

Intel® Smart Display Module (Intel® SDM)

SDM Essential.



The Essential SDM module, optimised for signage applications.

The **Essential** SDM module is optimised for signage applications, driving video content in Ultra-High Definition (UHD) resolution, suitable for flight information (FIDS) in airport terminals and retail or corporate signage applications.

With the Intel chipset, Elkhart Lake x6413E, benefit from the highest performance at low power consumption, reducing the Total Cost of Ownership for 24/7 applications.

- **High reliability** - using Intel embedded chipsets provides a robust solution for 24/7 applications in the IoT and signage world.
- **Plug & Play with Sharp Large Format Displays** - combine the SDM Essential module with a Sharp display for a 100% working solution, out of the box.
- **Long term support** - with the latest Windows 11 IoT LTSC 2024, receive software servicing updates from Microsoft for 10 years.
- **Superb video playback** - native media codec support of h.264/h.265/VP8/VP9 for smooth 4Kp60 playback.
- **High security** - with integrated TPM2.0 capability using Intel® Platform Trust Technology (Intel® PTT).
- **Manageability** - utilise the integrated watchdog to automatically restart applications.
- **Low noise** - the highly efficient Elkhart Lake CPU results in low heat dissipation enabling the module to be cooled using passive heatsink.

Specifications

Order Codes

SDM Essential (EHL-A-d8/128/W11IoT B)	L50SDM-EHL-16363
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PC Configuration

CPU	Intel Elkhart Lake Atom® x6413E Processor 4x 1.5GHz
BIOS	AMI uEFI 256 Mbit
RAM	8GB dual channel
Mass Storage	128GB M.2 SSD (SATA)
Graphics (board)	Intel® UHD Graphics for 10th Gen Intel® Processors HW Codec: H.265/HEVC, VP8, VP9, MPEG2, JPEG, VC1/WMV9. OpenGL4.5; DirectX 12; OpenCL 1.2
Operating System	Windows 11 IoT Enterprise LTSC 2024
Hardware Management Tools	Intel® Platform Trust Technology (Intel® PTT)

Connectivity

Interfaces Frontside	2 x USB 3.1 Gen2 1 x RJ45 10 / 100 / 1000 Mbps 1 x MiniDP++ 1.2 1 x Mini Jack Audio in/out
Interfaces backside	Internal Intel® SDM PCIe x8 interface, supporting USB3.1 x1, HDMI 2.0 x1, Display Port 1.2 x1, RS232 x1, 12V DC-In

Resolution

EDID/DDC support	Internal SDM interface up to 3840 x 2160 @ 60Hz External MiniDP++ interface up to 4096 x 2160 @ 60Hz
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Electrical

Power Consumption [W]	Idle: 7.5 Watt Max: 25 Watt
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Environmental conditions

Operating Temperature [°C]	0-55
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Mechanical

Net Weight (kg)	1.0
Gross Weight (kg)	1.2
Size / Gross Dimensions (m)	0.175 x 0.100 x 0.020 / 0.325 x 0.245 x 0.075

Additional features

Compatibility	All Sharp and NEC Large Format Displays accepting Intel® Smart Display Module Large
Cooling	Passive
Warranty	3 Years warranty, additional services available

Available options

External Adapter	L50SDM-SA-ADPT-V2
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For additional pictures and solutions overview,
visit www.sharppdisplays.eu for details.