

ECR ION SOURCE CONTROL SYSTEM IN HIRFL

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ECR ion source control system is a mainpart of HIRFL distributed control system. The system is used to control two sets of ECR ion source, online source and offline source. A compactPCI with an embedded Pentium CPU is used as main computer. A new fieldbus, CANbus, will be used in the control area. A CANbus adapter is located in the compactPCI crater. Some CANbus modules, such as AI/O, DI/O, are used to control the equipment in ECR ion source. A Fast Ethernet, 100M, is used to communicate between ECR control station and other control stations in HIRFL control system. The WINSOCK is used in network programming. The applications that are used to control equipment are written in C or C++ . They are linked into a DDL(dynamic linking library) which is called by standard windows' applications. The GUI is programmed in OOP programming language C++ or VB and run under Windows/95 Chinese version (next: Windows/ NT). The system was built in 1998 and will be completed in 1999.