FIND OUT MORE

SMART Signage

For more information about Samsung SMART Signage, visit www.samsung.com/business or www.samsung.com/displaysolutions

About Samsung

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.

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Screen images simulated.

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2015-08

FOCUS **ON THE FUTURE**

Samsung SMART Signage Catalog for LED and LCD Technology



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WE HELP YOU COMMAND THE WORLD'S ATTENTION

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THE NEXT LEVEL **OF DIGITAL** COMMUNICATION

To be successful in a world saturated by competing media, organizations are looking for innovative ways to cut through the clutter and connect with their audiences. That's why more and more of them are turning to Samsung.

DIGITAL SIG SAMSUNG I THE TOTAL INDUSTRY S SOLUTION F SMART LED SMART LED LED INDOOF LED OUTDO SMART LCD LCD SMART LCD LINEUF

Combining our global leadership in display technology with a holistic approach to your challenges, we offer complete SMART Signage solutions. From the first consultation to assess your needs, to helping with content management and after-sales service, our network of leading digital signage integration partners can help design and install a customized solution to meet your unique needs.

Get ready to engage and connect with Samsung.

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DIGITAL SIGNAGE MARKET IS GETTING BIGGER

All over the world, marketers, event organizers and venue owners want to create unique and sophisticated customer experiences. They are turning to digital signage as an effective medium for everything from advertising to educating, entertaining to engaging.



The Marketplace is Growing

The digital signage market is growing fast, especially in the LCD signage arena. In 2014, global revenue for LCD signage topped \$7 billion and is expected to grow to \$15.4 billion in 2018. As LED signage becomes more affordable, the market growth for these solutions will accelerate as well.1



LCD Trends: Bigger. Better. Brighter.

- Full HD displays becoming standard
- Video walls built on displays with super narrow bezels
- High brightness solutions for outdoor or semi-outdoor usage
- Touchscreens and touch-based interactivity
- Cloud-based software delivery



LED Trends: Bring Outdoor Indoors

- · High-density LED video displays
- Fine pixel pitch solutions
- Customized solutions
- LEDs are becoming a viable alternative to LCD for indoor use



IT'S GROWING FOR A REASON

In the past, many of smaller companies have been reticent to embrace digital signage. Now, integrated display solutions are able to significantly reduce the cost and complexity of digital signage allowing more business to embrace the digital future.



1. Samsung market research

2. http://cdn2.hubspot.net/hub/330100/file-555310858-png/DigitalsignageVS.png

3. www.samsung.com/us/business/smart-signage-platform/White_Paper_Streamlining_Digital_Signage_SSP_Final.pdf

SAMSUNG IS THE GLOBAL LEADER

finish.

The strong global presence of Samsung R&D, manufacturing and subsidiaries ensures timely, professional support and an understanding of your needs on a local level.

Samsung has been leaders in the digital signage market for several years now. Our backlit LED (LCD) signage, built on Samsung technology, offers superior guality and choice for customers.

products.

WHY CHOOSE SAMSUNG?

To be the best, you need to offer the best. Samsung offers the widest range of LED and LCD signage, built with the most innovative technology and highest quality components. Samsung products are backed by full service from start to

By acquiring YESCO Electronics, a provider of LED solutions, Samsung is now able to address all your needs for high-quality indoor and outdoor signage.

YESCO Electronics was founded in 1988, and has over twenty years of experience in LED solutions. They are a leading LED signage and display manufacturer, with over 2,000 sign deployments across the U.S. and abroad.

YESCO Electronics product expertise combines with Samsung's rigorous quality control and service excellence to make Samsung a market leader in digital signage, and provides a total signage solution with YESCO Electronics existing LED solutions and SAMSUNG's innovative fine pitch

THE TOTAL SOLUTION

Outdoor

Samsung offers the widest range of innovative LED and LCD display solutions in the market. Every display is engineered and built by Samsung for commercialgrade usage and reliability.

LED

LED signage is brighter than LCD screens and more robust, so they are suitable for outdoor use. LED screens have a completely customized design and higher viewing angle, so they are more flexible in their possible configurations. Indoor LED signage can be used instead of an LCD video wall solution, when a customer needs a really big screen without bezels that interrupt the image. A 1Q LOSS/SHR 25C

Durability 24/7 performance in demanding conditions

LCD VS LED TECHNOLOGY, WHAT TO CHOOSE?



LED signage is built to last

LCD

Typically, LCD screens have a lower initial cost, with easy setup and installation, simple management and suitable performance for your general business environments. They have a fixed aspect ratio and come in a range of predetermined sizes, this means that they can be installed guickly.



Easy management

Creat, display and manage with ease using Samsung Smart Signage Platform

High Resolution Display clear and vivid

business messaging



Indoor

Brighter

Bright, high-contrast screens are visible in all conditions.

Customizable

Customers can decide the size, shape or the resolution that's just right for their application

EVERY STEP OF THE WAY

From the first consultation to installation, maintenance and support, Samsung is there every step of the way to ensure that you have digital signage that meets your needs and exceeds your expectations.





Planning and Consultation

Consult with a local representative to find the perfect solution.

They will advise you on which technology, installation and service plans are available.

Design and Installation

The highest-quality products and customized frames are installed by trusted local partners, and overseen by Samsung.

We control the entire production process, from manufacture to final shipping, to make sure you get only the best.



Content Creation and Management

Use Samsung tools to create compelling content, or trust our content team to do it for you.

We can help you create content that is tailored to your solution.











Support and Maintenance

Remote troubleshooting, on-site and off-site support mean that your displays last longer and issues are resolved more quickly.

365/24-7 support staff are ready to assist if necessary.



The level of support and service differs from product to product. Please consult your sales agent for more details.

NEXT-LEVEL TECHNOLOGY

Whether LED or LCD, Samsung SMART Signage provides superior picture quality and rugged reliability. This quality means you can be confident you are investing in a solution that can handle even the most rugged applications without interruption, for years to come.



Customer-Focused Innovation

Samsung's extensive market research and in-depth industry analysis give us an advantage when finding solutions for any business. We have our fingers on the pulse of changing technology trends to help us adopt the latest solutions to benefit our customers.



Technology Leadership

Samsung believes in the constant pursuit of new innovation and success, regardless of past performance. By increasing investment in R&D, Samsung can be ranked as one of the foremost high-tech companies in the world. Our focus on R&D will continue in the future, establishing us as the leader in the technology sector in both quality and quantity.



Proven Market Leadership

This technology leadership is proven by our products and our customer base. Samsung has many industryleading products including mobile phones, high-definition televisions, semiconductors (memory), and digital signage. Samsung strives to lead the global market with cuttingedge technologies and exceptional products. And, because of this, we service and supply some of the biggest and most demanding customers in the world.



Solid Reliability

Samsung maintains direct and thorough control of every process, from manufacturing to services and support. This allows us to meet the highest international standards and requirements, and makes us more efficient. It ensures dependability in any environment, thanks to our strict quality testing specifications and criteria.





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INDUSTRY SOLUTIONS

Every industry is different. Every business is unique. One thing remains constant: Samsung's dedication to specialized solutions that cater to your needs.

Take a look at just some of the ways that Samsung delivers the dynamic digital signage solutions that help businesses across today's most demanding industries stand out from the competition.

SOLUTIONS FOR RETAIL

Digital signage has a profound impact on the shopping experience, enabling customers to make more informed decisions and helping retailers to make their stores more attractive.

Industry Needs:

- · Diversifying content types and display methods to increase customer interest
- · Promoting brand with compelling content
- Easy access to information and content
- Interactive shopping experiences

Make an Immediate Visit



Bright LED displays advertise your business, show real-time offers and draw customers in.



Boost Shopping Decision

Create a premium and memorable shopping experience with lifesize displays. Samsung SMART signage can be flexibly mounted to deliver rich, dynamic and high-impact content.



Build an interactive shopping experience for prospective buyers with Samsung touchscreen-enabled SMART Signage displays.



With Samsung SMART Signage displays pointing the way, people can easily find stores, restaurants and amenities at malls and shopping centers. Signage updated instantly to show promotions, new stores and other relevant information.

SOLUTIONS FOR SPORTS & ENTERTAINMENT

Give the fans what they want. Whether you're promoting high art or the art of the game, Samsung SMART displays make sure your venue makes an impact. The big news is the adoption of LED displays to make fans' experience even more intense.

Industry Needs:

- · Demand for large sized screens with strong durability
- Deploying timely and tailored information
- · Heightening customer excitement with vibrant images and dynamic layouts



Drive fan engagement by Samsung SMART LED Signage which allows stadium branding opportunities with excellent images. With our sports venue control system which supports Live Video, Replays, Scores and Advertising, fans never miss a single play, a single moment once they take a seat in the stadium.



Imagine bringing precious artifacts, art, and history to life with large interactive touch screen displays that engage the viewer at museums and galleries.

Encourage repeat visits to your theatre by promoting upcoming movies on life-size displays. Grab customer attention with mouthwatering food and beverage images at concession stands on digital menu boards.

SOLUTIONS FOR HOSPITALITY

Hotels and resorts need to rethink how to deliver excellent service and distinguish themselves from competitors. They must offer more than just simple broadcast channels and video-on-demand. They must offer effortless connectivity across all platforms.



Industry Needs:

- Enhanced outdoor solutions
- · Simple but stylish design to fit within existing décor
- Dynamic, space-efficient advertising for shared spaces, such as lobbies
- Smarter automated solutions that reduce maintenance costs



Attract Guests



Take your brand to the streets with larger-than-life displays that bring in business.



Integration-ready SMART Signage or an eye-catching video wall can present guests with important information while enhancing the ambiance of the property's public areas.

Real-time information about your vacancies, facilities and restaurants have a positive impact on the quest experience. Bring in more business and build your brand.



Cut down on printing and labor costs by installing signage that updates automatically. Keep your guests in the loop and reduce pressure on your staff.

SOLUTIONS FOR TRANSPORTATION

Catering to a more empowered customer has required the transportation industry to embrace technology in a new way. Travelers and freight shippers now expect help in choosing how best to get from point A to point B, taking into consideration cost, time and convenience.



Industry Needs:

- · Reduce operating costs by creating content in-house
- Streamline maintenance of the digital signage network with remote management capabilities
- Deliver real-time flight/transit information
- Enhance revenue with paid promotions for local attractions, restaurants and stores



Ticketing counter and boarding area displays at airports and other transportation hubs are critical for ensuring that passengers stay informed.



At retail spaces or duty-free, standalone and kiosk displays situated at entrances and windows to engage shoppers with vivid images and rich motion graphics. And seamless video walls and LED signage deliver impactful shopping experience.

Airline passengers can get reliable and easy-to-view flight information, using Flight Information Display Systems (FIDS) to check gate and departure status.

Today's modern airports offer a wide range of dining, shopping, entertainment and personal services choices. Samsung SMART displays with interactive touchscreens lead them towards these facilities and promote special offers.

SOLUTIONS FOR CORPORATE COMMUNICATIONS

By replacing old data projectors in meeting rooms, training centers and boardrooms with Samsung SMART Signage, companies can take teamwork to the next level. Integration-ready digital signage solutions can help corporations foster a collaborative work environment and reinforce their brand image.



· Upgrade or replace outmoded equipment

- · Increase efficiency through connected and networked devices
- Project the right brand image
- Maintain cost-effectiveness while making an impact, both indoors and outdoors



Instantly share presentations, videos and websites on a large, full-motion LED and LCD display screen.



Send tailored messages to each department and allow them to publish their own news on screens around your office.



Welcome visitors to reception and present your company with our SMART Signage which is designed for seamless screen with a crystal-clear picture quality.

SOLUTIONS FOR EDUCATION

People are more digitally savvy than today's college students. They grew up as digital natives and expect to learn, share and collaborate digitally. Samsung offers a wide range of displays that foster collaboration all around campus.



- Prepare the next generation of digital natives
- · Increase collaboration though interactive media
- · Deploy solutions throughout campuses and classrooms, even on a tight budget



In classrooms and lecture halls, data projectors and whiteboards are being replaced with Samsung touchscreen-enabled commercial displays. The displays provide instructors with tremendous flexibility in presenting multimedia content and using the touchscreen as a digital whiteboard.



Samsung SMART Signage displays are ideal in student meeting rooms at libraries, dorms and academic buildings. Students can gather around the display and connect their mobile computing device to prepare, edit, review and share project work.

Colleges are now adding Samsung outdoor kiosks and indoor touchscreen displays for wayfinding. New students, alumni, prospective students, conference attendees and other visitors can quickly locate buildings, rooms and daily events.

TAKE **SIGNAGE TO** THE NEXT LEVEL

The Samsung SMART LED and LCD range offers complete solutions for diverse requirements.

Outdoor

High-brightness with IP certification for viewing in any conditions.

Custom Design Outdoor

Enhanced weatherproofing and rigid structure combined with high brightness & deep contrast means long-lasting superior performance

Touchscreen

Interactivity

Enhance the customer

experience in various retail

and hospitality settings.

Semi-Outdoor Bigger, brighter displays can be seen even in bright sunlight.

> 24/7 Operation Components certified for continuous operation.

Video Wall

Ultra-thin bezels ensure nothing gets in the way of your message.

LCD

UHD Resolution

Samsung panel technology offers precise visual impact.

Indoor

Outdoor

LED

Bezel-less Indoor

Grab both the mind and the eye of customers with brighter, vivid and wideangled view

Fine Pixel Pitch

Far higher resolution and greater image quality for close-up view

SMART LED SIGNAGE

Samsung's LED Signage is designed with the latest in technology and changing market demands in mind to take innovation to the next level.

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BIB CHARTEN PLOT



LED MARKET AND TRENDS

The LED market share for commercial displays is growing, thanks to more efficient production, higher resolutions and greater cost-efficiency. LED solutions offer brighter images and higher refresh-rates than older technologies. LED displays can be almost any size and any shape, meaning you can have a completely customized solution.

WHY SAMSUNG SMART LED

If you want to make a big impression, look no further than Samsung SMART LED. Unlike other signage technologies, Samsung LED Signage is free of bezel-interference, color deviation between screens, or low visibility, to deliver a truly impressive viewing experience even on the largest formats.

0100 0000 1011



compatible displays.

Analog to Digital



Increased Indoor Demand

The conversion from static to digital signs has been well underway for indoor applications. Especially in the small pixel pitch arena, demand is increasing. Outdoor billboards in high-traffic locations will follow this trend.



High-Density LED Video Displays

High-density LED video displays are quickly gaining prominence in the digital signage industry. Samsung offers one-millimeter pixel pitch solutions to make it possible for images to be viewed from close up.



Staying in the Game

The entertainment sector is taking advantage of larger, brighter LED technology for mass outdoor events, such as concerts and sports events.



Retail and Public Space is a Driver for New Technology

The market for small pixel pitch display applications is growing dramatically, such as shopping malls, restaurants, clubs, convention centers, and auditoriums.



Enhanced Picture Quality and Innovative Technology

Our electronic displays are recognized worldwide for their vibrant color, deep contrast, and superior image quality. We source only the best diodes, processors, and raw materials. Camera-based automatic color calibration, sharp contrast, high-nit brightness ratio help ensure enhanced visibility and accurate color representation.

Superior Reliability

Our screens are designed to pass rigorous environmental testing and to perform in even the harshest settings. Conceived to operate at optimum voltage for improved power consumption and temperature, Samsung LED Signage offers enhanced durability and generates cost savings to help business owners achieve their long-term goals.

Engineered for Sustainability

Our displays feature the most efficient LEDs in the world. Combined with an optimized power supply system, our displays save thousands of dollars in electricity costs over their lifetime. Our products are UL Greenleaf certified for energy efficiency and are made of 98% recyclable material.

Easy Content Management Solutions and Content Creation Services

Samsung's MagicInfo content creation and management solution is embedded in most Samsung signage products, making content management easy. To ensure you have compelling material for your signage, our Content Service Team is ready to help you develop static images and video.

ADVANCED PICTURE AND VIDEO QUALITY

Samsung technology ensures the best image quality possible. We source only the most premium diodes in the world, and calibrate each screen using advanced diode-level color and brightness correction techniques. The software and technologies for image scaling, brightness adjustment and video processing ensure the output of Samsung displays are higher resolution, brighter and smoother than the competition.

EMBEDDED DEVICES

Selected Samsung SMART LED solutions¹ come with innovative integrated hardware to save costs and increase efficiency, eliminating the need for expensive external devices. Amplify your messaging on our displays, with accelerated performance that's built in.



Bright & Vibrant Picture Quality

Samsung uses only the industry's highest -quality, tier-1 LEDs to maintain the highest picture quality. This means Samsung SMART LED signage is brighter and more vibrant, while our preferential binning practices minimize manufacturing variations to ensure quality.



Enhanced Visibility and Accurate Color Representation

Camera-based automatic color calibration is done in two steps: first at the factory and then in the field to ensure quality





STEP 1. Factory Calibration

Precise color calibration of each sub-pixel independently, including brightness, color chromaticity and uniformity

STEP 2. Field Calibration

Our field calibration is both accurate and fast, compared to competition.

- 1) Take a picture with digital camera
- 2) Transmit the picture to NOC

3) Analyze the picture and do calibration remotely



Superior Picture Quality Proven by Samsung TV and LCD Signage

The technical superiority of Samsung hardware and software makes us the clear choice for businesses to bring their messages to their customers.

ADVANCED AUTO CONTRAST ENHANCER : Adjusts the contrast to create deeper blacks & purer whites PURCOLOR : Produces more details in color gradation for sensitive color reproduction. UP-SCALING : Unique 4-step upscaling process

Advanced Video Processing

One to one drive system sends video to all LEDs simultaneously.



Processor sends video to one line at a time, scanning rapidly between lines.



Advanced processor sends video to all lines simultaneously.







Receivers

An HDBase-T RX module is embedded in SMART LED Signage to enable remote transmission of video or images. You can save 85% on your total network cost, compared to the competition, because you don't need any additional devices to get started (amplifier, distributor, HDMI, RS232C cables). Enjoy long-distance video transmission, up to 100m, without any quality loss.



Video Processors

High performance comes with Samsung innovation already inside. The integrated Samsung S-Box provides superior picture quality and video processing. Play video and display images without purchasing an expensive video processor, while enjoying image quality that's second to none.

Seminole Hard Rock Hotel & Casino, Hollywood, FL 16mm 528x4672

BUILT TO BE THE BEST

Samsung SMART LED displays are constructed from the highest-quality materials and come complete with integrated components that increase their utility and value.

QUALITY TESTING

Simulates real-life operation in a wet environment.

Salt Fog Chamber

Tested to go beyond the limits of your expectations, Samsung SMART LED displays are built to withstand the most extreme conditions. From hot and humid to cold and dry, Samsung SMART LED dipslays will stay operational.



Highest Class of LEDs

Samsung uses only the industry's highest-quality, tier one LEDs. Exposed to the exact same environmental conditions, Samsung's LEDs provide significantly longer life than competitors.

Quality Construction

Our manufacturing facilities are highly resourced with both skilled/trained technicians and all machinery & tooling required for creative and structural fabrication. Durable and reliable, Samsung SMART displays are built to withstand harsh environmental conditions, including extreme temperatures and varying sunlight.



Enhanced Thermal Structure

SMART LED Signage has specially designed cabinets with enhanced thermal structure, to reduce heat build-up and reduce cooling costs.



C3 Contamination and lonograph Testing Ensures military grade standards for cleanliness and contamination during the manufacturing process.

Certified Quality

• IP 65 certified: front, rear

- IP 67 certified: module-level protection
- Designed and proven to withstand Lv4 Hurricane
- IP ratings, or ingress protection, were developed by the IEC (International Electrotechnical Commission)

Level 4 Hurricane: Wind speed of 210 to 249km/hr (Typhoon NOUL on May 11, 2015: Max wind speed of 220km/hr)

SMART LED Signage is designed to last even under hottest, coldest, wettest locations in the world. Each display passes through a proprietary three-step waterproofing process with Parylene polymers

Enhanced Weather Proofing

SUPPORTING YOUR SOLUTION



NOC, Enhanced Remote Control

Samsung provides pre-emptive real-time monitoring, diagnostics and support from our NOC (Network Operation Center). Through an LED dot error analysis system, our monitoring systems can recognize errors in advance to ensure an uninterrupted visual experience, and dispatch a service team quickly if any issues are diagnosed.



Round-the-Clock Support

We provide live 24-7/365 service and technical support from our customer support center. Our knowledgeable technicians are ready to give their full support and to troubleshoot any issues that may arise.



CONTENT CREATION SERVICE

Make the most of your Samsung display solution. Use our experience in creating content for large format displays to your advantage and see better results. Collaborate with our Content Service Team and get compelling video and images for your LED displays.



Free Downloads

Customized Content

graphic artists.

Based on the subscription plan. our customers have access to custom

content designed by professional

Download up to 25 media slides per day at no extra charge. We upload new content every week.



Media Support

Fast and dedicated support for all content is provided by YESCO Media Services. Direct communication with the artists yields quality results.

Access Your Downloads, Anywhere

You can view your download history (for your account pages) and can use your content, wherever you are.

REMOTE MANAGEMENT SOLUTION

MagicInfo is a smart, intuitive content creation and management solution available as standard on Samsung Display Solutions products.





Embedded Solution

- Comes standard with the purchase of a Samsung SMART display solution
- · Save on the purchase cost of content management software



Easy Content Creation and Scheduling

- Deliver time-relevant content
- · Plan your media delivery in advance and execute it remotely





MagicInfo equips you with a suite of creative tools built to facilitate content creation and display management. You can perform a range of functions, from creating eye-catching digital signage content, to designing and managing a complex, interactive multimedia display system.



Easy-to-Use Interface

Simplified creation of custom content with easy drag and drop capability and a library of readily available templates.

Runs on S-Box

S-Box i video processor comes integrated with your SMART display solution.

Energy Solutions Arena / Utah Jazz, Salt Lake City, UT - Center Hung Displays are 6mm, Upper Ring on Center Hung Scoreboard is 10mm, Corner Displays are 10mm, and Outer Rings 20mm

SMART LED SIGNAGE OVERVIEW

LED PRODUCT IMAGE - CUSTOM TYPE



What is an LED?

LED stands for "light emitting diode." An LED produces light when power is applied to the diode's semiconductor chip. We source only the brightest and most efficient diodes. Our engineers work directly with LED manufacturers to provide the optimal diodes for every application. We combine these superior diodes with our industry-leading power supply system to ensure that each display we produce stays brighter and lasts longer.

What is an SMD?

An SMD is a surface-mount diode, also known as surface mount technology (SMT). These diodes contain a red, blue, and green chip all in one fixture. Because of the small size of SMDs, we place them closer together to manufacture screens with higher resolutions. SMDs are ideal for applications with close viewing distances. They also offer wider viewing angles.

What is Pixel Pitch?

Pixel pitch is the distance between pixels. The higher the pitch, the more spread out the diodes and lower the resolution. The lower the pitch, the closer the diodes and higher the resolution. We offer exterior displays in 6, 10, 12, 16, 20 and 25mm pitches, and interior displays in 1.5, 2.5, 3, 4, 6, 8, 10, 12 and 16 mm pitches.

What is Resolution?

Resolution is the number of pixels contained in a given area. It is generally listed as the number of pixels high by the number of pixels wide (for example, 64x128). Resolution determines how much detail can be displayed.



LED PRODUCT IMAGE - CABINET TYPE







LED INDOOR LINEUP



	Indoor									
	Pixel Pitch (mm)	P1.5	P2.5	P3	P4	P6	P8	P10	P12	P16
Physical Parameter	Pixel pitch	1,5mm	2,5mm	3.175mm (.125") centers	4.1275mm (.1625") centers	6.35mm (.25") centers	8.255mm (.325") centers	10.32mm (.40625") centers	12.7mm (.5") centers	16.51mm (.65") centers
	Pixel configuration	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue
	Pixel density	444,444m ² / 41,290 ft ²	160,000m ² / 14,864 ft ²	99,200m ² / 9,216ft ²	58,698m ² / 5,453ft ²	24,800m ² / 2,304ft ²	14,675m ² / 1,363ft ²	9,392m ² / 876ft ²	6,200m ² / 576ft ²	3,669m ² / 341ft ²
	Diode type	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)
	Dimensions (LxH)	480x540mm (per cabinet)	480x540mm (per cabinet)	203x229mm (per module)	264x297mm (per module)	203x229mm (per module)	264x297mm (per module)	165x165 or 330x165 mm (per module)	203x203mm (per module)	264x264mm (per module)
	Weight	10kg (per cabinet)	10kg (per cabinet)	0.39kg (per module)	0.52kg (per module)	0.32kg (per module)	0.50kg (per module)	0.27 or 0.54kg (per module)	0.27kg (per module)	0.44kg (per module)
	Brightness	800 nit	2,000 nit	2,000 nit	2,500 nit	2,500 nit	2,500 nit	2,500 nit (black faced)	2,000 nit	1,500 nit
Optical Parameter	Contrast ratio	3,000:1	4,000:1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Viewing angle - horizontal	160°	160°	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°) vertical	160° (+/- 80°) vertical
	Viewing angle - vertical	160°	160°	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°) vertical	160° (+/- 80°) vertical
	Number of colors	100 trillion colors	100 trillion colors	281 trillion colors	281 trillion colors	281 trillion colors	281 trillion colors	281 trillion colors	281 trillion colors	281 trillion colors
	Color wavelength	red: 625nm, green: 526nm, blue: 468nm	red: 622nm, green: 520nm, blue: 468nm	red: 630nm, green: 530nm, blue: 468nm	red: 630nm, green: 530nm, blue: 465nm	red: 630nm, green: 530nm, blue: 465nm	red: 630nm, green: 530nm, blue: 465nm	red: 630nm, green: 530nm, blue: 465nm	red: 630nm, green: 530nm, blue: 465nm	red: 630nm, green: 530nm, blue: 465nm
	Color temperature - default	6,500K	6,500K	6,500K	6,500K	6,500K	6,500K	6,500K	6,500K	6,500K
	Color temperature - adjustable	3,000 - 10,000K	3,000 - 10,000K	4,500 - 9,000K (adjustable)	4,500 - 9,000K (adjustable)	4,500 - 9,000K (adjustable)	4,500 - 9,000K (adjustable)	4,500 - 9,000K (adjustable)	4,500 - 9,000K (adjustable)	4,500 - 9,000K (adjustable)
Electrical Parameter	Video rate	50/60Hz	50/60Hz	60 frames per second	60 frames per second	60 frames per second	60 frames per second	60 frames per second	60 frames per second	60 frames per second
	Input power range	110~240 VAC, 50/60Hz	110~240 VAC, 50/60Hz	120/240 volts, 50/60Hz	120/240 volts, 50/60Hz	120/240 volts, 50/60Hz	120/240 volts, 50/60Hz	120/240 volts, 50/60Hz	120/240 volts, 50/60Hz	120/240 volts, 50/60Hz
	Power consumption - max (W/m ²)	820	640	992	763	484	433	282	397	385
	Power consumption - typical (W/m ²)	310	250	495	191	173	161	103	118	106
	Refresh rate	2,400Hz	2,400Hz	24,960Hz	24,960Hz	24,960Hz	24,960Hz	24,960Hz	24,960Hz	24,960Hz
Operation Conditions	Working temperature	0°C~40°C (32°F to 104°F)	0°C~40°C (32°F to 104°F)	-18°C to 55°C (0°F to 131°F)	-18°C to 55°C (0°F to 131°F)	-18°C to 55°C (0°F to 131°F)	-18°C to 55°C (0°F to 131°F)	-18°C to 55°C (0°F to 131°F)	-18°C to 55°C (0°F to 131°F)	-18°C to 55°C (0°F to 131°F)
	IP rating	IP20	IP20	IP50	IP50	IP50	IP50	IP50	IP50	IP50
	LED lifetime	100,000 hours to half brightness	100,000 hours to half brightness	100,000 hours to half brightness	100,000 hours to half brightness	100,000 hours to half brightness	100,000 hours to half brightness	100,000 hours to half brightness	100,000 hours to half brightness	100,000 hours to half brightness
Certification	Certification	EMC Class A, Safety 60950	EMC Class A, Safety 60950	UL listed	UL listed	UL listed	UL listed	UL listed	UL listed	UL listed





2,000 nit

1,500 nit

LED OUTDOOR LINEUP



	Outdoor						
	Pixel Pitch (mm)	P6	P10	P12	P16	P16	P20
hysical arameter	Pixel pitch	6.35mm (.25") centers	10.32mm (.40625") centers	12.7mm (.5") centers	16.5mm (.65") centers	16.5mm (.65") centers	20.6mm (.8125") centers
	Pixel configuration	1 red, 1 green, 1 blue					
	Pixel density	24,800m ² / 2,313ft ²	9,392m ² / 876ft ²	6,200m ² / 576ft ²	3,669m ² / 344ft ²	3,669m² / 344ft²	2,350m² / 218ft²
	Diode type	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Discrete lamp	Discrete lamp
	Dimensions (LxH)	203x203mm (per module)	165x165/330x165 mm (per module)	203.2x203.2mm (per module)	264x264mm (per module)	264x264mm (per module)	330x165mm (per module)
	Weight	0.54kg (per module)	0.34 or 0.69kg (per module)	0.61kg (per module)	0.95kg (per module)	1.16kg (per module)	0.95kg (per module)
	Brightness	9,000 nit	8,200 nit	9,000 nit	7,500 nit	9,000 nit	9,000 nit
	Contrast ratio	N/A	N/A	N/A	N/A	N/A	N/A
ical ameter	Viewing angle - horizontal	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	140° (+/- 70°)	140° (+/- 70°)
	Viewing angle - vertical	95° (+40/- 55°)	65° (+15/- 50°)	72° (+16°/- 56°)	75° (+17°/- 58°)	77° (+25°/- 52°)	59° (+17°/- 42°)
	Number of colors	281 trillion colors	281 trillion colors	281 trillion colors	281 trillion colors	281 trillion colors	281 trillion colors
	Color wavelength	red: 630nm, green: 530nm, blue: 468nm					
	Color temperature - default	6,500K	6,500K	6,500K	6,500K	6,500K	6,500K
	Color temperature - adjustable	4,500 - 9,000K					
ectrical rameter	Video rate	60 frames per second	60 frames per second	60 frames per second	60 frames per second	60 frames per second	60 frames per second
	Input power range	120/240 volts, 50/60Hz					
	Power consumption - max (W/m ²)	992	836	806	624	348	329
	Power consumption - typical (W/m ²)	248	209	202	156	87	82
	Refresh rate	24,000Hz	24,000Hz	24,000Hz	24,000Hz	24,000Hz	24,000Hz
peration anditions	Working temperature	-40°C to 55°C (-40°F to 131°F)					
	IP rating	Silicone sealed (Module IP67, Cabinet IP65)					
	LED lifetime	100,000 hours to half brightness					
ertification	Certification	UL listed					



The LINQ, Las Vegas, NV - 16mm (top) and 10mm (bottom)

SMART LCD SIGNAGE

Samsung's suite of LCD signage is designed to help business owners produce brilliant messaging with highlyvisible and energy-efficient displays.



LCD MARKET AND TRENDS

The growing demand for LCDs in digital signage is becoming increasingly diverse, with many noteworthy trends in LCD technology allowing these displays to be employed in a wide range of vertical markets.

Total worldwide growth for LCD digital signage displays is projected to be at 7.3% and 7.8% in 2015 and 2016, respectively.¹



More Attractive for Business

Adoption of digital signage bundles will become more common across the business spectrum. Turnkey, entry-level digital signage packages have been gaining popularity this past year, with display manufacturers targeting more price-sensitive market segments.

Super and Ultra-Narrow Bezel Displays

Super narrow bezel LCD displays have also seen extraordinary growth since entering the market, experiencing great success within video wall applications. Over the past year, significant strides in reducing bezel width have been made, making it possible to create nearly seamless video walls.

Outdoor Digital Signage Broadens its Presence

Outdoor displays are also becoming increasingly sought after, especially in markets such as street billboards, storefront windows, stadiums, transportation, QSRs, shopping malls, and airports, among others. The greater influx of outdoor digital displays also allows many of these market segments to deliver a unified brand identity and content messaging in both outdoor and indoor environments.

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WHY SAMSUNG SMART LCD SIGNAGE

Samsung is the market leader in display technology. Our LED-backlit panels (LCD screens) are renowned for their sharp text, rich color and reliable performance.



WIDEST RANGE OF UNIQUE DESIGNS

Samsung offers the widest range of commercial display solutions to meet almost any digital signage need. The commercial displays for standalone or video wall use are available in a wide variety of sizes (32"–105") to fit almost any digital signage requirement. A square 22" display offers amazing design creativity. An integrated kiosk display can be used indoors and out. And Samsung's touchscreen overlays can convert our commercial displays (select models) into interactive displays

LOWER OPERATIONAL COSTS WITH LCD

Samsung SMART LCD displays are a cost-effective way to get your message out there. A winning combination of durable construction materials, lower operational costs and more connectivity for content delivery results in a better solution for you.







Easy Installation and Advanced Cooling

Samsung premium signage displays have a sturdy yet lightweight design that allows for easy unpacking and installation. Once installed, they're all about low-cost operation. Since the displays are built with advanced LED technology, they use less electricity than comparably-sized CCFL panels.

Innovative cooling technologies dissipate heat while lowering internal temperatures. So your Samsung SMART Signage displays will operate more efficiently and consistently over longer periods of time.



Transition from Static Signage to Dynamic Digital Signage

Businesses recognize the many advantages of digital signage, but the transition can be challenging from a content and technology perspective. Samsung makes it easy. The Samsung SMART Signage Platform* eliminates the need for an external media player and streamlines deployment. The embedded media player



includes a dual or quad core processor, up to 8GB of storage and a high-performance video processor. The media player works with Samsung MagicInfo software and third party software. The integrated solution enables easy deployment and management without sacrificing flexibility and performance.

*Compatibility may be limited to certain models of Samsung SMART LCD Signage. Please check www.samsung.com for more details





Seamless Connectivity

Collaborative workspaces such as classrooms and conference rooms require presentation tools that foster seamless sharing of content. Traditional data projectors are often hard to view, especially in bright lighting conditions. Fast-moving images don't render smoothly and crisply, and connecting mobile devices through cables or complex wireless setups is a hassle.

Samsung SMART Signage displays enable completely new ways to share and collaborate. Android smartphones and tablets can wirelessly transmit images to a Samsung display for quick and easy sharing (requires Samsung AllShare solutions). For Windows and iOS environments, Samsung MagicInfo Interactive Whiteboard enables both content sharing and collaboration.

STREAMLINE CONTENT CONFIGURATION AND REDUCE COSTS WITH SSSP

The Samsung SMART Signage Platform (SSSP) is an all-in-one solution that marries cutting-edge display hardware with a simplified, integrated media player and open-source system platform. SSSP operates off the display's internal CPU and high-performance video processor, eliminating the need for an external set-back box or PC.



3



player)

A media player feature embedded inside the display that integrates a capable computer into the display as a System-on-Chip (SoC).



Proven Samsung Hardware

Higher reliability with Samsung proven hardware on which the SI solution runs.

Potent Processing Power

Potent processing power and resources that third-party SIs can use to build proprietary content management solutions, without the need to custom-design a box.

Integrated Solution Offering

Lower TCO by eliminating the conventional need to purchase additional components or installation structures and configurations (a separate STB or PC to act as media

Embedded Media Player Functionality

LCD SIGNAGE PRODUCT OVERVIEW

Samsung SMART Signages open up new business possiblities by creating a digitally immersive commercial environment.

	Stand Alone		Video Wall	
PREMIUM	DHD Series	PEC Series	UDE-P Series UDE-S Series UDE-A Series	UED Series
PROFESSIONAL	DME Series	DBE Series	UDE-B Series	
PERFORMANCE	EDD Series		UDE-C Series	
	Outdoor	UHD	Small Signage	Interactive/Touch
SPECIALIZIED	OHD Series OMD Series	QMD Series	DB22D-P DB22D-T DB10E-T DB10E-POE	DM-BR Series
ACCESSORY	SBB/PIM		Signage Player Box	
SOFTWARE	MagicInfo		SSSP (SAMSUNG SMART	Signage Platform)





LCD LINEUP

Premium		Professional		Performance
You deserve a vacuation Book with us today and save a bootload	Version Constructions Version Constructions	Our precisus por electron a construction of the construction of th	30% off the spring Collection	SUMMER ESCAPE Paradise 20% OFF ALL AIRFARE
DHE	PEC	DME	DBE	EDD
High-brightness display with powerful embedded solution	Slim, high-brightness display with non glossy design	24/7 professional display with powerful embedded solution	High-performance displays with easy content management	Affordable LED display for basic digital signage
40", 48", 55"	40", 46", 55"	32", 40", 48", 55", 65", 75"	32", 40", 48", 55"	32", 40", 46", 55", 65", 75"
13.3mm-18.8mm bezel	13.5mm-17.1mm bezel	9.5mm-23.5mm bezel	9.5mm-15mm bezel	16.3mm-23.5mm bezel
Extended business hours	Extended business hours	Extended business hours	Business hours	Business hours
700 nit brightness	700 nit brightness	400-450 nit brightness	350 nit brightness	320-400 nit brightness
Samsung SMART Signage Platform 3.0	Samsung SMART Signage Platform	Samsung SMART Signage Platform 3.0	Samsung SMART Signage Platform 3.0	

Specialized











OHD	OMD	QMD	DB22D-P, T	DB10E-T, POE	DM82E-BR
IP56 certified outdoor signage with 24/7 durability	Semi-outdoor display, ready to use right out of the box	High-detail UHD display with 4x the pixels compared to full HD	Small sized display with fully embedded solution including interactive touch	Small sized display with fully embedded solution including interactive touch and POE solution	All-in-one E-board display package
46", 55"	46", 55", 75"	55", 85", 105"	21.5"	10.1"	82"
24.9mm bezel	6.5mm-11.7mm bezel	13.2mm-22.7mm bezel	14.9mm-24.5mm bezel	14.1mm bezel	51.9mm bezel
Extended business hours	Extended business hours	Business hours	Business hours	Business hours	Extended business hours
2500-3000 nit brightness	2500 nit brightness	350-500 nit brightness	220-250 nit brightness	400-450 nit brightness	430 nit brightness
Samsung SMART Signage Platform 2.0	Samsung SMART Signage Platform 2.0		Samsung SMART Signage Platform 2.0	Samsung SMART Signage Platform 3.0	Samsung SMART Signage Platform 3.0 MagicIWB 2.0"

Video Wall

Video Wall						
Gode Roman	WNB NENS Internet Marine Internet Inter	20% SALE Season Off	BIG BIG SALE SOLGEE	ALTERNATIONAL ARPORT		
UDE-P	UDE-S	UDE-A	UED	UDE-B	UDE-C	UD22B
Premium video wall solution with ultra narrow bezels and optimized picture quality	Factory-calibrated video wall solution for broadcasting studio usage	Specialized daisy chained video wall solution for UHD content play	Affordable video wall with advanced color management	Powerful and versatile video wall solution for various business needs	Budget-friendly displays with standard features	1:1 aspect ratio(Square) displays for unique and artistic designs
46", 55"	55"	46"	46", 55"	46", 55"	46"	21.6"
2.3mm(U/L), 1.2mm(R/B) Ultra narrow bezel	2.3mm(U/L), 1.2mm(R/B) Ultra narrow bezel	2.3mm(U/L), 1.2mm(R/B) Ultra narrow bezel	5.5mm bezel	2.3mm(U/L), 1.2mm(R/B) Ultra narrow bezel	3.7mm(U/L), 1.8mm(R/B) bezel	3.7mm(U/L), 1.8mm(R/B) bezel
Extended business hours	Extended business hours	Extended business hours	Business hours	Extended business hours	Extended business hours	Extended business hours
700 nit brightness	700 nit brightness	700 nit brightness	450 nit brightness	500 nit brightness	500 nit brightness	450 nit brightness
Samsung SMART Signage Platform 3.0	Samsung SMART Signage Platform 3.0	UHD Content play up to 5x5 (daisy chain)	Samsung SMART Signage Platform 2.0	Signage Player Box	(optional)	

Software		
🕸 MagicINFO	SAMSUNG SIGNAGE PLATFORM	
MagicInfo	Samsung SMART Signage Platform (SSSP)	
Create and manage content with robust, easy-to-use software tools	Integrated signage platform eliminates need for external media player and streamlines deployment	(
Create, schedule and manage multi-media content	Open development platform enables customized solutions	(
Author content from different devices with Samsung Web Author	Embedded media player	[
Deliver content through various channels (USB, built-in Wi-Fi, network)	Large network of content creation/ management providers	١

Media Players

