

IoT Solution Brief

Plug and Play Digital Signage Solution for Retail

By Emily Chen

Simple • Affordable • Easy to Use



Picture 1, Intel Corporation.



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Polywell Computers, Inc.
Quality Built In America

Plug and Play Digital Signage Solution for Retail

Abstract

Polywell Computers, Inc. has designed a complete digital signage solution to meet the needs of retail businesses—especially brick-and-mortar stores. Each year, e-commerce companies have tremendous success in capturing a higher percentage of consumer spending. To counter this problem, retailers are turning to technology. They're looking for solutions that bring interactive digital experience to in-store customers. In this solution, our definition of “retail businesses” encompass various vertical markets and physical environments, including fast food chains, movie theaters, department stores, waiting rooms, offices, medical centers, hotels,

Challenge: Why Typical Digital Signage Is Not Easy

Today, one of the biggest challenges in digital signage is how to deliver interactive and informative content to customers in an easy and manageable manner. A typical digital signage solution consists of any combination of software management, content creation, hosting services, Internet service, and network management. Developing, implementing, and maintaining a digital signage solution is a headache for most businesses. That's why we have designed the simple plug and play digital signage solution to help business owners save time and resources so they can put more focus on their core business functions. At Polywell Computers, we don't believe technology should be difficult. So, we make everything easy. Our digital signage solution is the gateway to connect with your customers.

Plug and Play Digital Signage Solution for Retail

Solution: Plug and Play Digital Signage

Our solution includes everything a business needs to effortlessly deploy and manage digital signage. We have bundled the components to provide a true plug and play solution. Even someone with minimal IT and content management experience will find our solution easy to deploy, use, and manage. One of the biggest advantages is that no Internet connection is required. Our solution includes the following:

Host PC—Comes equipped with Windows 10 operating system and digital signage content manager software, then preconfigured to communicate with player PCs wirelessly.

Player PC—Comes equipped with Windows 10 operating system and digital signage content player software, then preconfigured to communicate with host PC wirelessly. Customers can start with 1 player PC and go up to 8 player PCs.

Digital Signage Software—Comes equipped with SmarterSign Digital Signage software. Please direct all your inquiries about other software compatibility to the contact information on the front page.

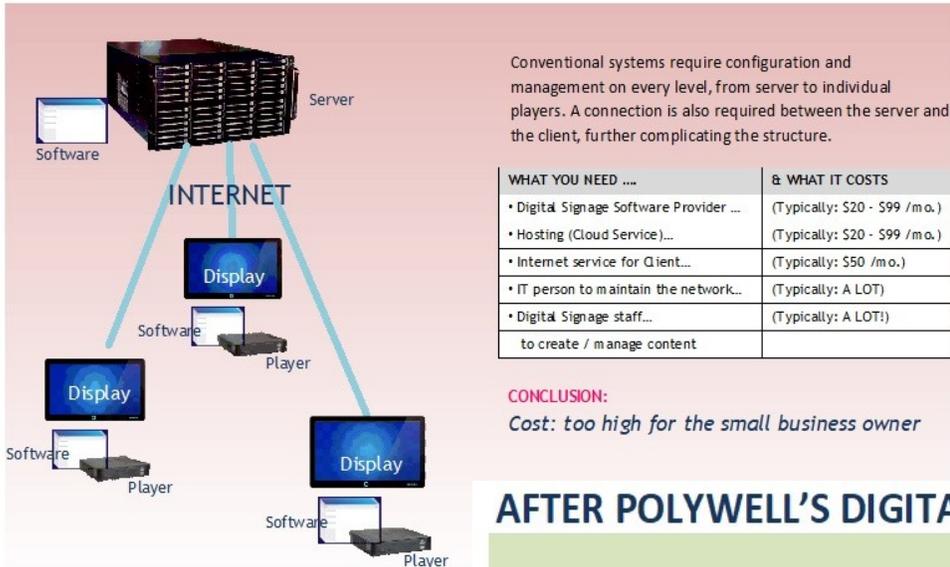
Template Library—The content manager includes hundreds of professional and easy-to-edit templates to create and display content.

The host PC and player PCs are preconfigured to communicate wirelessly via WiFi Direct. It doesn't require any internet connection so your wireless communication channel is not subject to network latency or unavailability. Although, player PCs are recommended to stay within 200 feet radius of any host PC. Everything needed to create and connect to are built into our solution. The host PC and player PCs display through HDMI. Each player PC supports 2 displays. After connecting the host PC to a computer and the player PC to a display screen, contents can be created and published immediately. Our digital signage solution is market-ready, and can deploy in a plug and play fashion.

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BEFORE POLYWELL'S DIGITAL SIGNAGE SOLUTION



A Simple Comparison

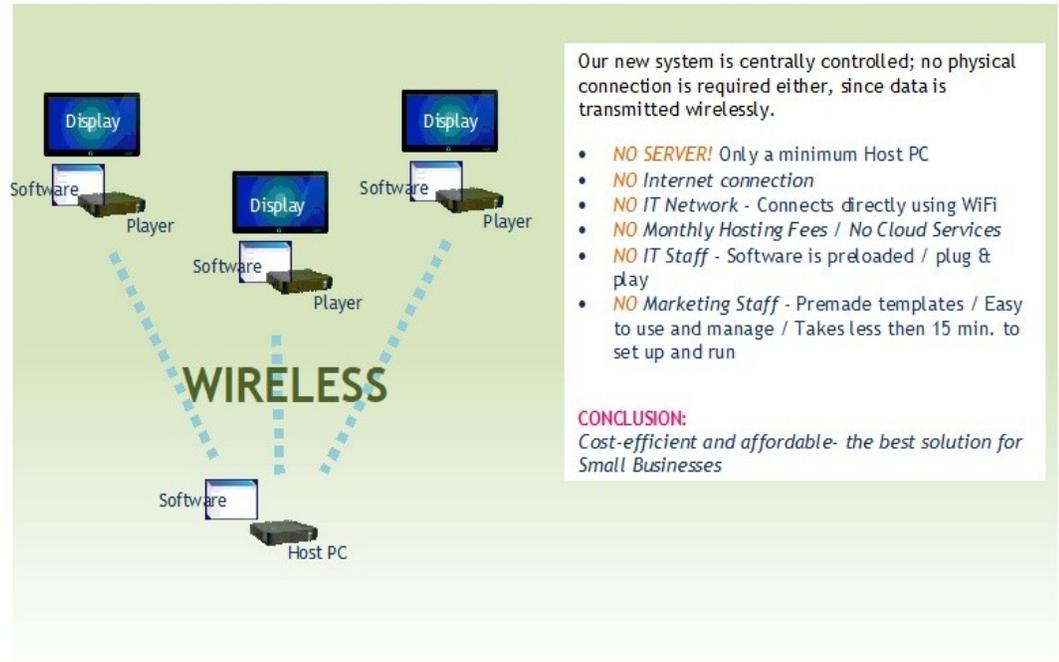
Our solution can support up to 8 player PCs per host PC.

Player PC



Each player PC supports 2 displays. Depending on client needs, the solution can start with 1 player PC or more.

AFTER POLYWELL'S DIGITAL SIGNAGE SOLUTION



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Plug and Play Digital Signage Solution for Retail

PC Specifications

Model	Nano-6100D (Host)	Z83-4D (Player)
Dimension	139.2 x 137 x 37.8mm	127 x 127 x 19.1 (30 with fan)mm
Motherboards	120 x 120 mm	125 x 125 mm
CPU	Intel® Core™ i3-6100U Processor, 2.3GHz, 2 core + 4 Thread (TDP 15W)	Intel® Atom™ Processor x528000 1.44/1.8GHz, 4 core + 4 Thread (TDP 20W)
Memory	1 x SO-DIMM DDR4-dtcl 2133/1866 MHz 4GB pre-installed, Max. 32GB	4GB DDR3 1600 MHz Embedded
LAN	Gigabit LAN (Realtek RTL8111H)	Gigabit LAN
Audio	Realtek ALC962	5.1 HD Audio
Video	Intel® HD Graphics 530	Intel® HD Graphics
HDMI Resolution (Max.)	4096x2304 @ 24 Hz	1920x1080 @ 60 Hz
Mini DP Resolution (Max.)	Optional 3096x2304 @ 60Hz	3840x2160 @ 24Hz
VGA Resolution (Max.)	1920 x 1200 @ 60Hz	-
Expansion Slots	1 x mini PCIe (mSATA) (SATA/SSD (M.2) optional) 1 x mini PCIe slot occupied by the WiFi/BT card	32G eMMC Internal Storage 1 x mini PCIe slot occupied by the WiFi/BT card
Front I/O	4 x USB 3.0 2 x USB 2.0 2 x Serial (RJ45) 1 x HDMI (1,4b)	1 x USB 3.0 3 x USB 2.0 1 x TF (Micro SD) slot 1 x HDMI (1,4b)
Rear I/O	1 x VGA 1 x RJ45 GigaLAN 1 x DC 12V-In (2.5mm) 1 x Mic-In (3.5mm) 1 x Speaker-out (3.5mm)	1 x mini DP 1 x RJ45 GigaLAN 1 x DC 12V-In (2.5mm) 1 x Headphone/Speaker out (3.5mm)
Side I/O	-	1 x Kensington lock slot External WiFi Antenna connector
Power Supply	Input: AC 100-240V Output: DC 12V (35W) 3A	Input: AC 100-240V Output: DC 12V (35W) 3A
VEBA	Bracket Included	Bracket is optional
3.5" BATA HDD Tray	Yes	No
WiFi /BT Card	Intel® Dual Band Wireless-AC	Intel® Dual Band Wireless-AC
USB 3.1	No	No
Support OS	Win 10 Preloaded, Linux is optional	

Fanless Nano-6100D (Host)



Front View



Back View

Fanless Z83-4D (Player)



The Most Affordable Solution

No Monthly Fee
No Internet Required
Saving Annual Subscription Cost
Template Ready, Easy to use

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Benefits

Simple to Install

- Plug in the host and the player PCs, power on, and have your digital signage solution running in minutes.
- No extra configuration is required.
- No need to setup wireless network or access point.

Easy to Use

- Software comes standard with hundreds of professionally created templates.
- Drag and drop to update new content, one-button to publish contents, and real-time sign updates
- Supports video, audio, animation, photos, and more.

Affordable to Buy

- One-time payment for a complete Digital Signage solution.
- No monthly software subscription fees.
- No monthly internet service fees.



Please direct any questions and inquiries to:
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