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 : 350μA operation, 0.5μA shutdown
Exhaustive Learning Material
2 Year Warranty

Note :

1. This module is compatible with Nvis NV5001 series.
2. 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 (Gold plated)
Power Supply	:	From Microcontroller development platform NV5001 series
Dimension (mm)	:	W 255 × D 155 × H 80
Weight	:	280 gm. approximately
Learning Material	:	CD (Theory, procedure, reference results, etc), Online (optional)

Included Accessories :

Patch cord	:	4 nos.
Learning material (CD)	:	1 no.

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Subject to Change

Designed & Manufactured by :
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