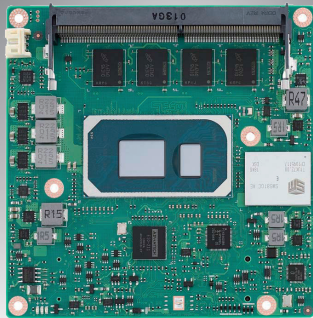


SOM-6883

Intel® 11th Generation Core™ Processor U-Series COM Express® Compact Module Type 6

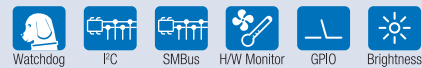
Preliminary



Features

- 11th Generation Intel® Core™ Processor U-Series
- COM Express R3.0 Compact Module Type 6 Pinout
- Dual channel with one memory down and one SODIMM
- High speed I/O: 1 PCIe x4 Gen4, 5 PCIe x1 Gen3, 4 USB3.2 Gen2
- Onboard NVMe x4 SSD up to 64GB, TPM2.0
- Supports iManager, Embedded Software APIs and WISE-DeviceOn

Software APIs:

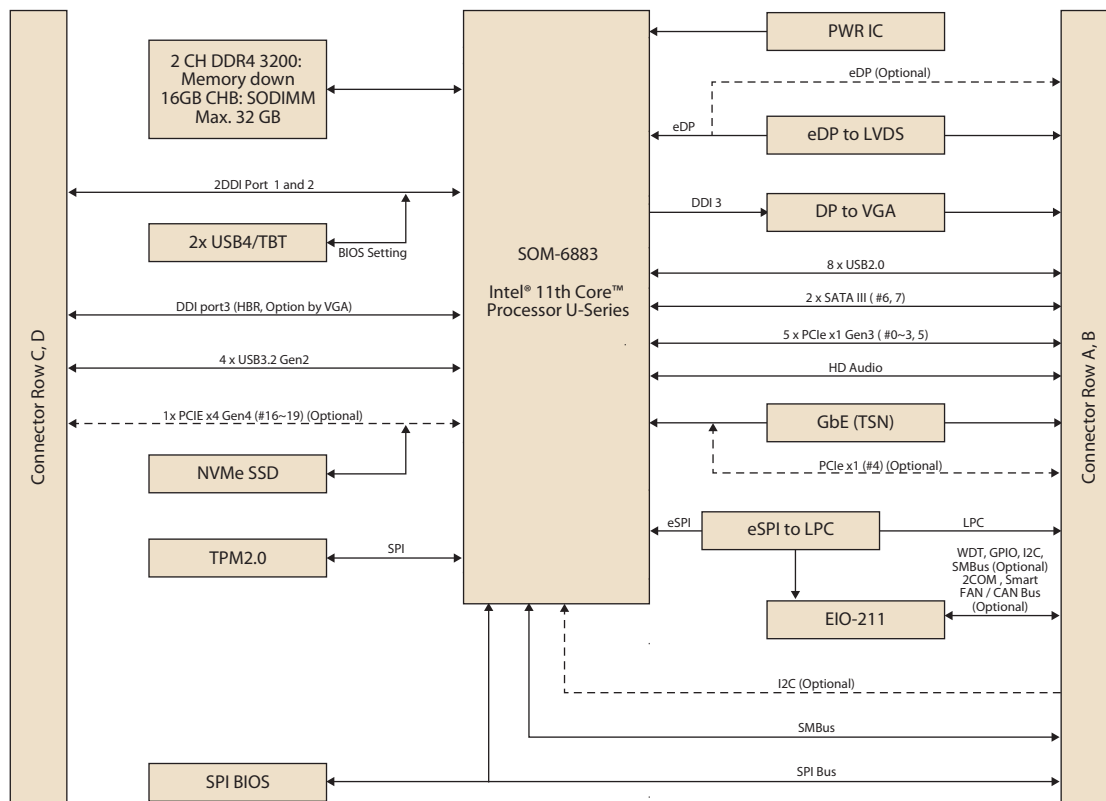


 Windows Embedded **iManager WISE-DeviceOn**  

Specifications

Form Factor	Form Factor	COM Express Compact Module
	Pin-out Type	COM Express R3.0 Type 6 compatible
Processor System	CPU	Core i7/i5/i3/Celeron (Embedded or Industrial)
	Base Frequency	2.2GHz~1.6GHz
	Max Single Core Turbo Frequency	
	Cores	
	LLC	
Memory	CPU TDP	12/15/28W TDP
	IB ECC	Industrial Only
	Technology	DDR4, Dual-channel memory, up to 3200 MT/s
	Speed	
	ECC Support	IB ECC supported by Industrial SKU
Graphics	Onboard Memory	16GB
	SODIMM Memory	up to 32 GB by one SODIMM Socket
	Controller	Gen 12 Graphics up to 96 EUs
	Max. Frequency	1.2 GHz
	2D&3D/HW Acceleration	2D& 3D Acceleration : Direct3D* 2015, Direct3D 12, Direct3D 11.2, Direct3D 11.1, Direct3D 9, Direct3D 10, Direct2D; OpenGL* 4.5; Open CL* 2.1, Open CL 2.0, Open CL 1.2 HW Encode: Supports AVC, MPEG-2, HEVC, and VP9. HW Decode: Supports Direct3D* 9 Video API (DXVA2), Direct3D12 Video API, Intel Media SDK, MFT (Media Foundation Transform) filters, Intel VA API
Display	VGA	1920 x 1200@60Hz
	LCD	LVDS dual channel: 1920 x 1200@60Hz (option support eDP 4096 x 2304@60Hz, 24bpp)
	DDI	3 DDI ports support configurable HDMI/DisplayPort -HDMI 2.0b: 4Kx2K 48-60Hz 24bpp -DisplayPort 1.4: 4096x2304 60Hz 36bpp
	Type C	DP 1.4 (option from USB Type-C); HDMI 2.0b (Native); Up to 4ports
	Multiple Display	Four displays with each display combinations
Expansion	PCI Express x1 (Gen3)	5 PCIe x1 (Up to 6 by option)
Serial Bus	SMBus	Yes
	I2C Bus	Yes
Ethernet	Gigabit	Intel I225 LM controller ; Speed: 10M / 100M / 1000M / 2.5G speeds (2.5G TSN optional)
	TSN	Support by I225 (Industrial Only)
I/O	SATA3.0	2 Ports (6Gbps)
	USB3.2 (Gen2)	4 Ports (10 Gbps)
	USB2.0	8 Ports (480 Mbps)
	LPC	Yes
	SPI Bus	Yes
	GPIO	8-bit GPIO
	Watchdog	65536 level, 0 ~ 65535 sec
	CAN Bus	Support one CAN Bus option from COM Port
	COM Port	2 Ports (2-Wire)
	TPM	TPM2.0
Power	Smart Fan	2 Ports: 1 port on COM module (Notice: the input voltage of fan is aligned to Vin); 1 port on carrier board
	Type	ATX: Vin, VSB; AT: Vin
Environment	Supply Voltage	Vin: 8.5V ~ 20V; VSB: 4.75V ~ 5.25 V, RTC Battery: 2.0V ~ 3.3V
	Operating Temperature	Standard: 0 ~ 60 °C (32 ~ 140 °F) Extend: -40 ~ 85 °C (-40 ~ 185 °F)
	Storage Temperature	-40 ~ 85 °C (-40 ~ 185 °F)
	Humidity	Operating: 40°C@95% relative humidity, non-condensing Storage: 60°C@95% relative humidity, non-condensing
	Vibration Resistance	3.5 Grms
Mechanical	Dimensions	95 x 95 mm (3.74" x 3.74")

Block Diagram



Ordering Information

P/N	CPU	Cores	Freq. (Base/Turbo)	CPU TDP	Onboard eMMC	LLC	Giga LAN	PCIex1	USB 2.0	USB 3.2 (Gen2)	SATA 3.0	LPC	Power	Thermal Solution	Operating Temperature

Development Board

Part No.	Description

Optional Accessories

Part No.	Description

Packing List

Part No.	Description	Quantity

Embedded OS

OS	Part No.	Description
Win10	TBD	TBD