# Samsung MDC Series Displays

Cost-effective, yet advanced LFDs in a convenient, lightweight design



### **Highlights**

- Decrease digital signage expenditures with advanced, sleek LED BLU large format displays (LFDs)
- Choose from a broad selection of display applications with the built-in Samsung Smart Signage Platform (SSSP)
- Gain content management flexibility from the practical design of a detachable PC module, on which Samsung MagicInfo® Premium i Player can be installed
- Customize content orientation more easily with the Auto Image Rotation feature
- · Access a wide range of digital content with advanced connectivity

# Present distinctive messaging and lower costs with streamlined LFD displays

Mainstream and market segment business managers want to provide distinctive messaging to viewers with high-quality digital signage. Businesses also need ways to reduce startup and operating costs, including the expense and effort of buying additional PC modules.

Samsung MD Series LFDs offer enhanced, vibrant content display in a slim, lightweight design. The slender design and built-in SSSP enable economical installation and operation to reduce costs. In addition, MD Series (MDC) advanced connectivity options support a more engaging customer viewing experience.

# Reduce digital signage expenses with attention-catching LED LFDs

MD Series (MDC) displays deliver crisp, attractive visual messaging to customers in retail shops, food and beverage outlets and other leisure-oriented locations.

LED BLU (backlight unit) technology offers superior picture quality, broad color definition, realistic color and rich black hues. LED BLU technology also contributes to a slim, and lightweight design with reduced power consumption for lower operating costs. MDC Series displays are also Energy Star 5.0 compliant.



Figure 1. MDC Series displays offer attractive visual



## Convenient features help optimize time, costs and space

## Expand the range of display applications with the built-in SSSP

MD Series (MDC) displays feature the built-in SSSP that eliminates the need to purchase a separate PC or media player.

#### **Samsung Smart Signage Platform**

SSSP eliminates the need to purchase, install or use an external PC or media player. These cost-saving, standalone models include embedded MagicInfo® Premium S Player and MagicInfo® Lite software for easier content control. Users can save content and templates in internal memory to generate customized messaging. A remote control device enables content creation, playback and scheduling capabilities with just a few clicks. The enhanced content control capability supports a more engaging viewer experience.

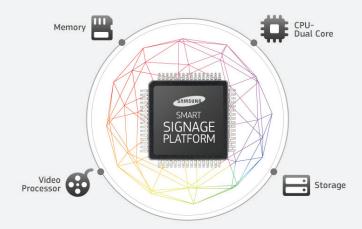


Figure 2. An integrated solution to provide a new digital signage experience

### MagicInfo® Lite and MagicInfo® Premium S Player

MagicInfo Lite software includes a straightforward GUI, which can be deployed to create high-quality video display content. The software supports:

- Automatic content play from USB or internal 6 GB memory
- · Smart and local scheduling
- Centralized control through a Multiple Display Control (MDC) feature and the MagicInfo Lite server
- Ethernet connectivity through an RS-232C connection for remote control capabilities

The ability to efficiently schedule, play and update content with Samsung MagicInfo Lite software conserves company resources and lowers operational expenses. The Local Schedule Manager provides a direct way to select storage, time period and content options that control how and when the content is displayed. Selecting and scheduling automatic content play is designed for ease of use, enabling employees to produce effective, polished display results more readily.

The embedded MagicInfo Premium S Player enables content managers to create, schedule and play standalone content. With this application, users can perform basic network management tasks.



Figure 3. Create, display and manage. All with simple, effortless steps





## Clear images and highly legible text regardless of the surrounding light

# Increase flexibility with a detachable PC module and robust management software

MD Series (MDC) displays support a detachable Setback Box-C (SBB-C) PC module, in which MagicInfo® Premium i Player can be installed. MagicInfo Premium i Player works with MagicInfo Server over a network to provide full user control of network devices and support for advanced content play.

Featured at the high end of the MagicInfo media player family, the MagicInfo Premium i Player offers full content support. This support includes Really Simple Syndication (RSS) content, multiple content types, special effects, touch overlay support and integration with database information.

# Tailor content orientation more easily with Auto Image Rotation

Auto Image Rotation enables images to be rotated from landscape to portrait mode to customize the content display. For convenience, two resolution options are available when rotating an image: original resolution and auto full-sizing resolution.





Figure 4. Portrait to landscape image rotation enhances usability with no loss of resolution.

# Broaden the range of digital content choices with enhanced connectivity

MD Series (MDC) displays offer access to a wide range of digital content with advanced connectivity options to create a more engaging user experience. PCs and other compatible devices can be connected to the displays to show content targeted to particular audiences. The displays can be simultaneously controlled with Ethernet RS-232C and a remote control. A built-in LAN card enables users to access the network without the need for other devices or additional infrastructure.

### Features and benefits

|   | Benefits   |
|---|--|
| LED BLU<br>technology   | Lowers operating temperatures for increased durability                                   |
| SSSP  | Eliminates the need to purchase a separate PC or media player                            |
| Detachable PC<br>module<br>and the MagicInfo®<br>Premium i Player | Provides full user management and control of network devices and supports varied content |
| Auto Image Rotation   | Enables content customization from portrait to landscape mode                            |
| Enhanced connectivity   | Supports a more engaging user experience   |





## Samsung MDC Series displays

# **MDC**

32"/40"/46"/55"



### Connectors (North America/Korea)



- 1. HDMIIN
- 2. DVIIN
- 3. USB
- 4. AV IN / COMPONENT IN
- 5. RGB IN
- 6. AUDIO OUT
- 7. RGB/DVI/HDMI/ AV/COMPONENT/ AUDIO IN
- 8. ANT IN
- 9. RJ45
- 10. RS232C (OUT / IN)
- 11. POWER

### Connectors (Global)



- 1. HDMIIN
- 2. DVIIN
- 3. USB
- 4. AV IN / COMPONENT IN
- 5. RGB IN
- 6. AUDIO OUT
- 7. RGB/DVI/HDMI/ AV/COMPONENT/ AUDIO IN
- 8. RJ45

9. RS232C (OUT/IN)

10. POWER





## Samsung MDC Series displays

## **Specifications**

|              |                              |               | MD32C                                 | MD40C                            | MD46C                               | MD55C                            |  |
|--------------|------------------------------|---------------|---------------------------------------|----------------------------------|-------------------------------------|----------------------------------|--|
|              | Diagonal size                |               | 32 in.                                | 40 in.                           | 46 in.                              | 55 in.                           |  |
|              | Туре                         |               | 60 Hz LED BLU 120 Hz LED BLU          |                                  |                                     |                                  |  |
|              | Resolution                   |               | 1,920 x 1,080 (16:9)                  |                                  |                                     |                                  |  |
|              | Pixel pitch (mm/in.)         |               | 0.121 x 0.363<br>(0.004 x 0.014)      | 0.153 x 0.461<br>(0.006 x 0.018) | 0.176 x 0.530<br>(0.006 x 0.02)     | 0.210 x 0.630<br>(0.008 x 0.024) |  |
|              | Active display area (mm/in.) |               | 698.4 x 392.8<br>(27.4 x 15.4)        | 885.6 x 498.1<br>(34.8 x 19.6)   | 1,018.08 x 572.6<br>(40.08 x 22.54) | 1,209.6 x 680.4<br>(47.6 x 26.7) |  |
| Panel        | Brightness                   |               | 350 nit                               |                                  |                                     |                                  |  |
|              | Contrast ratio               |               | 5,000:1                               |                                  |                                     |                                  |  |
|              | Viewing angle (H/V)          |               |                                       | 178                              | 3:178                               |                                  |  |
|              | Response time (G-to-G)       |               | 8 ms                                  |                                  |                                     |                                  |  |
|              | Display colors               |               |                                       | 16                               | .7 M                                |                                  |  |
|              | Color gamut                  |               |                                       | 7:                               | 2%                                  |                                  |  |
|              | Dynamic C/R                  |               |                                       | 10,000:1                         | (AV Mode)                           |                                  |  |
| District     | H-Scanning frequency         |               |                                       | 30 –                             | 81 kHz                              |                                  |  |
| Display      | V-Scanning fre               | equency       | 48 – 75 Hz                            |                                  |                                     |                                  |  |
|              | Maximum pixel frequency      |               | 148.5 MHz                             |                                  |                                     |                                  |  |
| Sound        | Speake type                  |               |                                       | Built-in Speak                   | er (10 W + 10 W)                    |                                  |  |
|              | F                            | RGB           |                                       | Analog D-                        | SUB, DVI-D                          |                                  |  |
|              | Input \                      | /ideo         |                                       | HDMI, Componer                   | nt (CVBS Common)                    |                                  |  |
|              | A                            | Audio         | Stereo mini jack                      |                                  |                                     |                                  |  |
|              | Output                       | RGB           | N/A                                   |                                  |                                     |                                  |  |
| Connectivity |                              | /IDEO         | N/A                                   |                                  |                                     |                                  |  |
|              |                              | AUDIO         | Stereo mini Jack                      |                                  |                                     |                                  |  |
|              |                              | Power Out     | N/A                                   |                                  |                                     |                                  |  |
|              | External control             |               | RS232C(in/out) thru stereo jack, RJ45 |                                  |                                     |                                  |  |
|              | External sensor              |               | N/A                                   |                                  |                                     |                                  |  |
|              | Туре                         |               | Internal                              |                                  |                                     |                                  |  |
|              | Power supply                 |               | AC 100 - 240 V~ (+/- 10 %), 50/60 Hz  |                                  |                                     |                                  |  |
|              | Power consumption            | Max (W/h)     | 77                                    | 110                              | 121                                 | 165                              |  |
| Power        |                              | Typical (W/h) | 47                                    | 58                               | 65                                  | 86                               |  |
|              |                              | BTU (Max)     | 262.57                                | 375.1                            | 412.61                              | 562.65                           |  |
|              |                              | Sleep mode    | less than 0.5 W                       |                                  |                                     |                                  |  |
|              | Off mode                     |               | less than 0.5 W                       |                                  |                                     |                                  |  |





## Samsung MDC displays

## **Specifications**

|                     |                              |   | MD32C  | MD40C  | MD46C  | MD55C  |  |
|---------------------|------------------------------|---|--|--|--|--|--|
| Mechanical<br>specs | Dimension                    | Set   | 736 x 436.0 x 93.5<br>(28.9 x 17.1 x 3.6)  | 925.4 x 542.6 x 93.5<br>(36.4 x 21.3 x 3.6)  | 1,057.8 x 617.0 x 94.5<br>(41.4 x 24.2 x 3.7)  | 1248.7 x 724.2 x 94.5<br>(49.1 x 28.5 x 3.7) |  |
|                     | (mm/in.)                     | Package   | 833 x 518 x 162<br>(32.7 x 20.3 x 6.3)   | 1,055 x 616 x 165<br>(41.5 x 24.2 x 6.4)   | 1,217 x 728 x 172<br>(47.9 x 28.6 x 6.7)   | 1,381 x 838 x 170<br>(54.3 x 32.9 x 6.6)     |  |
|                     | Weight (kg/                  | Set   | 6.4 (14.1)   | 9.8 (21.6)   | 12.6 (27.7)  | 18.5 (40.7)                                  |  |
|                     |                              | Package   | 8.1 (17.8)   | 12 (26.4)  | 16.6 (36.5)  | 23.8 (52.4)                                  |  |
|                     | VESA mount (mm/in.)          |   | 200 x 200 (7.8 x 7.8) 400 x 400 (15.7 x 15.7)  |  |  |  |  |
|                     | Protection glass             |   | N/A  |  |  |  |  |
|                     | Stand type                   |   | Foot stand (Optional)  |  |  |  |  |
|                     | Media player option type     |   | Embedded, SBB-C<br>(No Mechanical Structure)   | E  | Embedded, SBB-C (attached)   |  |  |
|                     | Bezel width (mm/in.)         |   | 16.3 (0.64) (Top, Side)<br>21.9 (0.86) (Bottom)  |  | 17.4 (0.68) (Top, Side) 17.5 (0.6 22.0 (0.86) (Bottom) 22.2 (0.  |  |  |
| Operation           | Operating ten                | nperature   | 0℃ ~ 40℃   |  |  |  |  |
|                     | Humidity                     |   |  | 10%  | ~ 80%  |  |  |
|                     | Special                      |   | Magic Clone(to USB), Auto Source Switching & Recovery, Lamp Error Detection, Super Clear Coating, Temperature Sensor, RS232C/RJ45 MDC,Plug and Play (DDC2B), PIP/PBP, Video Wall (10 x 10), Pivot Display, Image Rotation, Button Lock, Smart Scheduling, Smart F/W update, Clock Battery (80 hrs Clock Keeping), Built in Speaker Built In MagicInfo (Lite, Premium-S, Videowall-S) |  |  |  |  |
|                     |                              |   |  | - 1  | . 0,   |  |  |
|                     | Key                          |   |  | Built In MagicInfo (Lite,  | . 0,   |  |  |
|                     | Key                          | Processor   |  | Built In MagicInfo (Lite, Slim & Light LFD with  | Premium-S, Videowall-S)  |  |  |
|                     | Key                          | Processor On-chip cache memory  |  | Built In MagicInfo (Lite, Slim & Light LFD with  Cortex®-A9 1GH  L1 (I/D): 32  | Premium-S, Videowall-S)  Built-in MagicInfo Lite   |  |  |
|                     | Key                          | On-chip cache   |  | Built In MagicInfo (Lite, Slim & Light LFD with  Cortex®-A9 1GH  L1 (I/D): 32  L2 (Unified   | Premium-S, Videowall-S)  Built-in MagicInfo Lite  Iz Dual Core CPU  KB / 32 KB   |  |  |
| Feature             | Key                          | On-chip cache memory  |  | Built In MagicInfo (Lite, Slim & Light LFD with  Cortex®-A9 1GH  L1 (I/D): 32  L2 (Unified   | Premium-S, Videowall-S)  Built-in MagicInfo Lite  Iz Dual Core CPU  KB / 32 KB  d): 512 KB   |  |  |
| Feature             | Internal player<br>(Embedded | On-chip cache<br>memory  Clock speed  Main memory<br>interface                    |  | Built In MagicInfo (Lite, I<br>Slim & Light LFD with<br>Cortex®-A9 1GH<br>L1 (I/D) : 32<br>L2 (Unified<br>1 GHz C<br>1 GB Dual 32-bit DE<br>2D & 3D Gra<br>- Up to 1,920 x   | Premium-S, Videowall-S)  Built-in MagicInfo Lite  Hz Dual Core CPU  KB / 32 KB  d): 512 KB   |  |  |
| Feature             | Internal player              | On-chip cache<br>memory  Clock speed  Main memory<br>interface                    |  | Built In MagicInfo (Lite, I<br>Slim & Light LFD with<br>Cortex®-A9 1GF<br>L1 (I/D) : 32<br>L2 (Unified<br>1 GHz C<br>1 GB Dual 32-bit DE<br>2D & 3D Gra<br>- Up to 1,920 a<br>- Supports (   | Premium-S, Videowall-S)  Built-in MagicInfo Lite  Hz Dual Core CPU  KB / 32 KB  d): 512 KB  CPU Dual  DR3-667 (1,333 MHz)  phics Engine (1,080. 32 bpp   |  |  |
| Feature             | Internal player<br>(Embedded | On-chip cache memory  Clock speed  Main memory interface  Graphics                |  | Built In MagicInfo (Lite, I<br>Slim & Light LFD with<br>Cortex®-A9 1GH<br>L1 (I/D): 32<br>L2 (Unified<br>1 GHz C<br>1 GB Dual 32-bit DE<br>2D & 3D Gra<br>- Up to 1,920 or<br>- Supports (I<br>4 GB (1.2 GB occupied I)<br>Video E<br>- MPEG-1/2, H<br>- VC-1, JI<br>Audio DSF                       | Premium-S, Videowall-S)  Built-in MagicInfo Lite  Hz Dual Core CPU  KB / 32 KB  d): 512 KB  CPU Dual  DR3-667 (1,333 MHz)  phics Engine (1,080. 32 bpp  DpenGL ES®   |  |  |
| Feature             | Internal player<br>(Embedded | On-chip cache memory  Clock speed  Main memory interface  Graphics  Storage (FDM) |  | Built In MagicInfo (Lite, I<br>Slim & Light LFD with<br>Cortex®-A9 1GH<br>L1 (I/D) : 32<br>L2 (Unified<br>1 GHz C<br>1 GB Dual 32-bit DE<br>2D & 3D Gra<br>- Up to 1,920 or<br>- Supports (I<br>4 GB (1.2 GB occupied II)<br>Video II<br>- MPEG-1/2, H<br>- VC-1, JI<br>Audio DSF<br>- AC3 (DD), MPE | Premium-S, Videowall-S)  Built-in MagicInfo Lite  Hz Dual Core CPU  KB / 32 KB  d): 512 KB  CPU Dual  DR3-667 (1,333 MHz)  phics Engine  (1,080. 32 bpp  DpenGL ES®  Dy O/S, 2.8 GB available)  Decoder  264/AVC (Dual)  PEG, PNG  (Decoder) |  |  |





## Samsung MDC displays

## **Specifications**

|               |              |           | MD32C   | MD40C            | MD46C                 | MD55C |  |
|---------------|--------------|-----------|---|------------------|-----------------------|-------|--|
| Certification | Safety       |           | CUL (USA+Canada): UL60950  TUV (Germany): EN60950  CB (Europe): IEC60950/EN60950  EK (Korea): K60950  CCC (China): GB8898  PSB (Singapore): IEC60950  GOST (Russia): IEC60950, EN55022  SIQ (Slovenia): IEC60950, EN55022  PCBC (Poland): IEC60950, EN55022  NOM (Mexico): NOM-001-SCFI-1993  IRAM (Argentina): IRAM  SASO (Saudi Arabia): IEC60950 |                  |                       |       |  |
|               | EMC          |           | FCC (USA): FCC Part 15, Subpart B class A   |                  |                       |       |  |
|               | Environment  |           | ENERGY STAR® 5.0 (USA)  |                  |                       |       |  |
|               | Optional     | Stand     | STN-  | -L32D            | STN-L4055AD           |       |  |
| Accessories   |              | Mount     |   | 1070SD<br>250MD  | WMN4270SD<br>WMN250MD |       |  |
|               |              | Specialty |   | 400D<br>  Mount) |                       |       |  |
|               | Included     |           | Quick setup guide, warranty card, application CD, D-sub cable, power cord, remote controller, batterie  |                  |                       |       |  |
|               | CPU          |           |   |                  |                       |       |  |
|               | N/B          |           |   |                  |                       |       |  |
|               | S/B<br>GPU   |           |   |                  |                       |       |  |
|               |              |           |   |                  |                       |       |  |
| Media player  | FDM/HDD      |           |   | SBB-A, SBB-C     |                       |       |  |
| Jana piayoi   | Memory       |           |   |                  |                       |       |  |
|               | Ethernet     |           |   |                  |                       |       |  |
|               | Connectivity | USB       |   |                  |                       |       |  |
|               |              | Output    |   |                  |                       |       |  |
|               |              | Others    |   |                  |                       |       |  |





## Legal and additional information

### 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 TVs, smartphones, tablets, PCs, cameras, home appliances, printers, LTE systems, medical devices, semiconductors and LED solutions. We employ 286,000 people across 80 countries with annual sales of US\$216.7 billion. To discover more, please visit www.samsung.com.

### For more information

For more information about Samsung DBD Series displays, visit www.samsung.com/business or www.samsung.com/displaysolutions

Copyright © 2014 Samsung Electronics Co. Ltd. All rights reserved. Samsung and MagicInfo are registered trademarks of Samsung Electronics Co. Ltd. Specifications and designs are subject to change without notice. Non-metric weights and measurements are approximate. All data were deemed correct at time of creation. Samsung is not liable for errors or omissions. All brand, product, service names and logos are trademarks and/or registered trademarks of their respective owners and are hereby recognized and acknowledged.

ARM and Cortex are registered trademarks of ARM Ltd.

HDMI, the HDMI logo, and High- Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing, LLC in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

OpenGL ES is a registered trademark of Silicon Graphics, Inc. in the United States and/or other countries worldwide.

ENERGY STAR is a registered trademark of the U.S. government

Samsung Electronics Co., Ltd. 129 Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742, Korea

www.samsung.com

2014-10



