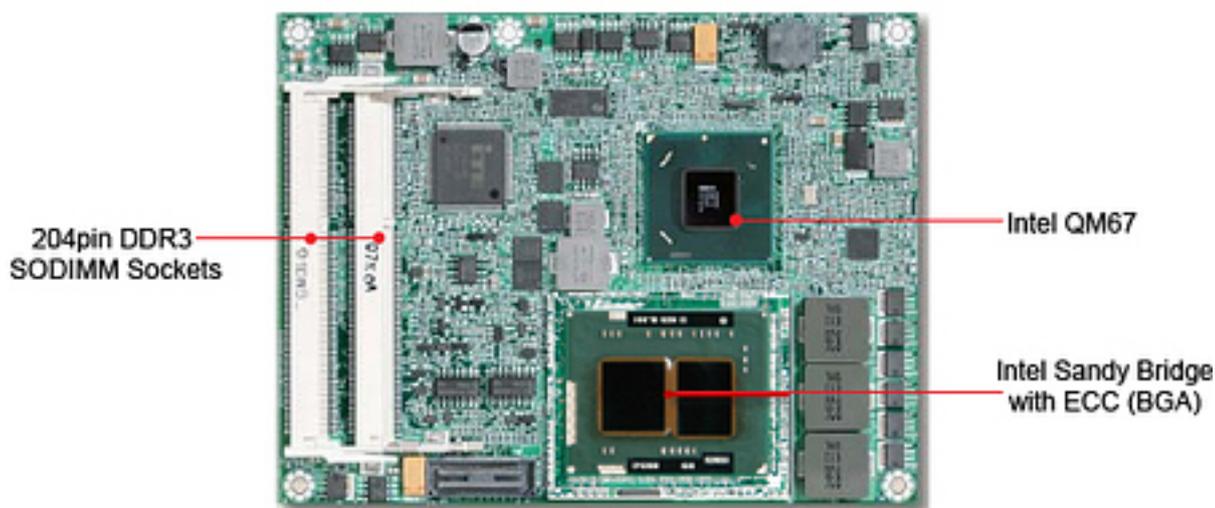


Type 6 COM Express Modules Feature 2nd-Gen Intel Core Processor & ECC RAM



American Portwell Technology released the PCOM-B217VG-VI-ECC embedded computer module to add Intel's second-generation quad-core and dual-core Intel Core i7/i5 processors to its Type 6 COM Express product portfolio. The Type 6 connector pin assignment is the successor to Type 2, adding the DisplayPort and high-speed USB 3.0 peripheral support contained in the latest high performance processors and chipsets in place of parallel PCI and IDE interfaces that are no longer present in most new chipsets. This announcement means that medical, commercial and industrial system OEMs using Portwell COM Express modules can either continue to follow Portwell's Type 2 product roadmap or migrate to Type 6 at their leisure, as both pinout types are provided by Portwell for the second-generation Core i7/i5 with 7-year lifecycles (through 2018).

The PCOM-B217VG-VI-ECC module features an error-correcting ECC memory controller for higher system and data reliability, and Turbo Boost Technology 2.0 which dynamically increases the operating frequency of processor cores beyond baseline levels - even beyond 3GHz - according to workload and real-time power and temperature measurements. This frequency increase is complementary to hyper-threading, which raises the performance of multi-threaded and single threaded applications. The processor-integrated graphics engine supports high-end media/graphics capabilities and delivers greater graphics performance while reducing overall platform power requirements. Portwell's PCOM-B217VG-VI-ECC module is well suited for gaming machines, high-end communications applications, test equipment, streaming video terminals, and medical imaging devices.

According to Robert Feng, American Portwell's COM Express product marketing manager, the new PCOM-B217VG-VI-ECC Type 6 COM Express module is the ideal

solution for system manufacturers just starting a new carrier design and wishing to take full advantage of the latest performance, features and module pin definition type. Besides the type 6 pinout and high-reliability ECC memory, onboard PCIe x1 Generation 2.0 technology doubles the I/O data rate between the COM Express module and the PCIe 2.0 add-on cards which plug into the COM Express carrier board, while SATA 3.0 increases the data rate from the chipset to hard drives.

Based on the second generation Intel Core i7/i5 quad and dual core mobile processor and mobile Intel QM67 Express chipset with integrated graphics engine, PCOM-B217VG-VI-ECC features Intel Core i7-2710QE 2.1 GHz (with Turbo Boost to 3GHz), Intel Core i5-2510E 2.5 GHz (with Turbo Boost to 3.1GHz), Type 6 COM Express Basic Size (125mm x 95mm), two SODIMM sockets supporting ECC DDR3 SDRAM up to 16GB 1067/1333 MHz total, four SATA ports (two 6Gbps and two 3Gbps ports), one Intel 82579LM Gigabit Ethernet PHY with AMT 7.0, and eight USB ports, several of which support the new SuperSpeed(tm) USB 3.0. AMT (Active Management Technology) is a hardware-level technology within the Intel vPro technology umbrella of features that permit secure remote access and updating even without an operating system running.

Expansion options on the developer PCOM-C210 COM Express Type 6 carrier board include: More PCIe 2.0 add-on cards and devices are supported with one PCIe x16 2.0 (configurable as two x8 or two x4 and one x8), and six PCIe x1 2.0 (configurable to one x4); LPC interface; SMBus/12C interface; and high definition audio interface. The faster x16 interface improves the performance of commercial market graphics cards (GPUs) for gaming, imaging and surveillance applications.

Turbo Boost to Maximize Performance

"By supporting both Type 2 and Type 6 pin definitions, Portwell is able to support legacy carrier boards as well as brand new carrier designs," notes Feng. "This COM product brings customers all of the benefits of second generation Intel(r) Core(tm) i7/i5 processors and Intel QM67 chipset, including high-performance integrated graphics, DX10+ support, and enhanced low power HD video playback. Turbo Boost technology enables us to maximize CPU and graphics performance dynamically according to application workloads. In addition," Feng adds, "the PCOM-B217VG-VI-ECC contains the Intel Flexible Display Interface (FDI) to utilize differential signaling to transport display data from a processor pixel source to the QM67 chipset at a rate of 2.7GT/s."

Portwell's extensive COM Express product portfolio now includes every high-performance Intel Core(tm) and Atom(tm) processor platform available for embedded market longevity support with Type 2 pinout, and both Core i7 generations: QM57 with ECC RAM and now QM67 with ECC RAM.

Product details:

<http://www.portwell.com/products/detail.asp?CUSTCHAR1=PCOM-B217VG-VI-ECC>

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[1] <http://www.portwell.com>