

NAME

getc_unlocked, getchar_unlocked, putc_unlocked, putchar_unlocked – nonlocking stdio functions

SYNOPSIS

```
#include <stdio.h>

int getc_unlocked(FILE *stream);
int getchar_unlocked(void);
int putc_unlocked(int c, FILE *stream);
int putchar_unlocked(int c);

void clearerr_unlocked(FILE *stream);
int feof_unlocked(FILE *stream);
int ferror_unlocked(FILE *stream);
int fileno_unlocked(FILE *stream);
int fflush_unlocked(FILE *stream);
int fgetc_unlocked(FILE *stream);
int fputc_unlocked(int c, FILE *stream);
size_t fread_unlocked(void *ptr, size_t size, size_t n,
    FILE *stream);
size_t fwrite_unlocked(const void *ptr, size_t size, size_t n,
    FILE *stream);

char *fgets_unlocked(char *s, int n, FILE *stream);
int fputs_unlocked(const char *s, FILE *stream);

#include <wchar.h>

wint_t getwc_unlocked(FILE *stream);
wint_t getwchar_unlocked(void);
wint_t fgetwc_unlocked(FILE *stream);
wint_t fputwc_unlocked(wchar_t wc, FILE *stream);
wint_t putwc_unlocked(wchar_t wc, FILE *stream);
wint_t putwchar_unlocked(wchar_t wc);
wchar_t *fgetws_unlocked(wchar_t *ws, int n, FILE *stream);
int fputs_unlocked(const wchar_t *ws, FILE *stream);
```

Feature Test Macro Requirements for glibc (see [feature_test_macros\(7\)](#)):

```
getc_unlocked(), getchar_unlocked(), putc_unlocked(), putchar_unlocked():
    /* Since glibc 2.24: */ _POSIX_C_SOURCE >= 199309L || /* Glibc versions <= 2.23: */
    _POSIX_C_SOURCE || /* Glibc versions <= 2.19: */ _SVID_SOURCE || _BSD_SOURCE

clearerr_unlocked(), feof_unlocked(), ferror_unlocked(), fileno_unlocked(), fflush_unlocked(),
fgetc_unlocked(), fputc_unlocked(), fread_unlocked(), fwrite_unlocked():
    /* Glibc since 2.19: */ _DEFAULT_SOURCE || /* Glibc versions <= 2.19: */ _SVID_SOURCE ||
    _BSD_SOURCE

fgets_unlocked(), fputs_unlocked(), getwc_unlocked(), getwchar_unlocked(), fgetwc_unlocked(),
fputwc_unlocked(), putwchar_unlocked(), fgetws_unlocked(), fputs_unlocked():
    _GNU_SOURCE
```

DESCRIPTION

Each of these functions has the same behavior as its counterpart without the "_unlocked" suffix, except that they do not use locking (they do not set locks themselves, and do not test for the presence of locks set by others) and hence are thread-unsafe. See [flockfile\(3\)](#).

ATTRIBUTES

For an explanation of the terms used in this section, see [attributes\(7\)](#).

| Interface | Attribute | Value |
|--|---------------|-----------------------|
| getc_unlocked() , putc_unlocked() , clear- err_unlocked() , fflush_unlocked() , fgetc_unlocked() , fputc_unlocked() , fread_unlocked() , fwrite_unlocked() , fgets_unlocked() , fputs_unlocked() , getwc_unlocked() , fgetwc_unlocked() , fputwc_unlocked() , putwc_unlocked() , fgetws_unlocked() , fputws_unlocked() | Thread safety | MT-Safe race:stream |
| getchar_unlocked() , getwchar_unlocked() | Thread safety | MT-Unsafe race:stdin |
| putchar_unlocked() , putwchar_unlocked() | Thread safety | MT-Unsafe race:stdout |
| feof_unlocked() , fer- ror_unlocked() , fileno_unlocked() | Thread safety | MT-Safe |

CONFORMING TO

The four functions **getc_unlocked()**, **getchar_unlocked()**, **putc_unlocked()**, **putchar_unlocked()** are in POSIX.1-2001 and POSIX.1-2008.

The nonstandard *_**unlocke**d() variants occur on a few UNIX systems, and are available in recent glibc. They should probably not be used.

SEE ALSO

[flockfile\(3\)](#), [stdio\(3\)](#)

COLOPHON

This page is part of release 4.16 of the Linux *man-pages* project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.