and the growing opportunities to add different forms of interactivity have all made for a compelling value. Digital menu boards make it easy for customers to easily see all menu offerings (along with eye-catching graphics and photos) and also learn about special promotions and/or nutritional information. Restaurants that have implemented them report attracting seven
Content Management
Displaying the right content on standalone signs, in point-of-sale (POS) systems, vending machines, kiosks—wherever they are located—is critical to maximizing their value as communications tools. That’s why Intel introduced the Intel® Retail Client Manager (RCM), cloud-based software that makes it easy to distribute content and messaging, getting the right information in front of the right people at the right time.

Digital Security & Surveillance
For restaurants, where concern over theft or safety is a top concern, newer digital-based video surveillance solutions are a major step forward from traditional systems. The image quality is far superior. And for the first time, video footage can be monitored using mobile, handheld devices. Footage can be used to keep an accurate count of customer flow and support employee training.

Storage
As restaurants take more advantage of today’s digital technologies, their need for data storage also increases. Today’s new generation of Network-attached Storage Devices (NAS) provide scalable storage, can be implemented and maintained with limited IT resources, and are ideal for supporting the storage needs of a wide range of users and devices over a standard local or wide area network.

Why Rely on Intel Technology
Intel and its global network of partners are ready to deliver the innovative solutions restaurants need today:

Wide Selection of Solutions
There’s an Intel processor for every kind of solution—POS system, handheld tablets menu boards, storage, video surveillance and more. Because all Intel processors use a multi-core architecture and offer a common language environment, solution developers can easily integrate devices, applications and processes resulting in solutions specifically designed to meet the needs of restaurants.

User Experience
A restaurant is a fast-paced environment where staff turnover is the norm, not the exception. Technology solutions have to be easy to use with simple, graphical interfaces. Intel is ready: for example, Intel® Core™ processors have an integrated graphics processor that delivers the extra thrust needed for rendering graphics at the highest possible level, increasing responsiveness and supporting solutions that maximize ease of use.

TCO/Manageability
Restaurants rely on their systems to be there every day. Being able to easily handle software upgrades and diagnose and repair malfunctioning systems—without incurring costly downtime—is critical. Intel® Active Management Technology (Intel® AMT), a feature of Intel® Core™ processors, makes it possible to fix a wide range of systems issues, even when the operating system is down. This reduces the chance of outages and eliminates the need for onsite service calls or dedicated technical staff.

Managing Content
POS systems, signs, menu boards, kiosks and other “touchpoints” provide an opportunity to deliver content that can drive sales and enhance the customer relationships. Making sure the right content appears at the right time is key to making the most of this opportunity. Intel® Retail Client Manager is software specifically designed for managing content across all kinds of touch points.

Addressing Top Challenges for Restaurants
Today’s new generation of intelligent, connected, Intel-based solutions are designed to help address the major challenges faced by restaurants:

Increasing Revenues: The restaurant industry is extremely competitive, with constantly changing tastes and trends. Customer loyalty and repeat business are critical to profitability. Smart use of today’s Intel-based solutions can address these challenges.

• Automatically recognizing and rewarding loyal customers through the POS
• Enhancing opportunities for customer engagement through the use of interactive signs, kiosks and mobile devices

Enhancing Operational Efficiency: Restaurants operate on notoriously tight margins, with heavy costs for food and labor. Solutions that help maximize “total revenue per patron visit”—by increasing the size of orders, reducing inventory needs and better managing staff—deliver on the bottom line. Intel-based solutions for restaurants are doing this today:

• POS systems and digital signage promote additional food options and combinations
• Mobile devices and self-service kiosks, which have a track record of increasing the size of orders
• Using data from the POS and digital signs to analyze business patterns and drive optimal staffing schedules

Minimizing Losses: Limiting losses due to spoilage, errors or theft are a constant battle for restaurants. Today’s video security/surveillance systems can work separately or together to help track orders and inventory and limit fraud or theft.
Restaurants & Food Service Establishments
The Intelligent Restaurant

Measuring Performance
A restaurant can gather information about patrons—age and demographic breakdowns, for example—and use this information for planning and marketing purposes. Intel® AIM (Audience Impression Metric) Suite technology gives restaurants the power to anonymously gather this information and dynamically adapt marketing accordingly.

Security
The addition of new consumer-facing systems—mobile POS, kiosks, interactive signs—environment is expanding the “footprint” for customer engagement, but also increasing the vulnerability to individuals that have criminal or malicious intentions. Intel solutions embed capabilities such as application whitelisting that can prevent malware from ever compromising or infecting a system or other device.

Learn More
A new generation of technology solutions is available that restaurants can take advantage of to operate more efficiently and deliver better customer experiences.

Intel technology is driving this transformation. Get more information on POS systems, digital signs, security, content management and other systems including updates on how the technology is evolving, examples of how restaurants are using them and steps you can take to put these solutions to work for you today.
Go to intel.com/retailsolutions.

For more information, visit intel.com/retailsolutions.

Requires activation and a system with a corporate network connection, an Intel® AMT-enabled chipset, network hardware and software. For notebooks, Intel AMT may be unavailable or limited over a host OoS-based VPN, when connecting wirelessly, on battery power, sleeping, hibernating or powered off. Results dependent upon hardware, setup and configuration. For more information, visit Intel® Active Management Technology.

Intel® vPro™ Technology is sophisticated and requires setup and activation. Availability of features and results will depend upon the setup and configuration of your hardware, software and IT environment. To learn more visit: http://www.intel.com/technology/vpro.

Iris™ graphics is available on select systems. Consult your system manufacturer.

Intel’s compilers may or may not optimize to the same degree for non-Intel microprocessors for optimizations that are not unique to Intel microprocessors. These optimizations include SSE2, SSE3, and SSSE3 instruction sets and other optimizations. Intel does not guarantee the availability, functionality, or effectiveness of any optimization on microprocessors not manufactured by Intel.

Microprocessor-dependent optimizations in this product are intended for use with Intel microprocessors. Certain optimizations not specific to Intel microarchitecture are reserved for Intel microprocessors. Please refer to the applicable product User and Reference Guides for more information regarding the specific instruction sets covered by this notice. Notice revision #2010/08/04

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

A "Mission Critical Application" is any application in which failure of the Intel Product could result, directly or indirectly, in personal injury or death. SHOULD YOU PURCHASE OR USE INTEL'S PRODUCTS FOR ANY SUCH MISSION CRITICAL APPLICATION, YOU SHALL INDEMNIFY AND HOLD INTEL AND ITS SUBSIDIARIES, SUBCONTRACTORS AND AFFILIATES, AND THE DIRECTORS, OFFICERS, AND EMPLOYEES OF EACH, HARMLESS AGAINST ALL CLAIMS COSTS, DAMAGES, AND EXPENSES AND REASONABLE ATTORNEYS’ FEES ARISING OUT OF, DIRECTLY OR INDIRECTLY, ANY CLAIM OF PRODUCT LIABILITY, PERSONAL INJURY, OR DEATH ARISING IN ANY WAY OUT OF SUCH MISSION CRITICAL APPLICATION, WHETHER OR NOT INTEL OR ITS SUBCONTRACTOR WAS NEGLIGENT IN THE DESIGN, MANUFACTURE, OR WARNING OF THE INTEL PRODUCT OR ANY OF ITS PARTS.

Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked “reserved” or “undefined”. Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them.

The information here is subject to change without notice. Do not finalize a design with this information. The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request. Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order. Copies of documents which have an order number and are referenced in this document, or other Intel literature, may be obtained by calling 1-800-548-4725, or go to http://www.intel.com/design/literature.htm

Copyright © 2013 Intel Corporation. All rights reserved. Intel, the Intel logo, and Xeon are trademarks of Intel Corporation in the U.S. and other countries.

*Other names and brands may be claimed as the property of others.