A DATA MAXIMIZING SERIAL TO PARALLEL BUS INTERFACE IN A DATA PROCESSING SYSTEM AND METHOD THEREFOR

ABSTRACT

A serial/parallel interface (102) for interfacing the serial port of a microcontroller (101) with parallel bus devices, and a protocol for communicating with the same. The interface (102) operates to maximize through-put with minimum handshaking. When the bus device (103) is a nonvolatile memory containing the operating software of the microcontroller (101) system, the interface (102) provides for dynamic updating of the operating program. It also relieves the constraints imposed on the number of bus devices accessible to the microcontroller (101) system because of the limited number of I/O pins available on the microcontroller (101).

Fig 1