

Experiment #1: Introductory Lab 1.Objective: c Capabilities and operation of Trainer Kit and basic digital Instruments and devices necessary to run experiments e Study the basic characteristics of Basic Digital Gates e Implementation of Logic Circuits 2.Background 2.1 Digital Integrated Circuits (IC) A logical

device is a digital circuit whose related input and output signals are binary variables, for example, gates, flip flops, and memories.ICs contain diodes, transistors, and resistors, required to implement the device, on a semiconductor base called a chip performing a great variety of logical functions.Connecting pins on the exterior of the package allows input/output signals and power to be transmitted between the chip and the outside world.Logic gates are constructed from integrated circuits (ICs).A logic symbol is the graphic .representation form of the logic function