

HOMEWORK 3. Due: Thursday, April 22, 2004 at 5pm in 558 Cory

This is an individual assignment!

Problem 1:

Read the paper “An analog EPR4 Viterbi detector in read channel IC for magnetic hard disks,” by K. Fukahori, et al, ISSCC’98, pp. 380-381.

- a) Explain the operation of the analog Viterbi decoder including the timing of the two ACS interleaves.
- b) Draw an equivalent of such an interleaved ACS in digital implementation. What would be its performance compared to conventional Radix-2 ACS or CSA architectures? Make reasonable assumptions.