

## FLASH MEMORY TECHNOLOGY FOR SPACE APPLICATION - AN APPROACH

Prabhakara Varna  
T & E Engineer  
Systems Reliability Group  
ISRO Satellite Centre  
Old Airport Road, Kodihalli  
Bangalore-560 017, India  
Email : prabhakara.varna@yahoo.in

Siva Yellampalli  
Professor  
VTU Extension Centre  
UTL Technologies Ltd  
No. 19/6, Ashokpuram School Road  
Bangalore-560 022, India  
Email : [siva.yellampalli@utltraining.com](mailto:siva.yellampalli@utltraining.com)

### Abstract

Recently, flash memory technology has been considered for space application. This paper provides an approach for induction of the flash memory based mass data storage system to space program. It also, provides the studies and experiments that have been carried out in recent past to understand and characterize the behavior of flash memory in space environment. Further, it provides the design aspects which need to be addressed when dealing with flash memory for space environment, as identified by domain experts

**Keywords:** Bit Error Rate, DRAM Chips, Flash Memories, Error Correction Codes, Satellites