alt_timestamp()

Prototype:	`alt_u32 alt_timestamp (void)`
Commonly called by:	C/C++ programs
Thread-safe:	See description.
Available from ISR:	See description.
Include:	`<sys/alt_timestamp.h>`
Description:	The `alt_timestamp()` function returns the current value of the timestamp counter. Refer to "Using Timer Devices" in the *Developing Programs Using the Hardware Abstraction Layer* chapter of the *Nios II Software Developer's Handbook*. The implementation of this function is provided by the timestamp driver. Therefore, whether this function is thread-safe and or available at interrupt level depends on the underlying driver. Always call the `alt_timestamp_start()` function before any calls to `alt_timestamp()`. Otherwise the behavior of `alt_timestamp()` is undefined.
Return:	Returns the current value of the timestamp counter.
See also:	alt_timestamp_freq() alt_timestamp_start()

alt_timestamp_freq()

Prototype:	`alt_u32 alt_timestamp_freq (void)`
Commonly called by:	C/C++ programs
Thread-safe:	See description.
Available from ISR:	See description.
Include:	`<sys/alt_timestamp.h>`
Description:	The `alt_timestamp_freq()` function returns the rate at which the timestamp counter increments. Refer to "Using Timer Devices" in the *Developing Programs Using the Hardware Abstraction Layer* chapter of the *Nios II Software Developer's Handbook*. The implementation of this function is provided by the timestamp driver. Therefore, whether this function is thread-safe and or available at interrupt level depends on the underlying driver.
Return:	The returned value is the number of counter ticks per second.
See also:	alt_timestamp() alt_timestamp_start()

alt_timestamp_start()

Prototype:	`int alt_timestamp_start (void)`
Commonly called by:	C/C++ programs
Thread-safe:	See description.
Available from ISR:	See description.
Include:	`<sys/alt_timestamp.h>`
Description:	The `alt_timestamp_start()` function starts the system timestamp counter. Refer to "Using Timer Devices" in the *Developing Programs Using the Hardware Abstraction Layer* chapter of the *Nios II Software Developer's Handbook*. The implementation of this function is provided by the timestamp driver. Therefore, whether this function is thread-safe and or available at interrupt level depends on the underlying driver. This function resets the counter to zero, and starts the counter running.
Return:	The return value is zero on success and nonzero otherwise.
See also:	alt_timestamp() alt_timestamp_freq()