the device in write mode, i.e., the slave address must be sent with the direction bit set to 0. The next byte to be sent is a command code, which, depending on the command, may be followed by a command parameter. The DS2482-100 acknowledges valid command codes and expected/valid command parameters. Additional bytes or invalid command parameters are never acknowledged.

Reading from the DS2482-100

To read from the DS2482-100, the master must access the device in read mode, i.e., the slave address must be sent with the direction bit set to 1. The read pointer determines the register that the master reads from. The master can continue reading the same register over and over again, without having to readdress the device, e.g., to watch the 1WB changing from 1 to 0. To read from a different register, the master must issue the Set Read Pointer command and then access the DS2482-100 again in read mode.

SRP	Command "Write Configuration", D2h
WCFG	Command "Write Configuration", D2h
1WRS	Command "1-Wire Reset", B4h
1WSB	Command "1-Wire Single Bit", 87h
1WWB	Command "1-Wire Write Byte", A5h
1WRB	Command "1-Wire Read Byte", 96h
1WT	Command "1-Wire Triplet", 78h

Table 5. Data Direction Codes

Master-to-Slave	Slave-to-Master

Status Bits Affected	RST set to 1; 1WB, PPD, SD, SBR, TSB, DIR set to 0.
Configuration Bits Affected	1WS, APU, SPU set to 0.

Set Read Pointer

Command Code	E1h
Command Parameter	Pointer Code (see Table 1)
Description	Sets the read pointer to the specified register. Overwrites the read pointer position of any 1-Wire communication command in progress.
Typical Use	To prepare reading the result from a 1-Wire Read Byte command; random read access of registers.
Restriction	None (can be executed at any time).
Error Response	If the pointer code is not valid, the pointer code is not acknowledged and the command is ignored.
Command Duration	None. The read pointer is updated on the rising SCL edge of the pointer code acknowledge bit.
1-Wire Activity	Not affected.
Read Pointer Position	As specified by the pointer code.
Status Bits Affected	None
Configuration Bits Affected	None