



ViaExpert 2020.01.h1

Release Notes

1. OVERVIEW

Via discontinuities in signal paths have significant impact on signal integrity for high speed designs. A quick way to build via models and then simulate them is essential for SI engineers. ViaExpert is made specially for this purpose. To quickly build via models, it provides multiple ways including built-in templates, direct layout file import, and a combined flow which takes advantage of both the layout trace breakout and built-in templates. To quickly simulate models, it deploys two solver technologies, one is a Finite Element Method (FEM) solver, and the other is a hybrid solver with an order of magnitude speedup compared to the FEM solver. Both adopt distributed processing and multi-core parallelization, which adds another level of acceleration. Auto port generation simplifies EM analysis setup. Parametric sweep and optimization help to achieve design convergence. It provides export to HFSS for quick benchmarking purpose.

The Release Notes cover the following releases:

ViaExpert 2020.01.h1

Release Date: February 5, 2021

The Release Notes present the latest information about ViaExpert Version 2020.01.h1 in the following sections:

- [Supported Operating Systems](#)
- [New Features and Enhancements in ViaExpert 2020.01](#)
- [New Features and Enhancements in ViaExpert 2020.01.h1](#)

2. SUPPORTED OPERATING SYSTEMS

ViaExpert 2020.01.h1 is available on 64-bit Windows. The supported platforms for this release include:

- Windows 7 SP1
- Windows 8.1
- Windows 10

3. NEW FEATURES AND ENHANCEMENTS IN VIAEXPERT 2020.01

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

- Support submit and manage tasks to Jobqueue;
- Support grid GND import in MS Two-zone pcb;
- Support the function of adding keepout to ground via;
- Support edit air box zoom based on current size;
- Support surface roughness on metal;
- Support Coax Port properties check.

4. NEW FEATURES AND ENHANCEMENTS IN VIAEXPERT 2020.01.h1

ViaExpert 2020.01.h1 provides new features and enhancements as described in the following sections.

- Add Package Via Template.
- Support to add constant spacing manually when extend trace.
- Support to import round trace interface in the BRD file.

5. LEGAL NOTICE

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

The Open Source components used in ViaExpert 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.trolltechcom/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`
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- **CGAL 4.9**

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- **Python 3.7.6**

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- Inno Setup 6.0.4

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- **Sklearn 0.21**

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