ABSTRACT

SINGLE WIRE BUS INTERFACE

Embodiments disclosed herein address the need for a single wire bus interface, which will allow the reduction of connectors for devices (220, 230). A device (220) communicates with a second device (230) via a single wire bus using a driver (1120) for driving the bus with a write frame (910) comprising a start symbol, a write indicator symbol, an address, and data symbols. In another aspect, the device receives one or more data symbols on the single wire bus during a read frame (920). In yet another aspect, a device (230) communicates with a second device (220) via a single wire bus using a receiver (1320) for receiving a frame on the single wire bus comprising a start symbol, a write indicator symbol, an address, and one or more data symbols, and a driver (1320) for driving return read data associated with the address when the write indicator identifies a write frame. Further modifications are disclosed, which also apply a Single-Wire Serial Bus Interface (SSBI) protocol.

Figure 8