

## Power management for Cryocooler of the superconducting magnet of AMS-02

김경숙<sup>1</sup>, 김미영<sup>1</sup>, 백나희<sup>1</sup>, 양종만<sup>1</sup>, 이만우<sup>2</sup>, 신정욱<sup>2</sup>, 박용화<sup>2</sup>,  
성기웅<sup>2</sup>, 노상률<sup>2</sup>, 조기현<sup>2</sup>, 박환배<sup>2</sup>, 김귀년<sup>2</sup>, 손동철<sup>2</sup>, 김동락<sup>3</sup>

<sup>1</sup>이화여대. <sup>2</sup>경북대. <sup>3</sup>기초과학연구원

To search dark matter, antimatter, and high energy cosmic ray, the Alpha Magnetic Spectrometer (AMS) experiment in the International Space Station (ISS) was suggested. For controlling and monitoring each component of the AMS-02, a universal slow control module (USCM) is designed and connected with each interface module of the component. We present the method of managing the power of the cryocooler for the superconducting magnet using the cryocooler interface module (CCIF) linked with USCM and the power amplifier (PA) stage of the cryocooler system. The CCIF control codes written in assembler, from initialization procedure to shut-down procedure, are added to the USCM software as a user program.