

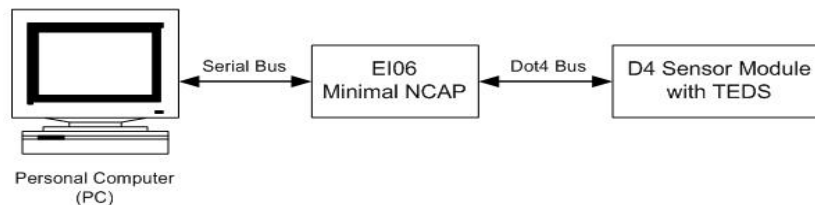
# E sensors



## IEEE 1451.4 Prototyping Kit (PC Version)

### Introduction

The **IEEE 1451.4** (Dot4) smart transducer interface standard has recently been adopted and the Class I interface is already being used by several accelerometer companies. However the Class II interface has the potential of being used with a larger number of devices, specifically with analog sensor signal conditioners. The kit is intended to be used by engineers adopting a Class II Dot4 interface to new or existing analog sensors. It provides the TEDS read/write capabilities along with an A/D for convenient conversion to a digital format.



### Description

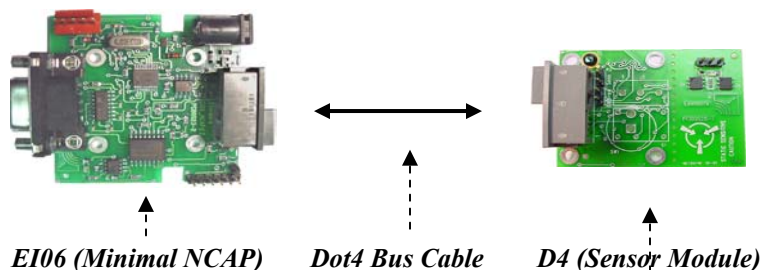
The **EI06** Minimal Dot4 NCAP (Network Capable Application Processor following IEEE 1451.4 protocol) allows testing and demonstration of the Dot4 Class 2 compatible transducers which have a TEDS (Transducer Electronic Data Sheet) and an analog signal input (Mixed Mode). One function provides an interface for reading (and writing) the TEDS digital data on the 1-wire Dallas/Maxim line and then to transfer this data to (and from) a PC via an RS232 link. The second function is to read analog data from a sensor, and to display this data on a PC screen.

The TEDS 64-bit Unique ID is displayed in hex, with the family code and CRC separated. The second part of the TEDS is the 64-bit Basic TEDS displayed as separate field (Manufacturer code, etc).

The EI06 has a 14-bit A/D and therefore can read in an analog signal. The a/d range is -2 to +2 volts. The EI06 reads in an analog signal and sends it to a PC through an RS232 following a read command.

The **D4** demonstration sensor module has the following features:

- Plugs into the EI06 via the 6-wire modular connector and cable (Dot4 bus)
- Uses the Dot4 type TEDS
- Analog signal outputs only when module is selected
- Multiple sensor modules can be connected on the same bus (multi-drop, 10+)
- Three optional versions of the D4 (Temperature, Illumination, and Switch Closure) are available
- Analog output compatible with the EI06 A/D range
- LED indicator indicates selection and power.



### Price

**Dot4 Kit (PC Version)** -- Available at \$800

To order, or for further information -- Contact [designer@eesensors.com](mailto:designer@eesensors.com)