

**NAME**

**bintime**, **getbintime**, **microtime**, **getmicrotime**, **nanotime**, **getnanotime** - get the current time

**SYNOPSIS**

```
#include <sys/time.h>
```

*void*

```
bintime(struct bintime *bt);
```

*void*

```
getbintime(struct bintime *bt);
```

*void*

```
microtime(struct timeval *tv);
```

*void*

```
getmicrotime(struct timeval *tv);
```

*void*

```
nanotime(struct timespec *ts);
```

*void*

```
getnanotime(struct timespec *tsp);
```

**DESCRIPTION**

The **bintime()** and **getbintime()** functions store the system time as a *struct bintime* at the addresses specified by *bt*. The **microtime()** and **getmicrotime()** functions perform the same utility, but record the time as a *struct timeval* instead. Similarly the **nanotime()** and **getnanotime()** functions store the time as a *struct timespec*.

The **bintime()**, **microtime()**, and **nanotime()** functions always query the timecounter to return the current time as precisely as possible. Whereas **getbintime()**, **getmicrotime()**, and **getnanotime()** functions are abstractions which return a less precise, but faster to obtain, time.

The intent of the **getbintime()**, **getmicrotime()**, and **getnanotime()** functions is to enforce the user's preference for timer accuracy versus execution time.

**SEE ALSO**

binuptime(9), getbinuptime(9), getmicrouptime(9), getnanouptime(9), microuptime(9), nanouptime(9), tvtohz(9)

**HISTORY**

The **bintime** functions first appeared in FreeBSD 5.0. The **microtime** and **nanotime** functions first appeared in FreeBSD 3.0 but have existed in other incarnations since 4.4BSD.

**AUTHORS**

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