

DATA WITH A STEADY HEARTBEAT

Endocardial Solutions, Inc./St. Jude Medical, Inc.

Headquartered in St. Paul, Minnesota, **Endocardial Solutions, Inc.** (ESI), a division of **St. Jude Medical, Inc.**, globally markets its EnSite™ Catheter and EnSite™ Electrophysiology Workstation to electrophysiologists (EPs)—cardiologists with highly specialized training in the diagnosis and treatment of heart rhythm problems. ESI's proprietary wire mesh balloon catheter, a non-contact heart mapping system that measures and calculates the electrical fields in the heart.



No Room for Errors

Compared to traditional single-point contact catheter mapping devices, ESI's unique non-contact, 64-electrode balloon design, created by 8 x 8 rows of wires, allows the EP to “look” at the entire “electrical map” of the heart at once, sparing the patient prolonged and repetitive procedures as well as reducing EP procedure time and cost. *“Mass produced for one single use, each catheter is subject to manufacturing variations and must be calibrated with the exact location of the x-y-z coordinates on each electrode, along with other ESI proprietary information, prior to being used in patient applications,”* explained Jeff Schweitzer, Manager of Hardware Engineering at ESI. To accomplish this, ESI determined that they needed a secure data transport device with the following attributes:

- ✓ Disposable
- ✓ Sterilization-resistant
- ✓ Fully-engineered to reduce R&D costs and time-to-market
- ✓ Long-term availability



The Solution is Key (or in this case, a Token)

ESI uses Datakey Electronics' IST16000 in a special sterilization-resistant plastic. According to Mr. Schweitzer, ESI chose the Datakey Electronics Token because it found it was ideally suited for integration. Not only does it meet ESI's basic requirements for nonvolatile memory, read/write capability, reliability, and ease of use, but Datakey Electronics also provided an instantly pluggable, customized package. *“The Datakey Electronics package is cheap enough to be disposable,”* said Jeff Schweitzer. *“It also qualifies for the sterilization method we use at ESI, which is extremely important. We are especially satisfied with this memory device because Datakey Electronics worked with us to give us a perfect custom solution for our calibration needs.”*

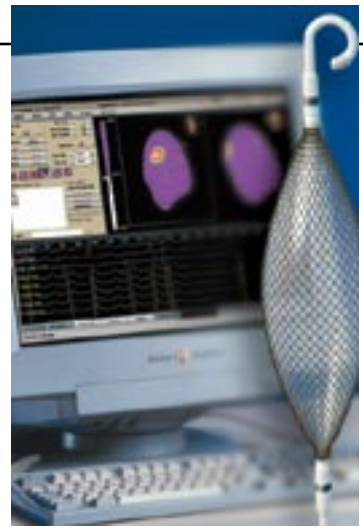


Fully-Engineered

In addition to the Token, ESI designed in Datakey Electronics' mating receptacle, the SR4210PCB. This high-cycle life Receptacle offers a detent mechanism that gives users tactile confirmation when an inserted Token is physically engaged. There is also a LOFO contact that may be used to protect the host bus by ensuring that Tokens have made secure contact with the receptacle before any signals are transmitted.



Endocardial Solutions, Inc.



They Chose Datakey Electronics

Pluggable, packaged data solutions that meet the stringent requirements of the medical industry for precision calibration, sterility and ease of use are the key to market success. As Jeff Schweitzer of ESI said, "As we develop new generations of our catheter, or begin rolling out future medical product designs, we know Datakey Electronics will be ready with a custom package we can plug in and rely on." Datakey Electronics' rugged, reliable, supported product line and custom capabilities provided ESI/St. Jude Medical with the perfect solution.



Datakey[®]
ELECTRONICS

Phone: 952-746-4066 • Toll-free: 1-800-328-8828
Fax: 952-746-4061 • Toll-free: 1-866-289-4212
SALES: Ext. 348 • ENGINEERING: Ext. 336
info@datakeyelectronics.com • www.datakeyelectronics.com