

**Figure 22.3** Example of a system-level architecture that shows the physical interconnections in a PC that uses two controller chips. Components that require the highest speeds attach to the *Northbridge* controller.

## 22.7 Connection Speeds

The connections illustrated in Figure 22.3 typically use a parallel hardware interface that has a fixed width and is engineered to operate at a fixed clock rate to deliver a specified throughput. Figure 22.4 lists typical values for the clock rate, width, and throughput of major connections.