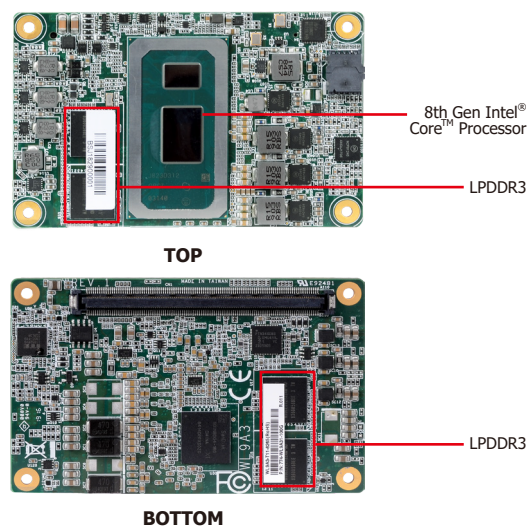


WL9A3

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Features

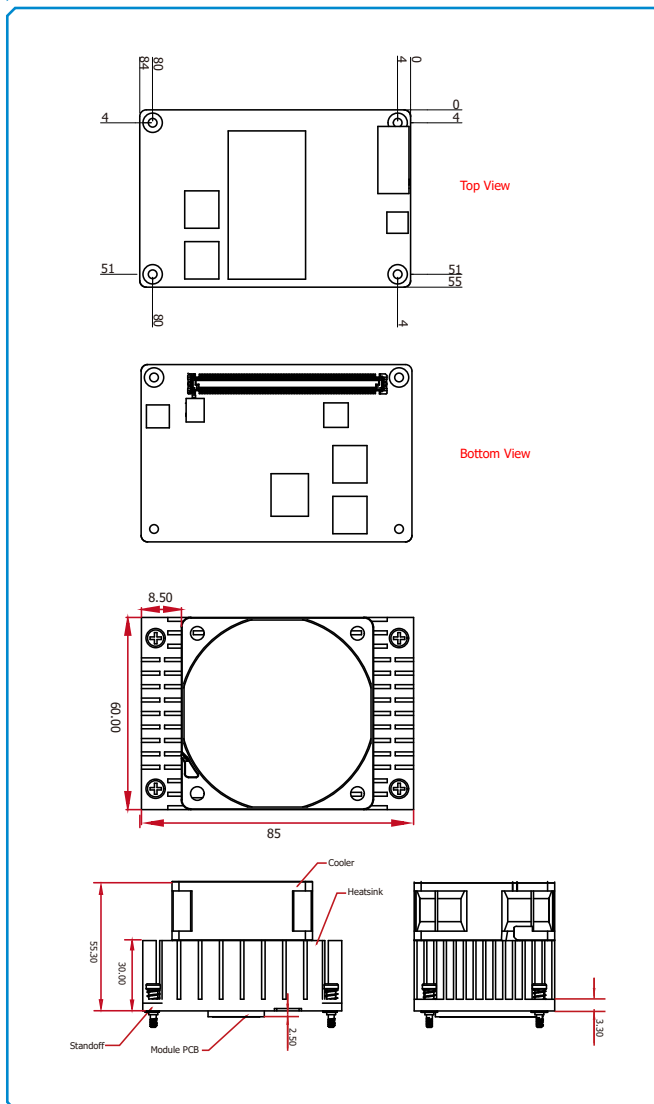
- Dual Channel LPDDR3 2133MHz Memory Down up to 16GB
- 1 LVDS/eDP, 1 DDI (HDMI/DP)
Supports dual displays: DDI + LVDS/eDP
- DP++ resolution supports up to 4096x2304 @ 60Hz
- Multiple expansions: 4 PCIe x1
- Rich I/O: 1 Intel GbE, 2 USB 3.0, 8 USB 2.0



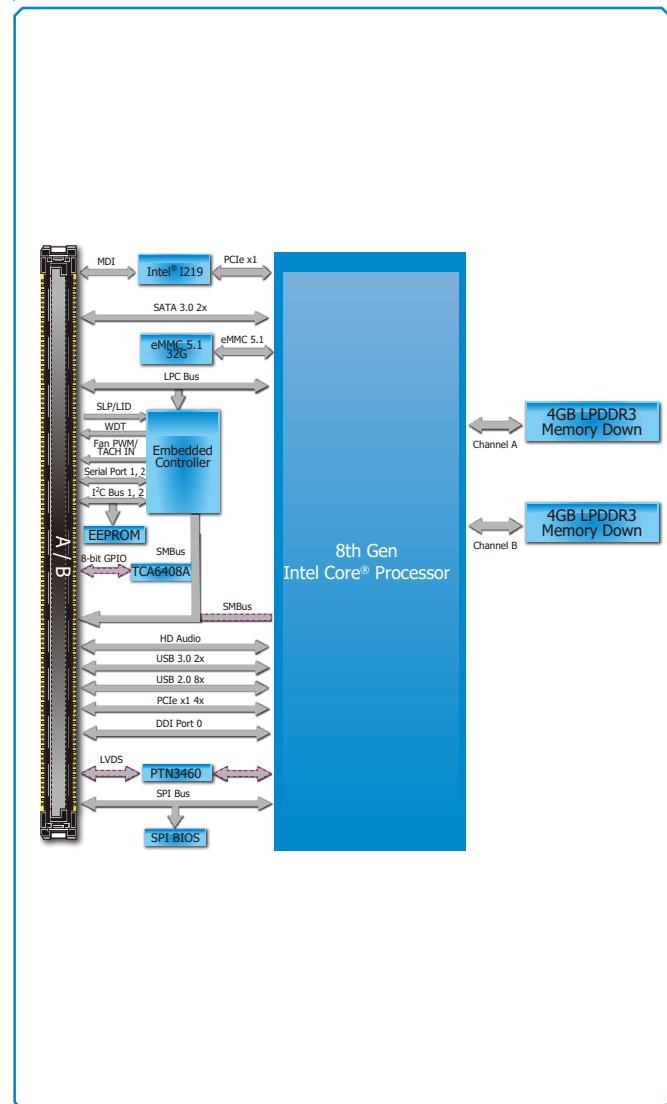
Specifications

SYSTEM	Processor	8th Gen Intel® Core™ Processor, FCBGA1528 Intel® Core™ i7-8665UE Processor, Quad Core, 8M Cache, 1.7GHz (4.4GHz), 15W Intel® Core™ i5-8365UE Processor, Quad Core, 6M Cache, 1.6GHz (4.1GHz), 15W Intel® Core™ i3-8145UE Processor, Dual Core, 4M Cache, 2.1GHz (3.9GHz), 15W
	Memory	8GB/16GB Memory Down Dual Channel LPDDR3 2133MHz
	BIOS	SPI 128Mbit (default supports FTPM)
GRAPHICS	Controller	Intel® UHD Graphics 620
	Feature	OpenGL 5.0, DirectX 12, OpenCL 2.1 HW Decode: AVC/H.264, MPEG2, VC1, WMV9, JPEG/MJPEG, HEVC/H.265, VP8, VP9, MVC HW Encode: AVC/H.264, JPEG/MJPEG, HEVC/H.265, VP8, VP9, MVC
	Display	1 x DDI (HDMI/DP++) 1 x LVDS/eDP LVDS: single channel 24-bit, resolution up to 1366x768 @ 60Hz HDMI: resolution up to 4096x2160 @ 30 Hz DP++: resolution up to 4096x2304 @ 60Hz eDP: resolution up to 4096x2304 @ 60Hz
EXPANSION	Dual Display	DDI + LVDS DDI + eDP
	Interface	4 x PCIe x1 (Gen 3) 1 x SDIO 1 x LPC 2 x I ² C 1 x SMBus 1 x SPI 2 x UART (TX/RX)
AUDIO	Interface	HD Audio
ETHERNET	Controller	1 x Intel® I219 (10/100/1000Mbps)
I/O	USB	2 x USB 3.0 8 x USB 2.0
	SATA	2 x SATA 3.0 (up to 6Gb/s)
	eMMC	1 x 4GB/8GB/16GB/32GB/64GB eMMC (available upon request)
	GPIO	1 x 8-bit GPIO
	WATCHDOG TIMER	Output & Interval
POWER	Type	12V~20V, 5VSB, VCC_RTC (ATX mode) 12V~20V, VCC_RTC (AT mode)
	Consumption	TBD
OS SUPPORT (UEFI ONLY)		Windows 10 IoT Enterprise 64-bit Linux
ENVIRONMENT	Temperature	Operating: 0 to 60°C -30 to 85°C Storage: -40 to 85°C
	Humidity	Operating: 5 to 90% RH Storage: 5 to 90% RH
	MTBF	TBD
	MECHANICAL	Dimensions
CERTIFICATIONS	Certifications	CE, FCC

Mechanical Drawing



Block Diagram



Ordering Information

Model Name	P/N	Processor	Memory	eMMC	DIO/SDIO	LVDS/eDP	GbE	USB 3.0	USB 2.0	Power	Thermal	Temp.
WL9A3-T80-8665	770-WL9A31-000G	i7-8665UE	LPDDR3 8 GB	NA	DIO	LVDS	1	2	8	ATX/AT	TBD	-30 to 85°C
WL9A3-T80-8365	770-WL9A31-100G	i5-8365UE	LPDDR3 8 GB	NA	DIO	LVDS	1	2	8	ATX/AT	TBD	-30 to 85°C
WL9A3-T80-8145	770-WL9A31-200G	i3-8145UE	LPDDR3 8 GB	NA	DIO	LVDS	1	2	8	ATX/AT	TBD	0 to 60°C

Packing List

• 1 WL9A3 board	
• 1 Heat sink (for 0 to 60°C)	A71-008129-000G
• 1 Cooler (for -30 to 85°C)	A71-108120-000G

Optional Items

• COM100-B carrier board kit	770-COM104-000G
• Heat spreader	A71-808320-000G