



AOCC 4.2 Release Notes

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New Features/Enhancements

- Based on LLVM 16.0.3 release (llvm.org, 3rd May 2023)
- -fPIC and -fPIE options made default since AOCC 4.1
- Default optimization level is -O2 since AOCC 4.1
- Tuned for [AOCL-LibM \(AMD Math Library\) 4.2](#)

***Note:** As -fPIC and -fPIE options are default since AOCC 4.1, it will generate location independent code by default. With AOCC 4.1 or later, static libraries that are statically linked and not using -fPIC options so far must be rebuilt with AOCC with these default options. Else, it could display a linker error. Alternatively, use the options -fno-PIC/-fno-PIE with AOCC to disable generating location independent code.*

Bug Fixes

This release includes fixes to the following critical and known issues:

- Bug fixes with Fortran pre-processing and compilation
- Bug fixes impacting performance of C, C++, and Fortran applications