

ST102-WL



Embedded Solution Powered by:
DFI WL176 motherboard

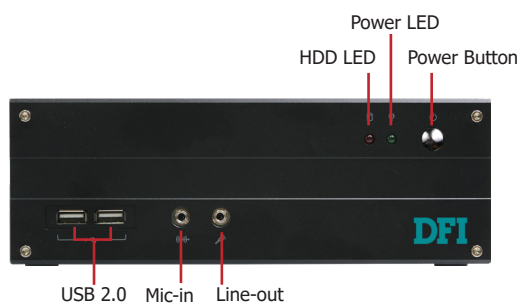


Features

- Compact mini-ITX system based on Intel 8th Gen Intel® Core™ ULT Processor
- 2DDR4 2666MHz SODIMM up to 64G
- 1 x 2.5" SATA drive bay, 1x optional slim ODD bay
- 2 Intel GbE, 4 USB 3.1, 2 DP/HDMI (auto-detection)
- 15-Year CPU Life Cycle Support Until Q2' 35 (Based on Intel IOTG Roadmap)
- Status : Sample Available



Panel

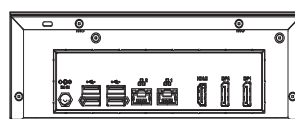


Front View

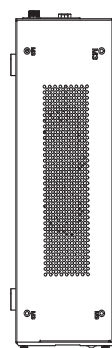


Rear View

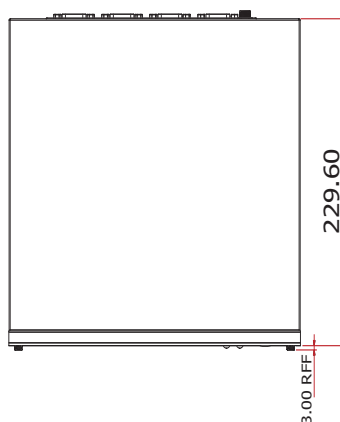
Dimensions



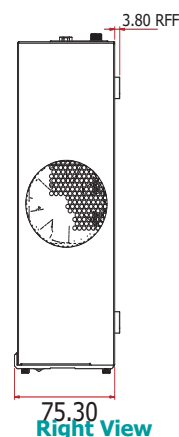
Rear View



Left View



Front View



Right View

Specifications

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	2 x 260-pin SODIMM up to 32GB DDR4 2400MHz/DDR4 2133MHz (for Celeron 4305UE)	
	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: H.264/AVC, VP8, VP9, VP9 10 Bit, H.265/HEVC 8 bit, H.265/HEVC 10 bit, MPEG2, MJPEG, VC-1 HW Encode: H.264/AVC, VP8*, VP9*, H.265/HEVC 8 bit, H.265/HEVC 10 bit, MPEG2, MJPEG (*VP8 and VP9 encode is not supported by Windows OS)	
	Display	2 x DP++/HDMI (Auto-detecting)	DP: resolution up to 4096x2304 @ 60Hz HDMI: resolution up to 4096x2160 @ 30Hz
STORAGE		1 x 2.5" SATA bay, anti-vibration	
EXPANSION		1 x Full-Size mini PCIe for mSATA 1 x m.2 2280 mKey (PCIe x 4/SATA) Support NVme and Intel Optane memory 1 x m.2 2230 Ekey (USB/PCIe)	
AUDIO	Audio Codec	Realtek ALC888S-VD2-GR	
ETHERNET	Controller	1 x Intel® I210AT PCIe (10/100/1000Mbps) 1 x Intel® I219LM PCIe with iAMT11.6 and vPro (10/100/1000Mbps) (only Core i7/i5 supports iAMT)	
LED	Indicators	1 x Power LED 1 x HDD LED	
FRONT I/O	USB	2 x USB 2.0 (X100-USB2)	
	Audio	1 x Line-out 1 x Mic-in (via cable to external interface from on board pin-header)	
	Buttons	1 x Power Button	
REAR I/O	Ethernet	2 x GbE (RJ-45)	
	USB	4 x USB 3.1 Gen2	
	Display	2 x DP++/HDMI	
	Audio	1 x Line-out 1 x Mic-in	
	Antenna	2 x antenna opening	
COOLING	Fan	1 x System Fan 1 x CPU Fan	
WATCHDOG TIMER	Output & Interval	System Reset, Programmable via Software from 1 to 255 Seconds	
SECURITY	TPM	dTPM 2.0	
POWER	Type	12V DC Jack, (optional power adapter 60W)	
	Connector	DC Jack	
OS SUPPORT		Windows 10 IoT Enterprise	
MECHANISM	Construction	Metal chassis + Aluminum front bezel Kensington lock	
	Mounting	Wall mount	
	Dimensions (W x H x D)	219mm x 75.15mm x 229.7mm (without of stand holder)	
	Weight	2.55 kg	
ENVIRONMENT	Operating Temperature	-5 to 55°C The configuration with i3 CPU throttles may occur	
	Storage Temperature	-20 to 70°C The configuration with i3 CPU throttles may occur	
	Relative Humidity	Operating: 10 to 85% (non-condensing) Storage: 10% to 90% (non-condensing)	
STANDARDS AND CERTIFICATIONS	Shock	Operating: 3G	Non-operating: 5G
	Vibration	Operating: Random 5~500Hz 1G	Non-operating: Sweep Sine 10~500Hz 1.5G
	Package Drop	ISTA Project 1A	
	Certification	CE/FCC class B	