

Abstract

Communication System

1. A communication system, wherein a transmitter circuit and a receiver circuit are connected to a transmission line and data is transferred between said transmitter circuit and said receiver circuit,

said transmitter circuit comprising:

transmitter means for transmitting data; and

multi-strobe generation means for generating N strobe signals, wherein N is an integer, each of which has a different timing, and wherein data is transmitted by said transmitter means when said strobe signals are sent; and

said receiver circuit comprising:

a plurality of latch circuits equal in number to the number of N strobe signals and for successively retaining data sent by said transmitter circuit at each point in time of said N strobe signals, wherein said plurality of latch circuits retain data when activated by a respective strobe signal; and

sampling means for sampling data retained by said plurality of latch circuits using a receiver clock having a frequency equivalent to data transmission rate to synchronize data with said receiver clock; said sampling means comprising:

a plurality of first multiplexer circuits connected to said plurality of latch circuits;

a plurality of first flip flop circuits connected to said plurality of first multiplexer circuits;

a second multiplexer circuit connected to said plurality of first flip flop circuits; and

control means for controlling operation of said first and second multiplexer circuits.