IN-VEHICLE Computing Version. 2022-11-01

# SD-3630

#### Intel® 11th Gen Core™ i7-1185G7E CPU with 4x GbE LAN On-Board Computer

## **Features**

- Intel® 11th Gen Core™ i7-1185G7E
- · Support 5G/LTE (Dual by option), GPS, Wi-Fi / BT and CAN Bus
- Wide Input Range 9 ~ 60VDC w/ Ignition Control for Vehicles
- Isolated DC Input 24 ~ 110VDC for Rolling Stock by Optional Module
- 1x 2.5GbE + 3x GbE LAN Port (Optional M12 Connectors)
- Support 4 Independent Display by 2x HDMI, 1x DP, 1x DVI-D
- Battery Backup Function (Optional)
- E13 and EN50155 Certified













## Introduction

SD-3630 is a fanless in-vehicle computer with 5G connectivity. It utilizes Intel® 11th Gen Core™ i7-1185G7E CPU up to 4.4 GHz. SD-3630 features an ultra-compact design measuring 250 x 165 x 55mm, which can easily fit into restricted spaces. The system can select 5G, LTE, GPS, and Wi-Fi / Bluetooth as robust connectivity by M.2 modules. It is a building-in four independent display output, audio line-out, and microphone-in. It is the perfect solution for fleet management, in-vehicle digital signage, and mobile DVR. Furthermore, it features Smarter Vehicle Power Ignition and wireless remote control in various vehicles.SD-3630 can effectively support cars in extreme weather and operating conditions, such as snowplows, trucks, buses, taxis, and forklifts.

# **Specifications**

Operating System

System		
CPU	IntIntel® 11th Gen Core™ i7-1185G7E 1.8GHz up to 4.4GHz Intel® 11th Gen Core™ i5-1145G7E 1.5GHz up to 4.1GHz Intel® 11th Gen Core™ i3-1115G4E 2.2GHz up to 3.9GHz Intel® Celeron® 6305E up to 1.8GHz	
Memory	2x DDR4-3200 SO-DIMM Up to 64GB	
LAN	1x Intel® I255-LM 2.5GbE Supports mGig Supports iAMT and PXE LAN Boot ROM 3x Intel® I210-AT Gigabit Ethernet	
Watchdog	Watchdog Timer Support, Offer 1 – 255 Step	
TPM	2.0	
1/0		
USB	2 x USB 3.2 Gen 2 (Type A) 2 x USB 2.0 (Type A)	
LAN	4 x RJ-45 (1 x 2.5GbE, 3 x GbE) (Option: M12 connector and/or IEEE 802.3af/at PoE w/ Max. 60W power budget)	
DIO	6 x DI (5~60V) and 4 x DO (5V/100mA) (option: 2x 12V/1A output)	
Audio	1 x Line-out and 1 x Mic-in (option: Line-in)	
Video	2 x HDMI, 1 x DP, 1 x DVI-D* (Supports 4 Independent Display)  * Use only with Single Link DVI Cables.	
Expansion Bus	1 x Combo Port (1x M.2 3042/52 Key B or 1 x mPCle Full Card) 1 x M.2 2230 Key A-E, 1 x mPCle Full Size (USB function only)	
Antenna	7 x Pre-cut Holes for External SMA Antenna	
SIM Card Socket	2 x SIM Card Sockets Supported Onboard with Eject	
Serial Port	4 x RS-232/422/485 (Auto Direction Control) ( 3 Ports for M12 Model)	
Storage		
Туре	$2\times2.5"$ Drive Bay for SATA Type HDD/SSD support RAID 0, 1, 5 $1\times M.2$ 2280 Key M for NVMe SSD* $^*$ Additional thermal heatsink is required. Please contact our sales representatives for a suitable type.	
Software		
Operating System	Windows 10 IoT 2021 LTSC (64-bit), Windows 11 IoT (64-bit)	

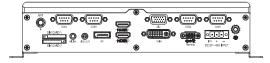
Linux Ubuntu 20.04 (64-bit), 22.04 (64-bit)

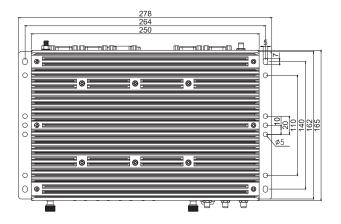
Graphics		
Graphics	Intel® Iris® Xe Graphics / Intel® UHD Graphics	
Resolution	Max Resolution (HDMI2.0b) : 4096x2304@60Hz	
	Max Resolution (DP): 4096x2304@60Hz	
Environmental		
Operating Temp.	-40 ~ 70°C, ambient w/ 0.6m/s airflow	
Storage Temp.	-40 ~ 85°C	
Relative Humidity	10% ~ 90% RH (non-condensing)	
Vibration	IEC60068-2-64, random, 2.5G@5~500Hz, 1hr/axis	
(with SSD)	MIL-STD-810G, Method 514.6, Procedure I, Cat.4, Operating	
Shock	Operating: MIL-STD-810G, Method 514.6, Procedure I, Trucks and semi-trailers 15G (11ms with SSD)	
Certifications	CE, FCC Class A, E13, EN50155, EN45545-2 (R25)	
Power Requirement		
Power Input	9 ~ 60 VDC Input (24 ~ 60 VDC Input for PoE Connections)	
Power Protection	Automatics Recovery Short Circuit Protection	
Power Mgmt.	Power Ignition for Vehicles	
Power Off Control	Power Off Delay Time Setting by Software	
UPS	Internal Battery Kit for 10 Mins Operating (Optional, Discharge Temp20-60°C) *UPS backup time varies depending on actual overall system power consumption.	
Mechanical		
Construction	Aluminum Alloy	
Mounting	Wall-mount	
Weight	2500g (Barebone)	
Dimensions	250(L) x 165(W) x 55(H) mm	

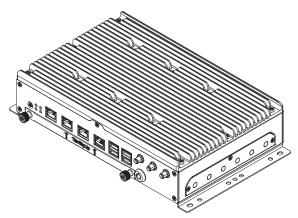
All specifications are subject to change without notice.

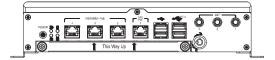
**Dimensions**Unit: mm

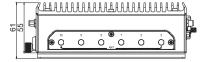
### SD-3630





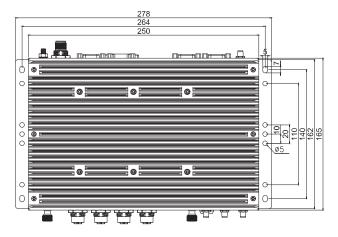


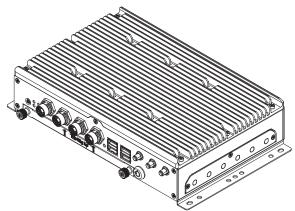


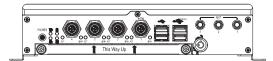


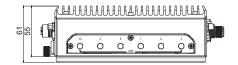
# SD-3630-M12X











# Ordering Information

Part Number	SD-3630x-yyyy-zz (x=P=w/PoE, yyyy= M12X=M12 x-code for LAN ports, zz=i7=i7-1185G7E, zz=i5=i5-1145G7E, zz=i3=i3-1115G4E, zz=C1=6305E)	
Description	Intel® 11th Gen Core i7-1185G7E CPU with 4 x GbE LAN On-Board Computer	
State of Origin	Made in China	

# **Optional Accessories**

DRAM	DDR4 SO-DIMM 3200 8GB~32GB (-40~85°C)
SATA SSD	2.5 inch TLC 64GB~1TB -40~85°C, M.2 2280 Key M for NVMe 256 GB~1 TB TLC -40~85°C with Heatsink
Modem	M.2 3042/52 Key B for 5G/LTE Modem *5G Modem with Heatsink
GPS	mPCIe GPS Module
CAN Bus	mPCIe CAN Bus Module
Battery Backup	BAT-3630 Kit, 2300mAh 3S1P Battery Kit (-20~60°C for Discharge)

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