

1 / *Technical Standard*

2 **Austin/89**

3 *The Open Group*
4 *The Institute of Electrical and Electronics Engineers, Inc.*

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See <http://www.opengroup.org/austin/bugreport.html> for instructions on commenting on this unapproved draft document.

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Proposed corrections for addition of *socketmark*() into the Austin Group specifications.

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1.1 General Changes

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Add the following function to the table in the System Interfaces volume of IEEE Std 1003.1-200x, Section 2.4.3, Signal Actions (the set of functions that shall either be reentrant or non-interruptible by signals and shall be async-signal-safe):

7

```
socketmark()
```

8

1.2 Header Changes

9

The following header file reference pages will need the listed interfaces added to them.

10

Add the prototype for *socketmark*() to the `<sys/socket.h>` header:

11

```
int socketmark(int);
```

12

1.3 Reference Page Changes

13

The following new reference pages are introduced.

14 **NAME**

15 socketmark — determine whether a socket is at the out-of-band mark

16 **SYNOPSIS**

17 #include <sys/socket.h>

18 int socketmark(int s);

19 **DESCRIPTION**

20 The *socketmark()* function shall determine whether the socket specified by the descriptor *s* is at
 21 the out-of-band data mark (see the System Interfaces volume of IEEE Std 1003.1-200x, Section
 22 2.10.12, Socket Out-of-Band Data State). If the protocol for the socket supports out-of-band data
 23 by marking the stream with an out-of-band data mark, the *socketmark()* function shall return 1
 24 when all data preceding the mark has been read and the out-of-band data mark is the first
 25 element in the receive queue. The *socketmark()* function shall not remove the mark from the
 26 stream. The use of this function between receive operations allows an application to determine
 27 which received data precedes the out-of-band data and which follows the out-of-band data.

28 **RETURN VALUE**

29 Upon successful completion, the *socketmark()* function shall return a value indicating whether
 30 the socket is at an out-of-band data mark. If the protocol has marked the data stream and all data
 31 preceding the mark has been read, the return value shall be 1; if there is no mark, or if data
 32 precedes the mark in the receive queue, the *socketmark()* function shall return 0. Otherwise, it
 33 shall return a value of -1 and set *errno* to indicate the error.

34 **ERRORS**

35 The *socketmark()* function shall fail if:

36 [EBADF] The *s* argument is not a valid file descriptor.

37 [ENOTTY] The *s* argument does not specify a descriptor for a socket.

38 **EXAMPLES**

39 None.

40 **APPLICATION USAGE**

41 None.

42 **RATIONALE**

43 None.

44 **FUTURE DIRECTIONS**

45 None.

46 **SEE ALSO**

47 *recv()*, *recvmsg()*

48 **CHANGE HISTORY**

49 Introduced in Issue 6.