

Samsung UDC and UDC-B Series video displays

Dynamic LED displays for impressive video wall designs



Highlights

- Design video walls with built-in Samsung Smart Signage Platform technology and MagicInfo™ VideoWall software
- Save energy and simplify installation with direct LED (d-LED) BLU (backlight unit) technology
- Improve color uniformity across the video wall with factory tuning and color calibration, and Advanced Color Management (ACM) software¹
- Increase display flexibility with simplified image rotation from portrait to landscape mode and automatic ratio options
- Connect up to 100 displays with DisplayPort® (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 large format displays (LFDs) that are in harmony with the store environment and do not overwhelm the surroundings. The optimal LFD 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 picture, high picture quality and simplified content management.

Samsung LED LFDs help retail business owners and managers create video walls that match their imaginations for a reasonable cost. With 46-inch UDC-B models and both 46-inch and 55-inch UDC models available, stores and shops can create stunning video walls in a myriad of configurations.

Samsung d-LED BLU technology helps reduce energy costs. Internal testing shows LEDs consume 40 percent less power on average compared with cold cathode fluorescent lamp (CCFL) LCDs. In addition, the LED LFDs are environmentally friendly because they contain no harmful mercury.

A flexible way to display distinctive content

Display content in multiple ways with the Samsung Smart Signage Platform

Samsung Smart Signage Platform (SSSP) eliminates the need to purchase an additional PC for each display in a video wall. SSSP, available on the UDC Series displays, supports the MagicInfo™ VideoWall application that plays content created in the Videowall Author or Videowall Console applications. The embedded MagicInfo™ VideoWall S Player enables the creation of video walls up to 4 x 4 without the need for additional PCs and video wall player software.

Built within a microchip, the internal media player includes the following components:

- A 1 GHz dual core CPU with a cache size of 512 KB
- 1 GB double data rate 3 (DDR3) dual 32-bit memory
- A video processor with full codec, high performance Microsoft® Windows® Media Video (WMV), MP4 and H.264 capabilities
- A storage solid state disk (SSD) of 8 GB (2 GB is occupied by the OS)
- Professional signage software with MagicInfo™ VideoWall

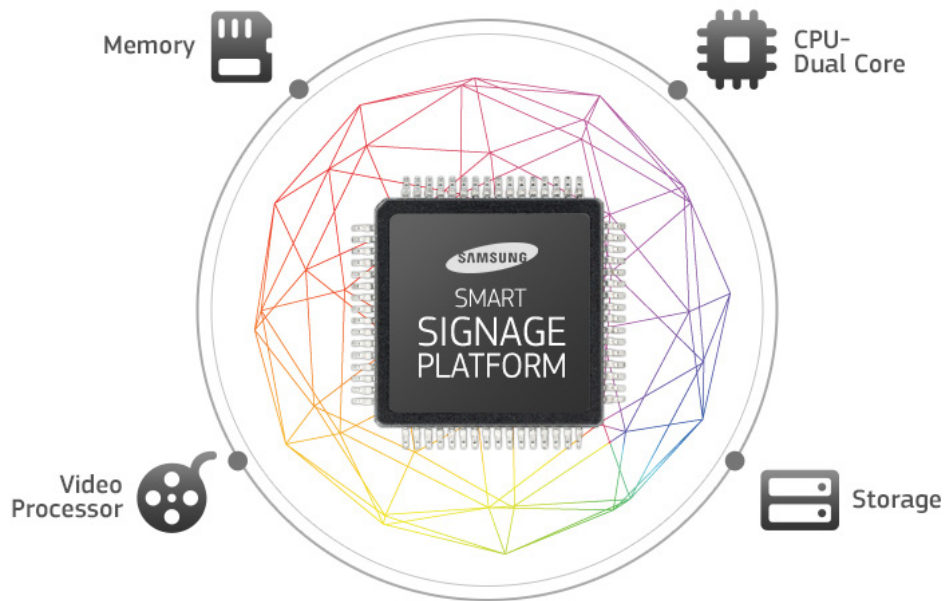


Figure 1. An integrated solution to provide a new digital signage experience

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

Multiple installation options offered by UDC and UDC-B units help businesses create individualized video walls. The d-LED BLU technology provides better color uniformity and higher brightness while consuming less power. The technology further delivers superior picture quality, broader color definition, more realistic color and richer black hues. A slim profile of 96 mm (3.78 in.) and light weight of 18 kg (39.68 lb) enable businesses to create video walls in limited spaces. Versatile installation accessories, such as a floor stand, a mobile Internet device (MID) and wall brackets, provide even more display options.

Design a video wall with vivid images and text

UDC and UDC-B Series displays are designed to help businesses create memorable video walls. Improved video wall color calibration, upgraded picture quality, bezel-to-bezel width of 5.5mm(0.22 in.) and clearly displayed high-resolution images create an enjoyable viewing experience. Light scatter is reduced with an anti-glare display surface, further enhancing a vivid video wall.

Improve color uniformity with color calibration

The UDC and UDC-B displays go through factory tuning process for improved white balance and color uniformity. It guarantees a bright image with matching color temperature across all UDC and UDC-B Series displays out of the box. The UDC Series displays come with an additional software called ACM(Advanced Color Management) for more fine adjustment of color and other attributes. With the standard ACM software, Samsung customers save on TCO by eliminating their investment in calibration software. They also increase operational efficiency and business productivity with a more uniform video wall.



Figure 2. The side-by-side comparison demonstrates how factory tuning increases color uniformity across the video wall.

Near-seamless video wall designed for creative installation

Rotate images without reworking the content source

UDC Series displays offer pivots and Image Rotation software, providing image orientation rotation 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 3. Portrait to landscape image rotation enhances usability with no loss of resolution.

Connect multiple displays and maintain content resolution

UDC and UDC-B Series displays support daisy chain up to 100 displays without loss of picture quality. UDC Series and UDC-B Series uses different technology to realize the functionality. UDC Series utilizes DP 1.2 port, which allows display of ultra high definition(UHD) resolution content - 3,840 x 2,160 - in 2 x 2 video wall configuration, while UDC-B Series utilizes DVI-D port.

The innate support of the corresponding ports for daisy chain of the displays reduces the TCO by removing an additional component or PC module.

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

UDC

46" / 55"



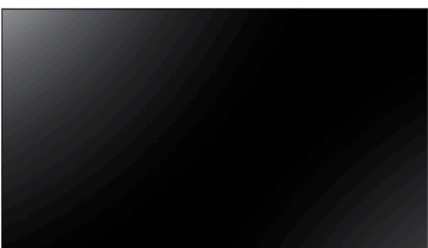
Connectors



- | | | | | |
|---------------|--------------|--------------|--------------------|----------------|
| 1. RS232C OUT | 4. DP IN | 7. HDMI IN 2 | 10. RGB IN | 13. RJ45 |
| 2. IR OUT | 5. RS232C IN | 8. DP OUT | 11. AV / COMP | 14. USB |
| 3. CONTROL IN | 6. HDMI IM 1 | 9. DVI IN | 12. AUDIO IN / OUT | 15. POWER CORD |

UDC-B

46"



Connectors



- | | | | |
|---------------|------------------------|-------------------|-----------------------|
| 1. CONTROL IN | 4. RS232C OUT | 7. AV / COMPONENT | 10. HDMI IN 2 |
| 2. IR OUT | 5. RS232C IN | 8. D-SUB IN | 11. DVI OUT (LOOPOUT) |
| 3. RJ45 MDC | 6. PC AUDIO (IN / OUT) | 9. HDMI IN 1 | 12. POWER CORD |

Samsung UDC and UDC-B video displays

Specifications

		UD46C	UD55C	UD46C-B	
Panel	Diagonal size	46 in.	55 in.	46 in.	
	Type	D-LED DID			
	Resolution	1,920 x 1,080			
	Pixel pitch (H x V)	0.530 mm (H) x 0.530 mm (V) (0.021 in. x 0.021 in.)	0.630 mm (H) x 0.630 mm (V) (0.025 in. x 0.025 in.)	0.530 mm (H) x 0.530 mm (V) (0.021 in. x 0.021 in.)	
	Active display area (H x V)	1,018.08 mm (H) x 572.67 mm (V) (40.08 in. x 22.55 in.)	1,209.6 mm (H) x 680.4 mm (V) (47.62 in. x 26.79 in.)	1,018.08 mm (H) x 572.67 mm (V) (40.08 in. x 22.55 in.)	
	Brightness (typ)	700 cd/m ²	700 cd/m ²	450 cd/m ²	
	Contrast ratio	3,500:1			
	Viewing angle (H x V)	178:178			
	Response time (G-to-G)	8 ms	8 ms	6.5 ms	
	Display colors	8 bit – 16.7 M			
	Color gamut	69%	69%	68%	
Connectivity	Input	RGB	Analog D-SUB, DVI-D, Display Port 1.2	Analog D-SUB, DVI-D, Display Port 1.2	Analog D-SUB, DVI-D
		Video	HDMI1, HDMI2, Component (CVBS Common)	HDMI1, HDMI2, Component (CVBS Common)	HDMI1, HDMI2, Component, CVBS
		Audio	Stereo mini jack		
	Output	RGB	DP 1.2 (loop-out)	DP 1.2 (loop-out)	DVI-D (loop-out)
		Audio	Stereo mini jack		
	External control	RS-232C (in and out), RJ45			
	External sensor	Detachable type (IR, Ambient)			
Power	Type	Internal			
	Power supply	AC 100 - 240 V - (+/- 10%), 50/60 Hz			
	Power consumption	Max (W/h)	165	220	130
		Typical (W/h)	120	160	113
		BTU (max)	563	750	443.3
		Sleep mode	< 0.5 W		
Off mode	< 0.5 W				
Mechanical specifications	Dimension	Set	1,023.8 mm x 578.4 mm x 96 mm (40.31 in. x 22.77 in. x 3.78 in.)	1,215.3 mm x 686.1 mm x 96 mm (47.85 in. x 27 in. x 3.78 in.)	1,023.7 mm x 578.3 mm x 95.5 mm (40.3 in. x 22.77 in. x 3.76 in.)
		Package	1255.0mm X 798.0mm X 355.0mm	1450.0 x 903.0 x 385.0mm	1255mm X 798mm X 355mm
	Weight	Set	18 kg (39.68 lb)	24 kg (52.91 lb)	18.2kg
		Package	35 kg	41.6kg (With Accessory)	31.2kg
	VESA mount	600 mm x 400 mm (23.62 in. x 15.75 in.)			
	Media player option type	Embedded, SBB-C (slide-in)		SBB-C (slide-in)	
	Bezel width	3.7mm(U/L), 1.8mm(R/B)		3.7mm(U/L), 1.8mm(R/B)	3.5mm(U/L), 2.0mm(R/B)

Specifications

		UD46C	UD55C	UD46C-B	
Features	Key	Super narrow bezel	Super Narrow bezel	Super narrow bezel	
	Internal player (embedded hardware)	Processor	Cortex A-9 1 GHz dual core CPU	Cortex A-9 1 GHz dual core CPU	-
		On-chip cache memory	L1 (I/D): 32 KB/32 KB L2 (Unified): 512 KB	L1 (I/D): 32 KB/32 KB L2 (Unified): 512 KB	-
		Clock speed	1 GHZ CPU dual	1 GHZ CPU dual	-
		Main memory interface	Dual 32-bit DDR3-667 (1,333 MHz)	Dual 32-bit DDR3-667 (1,333 MHz)	-
		Graphics	2D and 3-D graphics engine - Up to 1,920 x 1,080, 32 bpp - Supports OpenGL® ES	2-D and 3-D graphics engine - Up to 1,920 x 1,080, 32 bpp - Supports OpenGL ES	-
		Storage (FDM)	8 GB (TBD) (2 GB occupied by OS; 6 GB available)	8 GB (TBD) (2 GB occupied by OS; 6 GB available)	-
		Multimedia	Video decoder - MPEG-1/2, H.264/AVC (dual) - VC-1, JPEG, PNG audio DSP (decoder) - AC3 (DD), MPEG, DTS and etc.	Video decoder - MPEG-1/2, H.264/AVC (dual) - VC-1, JPEG, PNG audio DSP (decoder) - AC3 (DD), MPEG, DTS and etc.	-
		IO ports	USB 2.0	USB 2.0	-
		Operating system	Linux	Linux	-
Accessories	Included	Quick Setup Guide, warranty card, application CD, D-sub cable, power cord, remote controller and batteries	Quick Setup Guide, warranty card, application CD, D-sub cable, power cord, remote controller and batteries	Quick Setup Guide, warranty card, application CD, D-sub cable, power cord, remote controller and batteries	
	Mount	WMN-4675MD			
	Speciality	MID-UD46FS	MID-UD55FS	MID-UD46FS	
Media player	CPU	SBB-C (SIM type)			
	N/B				
	S/B				
	GPU				
	FDM, HDD, SDD				
	Memory				
	Ethernet				
	Connectivity				USB
Output					
Others					

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For more information

For more information about Samsung UDC and UDC-B Series video displays, visit www.samsung.com/business.



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1. Available with the UDC Series display only.

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