

## Expanding the Intel 600 Series Chipset for Intel vPro with 12th Gen Intel Core Desktop Processors

As part of the Intel vPro<sup>®</sup> platform, new [Intel<sup>®</sup> Q670](#) and [Intel<sup>®</sup> W680](#) chipsets deliver a full set of features and capabilities with the performance of the latest 12th Gen Intel<sup>®</sup> Core™ processors announced in October 2021.

Commercial and workstation users look to the Intel vPro platform for innovation and business-class performance. In the managed-IT environment, users need systems that can meet their workflow needs. Professional content creators, engineers and financial services professionals look to an Intel-based workstation for performance, the latest connectivity features and data integrity.

These new chipsets provide several advanced features over the previous generations of commercial platforms:

- Up to 12 lanes of PCIe Gen 4.0 enabling high-bandwidth storage and next-generation devices.
- Up to 16 lanes of PCIe Gen 3.0 for additional storage and graphics devices.
- Up to four ports of USB 3.2 Gen 2x2 (20G) for high-speed external storage devices.
- Up to eight ports of SATA 3.0 (6 Gb/s) for traditional SATA SSDs and HDDs.
- DDR5 ECC and DDR4 ECC Memory support. (Now enabled on Intel vPro with 12th Gen Intel Core desktop processors when using an Intel W680 workstation motherboard.)

### Introducing ECC Memory Support

The W680 chipset also includes error correcting code (ECC) memory support on Intel vPro with 12th Gen Intel Core processors/

ECC memory provides additional data integrity by detecting and correcting bit-flip errors that can occur to data in transfer between the CPU memory controller and DRAM. Software or thermal bit-flip errors can cause system crashes or unintended changes to data. As part of the Intel vPro platform, the Intel W680 chipset enables this additional data integrity with support for ECC memory on Intel vPro<sup>®</sup> Enterprise platforms with 12th Gen Intel Core processors. With the performance of the 12th Gen Intel Core desktop processors combined with ECC memory, these powerful workstation solutions will enable professional content creators, financial services professionals and engineers with performance and data integrity.

In addition to the 12th Gen Intel Core desktop processors, Intel is also announcing that ECC memory will be enabled on upcoming Intel vPro Enterprise platforms with 12th Gen Intel Core mobile processors in 2022's second quarter.

### More:

- [Intel W680 chipset with 12th Gen Intel Core Processors for Workstations](#) (PDF)
- [Intel Q670 chipset with 12th Gen Intel Core Processors for Business Desktops](#) (PDF)

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