Powerful video wall display with 2nd Generation SSSP and ultra-slim bezels



### **Highlights**

- Deliver state-of-the-art video wall innovation without an additional PC using the 2nd Generation Samsung SMART Signage Platform (SSSP), powered by a quad-core processor with an embedded media player and MagicInfo Player S2 software
- Save energy and simplify installation with direct LED (d-LED) blacklight unit (BLU) technology
- Improve color uniformity across the video wall with factory tuning and color calibration, and Color Expert software
- Increase display flexibility with simplified image rotation from portrait to landscape mode and automatic ratio options
- Connect up to 100 displays with DisplayPort<sup>®</sup> (DP) 1.2 multistreaming

# Promote products and services using an extraordinary display

Retailers are increasingly installing video walls to enhance the aesthetic design of stores. Owners and managers want highquality displays that are in harmony with the store environment and do not overwhelm the surroundings. The optimal display enables businesses to create video walls in small spaces to complement the merchandise. Businesses are also seeking units with narrow bezels for a near-uninterrupted viewing, high picture quality and simplified content management.

The Samsung UDD-P SMART Signage video wall displays help retail business owners and managers create video walls that match their imaginations for a reasonable cost. With the 46-inch UDD-P model, stores and shops can create stunning video walls in a myriad of configurations.

SSSP technology simplifies video wall configuration by eliminating the need for an additional PC, effectively reducing total cost of ownership (TCO).





# Impactful content creation using the powerful quad-core processor with embedded media player

# Launch a variety of versatile features with the processor's upgraded SoC technology

The UDD-P SMART Signage video wall display is designed with upgraded System-on-Chip (SoC) technology - the brains of the SSSP - providing convenience, simplicity of use and versatility. Included are features such as multi-channel scheduling, internal auto-play, built-in Wi-Fi and a mobile interaction application.

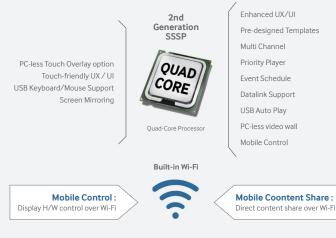


Figure 1. 2nd Generation SSSP robust capabilities

# Broadcast rich content with the most advanced embedded video wall management solution

The UDD-P SMART Signage video wall display comes equipped with the most advanced embedded video wall management solution, the powerful 2nd Generation SSSP and MagicInfo S2 software. This state-of-the-art SMART Signage innovation platform eliminates the need for a separate PC to run the displays and is powered by a robust 1 GHz quad-core CPU and 1.5 GB double data rate (DDR3) dual 48bit memory. Plus, there is a graphics card built into the embedded media player. The SSSP is also compatible with various third-party solutions.

Plus, the SSSP is equipped with a variety of features that simplify the design and deployment of display content, such as an interactive whiteboard and picture-in-picture (PIP) viewing, which can be enlarged to encompass over 50 percent of the display screen.

# Perform direct playback and management without a PC or wire clutter

The Samsung UDD-P SMART Signage video wall display requires no external PC to operate, either locally or over a network, which means there are no cumbersome wires or equipment to distract viewers from the message being delivered. Content playback, touch overlay support, as well as daisy chain and network connections, can all be performed without an external PC thanks to the embedded SSSP.

Plus, built in Wi-Fi and a mobile app enable display control and direct playback of content directly from a mobile device or laptop. Clutterfree and wireless content sharing and display management result in a video wall that is sleek looking and pleasing to the eye, which can enhance any business environment.



Figure 2. Users can manage and distribute content using mobile devices

# Create a video wall in a confined space with a range of installation options

Multiple installation options offered by the UDD-P display units help businesses create individualized video walls. A slim profile of 96 mm (3.78 in.) and light weight of 23 kg (50.7 lb) enable businesses to create video walls in limited spaces. Versatile installation accessories, such as a floor stand, a Multi-Interlocking Display (MID) and wall brackets, provide even more display options.





### Balanced images with color uniformity

### Design a video wall with vivid images and text

The UDD-P SMART Signage video wall display is designed to help businesses create memorable video walls. Improved video wall color calibration, upgraded picture quality and clearly displayed high-resolution images create an enjoyable viewing experience. The d-LED BLU technology provides better color uniformity and higher brightness, as well as superior picture quality, broader color definition, more realistic color and richer black hues. Light scatter is reduced with an anti-glare display surface, further enhancing a vivid video wall.

### Minimize visual distraction of video walls

The UDD-P SMART Signage video wall display is excellent for designing video walls. The UDD-P displays have ultra-narrow bezels that create a near-seamless video wall viewing experience with minimal visual distraction, which often results when multiple displays are joined together. The UDD-P SMART Signage video wall displays offer bezel-to-bezel width of 3.5 mm.



Figure 3. Ultra-narrow bezels for near seamless viewing experience

### Improve color uniformity with color calibration

The UDD-P display goes through a factory tuning process for improved white balance and color uniformity. This factory tuning process ensures a bright image with matching color temperature across all display out of the box. Each display also comes with Color Expert software for finer adjustment of color and other attributes. The UDD-P display comes with the ACM Integrated Chip (IC) that enables full calibration capabilities. With the standard Color Expert software, Samsung customers save on TCO by eliminating investment in calibration software while increasing operational efficiency.



Before calibration



After calibration

Figure 4. The side-by-side comparison demonstrates how factory tuning increases color uniformity across the video wall.





### Simplified installation enables creative video wall designs

### Rotate images without reworking the content source

The UDD-P SMART Signage video wall display offers pivots and Image Rotation software, providing image orientation from portrait to landscape for greater display flexibility. Image quality is preserved when the images are rotated. For convenience when rotating the image, three options are available: original or full ratio in a single screen or a video wall with full ratio.



Figure 5. Image rotation for greater display flexibility

#### Connect multiple displays and maintain content resolution

The UDD-P SMART Signage video wall display supports a daisy chain of up to 100 without loss of picture quality. The UDD-P display utilizes DP 1.2 port, which allows display of ultra-high-definition (UHD) resolution content - 3,840 x 2,160 - in a 2 x 2 video wall configuration. The ability to daisy chain the video wall displays reduces TCO by eliminating the need for additional components or PC modules.

The displays offer High-bandwidth Digital Content Protection (HDCP), which allows display of LiveTV<sup>™</sup>, Blu-ray Disc<sup>™</sup> and other HDCP content without an additional HDCP distributor box.

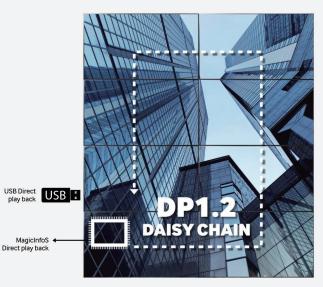


Figure 6. DP 1.2 connectivity for daisy chain of UHD resolution content





# UDD-P



### Connectors

2

10

11



- 1. RS232C OUT
- 2. IR OUT
- 3. CONTROL IN
- DP IN
  RS232C IN
- 6. HDMI IM 1
- 7. HDMIIN 2
- 8. DP OUT
- 9. DVI IN
- 10. RGB IN
- 11. AV / COMP 12. AUDIO IN / OUT
- 13. USB
- 14. RJ45
- 15. POWER CORD





### Specifications

			UD46D-P (Draft)
	Diagonal size		46"
Panel	Туре		D-LED DID
	Resolution		1,920 x 1,080
	Pixel pitch (mm/in.)		0.53025 x 0.53025 (0.02 x 0.02)
	Active display area (mm/in.)		1,018.08 x 572.67 (40 x 22.5)
	Brightness		Max 700 cd/m2
	Contrast ratio		3500:1
	Viewing angle (H/V)		178 / 178
	Response time (G-to-G)		8 ms
	Display colors		8 bit - 16.7 M
	Color gamut		69%
	Dynamic C/R		10,000:1
	H-scanning frequency		30 kHz ~ 81 kHz
Display	V-scanning frequency		48 Hz ~ 75 Hz
	Maximum pixel frequency		148.5 MHz
Sound	Speaker type		N/A
		RGB	Analog D-SUB, DVI-D, DisplayPort <sup>®</sup> 1.2
	Input	Video	HDMI <sup>®</sup> 1,HDMI2, Component (CVBS Common)
		Audio	Stereo mini Jack
	Output	RGB	DP 1.2 (Loop-out)
Connectivity		Video	N/A
2		Audio	Stereo mini Jack
		Power out	N/A
	External control		RS232C (in/out), RJ45
	External sensor		Detachable type (IR, Ambient)
	Туре		Internal
	Power supply		AC 100 - 240 V~ (+/- 10 %), 50/60 Hz
	Power consumption	Max [W/h]	176
Power		Typical [W/h]	125
		BTU (Max)	600
		Sleep mode	less than 0.5 W
		Off mode	less than 0.5 W
	Dimension (mm/in.)	Set	1022.1 x 576.7 x 97.0 (40.2 x 22.7 x 3.8)
		Package	1,255 x 798 x 355 (49.4 x 31.4 x 13.9)
	Weight (kg/lb)	Set	18.0 (39.6)
		Package	22.4 (49.3)
Mechanical	VESA mount (mm/in.)		600 x 400 (23.6 x 15.7)
specifications	Protection glass		N/A
	Stand type		N/A
	Media player option type		Embedded, SBB-C (Slide In)
	Bezel width (mm/in.) [Top × Side × Bottom]		U/L: 2.3 (0.09), R/B: 1.2 (0.04)
Operation	Operating temperature		0 ~ 40°C (32 ~ 104°F)
	Humidity		10 ~ 80%





### Specifications

			UD46D-P (Draft)
Feature	Кеу		Ultra narrow bezel
	Special		SD Card slot, ACM support (Advanced Color Management), Magic clone (to USB), Auto source switching & recovery, Lamp error detection, Anti retention (Haze 44%), Temperature sensor, RS232C/RJ45 MDC,Plug and Play (DDC2B), PIP/PBP, Video wall (10 x 10), Pivot display, Image rotation, Button lock, DP 1.2 Digital daisy chain (Supporting 2 x 2 UHD resolution, HDCP support), Smart scheduling, Smart F/W update, Clock battery (80 hrs clock keeping) Built-in MagicInfo
	Internal player (Embedded H/W)	Processor	Cortex <sup>®</sup> -A9 1 GHz Quad Core CPU
		On-chip cache memory	L1 (I/D) : 32 KB / 32 KB L2 (Unified) : 1 MB
		Clock speed	1 GHz CPU Quad
		Main memory interface	1.5 GB Dual 48 bit DDR3-933 (1,866 MHz)
		Graphics	2D & 3D Graphics Engine - Up to 1,920 x 1,080. 32 bpp - Supports OpenGL ES <sup>®</sup>
		Storage (FDM)	8 GB (2 GB occupied by O/S, 6 GB Available)
		Multimedia	Video Decoder - MPEG-1/2, H.264/AVC (Dual) - VC-1, JPEG, PNG,VP8 Audio DSP (Decoder) - AC3 (DD), MPEG, DTS and etc.
		IO ports	USB 2.0
		Operating system	Linux®





### Specifications

			UD46D-P (Draft)				
Certification	Safety		UL (USA) : UL 60950-1 CSA (Canada) : CSA C22.2 No. 60950-1 TUV (Germany) : EN60950-1 NEMKO (Norway) : EN60950-1 KC (Korea) : K60950-1 CCC (China) : GB 4943-2001 PSB (Singapore) : IEC60950-1 GOST (Russia) : IEC60950-1, EN55022 SIQ (Slovenia) : IEC60950-1, EN55022 PCBC (Poland) : IEC6050-1, EN55022 NOM (Mexico) : NOM-019-SCFI-1993 IRAM (Argentina) : IEC60950-1 SASO (Saudi Arabia) : IEC60950-1				
	EMC		FCC (USA) FCC Part 15, Subpart B class B CE (Europe) EN55022, EN55024 VCCI (Japan) V-3 (CISPR22) KCC (Korea) :KN22, KN24 BSMI (Taiwan) : CNS13438 (CISPR22) C-Tick (Australia) : AS/NZS3548 (CISPR22) CCC(China) : GB 9254-2008, GB 17625.1-2003				
	Environment		ENERGY STAR <sup>®</sup> 6.0 (USA)				
Accessories	Included		Quick Setup Guide, Warranty Card, Application CD, DP cable, Power Cord, Remote Controller, Batteries				
	Optional	Stand	N/A				
		Mount	WMN-4675MD				
		Specialty	MID-UD46DS				
Media player	CPU						
	N/B						
	S/B						
	GPU FDM/HDD/SSD Memory		SBB-C (SIM Type)				
				Ethernet			
				Connectivity	USB		
	Output						
	Others						



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#### For more information

For more information about Samsung UDD-P SMART Signage video wall display, visit www.samsung.com/business or www.samsung.com/displaysolutions

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2014-07



