

**NAME**

**atse** - driver for the Altera Triple-Speed Ethernet MegaCore

**SYNOPSIS**

**device atse**

**options ATSE\_CFI\_HACK**

In */boot/device.hints*:

**hint.atse.0.at="nexus0"**

**hint.atse.0.maddr=0x7f007000**

**hint.atse.0.msize=0x540**

**hint.atse.0.rc\_irq=1**

**hint.atse.0.rx\_maddr=0x7f007500**

**hint.atse.0.rx\_msize=0x8**

**hint.atse.0.rxc\_maddr=0x7f007520**

**hint.atse.0.rxc\_msize=0x20**

**hint.atse.0.tx\_irq=2**

**hint.atse.0.tx\_maddr=0x7f007400**

**hint.atse.0.tx\_msize=0x8**

**hint.atse.0.txc\_maddr=0x7f007420**

**hint.atse.0.txc\_msize=0x20**

**hint.e1000phy.0.at="miibus0"**

**hint.e1000phy.0.phyno=0**

**DESCRIPTION**

The **atse** device driver provides support for the Altera Triple-Speed Ethernet MegaCore.

**HARDWARE**

The current version of the **atse** driver supports the Ethernet MegaCore as described in version 11.1 of Altera's documentation when the device is configured with internal FIFOs.

**MAC SELECTION**

The default MAC address for each **atse** interface is derived from a value stored in cfi(4) flash. The value is managed by the atsectl(8) utility.

Only a single MAC address may be stored in flash. If the address begins with the Altera prefix 00:07:ed and ends in 00 then up to 16 addresses will be derived from it by adding the unit number of the interface to the stored address. For other prefixes, the address will be assigned to atse0 and random addresses will be used for other interfaces. If the stored address is invalid, for example all zero's, multicast, or the default address shipped on all DE4 boards (00:07:ed:ff:ed:15) then a random address is generated when

the device is attached.

## SEE ALSO

miibus(4), netintro(4), ifconfig(8)

*Triple-Speed Ethernet MegaCore Function User Guide, Altera Corporation, November 2011.*

## HISTORY

The **atse** device driver first appeared in FreeBSD 10.0.

## AUTHORS

The **atse** device driver and this manual page were developed by SRI International and the University of Cambridge Computer Laboratory under DARPA/AFRL contract (FA8750-10-C-0237) ("CTSRD"), as part of the DARPA CRASH research programme. This device driver was written by Bjoern A. Zeeb.

## BUGS

The **atse** driver only supports a single configuration of the MegaCore as installed on the Terasic Technologies Altera DE4 Development and Education Board.

Only gigabit Ethernet speeds are currently supported.