

# AQA Computer Science AS Level

## 3.9.1 Communication

### Flashcards

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# Define Baud rate



## Define Baud rate

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?



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

1024 bps

$$8 \times 128 = 1024$$



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



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

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?

? 0 1 1 0 0 1 0 1 0

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?



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

Asynchronous data transmission



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





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

Parallel data transmission



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



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

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?

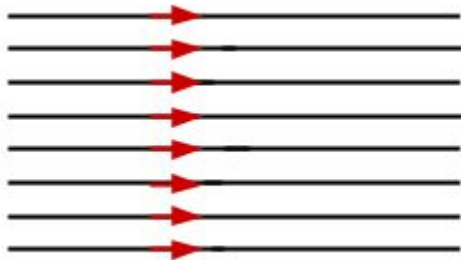


In which method of data transmission is used over short distances?

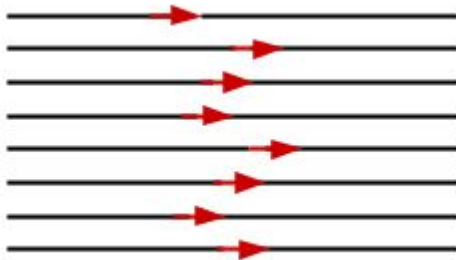
Parallel data transmission



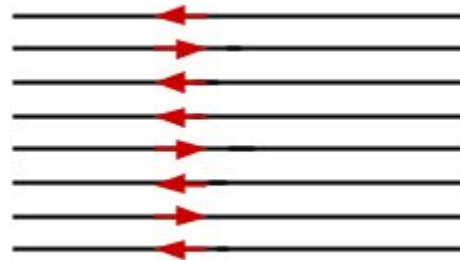
# Which diagram represents skew?



A



B



C





# Which diagram represents skew?

B



Which communication method is more reliable: serial or parallel?



Which communication method is more reliable: serial or parallel?

Serial



Which method of data transmission uses start and stop bits?



Which method of data transmission uses start and stop bits?

Asynchronous data transmission

