



SDM-L 612

ALDER LAKE SMART DISPLAY MODULE



Intel® Alder Lake-P
Core processors



1 x HDMI (7680 x 4320 @60 Hz)
SDM I/O support 4K resolution



Support Wi-Fi/BT module



Intel® vPro technology
Core™ i5-1245U

CPU

CPU	Intel® Core™ i3-1215U processor Intel® Core™ i5-1235U processor Intel® Core™ i5-1245U processor Intel® Core™ i7-1255U processor
Chipset	SoC
Total Cores	6 Cores /10 Cores /10 Cores /10 Cores
Total Threads	8 /12 /12/ 12
Base Power	15 W /15 W /15 W /15 W

System

System Memory	Up to 64 GB, 2 x SO-DIMM DDR5-5200 MHz
Storage	1 x M-Key M.2 (2280) PCIe4.0 X4 for SSD
TPM	Optional: TPM2.0
Watchdog Timer	Yes
Auto Power On	Yes
RTC	Set up independently every day, a week as a cycle
Power Requirement	DC-IN, 12 V/5 A SDM IO: 12 V
Dimensions	175mm x 110mm (6.89" x 4.33")
Operation System	Windows 11 (64bit) / Linux Ubuntu (64bit)
Operating Temperature	0°C ~60°C (32°F~140°F) @0.7m/s Air Flow
Storage Temperature	-20°C ~75°C (-4°F~167°F)
Humidity	95% @ 45°C (non-condensing)

Network

Network Controller	1 x Intel® Ethernet Controller I225-LM
Ethernet Interface	1 x RJ45 (2.5GbE)
Wi-Fi/BT	1 x E-Key M.2 (2230) for Wi-Fi/BT Support Wi-Fi 5, Wi-Fi 6 (CNVi)
Mobile Network	N/A

Display

GPU	Intel® UHD Graphics (Core i3) Intel® IRIS® Xe Graphics (Core i5, Core i7)
Graphic Engine	DirectX 12.1, OpenGL 4.6, OpenCL 3.0, 8K60 12b 4:2:0 HEVC/VP9/SCC
Display Interface	1 x HDMI (Max.7680 x 4320 @60 Hz)

I/O interface

USB	1 x USB Type-C3.2 Gen1, 2 x USB3.2 Gen2, 2 x USB2.0
Serial Port	NA
Audio	1 x MIC-IN, 1 x AUDIO-OUT
Button	1 x Power on, 1 x CLR-CMOS
Antenna	2 x Connector for Wi-Fi/BT
SDM I/O	HDMI2.0 , DP1.2 , USB3.2 Gen1 , UART ,
PCIe X8 Edge Connector	GSPI , I2C , PCIe , SYS_FAN