**Reading/Writing SD Card System Based on FPGA**

**Abstract**

**used**

The application based on FPGA chip are especially for speech processing and image processing. At the same time, the application needs more memory except for on-chip memory to solve additional data. To meet the requirements of external memory for FPGA is designed and implemented.

**FPGA Implementation of a SD card controller using SPI Communication**

**used**

**Abstract**

FPGA devices are being used more in especially in application that require real time data processing for example in communication systems. To meet the memory requirements for FPGA systems, the onboard memory can be used, but it cannot be expanded easily by adding some cards. More useful are Secure Digits (SD) cards that allows writing and reading SD cards using the SPI protocol. The main objective is to provide a storage solution for FPGAs, to store large files on large capacity, cheap, portable and easy to use storage solution for FPGA’s. The hardware design and implementation are developed on a Xilinx AC701 platform with Artix-7 FPGA, using VHDL language.

// The FPGA controller was tested with more SD cards and the results

**Data Concentration and archival to SD card via hardware desc lang**

**used**

**Abstract**

The main objective of this research to design an experimental platform for efficient, on-chip, real time data concentrator for accessing data from a SD flash memory card using SD bus protocol. All the hardware design is done using Verilog Hardware Descriptive language and implemented in FPGA. The data access from the SD card is implementation completely using Verilog and hence there is no use of any microcontroller or on-chip general purpose processors.

**Data Archival to SD Card via HDL**

**Abstract**

The main objective of this letter is to present the design of an efficient, real-time data archival system to a secure digital flash memory card via reconfigurable hardware. The data access from the SD card is implemented completely using Verilog and hence, there is no use of any microcontroller or on-chip general purpose processors.

**LIT REV**

Zinlin et al(2010) presented the application on that Applications based on FPGA chips are particularly suitable for audio and image processing. At the same time, applications require more memory in addition to on-chip memory to resolve additional data. External memory for FPGAs has been designed and implemented to meet the requirements.