## MP USER'S GUIDE (FOURTH EDITION)

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## Abstract

MP is a package of ANSI Standard Fortran subroutines for performing multiple-precision floating-point arithmetic and evaluating elementary and special functions is given. The subroutines are machine independent and the precision is arbitrary, subject to storage limitations. The User's Guide describes the routines and their calling sequences, example and test programs, use of the Augment precompiler, and gives installation instructions for the package.

## Comments

Only the Abstract is given here. The full report appeared as [1]. The algorithms are outlined in [2, 4]. Note that the Augment precompiler described in  $[1, \S4-5]$  and [5] is no longer supported.

## References

- R. P. Brent, MP Users Guide, Report TR 54, Computer Centre, ANU (September 1976), 53 pp. Revisions published as MP Users Guide (second edition), Computing Research Group, ANU (August 1978), 44 pp.; MP Users Guide (third edition), TR-CS-79-08, DCS, ANU (December 1979), 73 pp.; and MP Users Guide (fourth edition), Report TR-CS-81-08, Department of Computer Science, ANU (June 1981), 73 pp. Available by anonymous ftp from dcssoft.anu.edu.au (file rpb035.txt.Z in directory pub/Brent). rpb035.
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- [3] R. P. Brent, "Algorithm 524: MP, a Fortran multiple-precision arithmetic package [A1]", ACM Transactions on Mathematical Software 4 (1978), 71–81. rpb043.
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