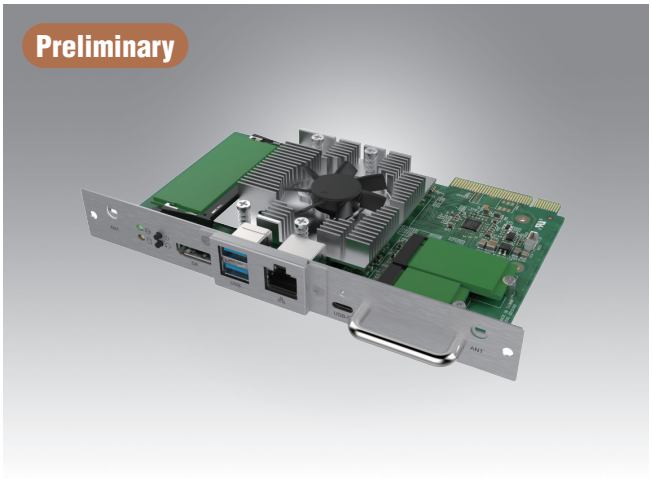
DS-282

Smart Display Module with Intel® Core™ Series 3 Processor



Windows Embedded Windows 11

intel IoT Solutions Alliance Premier

Features

- Compliant with the latest Intel® SDM 2.3 specification (SDM-L form factor)
- Intel® Wildcat Lake-U processor, up to 41 TOPS AI capabilities
- DDR5 6400 CSODIMM memory support up to 64GB
- 3 independent displays: 1 x DP1.4, 1 x DP1.4 through USB-C and Golden Finger (1 x HDMI 2.1, 1 x DP1.4)
- Intel® Xe 3 LPG (2Xe Cores), up to 18 TOPS
- Equipped with firmware TPM (fTPM) by default; discrete TPM 2.0 available as a BOM option based on project request
- Easy installation and maintenance with Intel® SDM slot-in design

Specifications

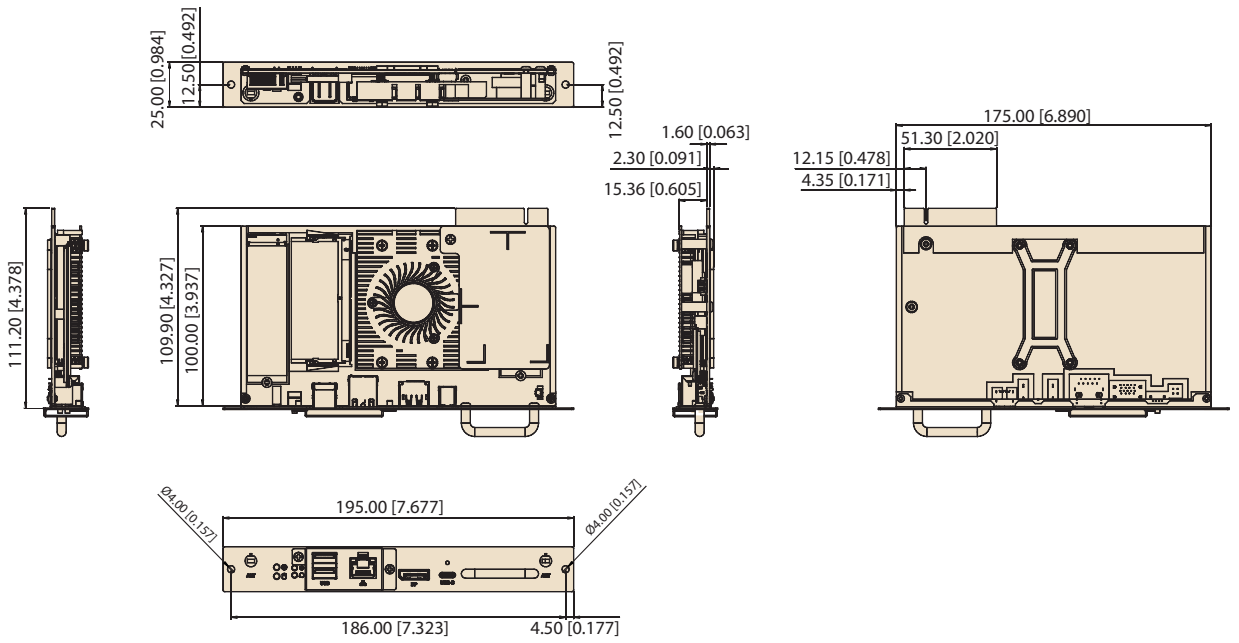
Model Name		DS-282		
Processor System	CPU	Core 3 304	Core 5 320	Core 7 350
	BIOS	AMI uEFI 512 Mbit		
Memory	Technology	DDR5 6400 MT/s CSODIMM		
	Max. Capacity	64GB		
	Socket	1x 262-pin SODIMM (no support ECC)		
Display	Controller	CPU integrated		
	Graphic Engine	Intel® Xe 3 LPG		
	Output	1x DP1.4a (Rear) 1x DP1.4 through USB-C (Rear) 1x DP1.4a (SDM) 1x HDMI 2.1 TMDS (SDM)		
	Max. Resolution	4096 x 2160@60Hz		
Expansion	M.2	1 x M.2 2242 M Key (PCIex2 Gen4) 1 x M.2 2230 E Key (PCIe & USB2.0)		
I/O Interface	Golden Finger	PCIe x8. The pin define follows Intel® SDM 2.3 specifications		
	DP 1.4	1		
	USB	2 x USB 3.2 Gen1		
	Ethernet	1 x Intel i226 (2.5GbE)		
	SDM I/O Interface	1 x HDMI 2.1, 1 x Display Port 1.4a, 1 x USB3.2 Gen1, 1 x 2.5GbE, 1 x RS-232, UART, I2C, 12V DC-In		
Power Requirement	Management	ACPI 3.0		
	Input Type	ATX/AT Mode		
	Input Voltage	12V DC-In (± 5%, Via Golden Finger)		
Trusted Platform Module	TPM 2.0	fTPM 2.0, Default TPM 2.0 (Nuvoton, NPCT760AABYX), BOM option by project support		
Watchdog Timer	Output	Interrupt, system reset		
	Interval	255 levels timer interval. By SUSI4.0 API		
Physical Characteristics	Dimensions (W x H x D)	175 x 100 x 20 (SDM-L compliant)		
	Weight	1 Kg		
Environment	Operating Temperature	0 ~ 55 °C @ Natural Convection Chamber		
	Thermal Solution	Cooler with blower FAN		
	Relative Humidity	95% @ 40 °C (non-condensing), Operating		
Software Development Kit	Operating System	Windows 11 IoT LTSC Linux by project support		
	Software (Optional)	WISE-DeviceOn, EdgeAI SDK		
Certification	Electromagnetic	CE/FCC, CB, UKCA,RCM, VCCI, EMC (Class B)		

All product specifications are subject to change without notice.

Last updated: 28-Oct-2026

Dimensions

Unit: mm [inch]



Ordering Information

Part No.	Description
DS-2820B-U0A1E	DS-282, WCL 304, Barebones
DS-2820B-U1A1E	DS-282, WCL 320, Barebones
DS-2820B-U2A1E	DS-282, WCL 350, Barebones

Note: RAM / Storage and Operating System bundled by request

Storage

Part Number	Description
	Storage M.2 NVMe 2242 TLC 128GB
	Storage M.2 NVMe 2242 TLC 256GB
	Storage M.2 NVMe 2242 TLC 512GB
	Storage M.2 NVMe 2242 TLC 1TB

Embedded OS

Part Number	Description
TBD	Win11 IoT LTSC EN, 64b Entry