

Host controller with two CAN channels

The Italian mammography device manufacturer IMS, uses the Econ 100 controller by HMS (Germany/Sweden). The ARM-based computer comes with CANopen software support.

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The Giotto Class medical device by IMS is controlled by the Econ 100 (Photo: HMS/IMS)

THE GIOTTO CLASS DIGITAL breast tomosynthesis machine is controlled mainly using the CANopen protocol. The brain of the medical device is the Econ 100, a host controller introduced by HMS in the year of 2013. Before, IMS (Italy) had tried different controller solutions, but none of them quite lived up to their demands. The selected Ixxat (brand of HMS) product is based on Xilinx's Zynq dual-core A9 processor. The host controller provides two CANopen ports, which enable to run two different transmission rates with different topologies (e.g. stub lengths). Both network segments are used for motion control purposes running IMS's proprietary application layer. According to the medical device manufacturer, the costs could be cut by 50 percent. "The Econ 100 is a compact and flexible system with a reasonable price for the variety of features offered," said Paolo Vignoli, IMS' research and development manager.