



# Metis 2020.01 Release Notes

## 1. OVERVIEW

Metis provides an efficient way to extract package models with its 3D accelerated Method of Moments (MoM) electromagnetic solver. The desired nets from bump to BGA ball in a package can be easily extracted. With its IC-package assembly capability, Metis enables the IC-package co-simulation, which helps IC designers to assess the package impact easily. Metis can be also used for advanced packaging such as 2.5D interposer with Through Silicon Via (TSV).

The Release Notes cover the following releases:

### Metis 2020.01

Release Date: Dec 11, 2020

The Release Notes present the latest information about Metis Version 2020.01 in the following sections:

- [Supported Operating Systems](#)
- [New Features and Enhancements in Metis 2020.01](#)

## 2. SUPPORTED OPERATING SYSTEMS

Metis 2020.01 is available on both 64bit Windows and Linux. Obtain the appropriate binary executable files for your operating system. The supported platforms for this release include:

- Windows 7 SP1
- Windows 8.1 KB2999226 or above
- Windows 10

- Linux RedHat 6

### **3. NEW FEATURES AND ENHANCEMENTS IN METIS 2020.01**

Metis 2020.01 provides new features and enhancements as described in the following sections.

- Improve MoM Solver simulation efficiency with 23.83% speedup, and reduce memory consumption by 7.91%.
- Improve MoM Solver simulation accuracy.
- Support 3D display of current density.
- Support 3D display of E/H field.
- Support creating bump automatically base on pins.
- Optimized simulation flow with magnetic algorithm.
- Optimized model cutting algorithm.
- Optimized via merging algorithm.

### **4. LEGAL NOTICE**

The source code used in Metis comprises of both Open Source and proprietary software components.

The Open Source components used in Metis are:

- Qt 5.13.2

This software uses the Qt library, a multiplatform C++ GUI toolkit from Trolltech. See <http://www.trolltechcom/qt/> for more information.

- Clipper 6.1.3

Freeware for both open source and commercial applications (Boost Software License).

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- QtXlsx 0.3

This software uses the Qt library, a multiplatform C++ GUI toolkit from Trolltech. See <http://www.trolltech.com/qt/> for more information.

- **GCC 4.8.2**

cpp (GCC): Copyright (C) 2003 Free Software Foundation, Inc.

- **MPFR 2.4.2**

MPFR is free. It is distributed under the GNU Lesser General Public License (GNU Lesser GPL), version 3 or later (2.1 or later for MPFR versions until 2.4.x). The library has been registered in France by the Agence de Protection des Programmes under the number IDDN FR 001 120020 00 R P 2000 000 10800, on 15 March 2000. This license guarantees your freedom to share and change MPFR, to make sure MPFR is free for all its users.

Unlike the ordinary General Public License, the Lesser GPL enables developers of non-free programs to use MPFR in their programs.

- **MPC 0.8.1**

The library is built upon and follows the same principles as GNU MPFR. It is written by Andreas Enge, Mickaël Gastineau, Philippe Théveny and Paul Zimmermann and is distributed under the GNU Lesser General Public License, either version 3 of the licence, or (at your option) any later version (LGPLv3+). The GNU MPC library has been registered in France by the Agence pour la Protection des Programmes on 2003-02-05 under the number IDDN FR 001 060029 000 R P 2003 000 10000.

- **GMP 4.3.2**

The GMP Announcements mailing list is a read-only list for announcements regarding the GNU Multiple Precision Library (GMP).

- **Boost 1.72**

Boost C++ Libraries <http://www.boost.org> is licensed under the Boost Software License V1 <http://www.boost.org/users/license.html>

- **CGAL 4.9**

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- **Python 3.7.6**

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- Klayout 0.25.3

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#### ▪ Inno Setup 6.0.4

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- VTK 7.1.1

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- **Sklearn 0.21**

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