DATA STORAGE SUBSYSTEM

ABSTRACT

A high performance data storage subsystem is described which is suitable for connection to a data processing system. The main functional units of the subsystem are (i) host adapter, (ii) device controller and (iii) direct access storage device (DASD). The functional units are interconnected by dedicated, point to point, full duplex serial links over which commands and data are transmitted in the form of packets. The serial links also support packet multiplexing which allows commands transmitted over the serial link to be multiplexed with read or write data being transferred from and to the devices. A basic configuration of the subsystem comprises an adapter connected via a serial link to a controller which is in turn connected by four serial links to four DASDs. However the subsystem architecture described allows each adapter to be connected to up to four controllers, thus allowing a maximum of sixteen devices to be attached to one adapter.

Figure 1