

Features

- 8th Gen Intel® Whiskey Lake-U 4 Core Ultra Low 15W Processor Onboard
- Intel® UHD Graphics 620/610
- Supports Dual Channel Max up to 64GB DDR4 2400Mhz System Memory
- Dual HDMI w/CEC Controller (Optional)
- Dual Expansion, M.2 Key-B/E
- Dual HDMI w/CEC Controller (Optional)
- Dual Intel® Gigabit Ethernet
- Realtek HD Audio supports 5.1 channel sound playback
- TPM 2.0
- Supports RAID 0/1
- Support VESA mount (Optional)



Specifications

System	
CPU	Intel® Core™ i7-8665UE Processor (8M Cache, up to 4.40 GHz) Intel® Core™ i5-8365UE Processor (6M Cache, up to 4.10 GHz) Intel® Core™ i3-8145UE Processor (4M Cache, up to 3.9GHz) Intel® Celeron® Processor 4305UE (2M Cache, 2.00 GHz)
System Memory	2 x 260-Pin SODIMM Socket, Max. Up to 64GB DDR4 2400MHz
Audio	Realtek HD Audio supports 5.1 channel sound playback
Ethernet	LAN1: Intel® I211AT Gigabit Ethernet Controller LAN2: Intel® I219LM Gigabit Ethernet Controller
Watchdog Timer	H/W Reset, 1sec. ~ 65535sec.
H/W Status Monitor	Monitoring System Temperature and Voltage with Auto Throttling Control
Expansion	1 x M.2 (Key-B, 2242/3042, PCIe, SATA, USB 3.0, USB 2.0, SIM Slot) 1 x M.2 (Key-E, 2230, PCIe, USB2.0, CNVi)
Storage	1 x 2.5" Drive Bay (7mm) 1 x M.2 (2242) Key-B Support RAID 0/1
OS Information	Win 10, Linux
Display	
Chipset	Intel® UHD Graphics 620 (i7-8665UE, i5-8365UE, i3-8145UE) Intel® UHD Graphics 610 (4305UE)
Resolution	2 x HDMI 1.4: Max. Resolution 4096x2160@24Hz
Multiple Display	Dual Display
External I/O	
Display	2 x HDMI
USB	4 x USB 3.1, Optional 2 x USB 2.0
COM	Optional 1 x RS-232
LAN	2 x RJ45
Audio	Mic-in & Line-out
Antenna	2 x Antenna mounting holes with dust protection cover
System Control	1 x Power on/off LED on front side Output: 12V/10A AC-DC 120W Adapter

Mechanical & Environment

DC Input	Typical +12V. Lockable DC Jack
Power Mode	Single Power ATX Support S0, S3, S4, S5. ACPI 5.0 Compliant
Power Type	AT/ATX (ATX is default setting)
Adapter	Input: 100 ~ 240Vdc/ 50 ~ 60Hz Output: 12V/10A AC-DC 120W Adapter

Mechanical & Environment

Power Adapter	Input: 100 ~ 240Vdc/ 50 ~ 60Hz Output: 12V/10A AC-DC 120W Adapter
Operating Temp	With extended temperature peripherals: -10°C ~ 50°C (14°F ~ 122°F) with 0.5m/s air flow With extended temperature peripherals: -10°C ~ 40°C (14°F ~ 104°F) with 0.2m/s air flow With 2.5" hard drive: 0°C ~ 40°C (32°F ~ 113°F) with 0.5m/s air flow
Storage Temp	-40°C ~ 75°C (-40°F ~ 167°F)
Op. Humidity	40°C @ 95% Relative Humidity, Non-condensing
Construction	Aluminum + Metal
Vibration Test	With SSD: 5Grms, IEC 60068-2-64, Random, 10 ~ 500Hz, 30min/Axis, 3 Axis
Shock Test	With SSD : 10G, IEC 60068-2-27, Half Sine, 11ms, Z Axis
Drop	ISTA 2A, IEC-60068-2-32 Test : Ed, 1 Corner, 3 Edges, 6 Faces
Mounting Kit	Stand (Default), VESA Mount kit (Optional)
Dimension	7" x 4.8" x 2.2" (177 x 123 x 55 mm)
Weight	2.65lbs (1.2KG)
Certification	CE, FCC Class B

Ordering Info

EPC-WHL-86-B1-1R	Intel® Core™ i7-8665UE Fanless Tiny System
EPC-WHL-83-B1-1R	Intel® Core™ i5-8365UE Fanless Tiny System
EPC-WHL-81-B1-1R	Intel® Core™ i3-8145UE Fanless Tiny System
EPC-WHL-43-B1-1R	Intel® Celeron 4305UE Fanless Tiny System

* All product specifications and images are subject to change without notice. Last update: 2021/05/08

