

	Intel® NUC-Kit NUC8i7BEK
Main data	
Suitable operating systems	Windows 10, 64-bit*
Board number	NUC8BEB
Mainboard format	UCFF (4" x 4")
Socket	Soldered-down BGA
Internal drive form factor	M.2 SSD
Number of supported internal drives	1
Lithography	14 nm
Power dissipation (TDP)	28 W
Supported input voltage (DC)	12-19 VDC
Included processor	Intel® Core™ i7-8559U Processor (8M Cache, up to 4,50 GHz)
Intel® vPro™ Platform qualification ‡	No
Number of cores	4
Number of Threads	8
Basic clock frequency of the processor	2,70 GHz
Max. Turbo clock frequency	4,50 GHz
Guarantee period	3 yrs
Additional Information	
Embedded models available	No
Description	Other features: Includes Thunderbolt 3 (40Gbps) USB 3.1 Gen 2 (10Gbps) and DP 1.2 via USB-C; also includes microSDXC card slot, dual microphones
Memory and data storage	
Max. Memory size (depending on the memory type)	32 GB
Memory types	DDR4-2400 1.2V SO-DIMM
Max. Number of memory channels	2
Max. Memory bandwidth	38.4 GB/s
Max. Number of DIMMs	2
Support of ECC memory ‡	No
Processor Graphics	
Processor graphic ‡	Intel® Iris® Plus Grafik 655
Integrated graphic ‡	Yes
Video output	HDMI 2,0a; USB-C (DP1.2)
Number of supported screens ‡	3
Extension options	
PCI Express Version	Gen3
PCI Express Configurations ‡	M.2 slot with PCIe X4 lanes
Removable memory slot	microSDXC with UHS-I support
M.2 Card slot (memory)	22x42/80
I/O Specifications	
Number of USB ports	6
USB configuration	2x front and 3x rear USB 3.1 Gen2; 2x USB 2.0 via internal headers
USB version	2,0, 3.1 Gen2
USB 2.0 configuration (external + internal)	0 + 2
USB 3.0 configuration (external + internal)	2B 2F + 0
Total number of SATA ports	2
Maximum number of SATA 6.0 Gbps ports	2
Audio (connectors on the rear panel + front connectors)	7.1 digital (HDMI mDP); L+R mic (F)
Integrated LAN	Intel® Ethernet Connection I219-V
Integrated WLAN‡	Intel® Wireless-AC 9560 + Bluetooth 5,0
Integrated Bluetooth technology	Yes

Rx infrared receiver	Yes
Other headers	CEC, 2x USB2.0, FRONT_PANEL
Number Thunderbolt™ 3 ports	1
Package Specifications	
Housing dimensions	117 x 112 x 36mm
Innovative technical functions	
Intel® Optane™ memory supports ‡	Yes
Intel® Direct I/O Virtualization Technology (VT-d) ‡	Yes
Intel® vPro™ Platform qualification ‡	No
TPM	No
Intel® HD Audio Technology	Yes
Intel® Rapid Storage Technology	Yes
Intel® Virtualization Technology (VT-x) ‡	Yes
Intel® Platform Trust Technology (Intel® PTT)	Yes
Safety and reliability	
Intel® AES New Instructions	Yes