



Data With a Steady Heartbeat Calibration Uploads & Limit Use

St. Jude Medical, Inc.

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. St. Jude’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, St. Jude'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 St. Jude proprietary information, prior to being used in patient applications,”* explained Jeff Schweitzer, Manager of Hardware Engineering, St. Jude. To accomplish this, St. Jude 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

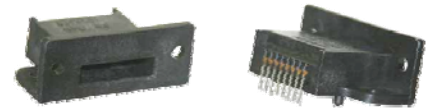
St. Jude uses Datakey Electronics’ IST16000 in a special sterilization-resistant plastic. According to Mr. Schweitzer, St. Jude chose the Datakey Electronics Token because it



found it was ideally suited for integration. Not only does it meet St. Jude’s basic requirements for non-volatile 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 St. Jude, 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, St. Jude 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.



Over, please...





St. Jude, cont.

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 St. Jude 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 St. Jude Medical with the perfect solution.



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