

**NAME**

memcpy, wmemcpy – copy memory area

**SYNOPSIS**

```
#define _GNU_SOURCE /* See feature_test_macros(7)
*/
#include <string.h>

void *memcpy(void *dest, const void *src, size_t n);

#define _GNU_SOURCE /* See feature_test_macros(7)
*/
#include <wchar.h>

wchar_t *wmemcpy(wchar_t *dest, const wchar_t *src, size_t n);
```

**DESCRIPTION**

The `memcpy()` function is nearly identical to the `memcpy(3)` function. It copies  $n$  bytes from the object beginning at `src` into the object pointed to by `dest`. But instead of returning the value of `dest` it returns a pointer to the byte following the last written byte.

This function is useful in situations where a number of objects shall be copied to consecutive memory positions.

The `wmemcpy()` function is identical but takes `wchar_t` type arguments and copies  $n$  wide characters.

**RETURN VALUE**

`dest + n`.

**VERSIONS**

`memcpy()` first appeared in glibc in version 2.1.

**ATTRIBUTES**

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

Interface	Attribute	Value
<code>memcpy()</code> , <code>wmemcpy()</code>	Thread safety	MT-Safe

**CONFORMING TO**

This function is a GNU extension.

**EXAMPLE**

```
void *
combine(void *o1, size_t s1, void *o2, size_t s2)
{
    void *result = malloc(s1 + s2);
    if (result != NULL)
        memcpy(memcpy(result, o1, s1), o2, s2);
    return result;
}
```

**SEE ALSO**

[memccpy\(3\)](#), [memcpy\(3\)](#), [memmove\(3\)](#), [wmemcpy\(3\)](#)

**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/>.