

2001

discussed above for the serial port receiver).

END

Question for four marks, Structured Hardware Design, Summer 2001.

Question:

Bluetooth is a radio technology where tiny nodes replace lengths of wire or cable between items of equipment with little or no modification to the design of the equipment. Sketch a block diagram of a typical node and write three sentences describing the main blocks. [4 Marks]

Suitable Answer (minus diagram) (typed in 3 minutes)

A central chip contains a microprocessor and ROM firmware together with the baseband part of the RF modem and a number of standard interfaces, such as IRDA, RS232 etc..

The RF front end does up and down conversion of the multi-gigahz radio signals that cannot be processed on the chip.

The flash memory stores configuration and encryption keys.

END