Samsung UDC and UDC-B Series and 55-inch UDD 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) software
- 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, as well as the new 55-inch UDD model available, stores and shops can create stunning video walls in a myriad of configurations.

Samsung d-LED BLU technology helps reduce energy costs. In addition, the LED LFDs are environmentally friendly because they contain no harmful mercury.

DATA SHEET

1

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 and 55-inch UDD display 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)
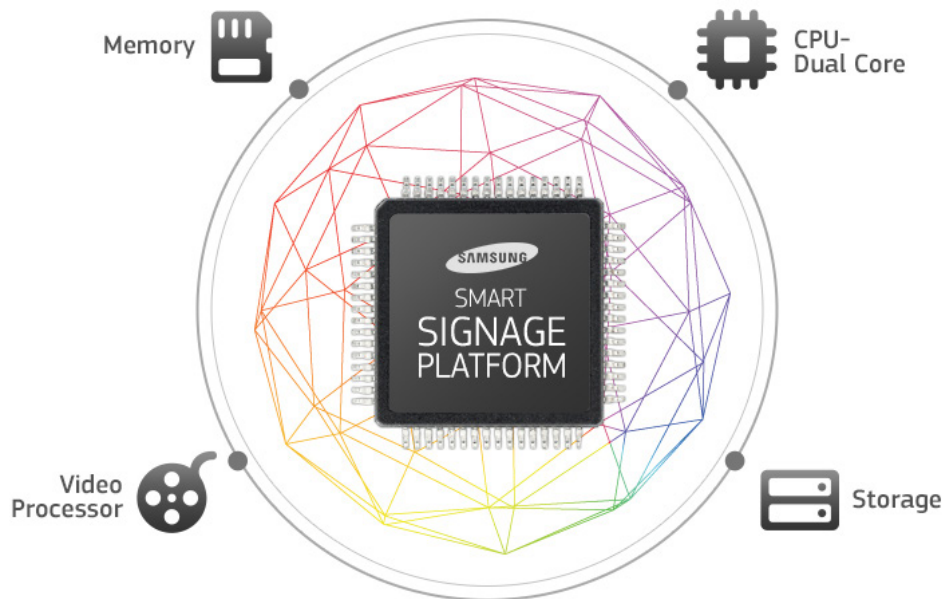- Professional signage software with MagicInfo VideoWall

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, UDC-B and 55-inch UDD 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 Multi Interlocking Display (MID) and wall brackets, provide even more display options.

Design a video wall with vivid images and text

UDC and UDC-B Series displays and 55-inch UDD display are 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. Light scatter is reduced with an anti-glare display surface, further enhancing a vivid video wall.

Minimize visual distraction of video walls

UDC and UDC-B series displays and 55-inch UDD displays are excellent for designing video walls. The displays have narrow bezel that contributes to the seamless visual experience of a video wall with minimal visual distraction that may result from the bezels of displays making up the video wall. UDC and UDC-B series displays offer super narrow bezel with bezel-to-bezel width of 5.5mm(0.22 in.) and 55-inch UDD displays offer ultra narrow bezel at 3.5mm(0.14 in.). If the need arises to put together 55-inch UDC displays and 55-inch UDD displays into a single video wall, special accessory is made available to compensate for the difference in bezel width.

Improve color uniformity with color calibration

The UDC, UDC-B and UDD 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, as well as 55-inch UDD displays out of the box. UDC Series displays and 55-inch UDD displays displays come with additional ACM(Advanced Color Management) software for more fine adjustment of color and other attributes. The UDC Series displays and 55-inch UDD displays also come with ACM IC (Integrated Chip) that enables full calibration capability of the displays, except for UD46C-B which lacks the ACM IC. Thus, UD46C-B is limited to white balance calibration only but can be extended to support gamma calibration if latest firmware is installed. With the standard ACM software, Samsung customers save on TCO by eliminating their investment in calibration software. They also increase operational
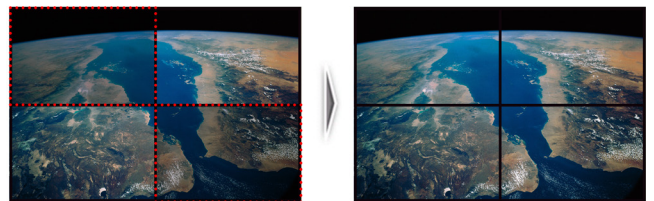

Figure 2. The side-by-side comparison demonstrates how factory tuning increases color uniformity across the video wall.

SAMSUNG

Near-seamless video wall designed for creative installation

Rotate images without reworking the content source

UDC Series displays and 55-inch UDD 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 and 55-inch UDD displays support daisy chain up to 100 displays without loss of picture quality.Different technologies are implemented to realize this functionality. UDC Series and 55-inch UDD displays utilize 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.

SAMSUNG

UDC

46" / 55"

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" / 55"

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

UDD

55"

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

DATA SHEET

SAMSUNG

Samsung UDC and UDC-B video displays

Specifications

			UD46C / UD46C-B	UD55C / UD55C-B	UD55D
Panel	Diagonal size		46 in.	55 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.)	0.630 mm (H) x 0.630 mm (V) (0.025 in. x 0.025 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.)	1,209.6 mm (H) x 680.4 mm (V) (47.62 in. x 26.79 in.)
	Brightness (typ)		700 cd/m²(UD46C) / 450 cd/m²(UD46C-B)	700 cd/m²(UD55C) / 500 cd/m² (UD55C-B)	Max 700 cd/m2
	Contrast ratio		3,500:1		
	Viewing angle (H x W)		178:178		
	Response time (G-to-G)		8 ms(UD46C) / 6.5 ms(UD46C-B)	8 ms	8 ms
	Display colors		8 bit – 16.7 M		
	Color gamut		69%(UD46C) / 68%(UD46C-B)	69%(UD55C) / 72%(UD55C-B)	69%
Connectivity	Input	RGB	Analog D-SUB, DVI-D, Display Port 1.2 (UD46C) / Analog D-SUB, DVI-D (UD46C-B)	Analog D-SUB, DVI-D, Display Port 1.2(UD55C) / Analog D-SUB, DVI-D(UD55C-B)	Analog D-SUB, DVI-D, Display Port 1.2
		Video	HDMI1,HDMI2, Component(CVBS Common)(UD46C) / HDMI1,HDMI2, Component, CVBS (UD46C-B)	HDMI1,HDMI2, Component(CVBS Common)(UD55C) / HDMI1,HDMI2, Component, CVBS(UD55C-B)	HDMI1,HDMI2, Component(CVBS Common)
		Audio	Stereo mini jack		
	Output	RGB	DP 1.2 (loop-out) (UD46C) / DVI-D (loop-out) (UD46C-B)	DP 1.2 (loop-out)(UD55C) / DVI-D (loop-out)(UD55C-B)	DP1.2(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(UD46C) / 130(UD46C-B)	220(UD55C) / 165(UD55C-B)	209
		Typical (W/h)	120(UD46C) / 113(UD46C-B)	160(UD55C) / 150(UD55C-B)	175
		BTU (max)	563(UD46C) / 443.3(UD46C-B)	750(UD55C) / 562.65(UD55C-B)	713
		Sleep mode	< 0.5 W		
		Off mode	< 0.5 W		
Mechanical	Dimension	Set	1,023.8 mm x 578.4 mm x 96 mm (40.31 in. x 22.77 in. x 3.78 in.)(UD46C) / 1,023.7 mm x 578.3 mm x 95.5 mm (40.3 in. x 22.77 in. x 3.76 in.)(UD46C-B)	1,215.3 mm x 686.1 mm x 96 mm (47.85 in. x 27 in x 3.78 in.) (UD55C) / 1215.3mm x 686.1mm x 113.8mm(UD55C-B)	1213.5 x 684.3 x 96.6
		Package	1255.0mm X 798.0mm X 355.0mm	1450.0 x 903.0 x 385.0mm(UD55C) / 1440.0 x 870.0 x 375.0mm(UD55C-B)	1450 x 385 x 903
	Weight	Set	18 kg (39.68 lb)(UD46C) / 18.2kg(UD46C-B)	24 kg (52.91 lb)(UD55C) / 24.3kg / 26.8kg (with network)(UD55C-B)	23.3kg
		Package	35 kg(UD46C) / 31.2kg(UD46C-B)	41.6kg (With Accessory)(UD55C) / 35.1kg / 37.7kg (with Acacessory)(UD55C-B)	36.9kg
	VESA mount		600 mm x 400 mm (23.62 in. x 15.75 in.)		
	Media player option type		Embedded, SBB-C (slide-in)(UD46C) / SBB-C (slide-in)(UD46C-B)	Embedded, SBB-C (slide-in)(UD55C) / SBB-C (slide-in)(UD55C-B)	Embbeded, SBB-C (Slide In)
	Bezel width		3.7mm(U/L), 1.8mm(R/B)(UD46C) / 3.5mm(U/L), 2.0mm(R/B)(UD46C-B)	3.7mm(U/L), 1.8mm(R/B)(UD55C) / 3.5mm(U/L), 2.0mm(R/B)(UD55C-B)	2.3mm(U/L), 1.2mm(R/B)

SAMSUNG

Specifications

			UD46C / UD46C-B	UD55C / UD55C-B	UD55D
Features		Key	Super narrow bezel	Super Narrow bezel	Ultra Narrow Bezel
	Internal player (embedded hardware)	Processor	Cortex A-9 1 GHz dual core CPU (UD46C only)	Cortex A-9 1 GHz dual core CPU (UD55C only)	Cortex-A9 1GHz Dual Core CPU
		On-chip cache memory	L1 (I/D): 32 KB/32 KB L2 (Unified): 512 KB (UD46C only)	L1 (I/D): 32 KB/32 KB L2 (Unified): 512 KB (UD55C only)	L1 (I/D) : 32KB / 32KB L2 (Unified) : 512KB
		Clock speed	1 GHZ CPU dual (UD46C only)	1 GHZ CPU dual (UD55C only)	1GHz CPU Dual
		Main memory interface	Dual 32-bit DDR3-667 (1,333 MHz) (UD46C only)	Dual 32-bit DDR3-667 (1,333 MHz) (UD55C only)	1GB Dual 32bit DDR3-667 (1333MHz)
		Graphics	2D and 3-D graphics engine - Up to 1,920 x 1,080, 32 bpp - Supports OpenGL® ES (UD46C only)	2-D and 3-D graphics engine - Up to 1,920 x 1,080, 32 bpp - Supports OpenGL ES (UD55C only)	2D & 3D Graphics Engine - Up to 1920x1080. 32bpp - Supports OpenGL ES
		Storage (FDM)	8 GB (TBD) (2 GB occupied by OS; 6 GB available) (UD46C only)	8 GB (TBD) (2 GB occupied by OS; 6 GB available) (UD55C only)	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. (UD46C only)	Video decoder - MPEG-1/2, H.264/AVC (dual) - VC-1, JPEG, PNG audio DSP (decoder) - AC3 (DD), MPEG, DTS and etc. (UD55C only)	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 (UD46C only)	USB 2.0 (UD55C only)	USB 2.0
		Operating system	Linux (UD46C only)	Linux (UD55C only)	Linux
Accessories		Included	Quick Setup Guide, warranty card, application CD, D-sub cable, power cord, remote controller and batteries		
		Mount	WMN-4675MD		TBD
		Speciality	MID-UD46FS	MID-UD55FS	TBD
Media player		CPU	SBB-C (SIM type)		
		N/B			
		S/B			
		GPU			
		FDM, HDD, SDD			
		Memory			
		Ethernet			
	Connectivity	USB			
		Output			
		Others			

About Samsung Electronics Co., Ltd.

Samsung Electronics Co., Ltd. is a global leader in technology, opening new possibilities for people everywhere. Through relentless innovation and discovery, we are transforming the worlds of televisions, smartphones, personal computers, printers, cameras, home appliances, LTE systems, medical devices, semiconductors and LED solutions. We employ 236,000 people across 79 countries with annual sales of US$187.8 billion. To discover more, please visit www.samsung.com.

For more information

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

Samsung Electronics Co., Ltd.
416, Maetan 3-dong,
Yeongtong-gu
Suwon-si, Gyeonggi-do 443-772,
Korea

www.samsung.com

2013-12