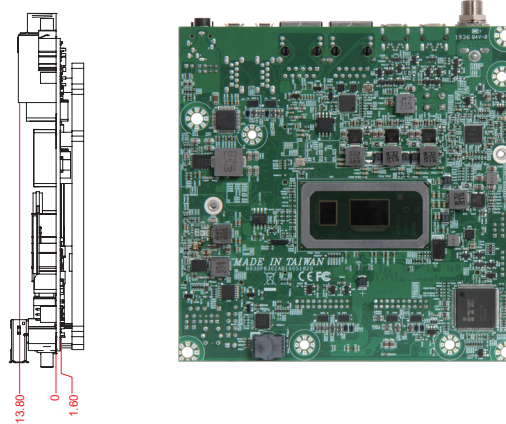
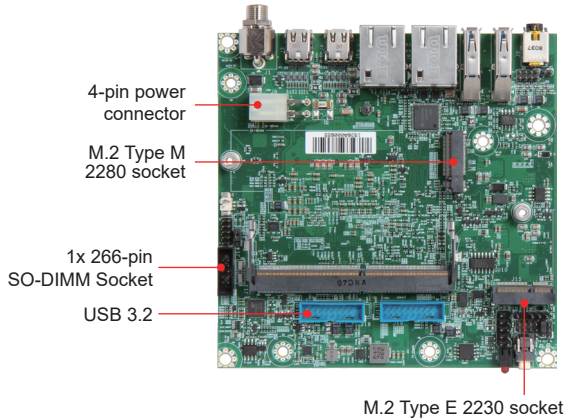


# NANO-6051

Intel® 8<sup>th</sup> Generation Core™ i5/i3 Processors based on NANO-ITX Board with mini DP, GbE LAN, USB 3.2, M.2 and Combo Audio jack

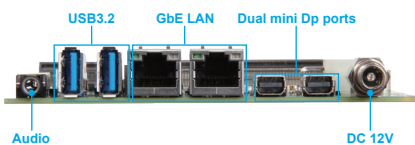


NANO-6051 build with Intel® 8<sup>th</sup> Generation Core™ i7/i5/i3 Processors and takes advantages of Intel® Core™ mobile processor technologies such as Hyper-Threading, high performance, and low power consumption. Portwell NANO-6051-based systems are ideal for passively cooled and hermetically sealed systems that can be used in various environments. NANO-6051 is an ideal platform with HD graphic output for POS, kiosk, digital signage and transportation applications.

## FEATURES

- Intel® 8<sup>th</sup> Gen Core™ i7, i5 and i3 processor
- Supports one DDR4 2400 non-ECC SO-DIMM up to 32GB
- Supports Dual mini DP ports
- Supports one M.2 Type M, one M.2 Type E, two USB 3.1 and four USB 3.0 ports
- Supports DC 12V input
- Supports TPM 2.0 (On board)

## REAR I/O



## ORDERING GUIDE

AB1-3J58	(R).NANO-6051-8145UE Nano-ITX ESB. Intel Core i3-8145UE 2.2GHz Dual Core.w/DDR4 SO-DIMM/two mini DP/dual GbE LAN/USB/M.2
AB1-3J57	(R).NANO-6051-8365UE Nano-ITX ESB. Intel Core i5-8365UE 1.6GHz Quad Core.w/DDR4 SO-DIMM/two mini DP/dual GbE LAN/USB/M.2
AB1-3J56	(R).NANO-6060-E3845 Nano-ITX ESB. Intel Core i7-8665UE 1.7GHz Quad Core.w/DDR4 SO-DIMM/two mini DP/dual GbE LAN/USB/M.2

## PACKING LIST

One NANO-6051 NANO-ITX Main board
One Passive Hear Spreader
One Installation CD

## GENERAL

Processor	- Intel® 8 <sup>th</sup> Gen Core™ i5/i3 processor - With 4MB Cache - Support Intel® Hyper-Threading Technology, Virtualization Technology (VT-x), Small Business Advantage
BIOS	AMI uEFI BIOS
Memory	1x DDR4 2400 non-ECC SO-DIMM up to 32GB
Storage Devices	N/A
Watchdog Timer	Programmable by embedded controller
Hardware Monitoring	- Temperature (CPU & System) - Voltage (CPU Vcore, 12V, 5V, 3.3V, RAM)
Expansion Interface	- 1x M.2 Type M 2280 socket - 1x M.2 Type E 2230 socket

## I/O INTERFACE

Audio	- HDA controller integrated in Intel® SoC - Realtek ALC888S HDA codec - Audio Combo Jack on rear I/O with Line-out/Mic in and on board pin header with Line-in, Line-out, Mic-in
Ethernet	- Intel® I210AT and Intel® I219LM ethernet controller - 2x RJ45 connector on rear I/O
Serial Port	1x RS-232/422/485 on board connector (selected by bios)
USB	- 2x USB 3.2(Gen2) ports on rear I/O - 4x USB 3.2(Gen1) ports on board
GPIO	8-bit configurable controlled by embedded controller
Other	N/A

## DISPLAY

Graphic Controller	- Intel® HD Graphics 5500/6000 supports DirectX11.2, OpenGL 4.3 / OpenCL 2.0 - Video decode HW acceleration support for H.264/AVC, VC-1, MPEG2, VP8
Display Interface	2x Mini DP on Rear I/O, up to 3840x2160

## Mechanical & Environment

Dimension	120(L) x 120(W) mm; 4.72"(L) x 4.72"(W)
Power Supply	DC 12V input
Environment	- Operation Temperature: 0°C to 60°C - Storage Temperature: -20°C to 85°C - Relative Humidity: 5% to 95%, non-condensing
Certification	CE, FCC Class A
MTBF	Over 100,000 hours at 40°C

