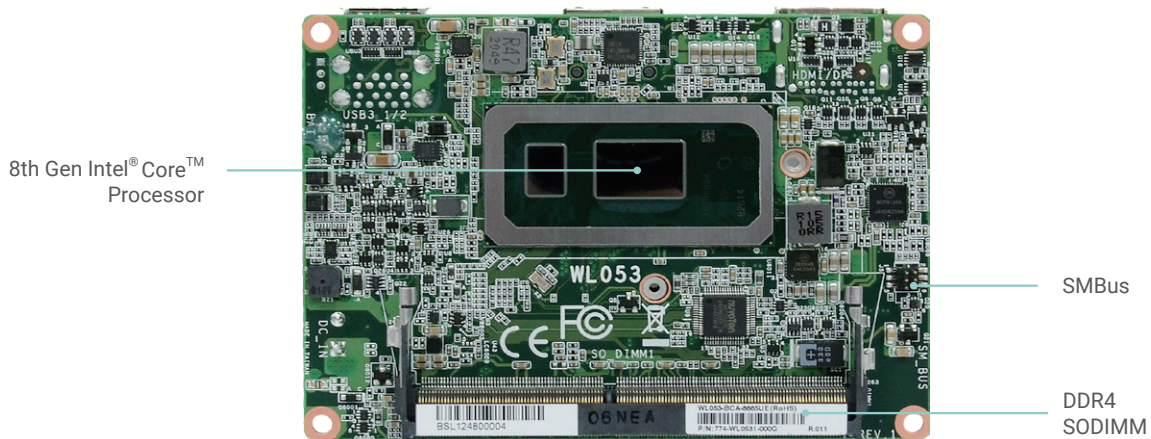


Top View



Bottom View

## KEY FEATURES



### DDR4

1 DDR4 2400MHz SODIMM



### 4K High Resolution

Supports 4K/2K resolution



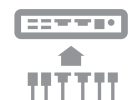
### Dual Display

1 HDMI/DP++



### Multiple Expansion

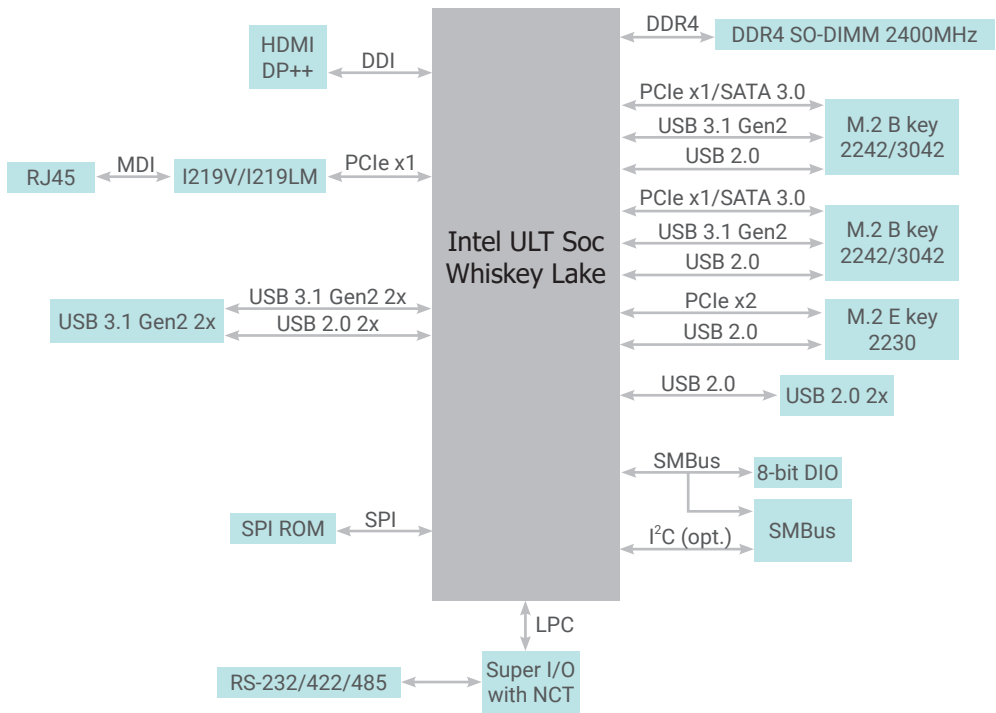
2 M.2 B Key,  
1 M.2 E Key



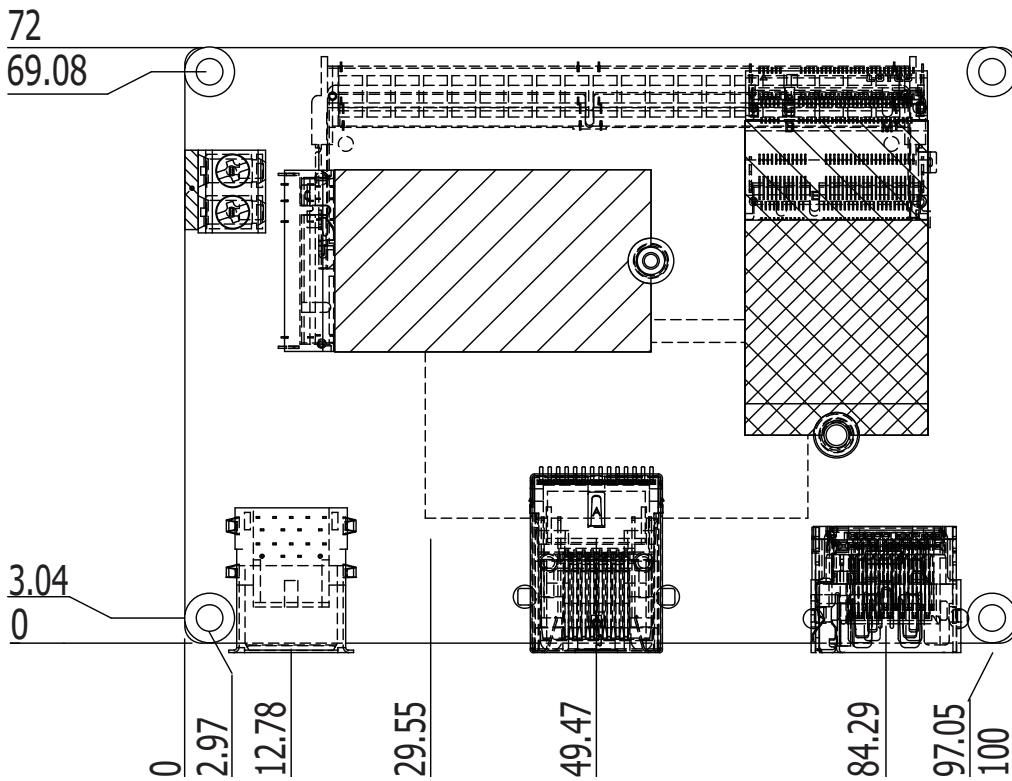
### Rich I/O

1 Intel GbE, 1 COM,  
2 USB 3.1 Gen2,  
2 USB 2.0

## BLOCK DIAGRAM



## MECHANICAL DRAWING



## SPECIFICATION

System	Processor	8th Generation Intel® Core™ Processors, BGA 1528 Intel® Core™ i7-8665UE, Quad Core, 8M Cache, 1.7GHz (4.4GHz), 15W Intel® Core™ i5-8365UE, Quad Core, 6M Cache, 1.6GHz (4.1GHz), 15W Intel® Core™ i3-8145UE, Dual Core, 4M Cache, 2.2GHz (3.9GHz), 15W Intel® Core™ Celeron® 4305UE, Dual Core, 2M Cache, 2.0GHz (2.0GHz), 15W	
	Memory	One 260-pin SODIMM up to 32GB Single Channel DDR4 up to 2400MHz	
	BIOS	AMI SPI 128Mbit	
Graphics	Controller	Intel® UHD Graphics 620/ Intel® UHD Graphics 610 (for Celeron 4305UE)	
	Feature	OpenGL 4.5, DirectX 12, OpenCL 2.1 HW Decode: AVC/H.264, MPEG2, VC1/WMV9, JPEG/MJPEG, HEVC/H265, VP8, VP9 HW Encode: AVC/H.264, MPEG2, JPEG, HEVC/H265, VP8, VP9	
	Display	1 x DP++/HDMI	DP++: resolution up to 4096x2304 @ 60Hz HDMI: resolution up to 4096x2160 @30Hz
	Dual Displays	DP++ + HDMI	
Expansion	Interface	1 x M.2 E key 2230 (PCIe x2/USB 2.0)	
		2 x M.2 B key 3042/2242 (PCIe x1 or SATA 3.0/USB 3.1 Gen1/USB 2.0)	
Ethernet	Controller	1 x Intel® I219V/I219LM (only Core i7/i5 supports iAMT)	
Rear I/O	Ethernet	1 x GbE (RJ-45)	
	USB	2 x USB 3.1 Gen 2	
	Display	1 x COMBO port (DP++/HDMI)	
Internal I/O	Serial	1 x RS-232/422/485 (1.27mm pitch)	
	USB	2 x USB 2.0 (1.27mm pitch)	
	DIO	1 x 8-bit DIO	
	SMBus	1 x SMBus	
Watchdog Timer	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds	
Security	TPM	fTPM2.0	
Power	Type	Wide Range 9~36V	
	Connector	2-pin Terminal Block	
	Consumption	TBD	
	RTC Battery	CR2032 Coin Cell	
OS Support	OS Support (UEFI Only)	Windows 10 IoT Enterprise (64-bit)	
		Linux	
Environment	Temperature	Operating: 0 to 60°C, -30 to 80 °C	
		Storage: -40 to 85°C	
	Humidity	Operating: 5 to 90% RH Storage: 5 to 90% RH	
Mechanism	Dimensions	2.5" Pico-ITX Form Factor 100mm (3.94") x 72mm (2.83")	
		Height	PCB: 1.6mm
	Top Side: 15mm		
	Bottom Side: 8mm		
Standards and Certifications	Certifications	CE, FCC, RoHS	

## PACKING LIST

1 WL053 board
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