Release Notes

SnpExpert 2018.02
Release Notes

XPEEDIC 芯禾科技
ACCELERATE YOUR IC DESIGN

1. OVERVIEW

Xpeedic SnpExpert provides a quick way to understand the electrical characteristics of the passive interconnectors in a system by not only viewing the S-parameter in frequency domain but also examining the time domain reflectometry (TDR). One-click definition of differential pairs and victim/aggressor setup, together with the built-in NEXT, FEXT, PSXT, ILD, ICR, and ICN, allows user to quickly evaluate the crosstalk.

The Release Notes cover the following releases:

SnpExpert 2018.02

Release Date: Dec 17, 2018

SnpExpert 2018.02.h1

Release Date: Jan 22, 2019

The Release Notes present the latest information about SnpExpert Version 2018.02 in the following sections:

- [Supported Operation Systems](#)
- [New Features and Enhancements in SnpExpert 2018.02](#)
- [New Features and Enhancements in SnpExpert 2018.02.h1](#)

2. SUPPORTED OPERATION SYSTEMS

SnpExpert 2018.02 is available on 64bit Window and Linux. Obtain the appropriate binary executable files for your operation system. The supported platforms for this release includes:

- Windows 7 SP1
- Windows 8
- Windows 10

3. NEW FEATURES AND ENHANCEMENTS IN SNPEXPERT 2018.02

SnpExpert 2018.02 provides new features and enhancements as described in the following sections.

- Improving the import speed of s parameters substantially.
- Optimize TDR algorithm to improve the accuracy,especially in the case of large oscillation.
- Support Peeling to plot TDR in "TDR Options".
- Support double coordinate system to plot TDR.
- Optimize Gating accuracy and improve the calculation speed.
- Optimize Dk/Df Extraction algorithm to improve the accuracy in Dk/Df optimization flow.
- Optimize TOD algorithm to improve de-embedding accuracy and calculation speed.
- Support 1X Open/Short de-embedding method.

- Add new built-in complainces for s-parameter exploration, including VESA DisplayPort,802.3bj 100BASE CR4 MTF,802.3bs C2C_120D,802.3bs C2M_120E complainces.

- Update COM analysis for IEEE 802.3cd and 802.3bs C2C_d2p1_120d to the latest compliance requirement.

- Support double coordinate system to plot Q/L value.

- Add F,uF,nF,pF,fF and aF etc units for capacitor.

- Add an option to save a project with a link to all s-parameter files instead of duplicating them under a project in "General Options".

- Support to import parameters of single point frequency.

- Support to define the location of legend by "General Options".

- Support to modify the y-axis label and legend names.

- Optimize the clarity of the exported pictures.

4. NEW FEATURES AND ENHANCEMENTS IN SNPEXPERT 2018.02.H1

SnpExpert 2018.02.h1 provides new features and enhancements as described in the following sections.

- Add calculation SDC and SCD to keep the difference of original s parameter skew in "Halve S-Parameter matrix".

- Add new built-in complainces for s-parameter exploration, including USB3.1,VESA DisplayPort(HBR Cable),PCIe4.0 and PCIe5.0 GenZ Connector complainces.

- Support huray model surface roughness as optimization target for optimization based DK/DF extraction flow.

- Optimize delay&skew algorithm to improve the calculation accuracy.

- Add three types such as PSNEXT, PSFEXT and PSNEXT+FEXT in custom compliance.

- Update Settings of Offset Time,Port Termination and Port Extension in "TDR Options".