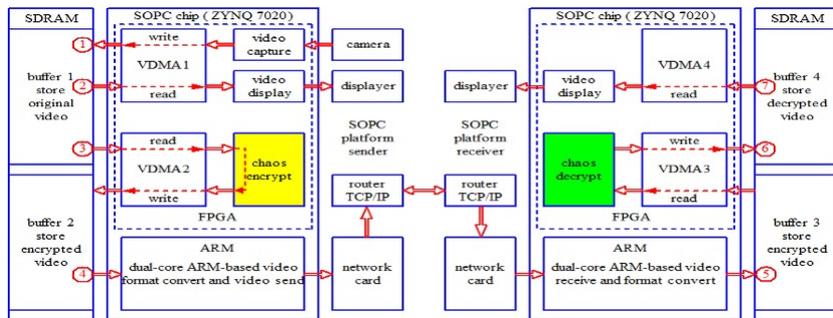


# SOPC-based Design and Realization of a Video Chaotic Secure Communication System

## Design

- The main feature of the SOPC-based scheme is that it can make full use of both FPGA and ARM. The FPGA is used for video capturing, displaying, encrypting and decrypting. The ARM are adopted for TCP/IP protocol, Ethernet sending and receiving.
- A 3-dimensional chaotic cipher algorithm utilizing the low 8 bits derived from multiplying is designed for RGB tricolor encryption-decryption.



## Results

- Hardware experimental results with the matched keys works well but mismatches can not work.

