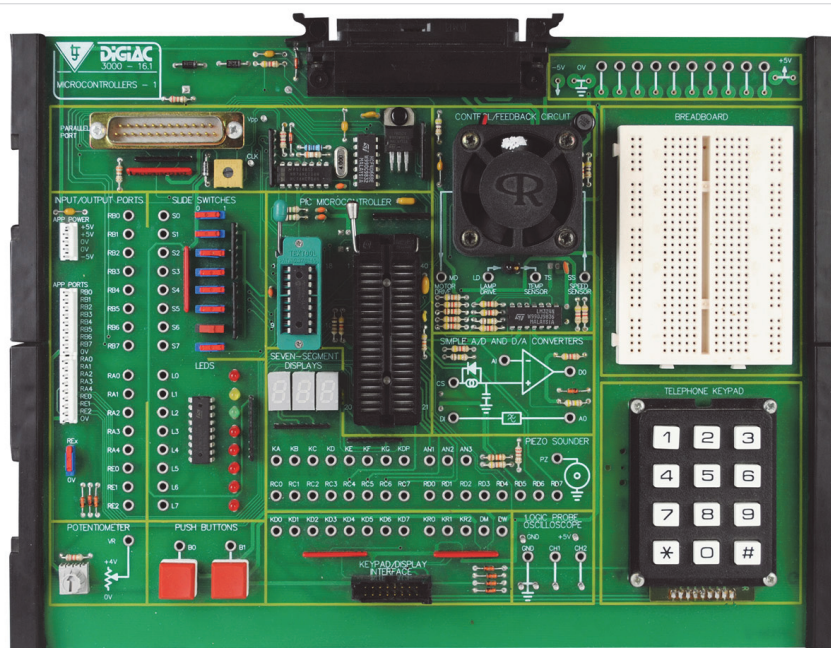


Product Information Sheet

PIC 3000 Microcontroller Study Module



This electronics study module is designed to connect to the Advanced Electronics Experiment Platform (300-01) as part of a modular electronics programme.

The study module is designed to introduce students to PIC Microcontrollers and their applications through a wide range of programming activities.

Using the Advanced Electronics Experiment Platform, a range of faults to be selected and inserted into the study module circuits to develop electronic diagnostic and faultfinding techniques.

The study module is supplied with PDF manuals that provide theory materials, practical tasks, faultfinding activities, and technical information.

Topics Include the Following:

- Microprocessors, Microcomputers, and Microcontrollers
- Overview of PIC Microcontrollers
- Number Systems
- PIC Software
- Interfacing
- Program Development
- Basic Input/Output
- Logic Systems
- Subroutines and Loops
- Interrupts
- Timers
- Keyboard Scanning
- Sound Generation
- EEPROM Programming
- Analog to Digital Conversion
- Digital to Analog Conversion
- Simple Closed Loop Control

Typical Activities Include:

- Investigating the component parts of a microprocessor
- Identify the numbering systems used in the programming of microcontrollers
- Investigating the PIC instruction set
- Identify the purposes of the pins of the PIC
- Investigate PIC-based input/output programs

- Investigating instructions used to simulate logic gates
- Investigate a program that scans a keypad
- Investigate a PIC-based sound generator circuit
- Identify the software needed to perform A to D conversions
- Investigating how a closed-loop control system operates

Items Included:

- Circuit Card
- Storage Case
- Curriculum Manual in PDF Format

Other Items Required:

- Windows PC
- And**
- 300-01 Advanced Electronics Experiment Platform
- Digital Multimeter
- Dual Trace Oscilloscope

General Information:

Dimensions: 81 x 323 x 256 mm (W, H, D)
Shipping Volume: Approx 0.008 m³
Shipping Weight: Approx 2 kg

Order Code: 316-01

P8535-D

For more information visit www.ljcreate.com