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| --- | --- |
| Conventional PCI | |
| PCI Local Bus | |
| [}}](https://en.wikipedia.org/wiki/File:PCI_Slots_Digon3.JPG)  Three 5-volt [32-bit](https://en.wikipedia.org/wiki/32-bit) PCI expansion slots on a [motherboard](https://en.wikipedia.org/wiki/Motherboard) (PC bracket on left side) | |
| **Year created** | June 22, 1992; 24 years ago[[1]](https://en.wikipedia.org/wiki/Conventional_PCI#cite_note-PCI-Spec-2.2pii-1) |
| **Created by** | [Intel](https://en.wikipedia.org/wiki/Intel) |
| **Supersedes** | [ISA](https://en.wikipedia.org/wiki/Industry_Standard_Architecture), [EISA](https://en.wikipedia.org/wiki/Extended_Industry_Standard_Architecture), [MCA](https://en.wikipedia.org/wiki/MicroChannel_Architecture), [VLB](https://en.wikipedia.org/wiki/VESA_Local_Bus) |
| **Superseded by** | [PCI Express](https://en.wikipedia.org/wiki/PCI_Express) (2004) |
| **Width in bits** | 32 or 64 |
| **Speed** | 133 [MB](https://en.wikipedia.org/wiki/Megabyte)/s (32-bit at 33 MHz – the standard configuration) 266 MB/s (32-bit at 66 MHz or 64-bit at 33 MHz) 533 MB/s (64-bit at 66 MHz) |
| **Style** | [Parallel](https://en.wikipedia.org/wiki/Parallel_communication) |
| **Hotplugging interface** | Optional |

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| --- | --- |
| PCI Express | |
| [}}](https://en.wikipedia.org/wiki/File:PCI_Express_logo.svg) | |
| **Year created** | 2004; 12 years ago |
| **Created by** | * [Intel](https://en.wikipedia.org/wiki/Intel) * [Dell](https://en.wikipedia.org/wiki/Dell) * [HP](https://en.wikipedia.org/wiki/Hewlett-Packard) * [IBM](https://en.wikipedia.org/wiki/IBM) |
| **Supersedes** | * [AGP](https://en.wikipedia.org/wiki/Accelerated_Graphics_Port) * [PCI](https://en.wikipedia.org/wiki/Conventional_PCI) * [PCI-X](https://en.wikipedia.org/wiki/PCI-X) |
| **Width in bits** | 1–32 |
| **Number of devices** | One device each on each endpoint of each connection. PCI Express switches can create multiple endpoints out of one endpoint to allow sharing one endpoint with multiple devices. |
| **Speed** | For single-lane (×1) and 16-lane (×16) links, in each direction:   * **v1.x** (2.5 [GT](https://en.wikipedia.org/wiki/Gigatransfers)/s):   + 250 MB/s (×1)   + 4 GB/s (×16) * **v2.x** (5 GT/s):   + 500 MB/s (×1)   + 8 GB/s (×16) * **v3.x** (8 GT/s):   + 985 MB/s (×1)   + 15.75 GB/s (×16) * **v4.0** (16 GT/s):   + 1969 MB/s (×1)   + 31.51 GB/s (×16) |
| **Style** | [Serial](https://en.wikipedia.org/wiki/Serial_communication) |
| **Hotplugging interface** | Yes, if [ExpressCard](https://en.wikipedia.org/wiki/ExpressCard), [Mobile PCI Express Module](https://en.wikipedia.org/wiki/Mobile_PCI_Express_Module) or [XQD card](https://en.wikipedia.org/wiki/XQD_card) |
| **External interface** | Yes, with [PCI Express External Cabling](https://en.wikipedia.org/wiki/PCI_Express#PCI_Express_External_Cabling), such as [Thunderbolt](https://en.wikipedia.org/wiki/Thunderbolt_%28interface%29) |