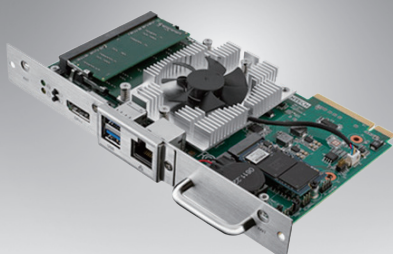


DS-230

13th Generation Intel® Core™ Processor SDM Player



Introduction

The DS-230 design is based on the Intel SDM specification and is powered by 13th Gen. Intel® Core™ processors. DS-230 delivers 4K UHD output and smooth content streaming via a card edge connector, while maintaining high-energy efficiency. DS-230 allows slot-in integration that reduces space requirements and lowers deployment and field maintenance costs. It also features built-in I/O such as HDMI, DP, USB 3.1, and a single LAN (RJ-45). DS-230 enables media playback and display and is ideal for all-in-one signage applications with space constraints.

Specifications

Form Factor	SDM	L (Large)
Processor System	CPU	Intel 13th Gen Raptor Lake U300E, i5-1345UE (vPro Enterprise)
	TDP	15W
	BIOS	AMI uEFI 128 Mbit
Memory	Technology	2 x DDR4 3200MHz 260-pin SODIMM
	Max. Capacity	32GB (16GB per SODIMM)
Display	Controller	CPU integrated
	Graphic Engine	Intel® Iris® Xe
	Video format	H.265/HEVC, H.264/AVC, MPEG2, VC1/WMV9, VP8, JPEG/MJPEG, VP9
	Output	HDMI 2.0 & DP1.4a from golden finger, DP1.4a from front bracket
	Max. Resolution	3840 x 2160 @ 60Hz
Storage	SATA/NVMe	M.2 2242 M Key
I/O Interface	DP 1.4a	1
	USB	2 x USB3.2 Gen2
	LAN (RJ-45)	Intel i226LM 2.5G (in vPro supported CPU) Intel i226V 2.5G (in non-vPro supported CPU)
	M.2	1 x 2230 (E key) for WiFi module
	SDM I/O Interface	PCIe x8. The pin define follows Intel® SDM specifications. USB3.2 Gen1 x1, HDMI 2.0 x1, Display Port 1.4a x1, UART, I2C, 12V DC-In
Power Requirement	Management	ACPI 3.0
	Power Consumption	Max: 12V@5.5A
	Power Type	ATX/AT Mode
	Power Input Voltage	12V DC-in (± 5%, Via Golden Finger)
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 (with 0.7m/s air flow)
	Thermal Solution	Active
	Relative Humidity	95% @ 40 °C (non-condensing), Operating
Software Development Kit	Operating System	Windows 11 (64bit), Windows 10 (64bit)
	Signage Software	WISE-PaaS/RMM, WISE-PAAS/SignageCMS, WISE-PaaS/EdgeSense
Certification	Electromagnetic	CE/FCC, CB, UKCA,RCM, VCCI, EMC (Class B)

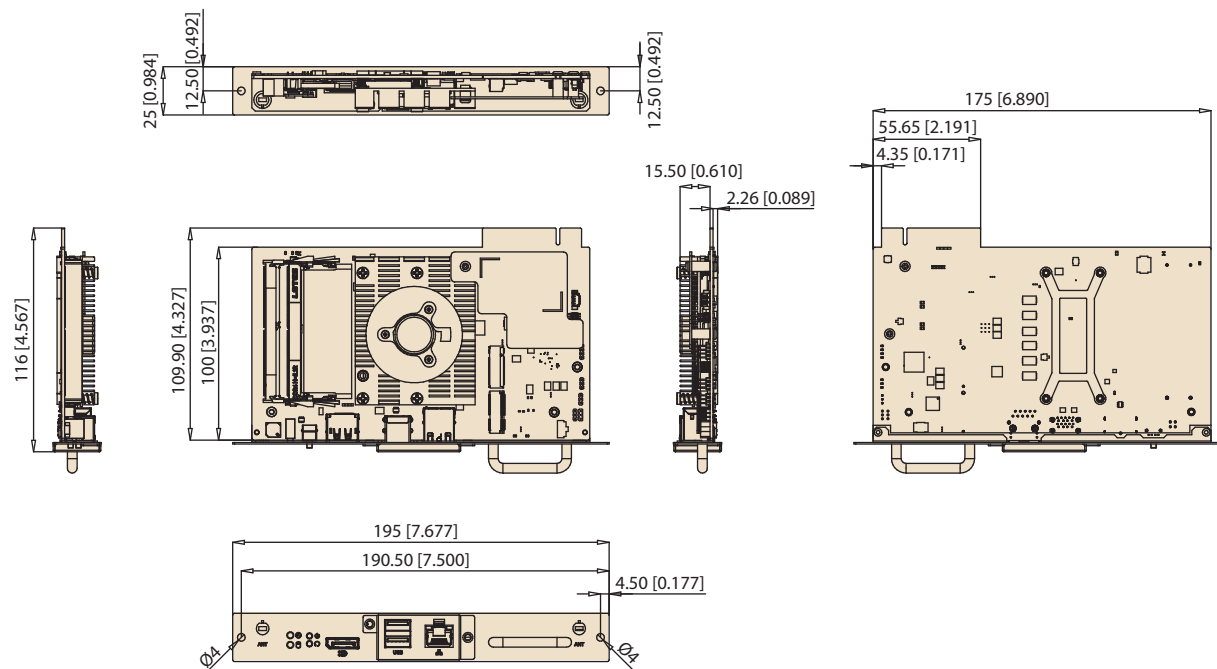
Features

- Intel SDM-L (Smart Display Module - Large) form factor
- 13th Generation Intel® Core™ Processor
- Dual channel DDR4-3200 SO-DIMM, up to 32 GB
- 3 independent displays: Golden Finger (HDMI 2.0, DP1.4a), Front Bracket (DP1.4a)
- Supports Real 4K resolution
- Supports Microsoft Windows 10 with proven compatibility and can be upgraded to Microsoft Windows 11
- Easy installation and maintenance with Intel® SDM slot-in design

WISE-PaaS/ DeviceOn WISE-PaaS/SignageCMS McAfee Acronis

Dimensions

Unit: mm



Ordering Information

Part Number	Description
DS-230GB-U0B1E	DS-230, RPL U300E, Barebones
DS-230GB-U1B1E	DS-230, RPL i5-1335U, Barebones
DS-230GB-U0B1U	DS-230, RPL U300E, Barebones, MIT

Packing List

Part Number	Description
-	DS-230 x 1
2006V10120	QSG(Quick Start Guide)
2026V10100	China RoHS for DS-230
-	Screws for M.2

Optional Items

Part Number	Description
EWM-W165M202E	Wifi/BT module, 802.11 ac/a/b/g/n, BT 4.1
1751000342-01 x 2	WiFi 6E Dipole ANTENNA
EBC-V101GB-P0A1E	SDM Docking Station with 12V@7A adaptor
1750008653-01	Cable Ant. SMA 200mm
1750008800-01	Cable Ant. SMA 100mm

Note: If Wi-Fi is required, the package must include the module, antenna, and antenna cable.

Embedded OS

Part Number	Description
20706WLE1S0094	Win 11 IoT 2024 En, 64b Entry
20706WX1ES0124	Win 10 IoT 2021 En, 64b Entry

RAM & Storage

Part Number	Description
SQR-SD4S4G3K2HNPG	Memory, SQ, DDR4 4GB, Hynix
SQR-SD4S8G3K2HNBG	Memory, SQ, DDR4 8GB, Hynix
SQR-SD4S16G3K2HNBG	Memory, SQ, DDR4 16GB, Hynix
SQR-SD4N4G3K2WNERG	Memory, SQ, DDR4 4GB, Winbond
SQR-SD4N8G3K2WNERG	Memory, SQ, DDR4 8GB, Winbond
SQR-SD4N4G3K2NNPHB	Memory, SQ, DDR4 4GB, Nanya
SQR-SD4N8G3K2NNBHB	Memory, SQ, DDR4 8GB, Nanya
SMI-SD4U4GN32-CG	Semi Ind D4 SO DIMM 3200 4GB 512x8 0 ~ 85 °C
SMI-SD4U8GN32-CE	Semi Ind D4 SO DIMM 3200 8GB 1Gx8 0 ~ 85 °C
SQF-C4MV2-128GDEDC	Storage, M.2 2242, SQ, 128GB
SQF-C4MV2-256GDEDC	Storage, M.2 2242, SQ, 256GB
SQF-C4MV2-512GDEDC	Storage, M.2 2242, SQ, 512GB

External I/O

Front

