SCHOOL OF ENGINEERING

IMPLEMENTATION OF GPIB MATLAB :
NETWORK ANALYZER

LEE YIN-KENG

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ABSTRACT

IMPLEMENTATION OF GPIB IN MATLAB:
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The main objective of this study is to develop a Virtual Instrument (VI) with the ability to retrieve, analyze, and display data from a real instrument by using the MATLAB programming software. This software is chosen for its intelligence and power toolbox for optimal instrument control, data acquisition, and signal processing capability. Furthermore, MATLAB also provides its own Graphical User Interface (GUI), which eases the usage of the program. As for the physical link, the General Purpose Interface Bus (GPIB) is used for the connection between network analyzer and computer unit for all measuring activities. GPIB technology can provide stable communication and is reliable as it has been in the market for more than 25 years. With this bus, all the measurement activities can be performed effectively and easily. The Marker function in this study is developed so that the user can store information of a particular point in the waveform.