

Virtual Instrumentation A way to Build Low Cost Laboratory Instruments

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A detailed study on building virtual instruments using Personal Computers equipped with Sound Blaster cards was carried out. A computer with a Sound Blaster card can be used to create virtual instruments with a 44.1 KHz sampling rate and a 16-bit resolution. Our studies show that local laboratories and even schools can benefited by using instruments built with this technique since a computer with a Sound Blaster card can be converted to many instruments by simply changing the control system software. We were able to create a single channel digital storage oscilloscope without constructing any complex electronic circuits.