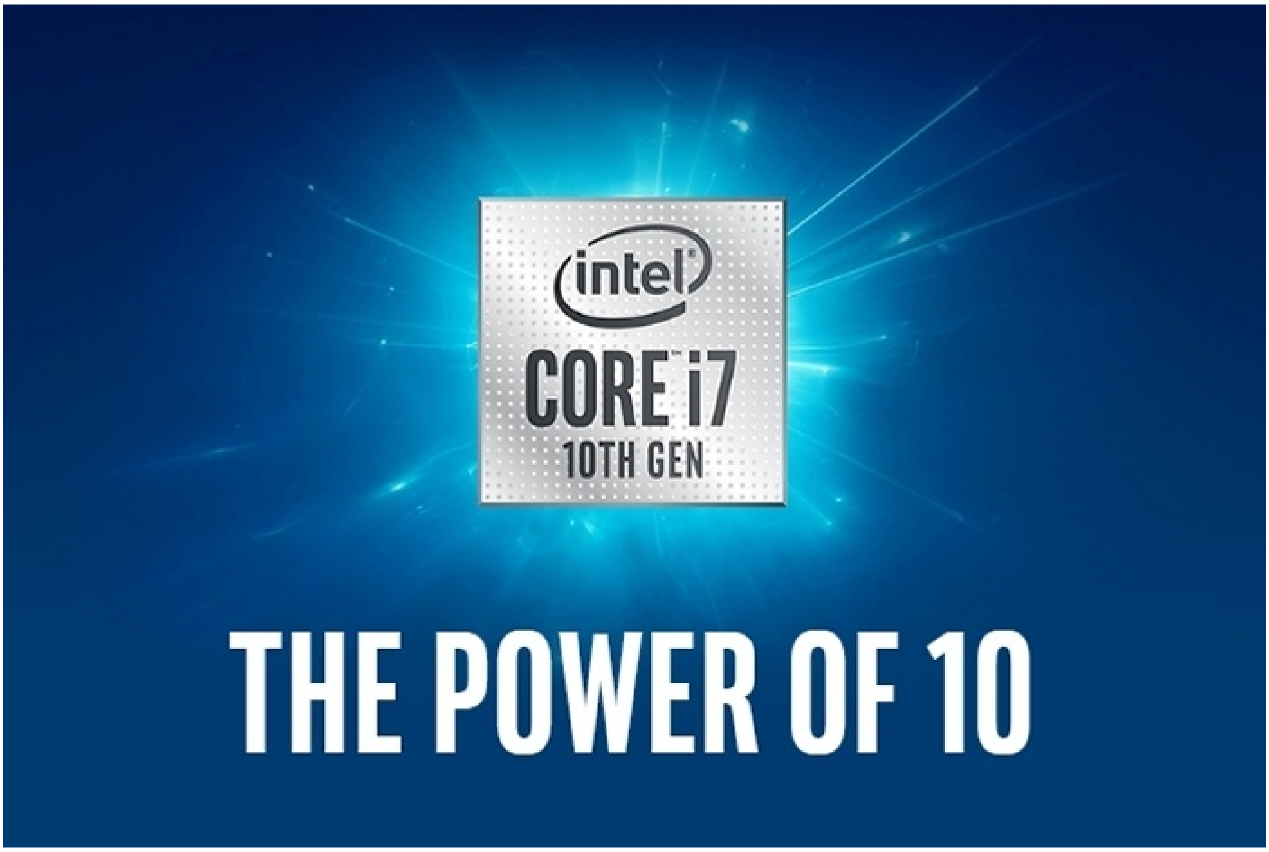
nexthardware.com

a cura di: **Gian Paolo Collalto - giampa - 15-07-2019 16:00**

Comet Lake in arrivo nel 2020

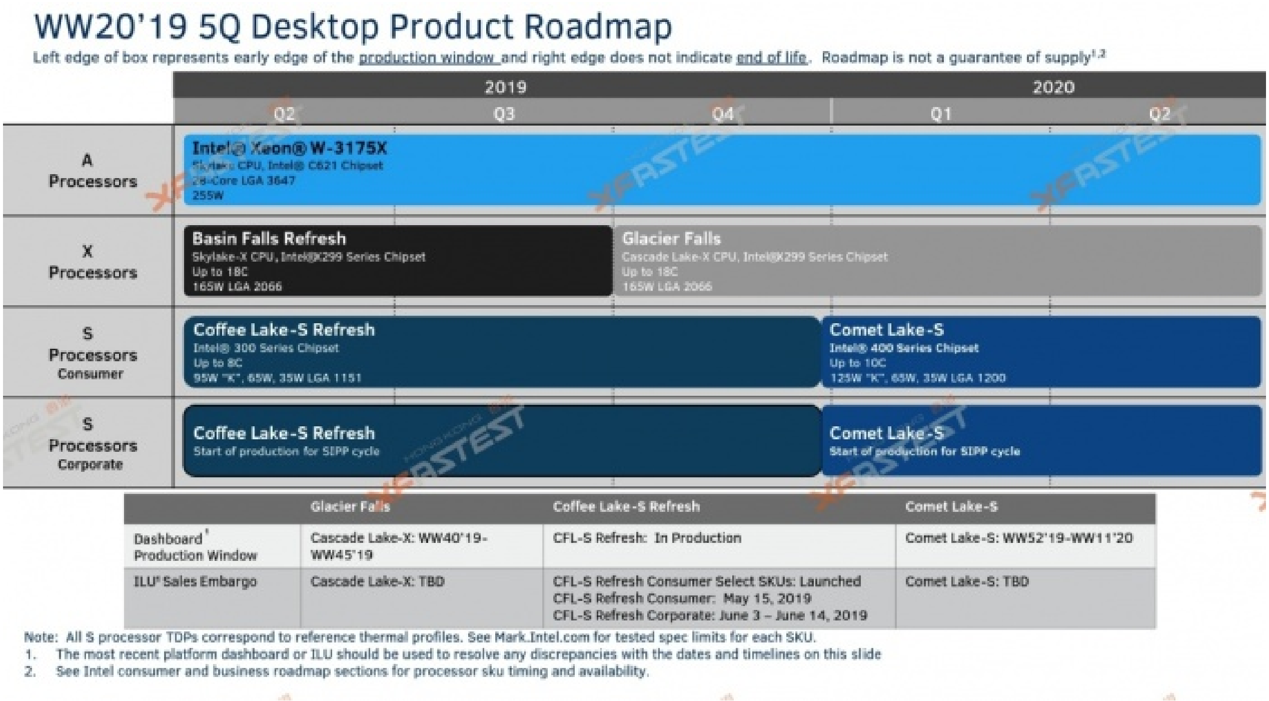
LINK (https://www.nexthardware.com/news/processori-chipset/8887/comet-lake-in-arrivo-nel-2020.htm)

Sino a 10 Core e 20 Thread, ma un processo produttivo sempre fermo 14nm.



Da XFastest sono arrivate nuove indiscrezioni riguardanti la prossima linea di processori Intel Core di 10a generazione e non sono così campate in aria come era sembrato in un primo momento.

Se da una parte è confermato l'arrivo di Cascade Lake-X con un massimo di 18 core (165W di TDP) sempre su socket LGA 2066 con chipset X299 o X499 (le differenze tra i due PCH sarebbero minime se non inesistenti) per il segmento HEDT, dall'altra ci sono concrete possibilità di vedere arrivare a fine anno o in Q1 2020 una prima risposta di Intel a Ryzen 3000 con Comet Lake che non sarà basato su un processo produttivo a 10nm come ci saremmo aspettati, ma su un ennesimo affinamento dell'attuale 14nm.



WW20'19 5Q Desktop Product Roadmap

Left edge of box represents early edge of the production window and right edge does not indicate end of life. Roadmap is not a guarantee of supply[1,2]

2019
2020
Q2
Q3
Q4
Q1
Q2
A Processors
X Processors
S Processors Consumer
S Processors Corporate

Intel® Xeon® W-3175X
Skylake CPU, Intel® C621 Chipset
28-Core LGA 3647
255W

Basin Falls Refresh
Skylake-X CPU, Intel®X299 Series Chipset
Up to 18C
165W LGA 2066

Glacier Falls
Cascade Lake-X CPU, Intel®X299 Series Chipset
Up to 18C
165W LGA 2066

Coffee Lake-S Refresh
Intel® 300 Series Chipset
Up to 8C
95W "K", 65W, 35W LGA 1151

Comet Lake-S
Intel® 400 Series Chipset
Up to 10C
125W "K", 65W, 35W LGA 1200

Coffee Lake-S Refresh
Start of production for SIPP cycle

Comet Lake-S
Start of production for SIPP cycle

	Glacier Falls	Coffee Lake-S Refresh	Comet Lake-S
Dashboard[1] Production Window	Cascade Lake-X: WW40'19-WW45'19	CFL-S Refresh: In Production	Comet Lake-S: WW52'19-WW11'20
ILU[1] Sales Embargo	Cascade Lake-X: TBD	CFL-S Refresh Consumer Select SKUs: Launched CFL-S Refresh Consumer: May 15, 2019 CFL-S Refresh Corporate: June 3 – June 14, 2019	Comet Lake-S: TBD

Note: All S processor TDPs correspond to reference thermal profiles. See Mark.Intel.com for tested spec limits for each SKU.
1. The most recent platform dashboard or ILU should be used to resolve any discrepancies with the dates and timelines on this slide
2. See Intel consumer and business roadmap sections for processor sku timing and availability.

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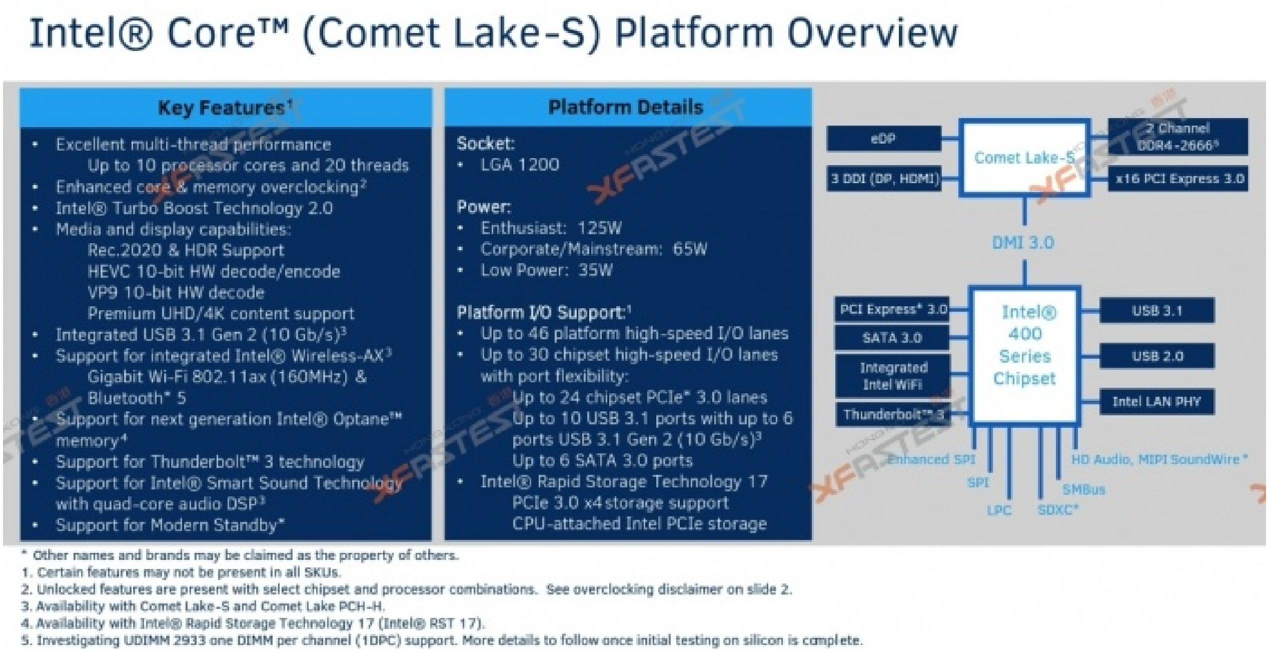
Il socket utilizzato per Comet Lake dovrebbe essere LGA 1200, quindi con 49 pin in più di LGA 1151, il che comporta la mancata retrocompatibilità con le CPU di precedente generazione nonostante l'architettura rimanga sostanzialmente invariata e resti immutato anche il supporto alle memorie DDR4-2666.



Intel® Core™ (Comet Lake-S) Platform Overview

Key Features[1]

- Excellent multi-thread performance
  - Up to 10 processor cores and 20 threads
- Enhanced core & memory overclocking[2]
- Intel® Turbo Boost Technology 2.0
- Media and display capabilities:
  - Rec.2020 & HDR Support
  - HEVC 10-bit HW decode/encode
  - VP9 10-bit HW decode
  - Premium UHD/4K content support
- Integrated USB 3.1 Gen 2 (10 Gb/s)[3]
- Support for integrated Intel® Wireless-AX[3]
  - Gigabit Wi-Fi 802.11ax (160MHz) & Bluetooth* 5
- Support for next generation Intel® Optane™ memory[4]
- Support for Thunderbolt™ 3 technology
- Support for Intel® Smart Sound Technology with quad-core audio DSP[3]
- Support for Modern Standby*

Platform Details

Socket:
- LGA 1200

Power:
- Enthusiast: 125W
- Corporate/Mainstream: 65W
- Low Power: 35W

Platform I/O Support:[1]
- Up to 46 platform high-speed I/O lanes
- Up to 30 chipset high-speed I/O lanes with port flexibility:
  - Up to 24 chipset PCIe* 3.0 lanes
  - Up to 10 USB 3.1 ports with up to 6 ports USB 3.1 Gen 2 (10 Gb/s)[3]
  - Up to 6 SATA 3.0 ports
- Intel® Rapid Storage Technology 17
  - PCIe 3.0 x4 storage support
  - CPU-attached Intel PCIe storage

* Other names and brands may be claimed as the property of others.
1. Certain features may not be present in all SKUs.
2. Unlocked features are present with select chipset and processor combinations. See overclocking disclaimer on slide 2.
3. Availability with Comet Lake-S and Comet Lake PCH-H.
4. Availability with Intel® Rapid Storage Technology 17 (Intel® RST 17).
5. Investigating UDIMM 2933 one DIMM per channel (1DPC) support. More details to follow once initial testing on silicon is complete.

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Il PCH metterà quindi a disposizione ulteriori 24 linee PCIe 3.0, mentre le restanti saranno destinate a pilotare gli altri canali di I/O.

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