# NEW PRODUCTS

## **EDUCATIONAL KITS**

#### A New Starter Kit

SchmartBoard has announced the availability of the new "Solder By Numbers(SBN) Starter Kit" — a starter kit for people who are new to electronics. The SBN Starter Kit includes:

- An Elenco 40 watt electronic soldering station
- · Assorted sized tips for the soldering iron
- · Water soluble solder flux in pen form
- Safety goggles
- · A lighted magnifying glass
- Two screwdrivers
- · Wire cutters
- · Wire strippers
- Needle-nose pliers
- SchmartSolder
- A Solder By Numbers project with SchmartBoard and Components (LED paperweight)

The Starter Kit costs \$99 and its release coincides with the launch of **www.solderbynumbers.com**.

"It takes two things to build an electronic circuit: the ability to solder the components and the ability to take an electronic schematic and transfer the schematic to a real circuit board," said Neal Greenberg, SchmartBoard VP of Marketing. "SchmartBoard has made these issues easy which opens up electronics to a wider audience than previously possible."

With SchmartBoard prototyping technology, anyone can solder any type of SMT electronic component.

- SchmartSolder makes it possible for anyone to hand solder through-hole components.
- Solder By Numbers tells you where to solder them onto the SchmartBoards to create your circuits.

"Solder By Numbers is to circuit building what 'Paint By Numbers' is to art," said Greenberg. "We plan to have hundreds of SBN circuits on the SolderByNumbers website available soon."

For further information, please contact:

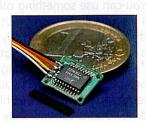
**SchmartBoard** 

Website: www.schmartboard.com/ index.asp?page=starter\_kit

### SENSORS

#### The TRACKER

ew Scale Technologies has announced its TRACKER position sensor: a high-resolution magnetic sensor with integrated, on-chip digital encoder. Its small size and 2 µm resolution make



this magnetic encoder a robust and cost-effective alternative to miniature optical encoders. It can be used as a linear encoder or off-axis rotary encoder.

The TRK-1T02 TRACKER position sensor measures 8.5 x 11.5 x 1.61 mm. Total height with magnet and air gap is approximately 3 mm — up to 50% thinner than comparable optical encoders with glass scale. Unlike optical encoders, the TRACKER does not require a light source and is insensitive to external light, making it well suited for optical imaging applications such as miniature cameras. It has additional advantages of insensitivity to shock, vibration, and high-particulate environments, as well as less stringent mounting alignment requirements.

The on-chip encoder provides direct digital output using standard I<sup>2</sup>C protocol, eliminating the need for external pulse counters. A microprocessor can query multiple TRACKER position sensors and read position information directly.

With no light source, the TRACKER has lower power draw. Because this incremental encoder features a built-in zero reference, power consumption can be further reduced by saving position information to Flash memory and turning off the power to the encoder when the system is not moving; the encoder does not need to be reset when power is restored. Automatic gain control and offset compensation make it less sensitive to external magnetic fields. The TRACKER's small size makes it ideal for creating tiny, integrated closed-loop motion systems using micro motors such as New Scale's SQUIGGLE motor.

The TRK-1T02-E TRACKER evaluation pack includes a TRK-1T02 position sensor, linear magnetic strip, MC-31MB interface card and software to facilitate evaluation. The USB interface returns direct position information to a PC.

For further information, please contact:

New Scale Technologies Website: www.newscaletech.com/ Tracker\_overview.html