About Samsung Electronics Co., Ltd.
Samsung inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and memory, system LSI, foundry and LED solutions. For the latest news, please visit the Samsung Newsroom at http://news.samsung.com.

For more information about Samsung Display Solutions, visit www.samsung.com/business or www.samsung.com/displaysolutions

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Education Display Solutions

Imagine a new era of learning

Digital flipchart | Interactive whiteboard | Smart signage | LED signage | Monitors | Hybrid classroom solution
Digitalization in education is not an option, but a must

Even before the pandemic, there was a trend of digitalization in schools and the education sector, but it was focused in urban, more advanced areas and the speed of digitalization was significantly slower compared to what we are seeing now. Since the pandemic, the need for digital transformation and technologies has increased rapidly and governments in countries across the world are increasing their investment in the digitalization of schools and education industry more broadly. With virtual learning the new reality, children must be able to learn whenever and wherever they are, meaning that digitalization in schools and education is no longer an option, but a must.

New learning trend
The need for virtual and online education is increasing. In addition, hybrid learning, which provides online and offline classes at once, is also emerging as a new educational trend. Students and teachers must adapt to the new reality, while ensuring that the education is engaging and effective to maintain the progress of students.

The need for a connected campus
Schools often need to showcase events and announcements in real time, so one of their major concerns is how to provide timely content throughout the campus. Advanced display technologies enable efficient content management across campus, while also providing eye-catching content to reach people anywhere on campus.

Health and safety top of mind
Due to the increased sensitivity around health and safety, display solutions must address these concerns and provide total peace of mind for every user. Display products designed with safety in mind and solutions that enable preparation for potential emergencies have become a critical part to protect students, teachers and staff.

Experience a new era of learning reimagined
To enable education institutions to meet the requirements of this digitalization trend, Samsung offers a full portfolio of display solutions optimized for any education environment. Whether you are inside the classroom, around the campus, or learning and teaching from home, Samsung’s education line-up gives teachers the tools they need to deliver an enhanced experience, while maintaining student engagement, collaboration and confidence. Samsung’s supporting solutions and education partners also ensure the safety and security of students and teachers for total peace of mind.

Elevate the classroom experience
Captivate students with eye-catching visuals and integrate with leading learning platforms and collaboration tools, ready right out of the box.

Rethink school-wide communication
Deliver informative messages in real time across your network of displays with reliable, easy-to-manage solutions that simplify campus communication.

Build safer learning spaces
Keep the community safe and healthy with up-to-date safety-conscious technologies. Ensure school data and user privacy is secure with Knox protection.
What Samsung offers

Samsung, the number one global digital signage solution provider, offers a comprehensive portfolio of education display solutions for a wide array of applications inside and outside the classroom.

Inside the classroom

1. Classroom
   Increased classroom collaboration and engagement is critical to ensure every student feels involved and confident. Interactive whiteboard and digital flipchart creates a positive classroom environment.
   Related products: Business TV, Digital flipchart, Interactive whiteboard

2. Personal study room
   Students need a properly equipped study room to enhance focus on their self study. Advanced monitors can create a optimal viewing experience in any study room, helping students stay productive.
   Related products: High resolution monitors, Ultra-wide monitors

3. Auditorium
   LED signage and video walls ensure that any auditorium delivers visible and vibrant content to every student, regardless of how big the space is and how big the audience is.
   Related products: LED signage, Video wall, Digital flipchart

Outside the classroom & around the campus

4. Entrance
   Make a first impression as students first enter the campus, with digital signage that delivers important information with great visibility, even in bright sunlight.
   Related products: Outdoor signage

5. Hallway
   In a busy hallway with people passing by, display technology becomes even more important in communicating critical information such as school events, emergency alerts and safety guidelines.
   Related products: Interactive displays, Crystal UHD signage

6. Lecture room
   Students and teachers are reliant on digital display technology for lecture information. Small displays can be used as a tool to display the information, installed right outside the classroom.
   Related products: Small displays
Easy setup and management
Samsung’s business TV frees up more time for teachers to focus on lesson planning and delivery, making them spend less time dealing with technical setup and issues maintenance. In addition, a pin-code protects the display settings, avoiding any potential content interruptions during class.

Eye-catching content
Samsung’s business TV delivers an eye-catching visual experience with UHD resolution in a range of sizes to fit any education environment. Crystal Display ensures optimized color expression and High-Dynamic Range improves brightness levels to better keep the attention of students and ensure important lessons deliver a lasting impression for optimized student performance and progress.

Digital flipchart
Captivate students with interactive content
With Samsung Flip, ideas can flow freely for students and teachers. Its enhanced collaboration capabilities empower any teacher to lead their class while encouraging students to develop new ideas without the hassle of any technical difficulties.

Pen and paper writing
Samsung Flip provides you with a smooth and familiar pen to paper writing experience in a variety of available colors, styles and widths. Up to 4 people can write simultaneously, using any object as a writing tool. In addition, users can quickly erase the drawings with finger or palm swipe.

Flexible image editing & Annotation on
With Samsung Flip, users can quickly and easily select, move, crop, caputre, and edit any image. Samsung Flip allows users to write on any background source. By simply clicking the note layer button, users can enjoy smooth writing without affecting any work behind the original layer.

Business TV
Bring lessons to life with dynamic content
Samsung’s business TV is the ideal display solution for classroom environments, enabling more interactive and interesting learning through the delivery of dynamic audiovisual content.

BET-H series

Business TV

Digital flipchart

WMR series 55”, 65”
Interactive whiteboard

Create light bulb learning moments

In-classroom interactive displays redefine what interactive looks like. While teachers can create a more engaging classroom environment, students can receive digital experience while learning.

**Enhanced touch technology**

Samsung Flip provides a wide color palette and range of thicknesses for a differentiated writing experience. It also provides an intuitive tool for up to 20 people to write and draw simultaneously on the large, 85-inch clear UHD display. These intuitive features ensure that all participants can actively and directly take part to increase class efficiency and engagement.

**Optimized for education**

Teachers are able to connect their personal devices to the Flip using the 'touch out' function, controlling content on the display in real-time while having the flexibility to move around. Any edits made to the content on-screen will also be mirrored back to the personal device and vice versa for efficient collaboration.

**Advanced collaboration**

Samsung Flip ensures easy access regardless of the content source – Microsoft Word, PowerPoint, Excel and Adobe PDF files – for improved class engagement. Samsung Flip now supports web browsing, with no additional device needed. Once the browser is open, annotation is still available for users to draw around the browser for on-the-spot collaboration.

**Multiple connection options**

A versatile selection of connectivity options, including USB, HDMI, DisplayPort, screen sharing and the recently added OPS slot, ensures the Flip is accessible from a variety of devices. When teaching a class, the Flip works seamlessly in the background to allow teachers to focus on engaging their students.
Flexible and effective for everyone

Integrated hybrid learning solutions improve classroom learning in a number of ways. The new model of face-to-face and online learning not only benefits teachers with additional resources for instruction, but also provides a more cohesive learning experience for students impacted by physical school closures – giving much needed flexibility for a high-quality education from anywhere.
High resolution monitors

TU87F/T85F series

Keep students motivated

High resolution monitors with UHD and WQHD resolutions, which provide extended displays with complete detail, allow students to stay focused on the latest assignment or group project.

Detailed clarity

Samsung’s UHD and WQHD monitors deliver more screen space and detail for truly lifelike images. This means students can view documents and webpages with less scrolling and enjoy higher readability with reduced eye strain — even during a long period of learning.

Multi-productive displays

PBP transforms a single monitor to a dual-view monitor by displaying content from two sources side by side on one screen. With PBP, students can see and organize multiple apps and files exactly how they want to — all supported by a variety of connectivity options and ergonomic design to improve comfort and learning efficiency.

Ultra-wide monitors

CJ89/CJ79 series

Work with a better view

A top choice for comfortable viewing, seamless multitasking, and an uncluttered single-screen setup for faculty and staff. Ultra-wide curved monitors offer a cost-effective way to enhance productivity when it matters most.

A better way to multi-task

The ultra-wide screen supports a number of open windows without scroll or zoom, while eliminating the clutter and inconveniences of the traditional dual monitor setups. Multi-tasking features — PIP, PBP and Easy Setting Box — allow teachers and administrative staff to work on multiple documents and applications simultaneously.

Ultimate connectivity

Samsung’s ultra-wide monitors let teachers and administrative staff multitask more efficiently, saving desk space. USB Type-C ports transmit both power and data. The built-in KVM switch lets them control two computers connected to the monitor using just one keyboard and mouse.

* UHD resolution is only available on TU87F series.
** WQHD resolution is only available on T85F series.
LED signage

Increase audience’s attention and involvement

For successful lessons and presentations, everyone in the auditorium must have visibility of all the content on display no matter how many are in the room. Samsung’s LED signage delivers an impactful viewing experience on a large scale.

Clearly refined visuals

Utilizing a propriety algorithm, LED HDR creates true-to-life images, turning any content into HDR-level quality without requiring any special metadata. Samsung’s LED signage also supports HDR10+ that optimizes brightness and contrast ratio scene-by-scene to ensure each frame looks exactly as intended.

Screen uniformity

Samsung’s complete and comprehensive calibration solution ensures LED displays continuously maintain picture quality. While all LED screens undergo multi-step factory calibration process, users can also easily manage brightness and color uniformity with their mobile devices.

Video wall

Deliver a seamless visual experience

Samsung’s video wall displays provide a captivating viewing experience for a wide variety of auditorium settings, allowing viewers to see vivid content regardless of where they are seated.

Immersive viewing experience

A narrow bezel – 0.88mm to 3.5mm bezel-to-bezel options – minimizes the visual distraction of video walls. The displays’ non-glare panels provide better visibility regardless of ambient light and the displays can project UHD content across multiple screens with daisy chain (up to 5x5).

Wide viewing angles & built durable

Through wide viewing angles, students and teachers can get clear details and vivid colors regardless of where the screen is located. IP5X certified, Samsung video walls are dust-resistant and able to withstand a range of environmental conditions without needing to prepare additional enclosure in dusty places.
Outdoor signage

Keep any campus informed – even outdoors

Samsung’s lineup of outdoor displays ensures the clear and concise delivery of important messages. Outdoor message center displays in front of the school capture the attention of students as soon as they walk through the door.

Unsurpassable visibility day and night

Samsung’s outdoor signage allows for exceptional, consistent content delivery with high brightness and 24/7 performance. With a built-in dimming sensor, the display automatically adjusts the brightness based on the external lighting environment.

Samsung’s outdoor signage is certified to perform in outdoor settings. IK10-rated Magic Protection Glass and IP56-rated protection* ensure the displays will withstand physical impact as well as dust**, humidity or other outdoor elements that could affect the display.

Built strong to endure outdoor elements

Samsung’s outdoor signage is certified to perform in outdoor settings. IK10-rated Magic Protection Glass and IP66-rated protection* ensure the displays will withstand physical impact as well as dust**, humidity or other outdoor elements that could affect the display.

Interactive displays

Help students and visitors easily navigate your campus

Built with responsive touch performance and eye-catching UHD picture quality, Samsung’s interactive displays help students, faculty and visitors get anywhere on campus — from the art room to the auditorium.

Powerful touch experience

Upgraded Tizen OS makes playback more stable and opens up new possibilities with high-speed content. A responsive capacitive touch functionality offers an engaging experience while the user-friendly design enables comfortable, productive digital interactions.

Enhanced picture quality & easy management

Samsung’s interactive displays provide UHD resolution* capabilities for incredibly clear content, increasing users’ engagement with lifelike images. It also offers improved visibility through non-glare glass. IP5X and Center IR ensures efficient and reliable performance.

*For kit models without front glass, IK10 rating does not apply and IP56 is contingent upon usage of a separate front glass.
**Ingress of dust is not entirely prevented but will not accumulate in sufficient quantities to interfere with the satisfactory operation of the equipment.

* The UHD feature is only supported for 43 inches and 55 inches display.
Crystal UHD signage

Ensure every student gets the message

Samsung’s Crystal UHD signage helps students, faculty and visitors get where they need to be, when they need to be there — whether it's a final exam or football game.

Real 4K resolution

Samsung’s UHD signage showcases intricate details thanks to 4K UHD resolution. Samsung’s cutting-edge intelligent UHD upscaling technology performs edge restoration and noise reduction to deliver UHD-level picture quality, even with lower resolution content.

High visibility at all times

Samsung’s UHD signage delivers clear information 24/7 with an impressive brightness. The display’s non-glare panels provide better visibility regardless of ambient light. Using 10-bit processing, the displays are able to showcase a wide spectrum of colors — up to a billion different shades — capturing subtle differences for flawless color expression.

Small displays

Easily check your lecture room information

Samsung’s small displays can be used as a tool to display the information on the day’s lecture, installed outside the classroom.

Slim design & crisp content

The compact and slim design of the display allows for efficient space utilization, even in compact locations. A sleek rear design makes the display optimal for wall mounting while the connectivity, content play and device controls are easy to operate.

Comprehensive security setup

The powerful Knox security system provides rigid, three-layer security, offering airtight protection at the application, platform and system level, while restricting access to content and hardware. In addition, remote control of the network and USB ports prevents any unauthorized access.
Samsung not only provides professional displays, but a comprehensive, all-in-one solution, allowing you to intuitively manage and control all of the displays as needed.

**Management solution**

Manage your display devices and content comprehensively

Samsung's Remote Management Solution is a central remote service solution that enables remote monitoring of devices and eliminates the need for site visits or service calls. The Remote Management Solution platform synchronizes with partners’ CMS and provides a comprehensive review of hardware and content.

**One-stop device and content management**

With MagicINFO™, you can manage both content and device on a single platform. Unlike other content management solutions, Samsung’s MagicINFO™ is a completely integrated solution for all types of display including LCD and LED signage.

**Intuitive user interface**

Unlike other content management solutions that only trained professionals can use, Samsung’s MagicINFO has an intuitive drag-and-drop web interface for users of all backgrounds, with no special training needed.

**SSSP solution**

SSSP is a fully integrated program that offers a versatile open platform and advanced SDK/API functionality. Partners can enjoy a developer-friendly platform with high compatibility with HTML5 and ECMAScript 6 and 3-layer secured protection to craft solutions that suit their operational needs.

**Integrated application development**

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## Specifications

### Business TV

<table>
<thead>
<tr>
<th>Project</th>
<th>Screen size</th>
<th>Resolution</th>
<th>Brightness</th>
<th>Contrast ratio</th>
<th>Features</th>
<th>Connectivity</th>
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<tbody>
<tr>
<td>SBT-H</td>
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<td>16/7</td>
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### Digital flipchart & Interactive whiteboard

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<th>Project</th>
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<th>Resolution</th>
<th>Brightness</th>
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<th>Touch pen type</th>
<th># of drawing</th>
<th>Object recognition range</th>
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<td>WM02</td>
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<td>InGlass™</td>
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<td>Dynamic Object Recognition</td>
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### Monitors

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<th>Aspect ratio</th>
<th>Resolution</th>
<th>Brightness</th>
<th>Refresh rate</th>
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### LED signage

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<th>Brightness (Peak/Peak)</th>
<th>Contrast ratio</th>
<th>Certification</th>
<th>Service</th>
<th>IP rating</th>
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<td>Surface Mount (SMD)</td>
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<td>BRC Lab, Sony, BVDV 551, LG, CS, NEC, Hitachi</td>
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### Outdoor signage

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<th>Resolution</th>
<th>Brightness</th>
<th>Contrast ratio</th>
<th>Operation hour</th>
<th>I/F rating</th>
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### Interactive displays

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### Crystal UHD signage

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### Small displays

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<td>4,700:1</td>
<td>24/7</td>
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