

NAME

owll, **OWLL_WRITE_ONE**, **OWLL_WRITE_ZERO**, **OWLL_READ_DATA**,
OWLL_REASET_AND_PRESENCE - Dallas Semiconductor 1-Wire Link Layer Interface

SYNOPSIS

int

OWLL_WRITE_ONE(*device_t lldev, struct ow_timing *timing*);

int

OWLL_WRITE_ZERO(*device_t lldev, struct ow_timing *timing*);

int

OWLL_READ_DATA(*device_t lldev, struct ow_timing *timing, int *bit*);

int

OWLL_RESET_AND_PRESENCE(*device_t lldev, struct ow_timing *timing, int *bit*);

DESCRIPTION

The **owll** interface provides access to the link layer of the Dallas Semiconductor 1-Wire from upper layers of the protocol.

OWLL_WRITE_ONE() and **OWLL_WRITE_ZERO**() writes a one bit or a zero bit respectively on the 1-Wire bus.

OWLL_READ_DATA() reads one bit from the 1-Wire bus. This is often referred to as a "Read Time Slot" in the 1-Wire device data sheets.

The **OWLL_RESET_AND_PRESENCE**() function starts a reset sequence and detects if any device(s) are present on the bus. This is the beginning of all 1-Wire transactions.

NOTES

This interface is intended to be used only by the ow(4) device to talk to the low-level bus. By convention, the device that implements this interface is called owc(4). Only devices that implement own(9) should call these interfaces.

SEE ALSO

ow(4), owc(4), own(9)

LEGAL

1-Wire is a registered trademark of Maxim Integrated Products, Inc.

HISTORY

The **owll** driver first appeared in FreeBSD 11.0.

AUTHORS

The **owll** device driver and this manual page were written by Warner Losh.