

**NAME**

**binuptime**, **getbinuptime**, **microuptime**, **getmicrouptime**, **nanouptime**, **getnanouptime**, **sbinuptime**, **getsbinuptime** - get the time elapsed since boot

**SYNOPSIS**

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

*void*

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

*void*

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

*void*

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

*void*

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

*void*

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

*void*

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

*sbintime\_t*

```
sbinuptime(void);
```

*sbintime\_t*

```
getsbinuptime(void);
```

**DESCRIPTION**

The **binuptime()** and **getbinuptime()** functions store the time elapsed since boot as a *struct bintime* at the address specified by *bt*. The **microuptime()** and **getmicrouptime()** functions perform the same utility, but record the elapsed time as a *struct timeval* instead. Similarly the **nanouptime()** and **getnanouptime()** functions store the elapsed time as a *struct timespec*. The **sbinuptime()** and **getsbinuptime()** functions return the time elapsed since boot as a *sbintime\_t*.

The **binuptime()**, **microuptime()**, **nanouptime()**, and **sbinuptime()** functions always query the timecounter to return the current time as precisely as possible. Whereas **getbinuptime()**, **getmicrouptime()**,

**getnanouptime()**, and **getsbinuptime()** functions are abstractions which return a less precise, but faster to obtain, time.

The intent of the **getbinuptime()**, **getmicrouptime()**, **getnanouptime()**, and **getsbinuptime()** functions is to enforce the user's preference for timer accuracy versus execution time.

### SEE ALSO

**bintime(9)**, **get\_cyclecount(9)**, **getbintime(9)**, **getmicrotime(9)**, **getnanotime(9)**, **microtime(9)**, **nanotime(9)**, **tvtohz(9)**

### AUTHORS

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