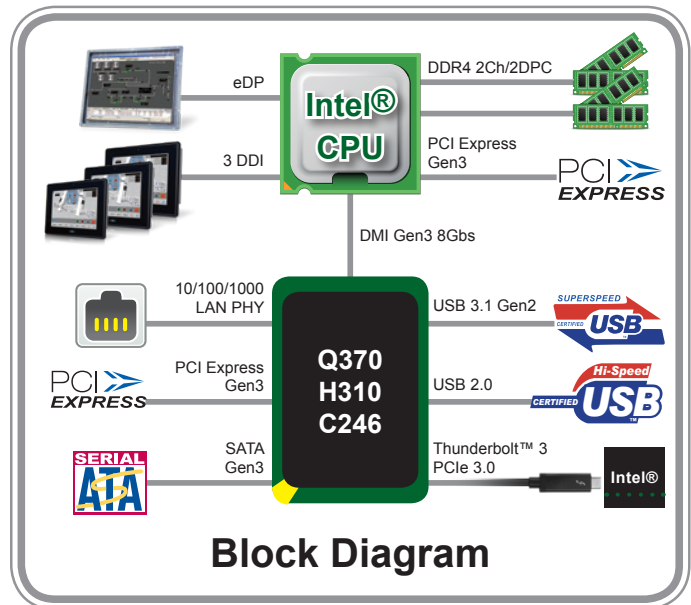


IEI 8th Generation Intel® Core™ Solution

» Intel® Coffee Lake Platform Overview

- Additional performance with 1.37x better productivity and up to 6 processor cores vs 4th generation processors
- Speed and versatility with USB-C and USB 3.1
 - » Gen 11 graphics engine
 - » 3 independent displays with audio stream
 - » Display resolutions supporting up to 4K@60Hz/5K@30Hz
- Security
 - » Intel® Device Protection Technology with Boot Guard
 - » Intel® Memory Protection Extensions (Intel® MPX)
 - » Intel® Software Guard Extensions (Intel® SGX)



» More Features on Coffee Lake



» Additional Performance

137% better productivity vs 4th Gen processors or 10% performance gain from 7th Gen processors.

» Media/Video Experience

High Dynamic Range (HDR) Rec.2020, HEVC 10-bit encode/decode, VP9 10-bit decode, Chrome browser VP9 HW acceleration support.

» New UX Capabilities

Speed and versatility with USB-C / USB 3.1 (10 Gbps)

» Intel® 8 Series, 9 Series & 100 Series Comparison

Item	2-Chip Platform-S (WS/DT)				2-Chip Platform-H (Mobile)				
	8 Series	100 Series	100 Series	300 Series	8 Series	9 Series	100 Series	100 Series	300 Series
Platform Name	Haswell	Skylake	Kaby Lake	Coffee Lake/ Canon Lake	Haswell	Broadwell	Skylake	Kaby Lake	Coffee lake / Coffee Lake Refresh
Process	22nm	14nm	14nm	14nm	22nm	14nm	14nm	14nm	14nm
CPU Package	LGA1150	LGA1151	LGA1151	LGA1151	BGA1364	BGA1364	BGA1440	BGA1440	BGA1440
Memory	DDR3/DDR3L	DDR3L/DDR4	DDR3L/DDR4	DDR4	DDR3L	DDR3/DDR3L	DDR3L/DDR4	DDR3L/DDR4	DDR4
PCI Express Lanes	Up to 8 Lanes (Gen2)	Up to 20 PCIe (Gen3)	Up to 24 PCIe (Gen3)	Up to 30 PCIe (Gen3)	Up to 8 Lanes (Gen2)	Up to 12 PCIe (Gen2)	Up to 16 lanes PCIe (Gen3)	Up to 16 lanes PCIe (Gen3)	Up to 24 PCIe (Gen3)
PCH	Q87/C226	C236/Q170/ H110	C236/Q170/ H110	C246/Q370/ H310	HM86/QM87	HM86/QM87	CM236/HM170/ QM170	CM238/ HM175/QM175 (Compatible with Skylake)	CM246/QM370/ HM310

» Intel® Coffee Lake Graphics Support

» Display Comparison

Time	2015	2016	2018
Platform Name	Skylake	Kaby Lake	Coffee Lake
Graphics	Gen9 graphics Intel® HD 510~530	Gen9 graphics Intel® HD 615~620	Gen9 graphics Intel® UHD
DirectX Support	Direct 12/11.3	Direct 12/11.3	Direct 12/11.3
OpenGL Support	4.4	4.4	4.5

» DisplayPort & 4K UHD Premium Content Support



» Intel® Coffee Lake OS Support

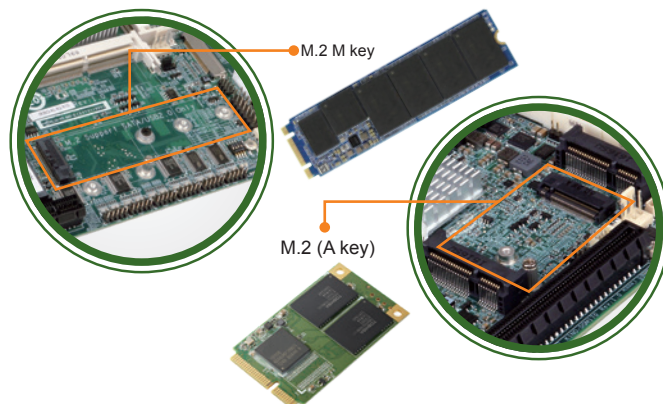
Type	Operating System	Support
Microsoft	Windows* 10 Enterprise & IOT Enterprise (64bit)	Intel / Microsoft
Linux	Ubuntu	Open Source community / Canonical Ltd
	Yocto	Yocto project community
RTOS	Wind River VxWorks	Wind River systems

** Distributions supported depend on each CPU sku.

» Features of IEI Product with 8th Gen Intel® Core™ Processors

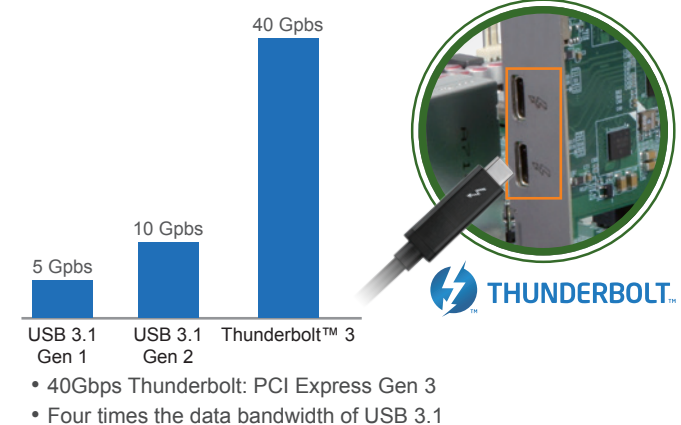
» M.2

IEI provides new products supporting Next Generation Form Factor (NGFF) expansion cards in different types, such as SSD, WWAN and WLAN cards suitable for small devices. Products with 8th Gen Intel® Core™ processors supports PCIe Gen3 x 4 NVMe interface.



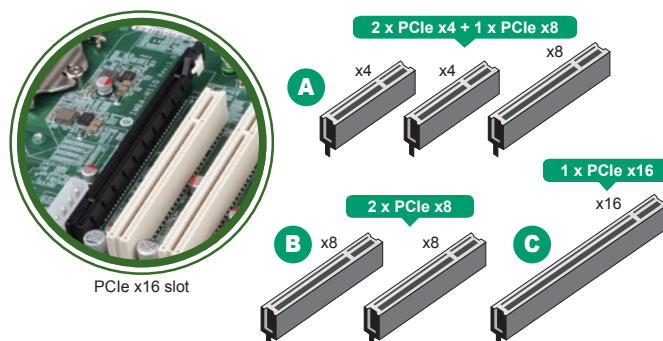
» Thunderbolt 3

Support dual Thunderbolt 3 by PCIe x4 card with Intel® Alpine Ridge DSL6540. Support more high speed applications through the latest USB Type C and thunderbolt 3 technology.



» Flexible CPU PCIe x16

Motherboards with high-end CPU has three controllers that can separate PCIe x16 into different sets.



» USB 3.1 Gen2

USB 3.1 Gen2 on USB Type A connector doubling the speeds of USB 3.1 Gen1 to as much as 10Gbps.

