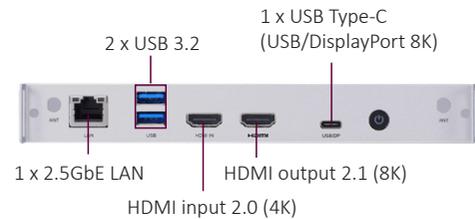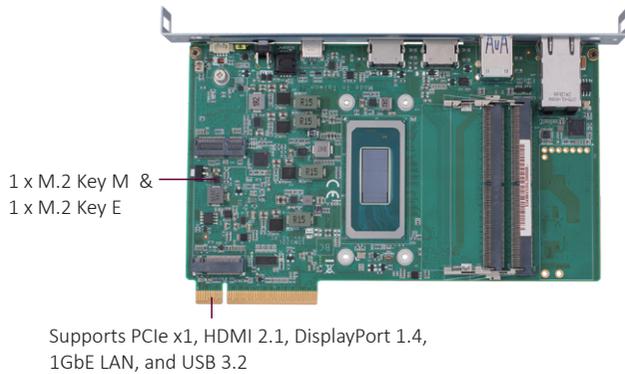# SDM520L NEW

Intel® Smart Display Module Large (Intel® SDM-L) with Intel® Core™ Ultra 7/5 Processors (Meteor Lake-U), Integrated NPU AI Solution, PoE, 4K HDMI Input, and 8K HDMI Output Support

intel.
smart display
module

1 x M.2 Key M &
1 x M.2 Key E

Supports PCIe x1, HDMI 2.1, DisplayPort 1.4,
1GbE LAN, and USB 3.2

2 x USB 3.2

1 x USB Type-C
(USB/DisplayPort 8K)

1 x 2.5GbE LAN

HDMI output 2.1 (8K)

HDMI input 2.0 (4K)

▲ Side view

DDR5	HDMI Input	8K Ultra HD	M.2	2.5GbE

Features

● Intel® Core™ Ultra 7/5 processors (Meteor Lake-U)
● 2 DDR5 SO-DIMM slot for up to 96GB memory
● One 2.5GbE LAN with optional PoE module support for Pro-AV applications
● Supports one 4K HDMI input and one 8K HDMI output for Audio Visual market
● Supports dTPM2.0

Specifications

CPU	Intel® Core™ Ultra 7/5 processors (Meteor Lake-U)
System Memory	2 x 262-pin DDR5-5600 SO-DIMM
Chipset	SoC integrated
BIOS	AMI
Storage	1 x M.2 Key M 2280 slot (PCIe x4 + SATA signal)
WatchDog Timer	255 levels, 1 to 255 sec.
Expansion Interface	1 x M.2 Key E 2230 slot for Wi-Fi 7/6E and Bluetooth 6.0/5.2
Battery Lithium	Lithium 3V/220 mAH
Power Input	Through SDM golden finger +12V and +3.3VSB
Graphic	Intel® Xe LPG Graphics
Display Interface	1 x DisplayPort 1.4 (4K @ 60Hz) (edge connector) 1 x HDMI output 2.1 (8K @ 60Hz) (edge connector) 1 x HDMI output 2.1 (8K @ 60Hz) (rear I/O) 1 x HDMI input 2.0 (4K @ 60Hz) (rear I/O) 1 x DisplayPort via Type-C (8K @ 60Hz) (rear I/O)
SDM Edge Connector	1 x HDMI 2.1 1 x DisplayPort 1.4 1 x USB 3.2 Gen 2 x1 1 x 1GbE LAN 1 x Serial TX/RX 1 x I^2C
Ethernet	2.5GbE with Intel® I226V via RJ-45 and transformer connector, supporting Wake-on-LAN, PXE Boot ROM
POE module (optional)	With the optional PoE module installed, the SDM520L can be powered by an external PoE source and supports at least 72W power input. PoE source need use an IEEE 802.3bt 60W PSE PoE LAN switch at minimum. Intel® 135U/165U support Intel vPro®
Audio	Audio by HDMI
USB	2 x USB 3.2 Gen 2 Type-A 1 x USB 3.2 Gen 2 Type-C

Mechanical and Environmental

Dimensions	175 x 110 mm
Weight (net/gross)	252g/340g
Board Thickness	1.6 mm
Operating Temperature	0°C to +55°C (+32°F to +140°F)
Relative Humidity	10% to 95% relative humidity, non-condensing

Ordering Information

Standard

SDM520L-125U-STD (P/N: E38X520L01)	SDM-L module with Intel® Core™ Ultra 5, 125U processor (15W), 2 SO-DIMM, 1 M.2 SSD, 1 HDMI output, 1 HDMI input, 1 LAN, 2 USB 3.2 Gen 2, and 1 x USB 3.2 Gen 2 Type-C
SDM520L-155U-STD (P/N: E38X520L02)	SDM-L module with Intel® Core™ Ultra 7, 155U processor (15W), 2 SO-DIMM, 1 M.2 SSD, 1 HDMI output, 1 HDMI input, 1 LAN, 2 USB 3.2 Gen 2, and 1 x USB 3.2 Gen 2 Type-C