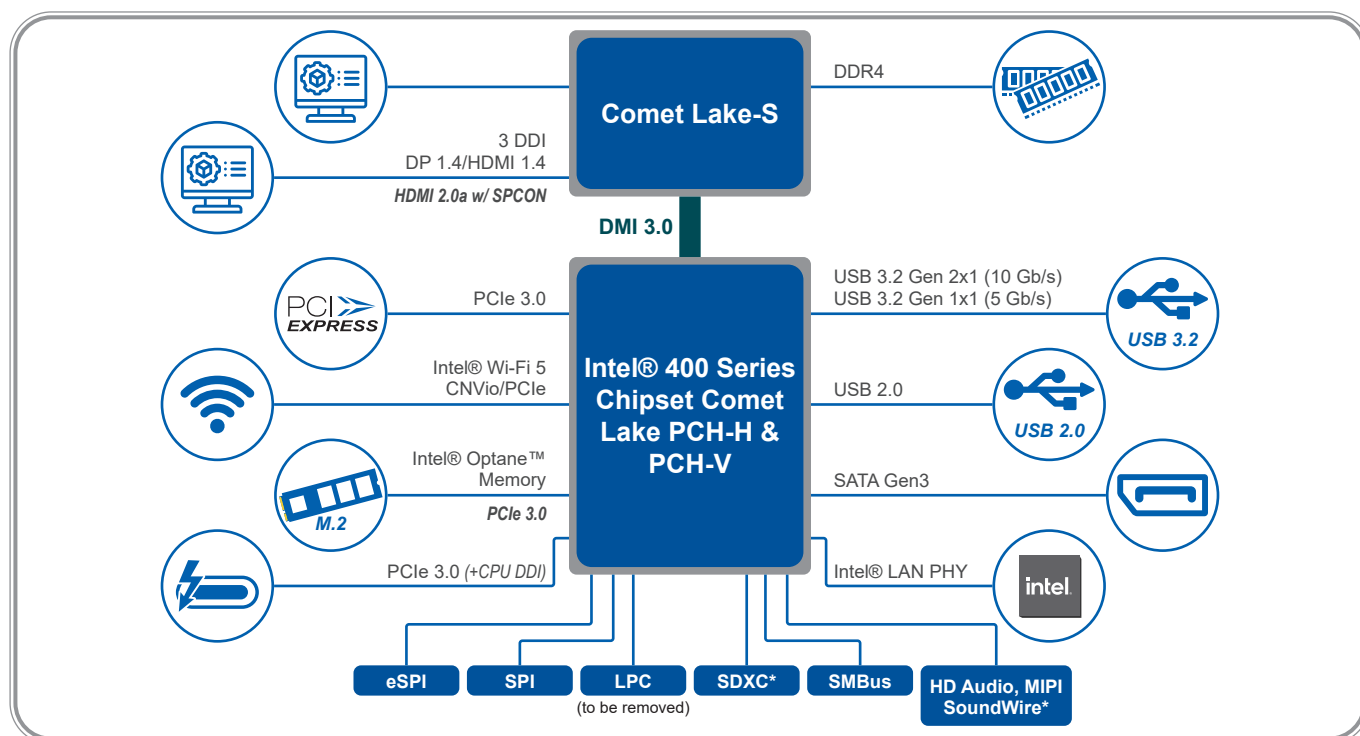# 10th Gen Intel® Comet Lake-S Solution

Intel® Comet Lake Platform Overview

IOTG Comet Lake is the follow on to Coffee Lake Refresh in our S-Series swim lane (including Intel® Xeon® Entry Workstation). 10th Gen Intel® Core platform with up to 10 Cores and improved performance over CFL-R. The Comet Lake up to 31% better integer multi-tasking compute intensive application performance on 10th Generation Intel® Core™ i9-10900E vs 9th Gen Intel® Core™ i7-9700. Ranging from 4 to 10 cores, with increased I/O capacity and the latest DDR4-2933 memory support, these processors deliver the performance required to consolidate multiple workloads.
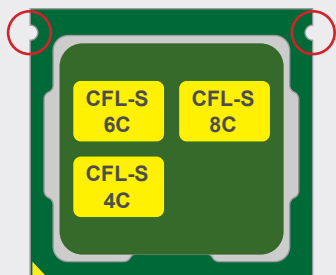

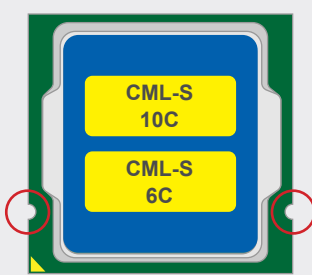## IOTG Coffee Lake-S to Comet Lake-S LGA Package & Socket TArgets

S-Series Platforms

2017/2018	2019/2020
LGA1151	LGA1200

- Comet Lake will transition to a higher pin count package.
- Comet Lake LGA will not have backward compatibility with legacy platforms.
- No changes to ILM dimensions or thermal solution retention.
- Comet Lake LGA improves power delivery & support for future incremental I/O features.

➠ Comet Lake-S Key Keatures

- Up to 4.7 GHz max frequency
- DDR4-2933 memory
- Integrated and discrete Gigabit-WiFi
- Intel® Smart Sound Technology
- Integrated USB 3.2 Gen 2
- Intel® Media SDK
- Media and display features for premium 4k content support
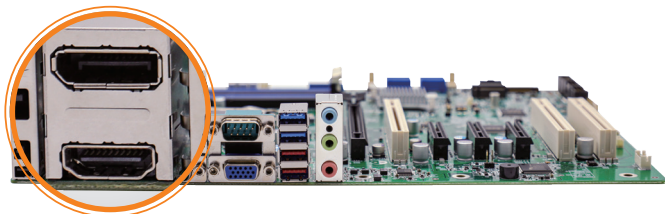- Intel® Turbo Boost Technology 3.0

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- W480E is pin compatible with Q470E and H420E
- H410 is not PIN compatible with W480E, Q470E and H420E

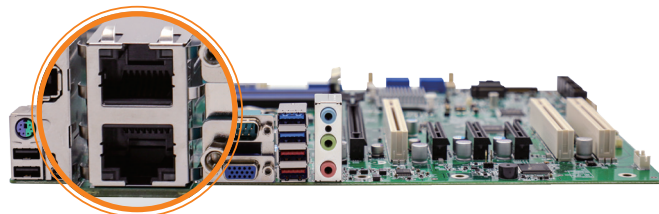|	2019		2020	
	1H	2H	1H	2H
	Coffee Lake-S Refresh Processor Intel® 300 Series Chipset		Comet Lake-S Processor Intel® 400 Series Chipset	
Entry Workstation	C246		W480E[1]	
Corporate with Intel® vPro™ (iSIPP)	Q370		Q470E[1]	
Value	H310		H420E[1]	H410

Embedded Use Conditions

1. "E" Suffix on Intel® 400 Series Chipsets designates Embedded Use Condition.
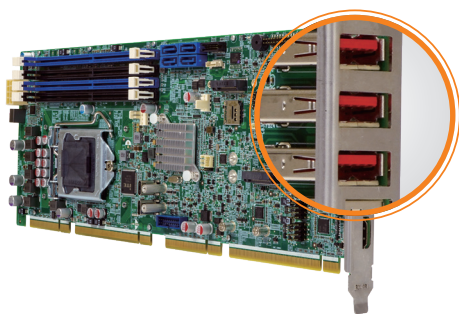
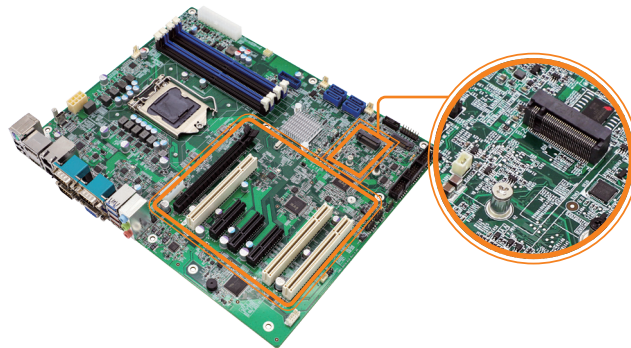## More Features on IEI Comet Lake SBC Products

Media & Display Features for Premium 4K Content Support

Integrated Intel® 2.5 GbE LAN Support

Integrated USB 3.2 Gen 2 (10 Gb/s) Support

Motherboards with rich PCIe and M.2 slots for different expansion cards.

Supported Operating Systems - Comet Lake

Type	Operating System	Support
Microsoft	Windows 10 IoT Enterprise RS5 (64bit)	Intel, Microsoft
	Windows* Server 2019 (Xeon W Only)	Intel, Microsoft
Linux*	Ubuntu*, SUSE, Red Hat* Enterprise, Wind River Linux	Canonical Ltd., Attachmate Group, Red Hat, Wind River Systems and open source community
	Yocto Project* BSP tool-based embedded Linux distribution (64bit)	Intel, Yocto Project community
RTOS	Wind River VxWorks* 7	Wind River systems

* Distributions supported depend on each CPU sku.