Solution Brief

Retail Energy, Hospitality, Government, Education, Transportation, Manufacturing

Bluefin Ocean Digital Signage Uses Intel for Dynamic Content

Bluefin Ocean is a digital signage platform with compute power from Intel® Processor N97 that enables dynamic content to meet the needs of retailers and a wide range of other use cases

With advanced technology driving new use cases for dynamic content, the market for digital signage is growing rapidly. Static digital signage is still a mainstay for impactful communications to groups in retail, office, transportation, hotel, hospital and other public places.

But with new interactive screen technology, advanced processors, and AI inferencing, digital signage has more tools to deliver novel and engaging experiences for consumers and collect data for analysis. Some of these new capabilities include:

- AI and Machine Learning: AI powers predictive content, dynamic personalization, audience analytics, and automated scheduling, making content smarter and more relevant in real-time.
- Enhanced Interactivity: Voice commands, gesture recognition, and QR codes allow for touchless, intuitive user engagement, turning screens into two-way communication tools.
- Augmented or Virtual Extended Reality (AR/VR): AR overlays digital info onto the real world via screens or smart glasses, while VR creates fully immersive experiences for training or retail.
- Programmatic Digital Out-of-Home (pDOOH): Automated, data-driven systems buy and serve ads on digital screens, similar to online advertising, optimizing placement and timing.

Retail is a Hot Bed of Digital Signage Innovation

Retail is a hypercompetitive industry where industry players adopt new technology that will provide an improved customer experience. Digital signage can be used to provide personalized experiences such as virtual clothing try-ons, suggestive selling or in-the-moment recommendations.

More information is also better in retail and by using content management systems (CMS), retailers can access retail media networks (RMS) offering up advertisements and entertaining digital short-form content. Some stores also use analytics and AI to deliver promotions to targeted customers based on time of day, weather, or shopper presence.

Bluefin is one of the companies that is leading the next wave of digital signage innovation. The company is an Intel® Industry Solutions Builders partner and is using Intel® technology for its Bluefin Ocean line of advanced digital displays.

Bluefin Ocean Has Compute Power for Dynamic Content

The Bluefin Ocean digital signage platform is a compelling combination of power, performance, efficiency, user-friendly features, and a flexible choice of screens. Powered by the Intel® Processor N97, The Bluefin Ocean is designed to deliver new types of dynamic content.

The Bluefin Ocean Series supports ultra-high definition and touch screen signage with screen sizes ranging from standard and ultrawide or customized screen sizes ranging from 15.6" to 86.0". A new USB feature provides HDMI override and allows users to play simple video loops from that drive.

Bluefin engineers chose the Intel Processor N97 because it provides the processing power for next-generation dynamic content but with low power consumption. The processor gives a Bluefin Ocean display the compute performance to process AI, analytics, and edge computing, so that customers can have near real-time access to customer-centric data such as dwell times, heat maps, and point of sale (POS) integration.

The system supports a wide range of codecs and formats providing the flexibility to configure signage that captivates audiences with visuals at scale. It is available for Windows, Linux and Chrome operating systems. Bluefin Ocean can also run on DSOS a digital signage-specific operating system from SpinetiX for high availability applications. DSOS is a lightweight OS with security features and native players (HMP and iBX) and cloud CMS (ARYA).

Bluefin Ocean supports embedded media players including the BrightSign XS6 and HS5 media players and Android MediaPlayer. Players can be added or upgraded without the need to replace the display. The software supports flexible screen orientation in both landscape and portrait mode.

Many organizations with the need to distribute content to multiple locations are using content management systems (CMS) for streaming their content. Bluefin Ocean is compatible with 99 percent of CMS offerings now on the market.

Bluefin Chooses Low-Power Processor

The Bluefin Ocean digital signage system is powered by the Intel Processor N97 which features four cores operating at a max turbo frequency of up to 3.6 GHz. The devices have a low power consumption of 12W TDP which supports fanless system design. The device supports dual 2.5GbE LAN.

The Intel Processor N97 features Intel® UHD Graphics, a graphics processing unit (GPU) functionality that provides 24 execution units and features maximum dynamic frequency of 1.2GHz. The device supports up to three displays with a maximum resolution of 4096 x 2160 at 60Hz.

University Chooses Bluefin Ocean to Inform Students

The Bluefin Ocean is a flexible solution that meets the needs of a wide range of applications including retail, museums, corporate offices, higher education and hospitality, among others.

One higher education customer implemented the system to provide digital marketing signage to communicate with its student body of more than 37,000 students.

The school also wanted a digital room signage system that communicated room availability, upcoming reservations, and study room availability so students could collaborate on study sessions. Bluefin and Intel came together to deliver a system that connected to a centralized room reservation system and the school uses that information to provide scheduling digital signage at each room door.

This digital signage ended confusion over who reserved the room, provided a digital assist to those running late for meetings and facilitated finding open study rooms for spur-of-the-moment study sessions.

The other main function of the system was digital information displays in the residence halls to provide academic, social and other relevant information to the students where they lived and studied.

This signage allows the marketing team to schedule content well in advance, ensuring students are always up-to-date on important school events and information. University administrators are also able to leverage and implement dynamic content to capture attention on a greater scale.

The Bluefin Ocean system comes with an option for touch screen functionality to give students direct control of their signage experience.

The university has deployed more than 40 Bluefin Ocean players and more than 50 room scheduling systems resulting in a streamlined solution for this collaborative space. The simplicity of the system has been a benefit to staff managing it and supporting content.

Conclusion

Dynamic content is in high demand and is requiring digital signage companies like Bluefin to incorporate powerful new technology into their digital signage systems. Working with Intel, Bluefin is serving up digital content using its Bluefin Ocean. The system is optimized with processing power, operating system flexibility and the necessary codecs and media players to lead the coming transition to more dynamic content.

Learn More

Bluefin Ocean

Intel Processor N97 Specifications

Intel® Industry Solutions Builders

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