Data converters play a crucial role in interfacing real time analog signals to the digital processing circuitry. Almost every SOC (system-on-chip) silicon design has an analog front/back end, which includes either an ADC (analog-to-digital converter) or a DAC (digital-to-analog converter). There is a wide range of applications that uses data converters spanning from medical systems to industrial control to audio players like the iPod. The resolution and speed of the converter depends on the application. For example, in video processors, the ADC resolution is 8/10 bits and the clock rate is approximately 150 MHz; whereas in digital audio applications, the resolution is much higher at 16/24 bits and the clock rate is about 44 KHz. We will discuss how ADCs are used in touch screen controllers and in high-energy detectors or medical imaging systems.