INTRODUCTION TO PARALLEL COMPUTING

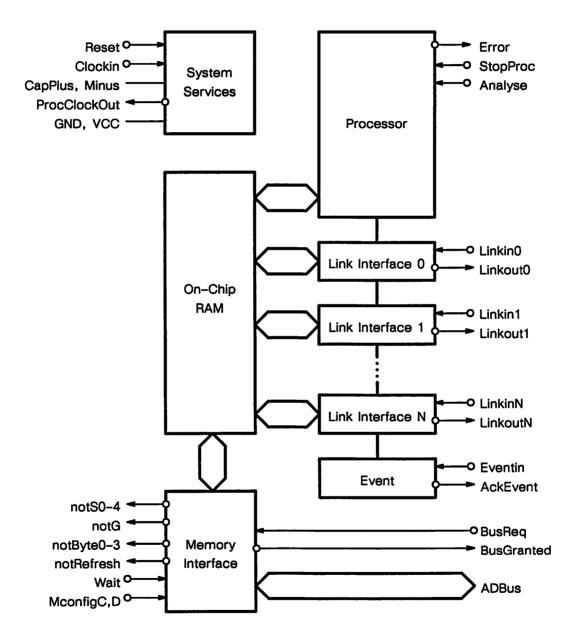
NEW VISTAS: COMMUNICATING SEQUENTIAL PROCESSES

In 1985 C.A.R. Hoare publishes his theory of Communicating Sequential Processes (CSP)

With an established theoretical base, R&D takes off in two directions:

- 1. Software development (OCCAM, later OCCAM 2)
- 2. Hardware development (TRANSPUTER)

A SCHEMATIC VIEW OF A TRANSPUTER



Note: Some transputer types contain FPUs.

A PROGRAMMER'S VIEW OF A TRANSPUTER

A transputer is a processing element equipped with some memory and (typically) four communications links:



A number of transputers can be configured, i.e. connected through software means into a multiprocessing network, suitable to attack any problem at hand:

