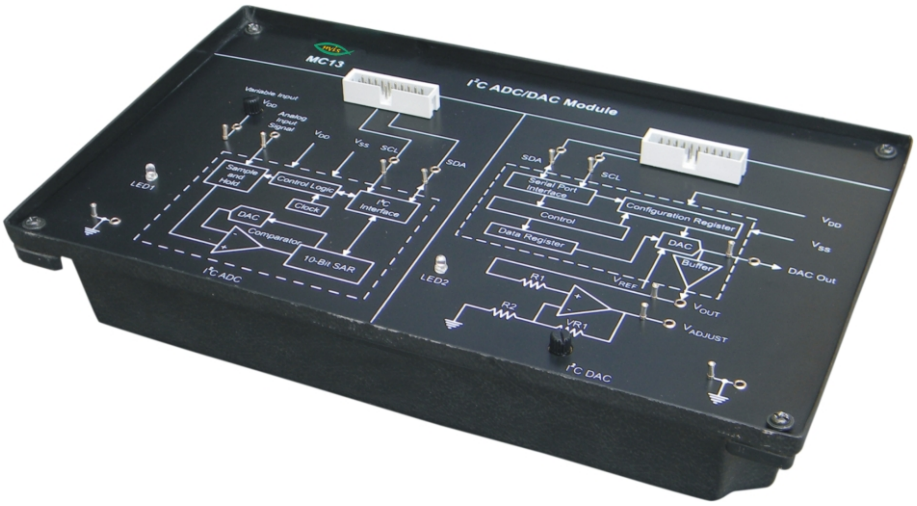
I²C ADC/DAC module

MC13



I²C protocol based ADC/DAC module enables students and practicing engineers to gain practical experience of applications of Microcontroller. The object is to understand how two wire serial interface device is used for interfacing with Microcontroller to communicate with external applications. Analog inputs are converted into digital through Microcontrollers and vice versa. ADC/DAC module, has input and output terminals for connection of external real world applications.

Features

- PC based programming
- Expansion connectors for plug in with Microcontroller unit and prototyping area
- Every pin is marked in order to make work easier
- Input/Output & test points provided on board

ADC

- I²C™ compatible serial interface, 400 kHz I²C fast mode
- Single-ended analog input channel
- On-chip sample and hold
- On-chip conversion clock
- Single supply operation

DAC

- Simple I²C™ Serial interface
- Single supply operation
- Low Power : 350mA operation, 0.5mA shutdown

Note :

- This module is compatible with Scientech 620X Series and Nvis 5001A/2/3/4A/5 Series Microcontroller development platform.
- To run MC13 experiments, MC04 module is required.

Scope of Learning

- Study of interfacing of I²C ADC
- Study of interfacing of I²C DAC

Technical Specifications

Resolution :

ADC	:	10-bit
DAC	:	10 -bit
ADC Input and Reference	:	0 - 5 V DC (Variable) voltage range
Interface	:	20 pin FRC cable
Test points	:	11 nos.
Power Supply	:	From Scientech 620X Series and Nvis 500X Series Microcontroller development platform
Dimension (mm)	:	W 255 ´ D 155 ´ H 80
Weight	:	280 gm. approximately

Included Accessories :

Patch cord	:	4 nos.

Subject to change - Version 2.0

Designed and Manufactured in India by -

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