

## A DIGITAL INTERFACE FOR AUTOMATED INSTRUMENTATION SYSTEM

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At present microcomputers are having a profound influence on almost every branch of industry. Thus in the field of research and data acquisition, a digital interface which enabled connection of instruments to a computer could radically change methods of conducting research and data acquisition.

The presently available digital interface for automated instrumentation is the IEEE 488 or GPIB interface which expects the instruments to give certain digital signals to enable the provision of communication facilities. The instruments which have this facility are called IEEE 488 industry standard compatible instruments and can be directly connected to a controller computer.

Most of the instruments which do not conform to this compatibility requirement cannot be connected to a controller computer to enable communication between them.

A digital interface through which the controller computer sees each instrument as a IEEE 488 industry standard compatible instrument, would solve this problem. Development of this interface would include hardware design of the interface and software development to enable the computer to control each instrument.