AQA Computer Science A Level
4.9.1 Communication

Flashcards

Define Baud rate

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The number of signal changes in a communication medium per second

A communication medium uses **8 bits per signal** and has a Baud rate of **128Bd**. What is the medium's bit rate?

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1024 bps

8 × 128 = 1024

In which method of data transmission is used for transmitting data over medium to long distances?

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Serial data transmission

What unit is used for bandwidth?

What unit is used for bandwidth?

Hertz (Hz)

Define bandwidth

Define bandwidth

The range of frequencies that a communication medium is capable of transmitting

What should be the value of the stop bit in the diagram below?

? 011001010

Stop bit — Transmitted data — Start bit

Direction of transmission

What should be the value of the stop bit in the diagram?

1

Define latency

Define latency

The difference in time between an action being initiated and its effect being noticed

Define protocol

Define latency

A set of rules relating to communication between devices

Which method of data transmission is suitable for transmitting information in real-time systems?

Which method of data transmission is suitable for transmitting information in real-time systems?

Synchronous data transmission

In which method of data transmission is data sent one bit at a time over a single communication line?

In which method of data transmission is data sent one bit at a time over a single communication line?

Serial data transmission

In which method of data transmission do the sender and receiver synchronise their clocks only for the duration of data transmission?

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Asynchronous data transmission

In which method of data transmission do numerous parallel communication lines send multiple bits between components simultaneously?

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Parallel data transmission

What problem is caused by signals from tightly packed communication lines leaking into others?

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Crosstalk

In which method of data transmission is a clock signal shared between the sender and receiver?

In which method of data transmission is a clock signal shared between the sender and receiver?

Synchronous data transmission

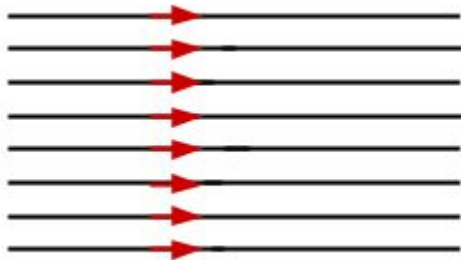In which method of data transmission is used over short distances?

In which method of data transmission is used over short distances?
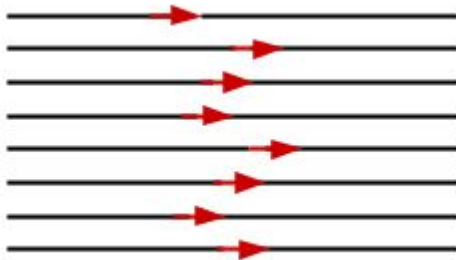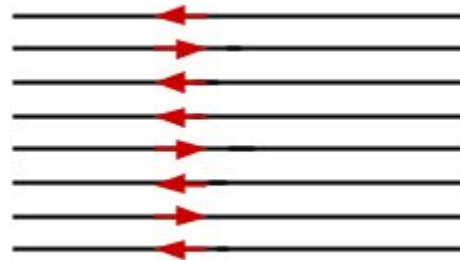
Parallel data transmission

Which diagram represents skew?

A   B   C

Which diagram represents skew?

B

Which communication method is more reliable: serial or parallel?

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Serial

Which method of data transmission uses start and stop bits?

Which method of data transmission uses start and stop bits?

Asynchronous data transmission