

**NAME**

**expand\_number** - format a number from human readable form

**LIBRARY**

System Utilities Library (libutil, -lutil)

**SYNOPSIS**

```
#include <libutil.h>
```

*int*

```
expand_number(const char *buf, uint64_t *num);
```

**DESCRIPTION**

The **expand\_number()** function parses the *buf* string and stores a unsigned 64-bit quantity at *\*num*.

The **expand\_number()** function is case-insensitive and follows the SI power of two convention.

The suffixes are:

Suffix	Description	Multiplier
K	kilo	1024
M	mega	1048576
G	giga	1073741824
T	tera	1099511627776
P	peta	1125899906842624
E	exa	1152921504606846976

For historical reasons, the **expand\_number()** function accepts and ignores a single "B" suffix at the end of the *buf* string. However, the usage of this suffix is discouraged.

**RETURN VALUES**

Upon successful completion, the value 0 is returned; otherwise the value -1 is returned and the global variable *errno* is set to indicate the error.

**ERRORS**

The **expand\_number()** function will fail if:

[EINVAL]           The given string contains no digits.

[EINVAL]           An unrecognized suffix was given.

[ERANGE]            Result doesn't fit into 64 bits.

**SEE ALSO**

humanize\_number(3)

**HISTORY**

The **expand\_number()** function first appeared in FreeBSD 6.3.