

1993 Paper 1 Question 1

Describe the operation and gate level circuit of a *multiplexer*. How may it be used in conjunction with a *demultiplexer* to establish alternative connections across a unidirectional path between two modules?

What is involved in extending the method to allow a bidirectional path between two (or more) modules? What do you understand by the terms *bus*, *master*, *slave* in connection with your circuit?