	Model		WM85R
	Diagonal Size		85"
			New Edge, 60Hz
Panel	Туре		
	Resolution		3,840 x 2,160 (Landscape)
	Brightness (Typ.)		350cd/m² (220cd/m² with glass)
	Contrast Ratio (Typ.)		4,000 : 1
	Viewing Angle (H/V)		178 : 178
	Response Time (G-to-G)		6ms (Typ.)
Sound			Built in Speaker (10W x 2CH)
Connectivity		RGB	N/A
	INPUT	VIDEO	HDMI 2 (Rear 1, Front 1), DP1, OPS I/F
		AUDIO	N/A
		USB	2 (Main/Tray), 2.0/3.0 External(Tray)
		RGB	N/A
	OUTPUT	VIDEO	HDMI1(Tray)
		AUDIO	1 (Stereo Mini Jack)
		Touch Out	Touch Out 2 (USB Upstream Type, Front 1, Rear 1)
	INTERNAL	SENSOR	N/A
	EXTERNAL	CONTROL	Touch Input, RJ45, RS232C (for SVC)
Touch	Туре		IR
	# of Drawing		4 drawing
	Touch Pen Type		Passive Pen with magnet
			· · · · · · · · · · · · · · · · · · ·
	Object Recognition Range		2mm/ 4mm / 8mm / 50mm (Brush Mode : Dynamic Object Recognition)
	Touch Response Time		TBD
Power	Туре		Internal (Main 1ea, OPS 1ea)
	Power Supply		AC100~240V 50/60Hz
	Power Consumption	Max [W/h]	418 (OPS 19V/3.7A)
		Typical [W/h]	151
		Rating [W/h]	380 (OPS 19V/3.7A)
		Stand-by [W/h]	0.5
		BTU [W/h]	1,425.38 (OPS 19V/3.7A)
Mechanical Spec	Dimension (mm) (W * H * D)	Set	1942.8 * 1144.1 * 69.4
			2136 * 1311 * 260
		Package	
	Weight (kg)	Set	74.5
		Package	91.5
	Color		Charcoal Black
	VESA Mount		600 * 400
	Protection Glass		Yes
	Stand Type		Wall Mount
	Media Player Option Type		OPS Slot support
	Rotation		Landscape only
	Power Cable Length		3m
	Accessory		Power Cord, USB Upstream Cable (2ea), Pen (2ea, Black), OPS Box, Waranty/QSG
	Operating Temperature		0°C ~ 40°C
Operation			
	Humidity		10 ~ 80%, non-condensing
Feature	Key		Flip App
	Special	H/W	Touch Overlay (IR), Front Connectivity (Tray), OPS I/F Support (w/OPS Box)
			Built in Speaker (10W x 2), WiFi/BT Module Embedded
		S/W	Flip S/W
		Platform	Muse-M (Tizen 5.0)
		Processor	CA72 Quad (1.7GHz) 2MB L2
	Internal Player (Embedded H/W)	On-Chip Cache	
		Memory	L2 : 2MB
		Clock Speed	17GHz CDIL Quad
			1.7GHz CPU Quad
		Main Memory	LPDDR4 1.6GHz 64bit 2.5GB
		Interface	
		Graphics	GPU : MaliG51 MP4@760MHz
		Storage	8GB (2.65GB Occupied by O/S, 5.35GB Available)
		IO Ports	USB 2.0
		Operating System	Tizen 5.0 : Samsung Proprietary OS (VDLinux)
Certification	Security		802.1x (WPA2 Enterprise) : EAP-TLS, EAP-PEAP
zer arreation	Included		
Accessories			Power Cord, USB Upstream Cable (2ea), Pen (2ea, Black), OPS Box, Waranty/QSG
	Optional	Wallmount	WMN8200SF
		Specialty	Flip UX

#### About Samsung Electronics Co., Ltd.

Samsung Electronics Co., Ltd. inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, cameras, digital appliances, medical equipment, network systems, and semiconductor and LED solutions. For the latest news, please visit the Samsung Newsroom at news.samsung.com.

#### Samsung Flip

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

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Samsung Flip is an intuitive and easy-to-use digital canvas that can meet the demands of modern education. While teachers are always looking for innovative solutions to create a more engaging classroom environment, students also have high expectations for the digital experience they receive while learning. The WM85R can meet the requirements of both teachers and students, providing enhanced connectivity options, UHD resolution on a larger 85-inch display, and various powerful features to help them upgrade their education environment.

# Highlights

- Intuitive pen and brush mode with multi writing up to 10 on any background for optimized classroom engagement
- Versatile connectivity options and easy sharing for seamless education experience
- Powerful touch out function on larger 85-inch UHD display for impactful learning
- Various form options and screen saver for always-on and effective student engagement
- · Advanced control with 6-digit lock system and Remote Management solution for easy and simple management

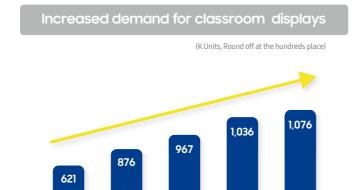




## Digitalization of the education environment

As education changes globally, the demand for digital solutions is increasing significantly. Learning environments are changing and traditional classroom settings are being replaced by virtual setups that are more interactive and engaging. Analog boards do not offer the same capabilities as digital solutions that can deliver content in multiple ways for a better classroom experience.

More than ever, government initiatives to transform traditional classrooms to digital ones, are now emphasized by the increase in demand for virtual learning environments. As a result of this increased demand, global classroom displays are expected to grow to more than one million units by the end of 2024, representing a 15% CAGR.



\* Source: Omdia, Public Displays and Signage TV Market Tracker Q1 2020, July 2020. K Units. Does Not Include Consumer TVs Used as Public Displays. Not an Endorsement of Samsung Electronics Co. Ltd. Any Reliance on these results is at the third-party's own risk.

2020

# Improve student engagement with digital canvas

Samsung's Flip WM85R is optimized to meet the digital demands of modern education. Whether painting in art class, editing images or annotating on a background, the Flip is an intuitive whiteboard that allows any teacher to easily lead their class. Versatile connectivity options (USB/HDMI/DP/NFC) and an OPS\* slot enables various solutions for education to be utilized — including a teacher's personal devices and even third-party education solutions and software — creating a seamless classroom environment. The larger display size also creates a more immersive experience, supported by features such as multi writing for up to 10 people, one touch device synchronization, advanced image editing capabilities and total peace of mind through a 6-digit locking system.



Advanced for collaboration

Web browser

Screen saver

Easy sharing

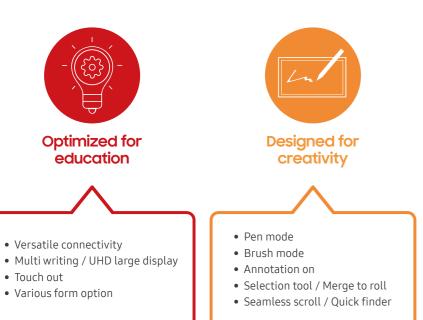
Document viewer

• 6-digit lock / File security

• Remote Management / OTN\*

\* OTN: Over The Network

\* OPS : Open Pluggable Specification



# Optimized for education



### Multiple connection options

A versatile selection of connectivity options, including USB, HDMI, DP, NFC, 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.

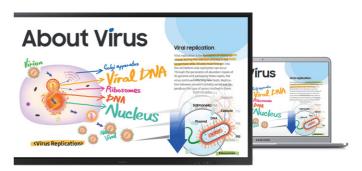




### Multi writing for up to 10 on larger sized display

Flip provides an intuitive tool for up to 10 people to use simultaneously. Students can write, solve math problems and draw pictures all at the same time on the large, 85-inch clear UHD display. These intuitive features ensure that all participants can actively and directly take part in various class environments to increase class efficiency, engagement and ultimately enjoyment.

\* WM85R supports multi writing feature up to 4 currently. The feature 'multi writing up to 10' will be available within 2020 and it will be updated by new firmware release.

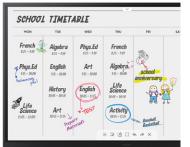


## Synchronized screen viewing

Teachers are able to connect their personal devices to the Flip using the 'touch out' function, controlling the content on 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.

\* Touch out control is available through a touch USB cable connection or UIBC-connected Android mobile



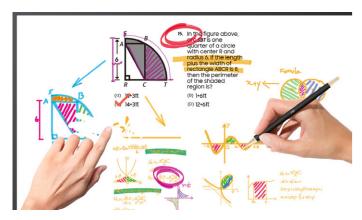


#### Varied formats for any classroom needs

Samsung Flip provides a variety of templates and tools – from timetables to schedule calendars to strategy boards – that can be used in class and school environments. Instead of writing on physical paper and discarding it, teachers and students can increase efficiency and enjoyment with a permanently available, digitally displayed template.

devices (2016 or later) and Windows 10 PCs.

## **Designed for creativity**



#### Draw, write & inspire new ideas

Samsung's Flip provides a wide palette of colors and range of pen and brush thicknesses to ensure a smooth writing experience. Users can freely write and draw text, shapes and anything needed within the classroom. Any drawing can then easily be erased with a finger or a palm swipe when required.



#### Creating a masterpiece

When using brush mode, the Flip recognizes a wide range of thicknesses, ensuring teachers and students can create art at the stroke of a brush. Water and oil painting modes allow different styles and textures, while a full, vibrant color palette allows flexible color mixing to truly embody the experience of art.



#### Write on any background

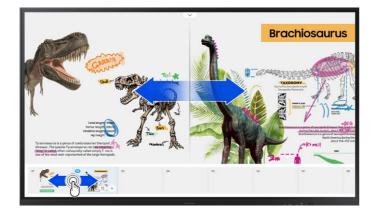
Samsung Flip allows people in the classroom to write on any background source. By simply clicking the note layer button, users can enjoy smooth writing anytime, anywhere on any content displayed, without affecting any work behind the original layer.





#### Flexible image editing

When using the versatile Samsung Flip, teacher and students can quickly and easily select, move, crop, capture, and edit any images. Each image can also be merged to the roll with just one click of a button, allowing it to be edited or erased to enable optimized creativity in a simple and easy way.



#### Easy content navigation

Samsung Flip has up to 20 pages of writing space per roll, allowing users to seamlessly scroll through pages. The Flip's intuitive, user-friendly menu simplifies navigation and saves time, while the quick finder feature allows users to preview content and make instant changes directly on the screen.

## **Advanced for collaboration**



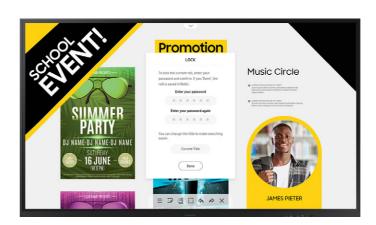
### Simple web surfing while annotating

Samsung Flip now supports web browsing and allows users to access the internet directly through the display, with no additional device needed. Once the browser is open, annotation is still available for users to draw around the browser too for on-the-spot collaboration.



#### Custom screensaver for constant communication

When the display is not in use, users can select a custom image to be shown on the Flip as a screensaver. This means the Samsung Flip can help to announce and promote a wide variety of communications tailored for students, such as an upcoming events calendar.



#### Safe, secure content protection

Samsung Flip ensures that confidential class information remains in the right hands. Using its reinforced, 6-digit lock system, each class leader is able to safeguard sensitive content, lock the display and remove critical content from view. In addition, users can set the Flip to delete files regularly for enhanced security.



#### Intuitive document access

Samsung Flip gives users the capability to open Microsoft Word, PowerPoint, Excel and Adobe PDF files directly with a built-in document viewer, ensuring easy access regardless of the content source for improved class engagement.



#### Effortless class recap distribution

Following any class, teachers can distribute recaps to all students, removing the frustration traditionally associated with handwritten notes. Important conversations and content are stored within the Flip in real-time, easily shareable across mobile and digital channels.



#### Comprehensive control options

Users can remotely control critical display settings on the Flip through Samsung's Remote Management solution. This provides the ability to power the display on and off, change the pin code, lock the network or USB port and adjust proxy server settings for enhanced convenience. In addition, the OTN capability enables firmware updates automatically for convenient management.

\* Samsung's Remote Management solution must be purchased separately.