



## **INFORMATION BULLETIN**

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This bulletin is an overview of PCI Express, 915-based motherboards and compatibility questions regarding Osprey Video products.

The information contained in this document accurately represents the current market state of PCI Express to the best of our knowledge and its relationship to ViewCast board products. Information in this bulletin is subject to change as PCI Express motherboards and components to build PCI Express expansion cards become more readily available.

### **1. “Do Osprey Video capture cards work with the new 915 systems?”**

The “new 915 systems” are based on motherboards that use Intel 915 and 915G chipsets. These are the first chipsets that support the new PCI Express bus.

Osprey cards will work in the “new 915 systems” in the conventional PCI slots that are present on the motherboard.

### **2. “What is PCI Express and is it the same as PCI-X?”**

PCI Express is a completely different bus that is not mechanically backward compatible with PCI or PCI-X. PCI-X and PCI Express is not the same thing. Because of the confusion with this naming convention (confusion between PCI-X and PCI Express), Intel is now calling standard, old-fashioned PCI slots “Conventional PCI.”

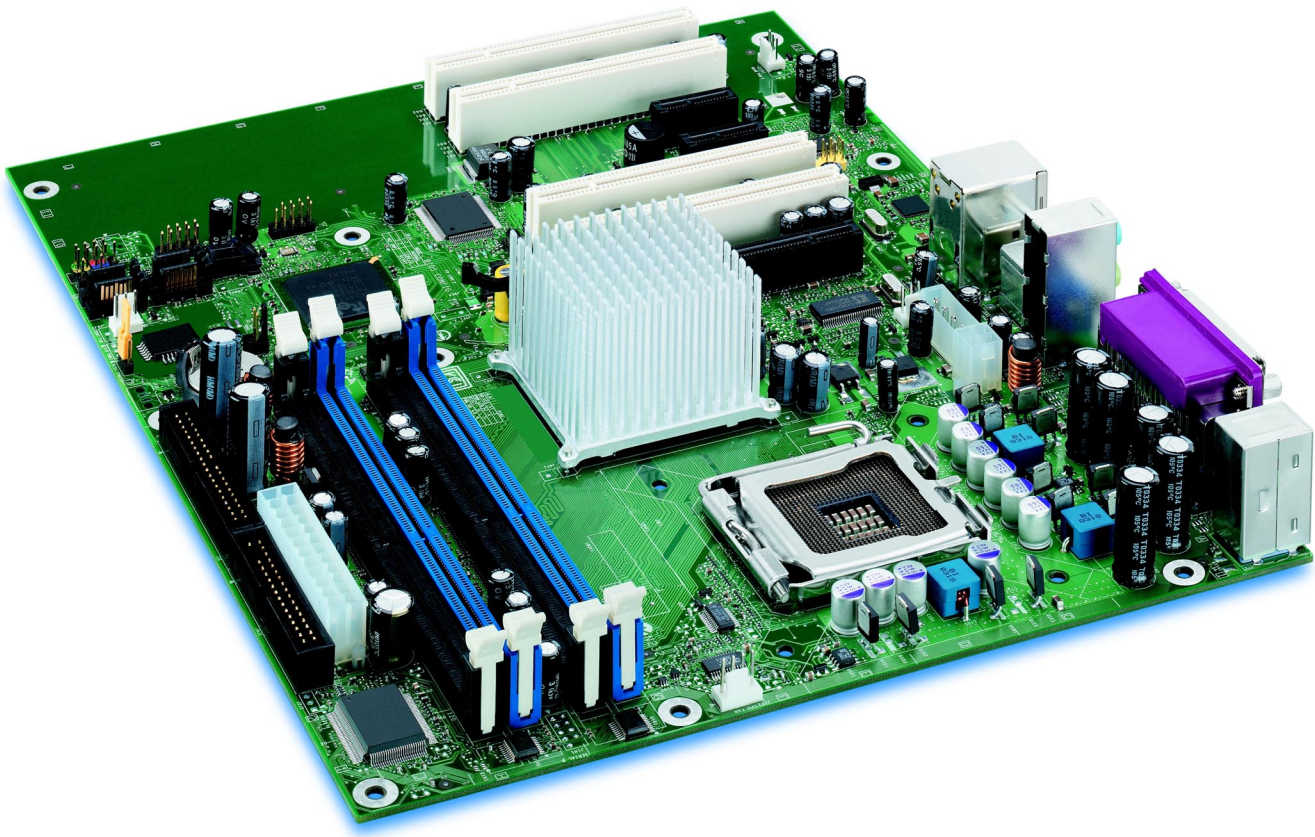
If you look at a PCI Express slot and compare it to a PCI-X slot, you will notice that these slots are very different in appearance. Not only is the physical appearance different but PCI Express functions very differently than the “Conventional PCI” bus.

PCI Express is a serial bus that is scalable by “parallelizing” serial channels. You will see x1, x8, x16, etc. associated with PCI Express. The N in xN refers to the number of parallel channels supplied to each PCI Express Slot. PCI Express is also a switched architecture, i.e. slots do not share connections. Much like the difference between network hubs and switches, each PCI Express slot has a dedicated connection to the bridge, and multiple PCI Express slots can therefore operate simultaneously.

### 3. “Will all new systems only have PCI Express slots instead of conventional PCI slots?”

We are not aware of any systems that are being built with only PCI Express slots and do not expect to see the elimination of conventional PCI slots for several years. There are very few PCI Express expansion cards at present, and the components to build them are only now becoming available.

The first PCI Express cards emerging now are graphics cards that have been transitioned from AGP to PCI Express (nVidia, ATI). 915-based systems no longer have AGP slots, so users will be forced to transition to PCI Express for graphics upgrades. 915G systems have integrated chipset graphics and therefore do not require a graphics card.



Typical Intel 915-based Motherboard

If you look just past the high heat sink in the photo above, you will see where the row of expansion slots begins. Starting from bottom going up, they are; PCI Express x16 (Black) which is the replacement for an AGP Graphics slot, conventional PCI (White), conventional PCI (White), PCI Express x1 (Black), PCI Express x1 (Black), conventional PCI (White), and conventional PCI (White).

Note that the conventional PCI slots are still 5V only slots, so ALL Osprey Video cards are compatible.

Intel 7520/7525 chipsets support combinations of PCI-X and PCI Express slots in a similar way for server, dual-Xeon motherboards. Like the previous generation of server motherboards, these

systems limit Osprey Video card options to the 3.3V capable products which are Osprey-230, Osprey-300, and Osprey-560.

## **Summary**

The current line of Osprey Video capture cards will work in 915-based systems using the conventional PCI slots that are present on the motherboard.