USD 17 Billion and Beyond: Continuing to Grow the Digital Signage Economy

A new Intel® specification helps speed and simplify the delivery of next-gen digital signage

By 2017, the global digital signage market is expected to top USD 17.1 billion.² That's more than twice the USD 7.88 billion it realized in 2012.³ And with Intel's prediction that 10 million media players will power 22 million digital screens by 2015, these are exciting times.

For solution providers, these are also challenging times. Developing and delivering continuously evolving, state-of-the-art digital signage—including LCD displays, media players, content management systems, device management consoles, wireless networking, security, and cloud connectivity—is time intensive and often requires expertise in many new areas.

To ease system integration and simplify the design, development, deployment, use, and management of digital signage networks, Intel has developed the Intelligent Pluggable System Specification (IPSS).

IPSS builds on the success of its predecessor, the Open Pluggable Specification (OPS) by encompassing the entire digital signage system: hardware (the OPS focus), software, and middleware technologies.

This broadened spectrum further advances the industry’s ability to modularize digital signage and opens the door to new usage models that are compelling, cost effective, and revenue generating.

IPSS is great news for the digital signage industry.

Industry Challenges

For years, a fragmented ecosystem and an unwieldy variety of non-complementary and non-interoperable systems have presented challenges to the digital signage industry.

As a result, solution providers have had to spend considerable time and effort cobbling together digital signage solutions that they hope are relatively secure and manageable. The process involves finding and writing specifications for interoperable components, selecting and getting all the software and licenses together, testing the system, and then hoping the whole thing doesn’t become obsolete in a few years.

This customization made the systems not only expensive for solution providers to implement and maintain, but also daunting for customers to invest in.

Unified and widespread industry adoption of the OPS was the first major step in improving the situation. Providing a modular standard for displays and media players, the OPS simplified the installation, maintenance, and upgrading of key system components; namely, the hardware.

The IPSS is the next step.

Taking the Industry to New Levels

The skyrocketing ubiquity of digital signage has outgrown the hardware-only focus of the OPS. The increasing regional and global implementations of digital signs now requires new thinking, which involves streamlining ways to design, implement, and manage large networked systems that connect hundreds of signs to the back-end or cloud, as well as to other retail systems, and are remotely manageable and highly secure.

It is a tall order and one that the IPSS fills.

IPSS extends the "pluggable spec" concept to envelope the entire digital signage system— hardware, software, middleware—by adding Intel® software solutions and technologies. This approach allows solution providers to address the emerging requirements of next-generation digital signs.
What is Intel OPS?
The Open Pluggable Specification (OPS) allows manufacturers to
develop digital signage displays and media players that readily
work with each other—and with other units—with modifications.
Launched in October 2010, the OPS has been endorsed by
Microsoft, NEC Display Solutions, and Taiwan Digital Signage
Special Interest Group.

The benefits to the industry include the following:

- **Faster time to market.** Developers and manufacturers can create innovative, new components and systems faster, in higher volumes, and at a lower cost.

- **Turnkey implementation.** Integrators and resellers can extend mix-and-match compatibility to the entire digital signage system, increasing the ease and efficiency of installation, use, and maintenance, while also delivering the right level of system performance and the flexibility and scalability to upgrade.

- **Increased revenue.** The ability to provide a fully modularized digital signage system increases customer demand and, ultimately, revenue opportunities for all digital signage vendors and providers.

To date, a range of companies support the IPSS, including Axiomtek, BenQ, Gigabyte, Grundig, JWIPC, Kontron, NEC, Nexcom, Philips, Pilot TV, Samsung, Display, and TCL. And the list is rapidly growing.

Table 1 describes the IPSS solution stack components and their value.

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**A New Era of Industry Innovation**

A new and exciting era for digital signage is dawning, and Intel is committed to supporting the industry's burgeoning growth. By developing standards-based frameworks—beginning with OPS and continuing with IPSS—Intel is helping to drive industry effectiveness, inspire new usage models and innovations, enhance revenue opportunities, and ultimately keep the momentum going.

Learn more about the Intelligent Pluggable System Specification at [www.intel.com/ipss](http://www.intel.com/ipss)