SHARP / NEC

Sharp LM551

LCD 55" Infrared Touch Display

Datasheet





Multi-purpose for interactive engagements

For best-in-class touch performance and value, the Sharp LM series commands feature-rich professional capabilities for small meeting spaces and interactive signage applications. An integrated System on Chip (SoC) with Android 14 CTS-compliant Operating System offers the most up to date features and security for seamless out-of-the-box collaboration.

Boosting creativity in group collaboration, the Sharp LM series features intuitive Pen-on-Paper writing, a built-in whiteboard, annotation overlay mode and Windows Ink support. Using the on-board EShare app, content can be wirelessly shared from any personal device to the display without the need for apps or dongles. A single USB-C cable transmits data, video/audio output and power delivery between notebook and display for the simplest and seamless BYOD workflows.

With its 4-sided uniform slim bezel design, the Sharp LM series supports installations in both landscape and portrait as well as tilted desk. Dedicated features including hide side bars, application lock and a built-in web browser make the Sharp LM series the perfect display for budget-driven interactive signage applications.

Benefits

Best readability – high brightness panel ensures content is readable even in well-lit environments and anti-glare coating avoids distracting reflections.

Pen-On-Paper user experience – Zero bonded glass and latest infrared touch technology enable highly accurate and responsive writing and drawing with up to 20 touch points.

Out-of-the-box collaboration – the integrated Android PC features a powerful home screen launcher offering fast and flexible access to a range of pre-installed applications.

Highly customizable – a variety of settings allow the display to be optimised to meet the needs of different applications, from small meeting and huddle rooms to touch signage and wayfinding.

Safe & Secure – latest Android 14 SoC provides a secure operating system which, together with extra security features, meets the highest IT security standards.

Product Information

Product Name	Sharp LM551
Model	PN-LM551
Product Group	LCD 55" Infrared Touch Display
Order Code	60006142

Display

Panel Technology	VA with Direct LED backlights
Screen Size [inch/cm]	55 / 138.8
Aspect Ratio	16:9
Brightness (without glass) [cd/m²]	500
Contrast Ratio (typ.)	5000:1
Viewing Angle [°]	178 horizontal / 178 vertical (typ. at contrast ratio 10:1)
Colour Depth [bn]	1.07 (8bit + FRC)
Response Time (typ.) [ms]	8 (grey-to-grey)
Panel Refresh Rate [Hz]	60
Haze Level [%]	25
Supported Orientation	Landscape; Portrait; Tilt (0 to 45°)

Touch

Touch Technology	Infrared
Number of Touches	Real multi-touch up to 20 touches
Touch Method	Finger; Gloves; Stylus dual pen tip (2.6mm/6.8mm)
Data Interface	USB 2.0 (full speed) HID; USB powered, plug & play
Accuracy [mm]	+/- 1
Windows Ink	yes
Palm Rejection	no
Operating System	Native Multi-Touch: Windows 10/11, Linux, Android, Chrome OS; Single Touch (Default Mouse): Mac OS 13/14/15

Glass

Type	Thermal-tempered, anti-glare coating; Zero Bonding
Bonding Gap [mm]	0.85
Thickness [mm]	3.1
Hardness [H]	9

Resolution

Native Resolution	3840 x 2160			
Supported Resolutions	1024 x 768; 1280 x 1024; 1280 x 720;	1280 x 960; 1440 x 900; 1680 x 1050;	1920 x 1080; 3840 x 2160; 4096 x 2160;	640 x 480; 720 x 400; 800 x 600

Synchronisation Rate

Horizontal Frequency [kHz]	31.5 - 135
Vertical Frequency [Hz]	24 - 70

Connectivity

HDMI IN 1	Video Input; UHD (60 Hz) HDCP (2.3); Audio Input; CEC
HDMI IN 2	Video Input; UHD (60 Hz) HDCP (2.3); Audio Input; CEC
HDMI IN 3	ARC; Video Input; UHD (60 Hz) HDCP (2.3); Audio Input; CEC
HDMI OUT	Internal SoC content: FHD (60 Hz) HDCP (2.3); UHD (60 Hz); Video Output; Audio Output; Loop Through: HDMI IN 1/2/3, OPS, Android SoC
USB-A 1	USB (3.0); Peripherals; USB Storage; Auto Switch (Android SoC, OPS, PC)
USB-A 2	USB (3.0); Peripherals; USB Storage; Auto Switch (Android SoC, OPS, PC)
USB-A 3	USB (3.0); Peripherals; USB Storage; Auto Switch (Android SoC, OPS, PC)
USB-A (Service)	Wireless Adapter; USB 2.0; Service
USB-C 1	Touch Signal; Video Input; UHD (60 Hz); DP alt. 1.4; HDCP (2.3); Audio Input; USB 2.0 / 3.0; 65 W
USB-C 2	USB 3.0; 7.5 W; Peripherals; Auto Switch (Android SoC, OPS, PC)
USB-B 1	Touch Signal; USB (3.0)
Audio Output (3.5 mm)	Audio Output; Line Out
LAN 1	100 MBit/s
RS-232C	9600 bps
Remote In (3.5 mm)	Eco Sensor (IR-Extender, Ambient and Presence)
Input Detect	First

Open Modular Intelligence

OPS Slot	Slot Technology: Open pluggable specification (NEC / Intel OPS standard)

Sensors

Ambient Light Sensor	optional via Eco Sensor (KTES1)
Human Sensor	optional via Eco Sensor (KTES1)

Electrical

Power Consumption [W]	145 shipping

Power Savings Mode [W]	< 0.5 (ECO Standby); < 2 (Networked Standby)
Power Management	VESA DPMS
Power Supply	100-240 V AC; 50/60 Hz

Environmental Conditions

Operating Temperature [°C]	+5 to +35
Operating Humidity [%]	20 to 80
Storage Humidity [%]	10 to 80
Storage Temperature [°C]	-20 to 60

Mechanical

Dimensions (W x H x D) [mm]	Without stand: 1,265 x 736 x 73
Weight [kg]	33
Bezel Width [mm]	15
VESA Mounting [mm]	400 x 400 (FDMI); M6
Packaging Dimensions (W x H x D) [mm]	1,410 x 885 x 185
Packaging Weight [kg]	43
Material	Aluminum alloy (front side); metal (back side)

Embedded Computing

System Version	Android 14
CPU	Arm Cortex A53x4 2 GHz (octo-core); Arm Cortex A73x4 2.3 GHz
System Memory	4G RAM
Internal Storage	32GB ROM
Android Features	App side loading (Google CTS compliant); Application lock; Hide Android SoC; Hide side bar; Portrait support (apps and OSD)
Built-in Applications	File Manager; Input Select; Office and PDF Viewer - Office Suite; Setting; Web Browser; Whiteboard; Wireless Screen Sharing - E-Share
Built-in Tools	Annotation overlay mode

Bluetooth

Bluetooth	5.3 compliant: A2DP; AVRCP; GATT; HID

Wireless LAN

WLAN	IEEE802.11 a/b/g/n/ac/ax compliant; WPA/WPA2/WPA3 Enterprise, Access Point

Available Options

Accessories	Eco Sensor (KTES1); Feet (ST-43M); Soundbar (PN-ZCMS1); Trolley (PD04 Tipster; EVER 350 Mobile Motor); USB-C cable (USB-C 5M; USB-C 7M); Wall mount (PDW S 32-65 L & P)
OPS Slot	Recommended: OPS Enterprise Pro (100016449); OPS Enterprise Ultra (100016450)

Regulatory

Safety and Ergonomics	CE; EMC Class B; RoHS; UKCA
Pixel Failure Class	ISO 9241-307, Class 1

Green Features

Energy Efficiency	ECOMode; LED backlight
Ecological Standards	EnergyStar 8.0

Additional Features

Special Characteristics	CEC Support; HDMI ARC; NaViSet Administrator 2 - free download; OSD rotation for portrait mode; Powered USB Port (65 W); Scheduler
Audio	Integrated Speakers (10 W + 10 W)
Shipping Content	2 x Passive Stylus; 2x AAA batteries; Blank Sticker; Bracket for Camera; Cable Clamps; Display; Power Cable; Remote Control; Setup Manual; USB cable; Wireless Adapter
Warranty	3 years warranty incl. backlight; optional 4. + 5. year warranty extension [1]
Operating Hours	18/7
External Control	HDMI CEC; Scheduled Timer
Remote Management	NaViSet Administrator 2
Security	Disable HW Buttons; Disable IR Functionality; Disable USB and LAN Ports; IEEE802.1X (Wi-Fi)

[1] please refer to terms and conditions of warranty extensions

RoHS

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