

IEEE Standards Interpretations for IEEE Std 1003.1c™-1995 IEEE Standard for Information Technology--Portable Operating System Interface (POSIX(R)) - System Application Program Interface (API) Amendment 2: Threads Extension (C Language)

Copyright © 1996 by the Institute of Electrical and Electronics Engineers, Inc. 3 Park Avenue New York, New York 10016-5997 USA All Rights Reserved.

Interpretations are issued to explain and clarify the intent of a standard and **do not** constitute an alteration to the original standard. In addition, interpretations are not intended to supply consulting information. Permission is hereby granted to download and print one copy of this document. Individuals seeking permission to reproduce and/or distribute this document in its entirety or portions of this document must contact the IEEE Standards Department for the appropriate license. Use of the information contained in this document is at your own risk.

IEEE Standards Department, Copyrights and Permissions, 445 Hoes Lane, Piscataway, New Jersey 08855-1331, USA

Interpretation Request #42

Topic: pthread_sigmask, pthread.h **Relevant Clauses:** 3.3.5.1, 2.7.3

ISO 9945-1:1996, 3.3.5.1, synopsis clause shows pthread_sigmask() declared in signal.h, but 2.7.3 shows it declared in pthread.h. Proposed response: POSIX.1-1996 is unclear and allows the prototype to appear either in pthread.h or signal.h. It is recommended that a future revision require it only in signal.h since pthread.h does not defined sigset_t.

Interpretation Response

The standard is clear in 2.7.3 that pthread_sigmask shall be defined in pthread.h. But 3.3.5.1 also clearly indicates that pthread_sigmask() is available as if it shall have been defined in , which is a contradiction in the standard. It is the opinion of the interpretations committee that the intent of the working and balloting groups is that shown by the synopsis of 3.3.5.1: the definition of pthread_sigmask should not be pthread.h but rather in signal.h. This is being referred to the sponsor for correction with a request for a speedy resolution. The interpretations committee also noted that the function pthread_kill has the same contradiction.

Rationale for Interpretation

The interpretation committee believes that the standard has a defect that causes a contradiction. The intention was to have the definitions in signals. Additionally, existing industry practice seems to support this belief and the need for a timely response by the sponsor.