

**SERIAL PORT FOR A HOST ADAPTER INTEGRATED
CIRCUIT USING A SINGLE TERMINAL**

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ABSTRACT

10 A host adapter integrated circuit that contains
data transfer modules has a serial port that uses a
single serial port pin to communicate with a slave
serial port input-output integrated circuit that
15 interfaces to various resources that are included in a
support circuit. The serial port forms a packet from
each byte of information to be transferred from a
module to the slave device by adding a start bit before
the byte, followed by a parity bit at the end of the
15 byte and followed by a stop bit. After transmitting
the packet, the serial port waits for an acknowledge
packet from the slave serial port input-output
integrated circuit, for example for two clock cycles
20 after transmission of the packet. For synchronous
operation, a common oscillator drives the clock signal
on the slave serial port input-output integrated
circuit and host adapter integrated circuit. The
serial port pin in the host adapter integrated circuit
25 is connected to a shifter circuit in the serial port
that serially clocks data from the serial port pin and
passes the data parallelly to a bus in the host adapter
integrated circuit and vice versa.

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Figure 3

