

PathWave Advanced
Design System

PathWave Advanced Design System 2021 Update 2.2 Release Notes

Notices

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PathWave Advanced Design System 2021 Update 2.2 Release Notes

ADS 2021 Update 2.2 Release Notes

Release: May 19, 2021

ADS 2021 Update 2.2 (minor update release) is a cumulative minor update release installed on ADS 2021 Update 2.0 (base release). You can upgrade your existing ADS installation (ADS 2021 Update 2.0) to ADS 2021 Update 2.2 without uninstalling any previous minor updates (if available any).

Version

532.update2.2

Following table lists the application version information:

	<i>Linux</i>	<i>Windows</i>
Design Environment	532.update2.2 May 11 2021 (64-bit)	532.update2.2 May 11 2021 (64-bit)
Data Display Server	532.update2.2 May 11 2021 (64-bit)	532.update2.2 May 11 2021 (64-bit)
hpeesofsess	532.update2.0 Mar 7 2021 (64-bit)	532.update2.0 Mar 6 2021 (64-bit)
Momentum MomEngine	2021.21.134 (*) built: Apr 1 2021	2021.21.134 (*) built: Apr 1 2021
FEM engine	392.200 2021-05-06	392.200 2021-05-06
hpeesofsim	532.update2.2 May 11 2021, MINT version 5	532.update2.2 May 11 2021, MINT version 5
	(64-bit linux built: Tue May 11, 2021 03:56:14 +0000)	(64-bit windows built: Mon May 10, 2021 18:44:51 +0000)

Platform Support

- Supported Platforms: **Windows and Linux** 64-bit.

Issues Addressed

ADS 2021 Update 2.2 addresses issues related to HD Design, Design and Technology Management, Design Editing, EM Simulation, and SIPro/PIPro.

HSD Design

DDR/Memory

- DDR_Controller: Touchstone S-Parameter file for package model has improved robustness.
- DIMM_Connector: The Signal Property table contents are properly saved and modifiable. The reference designator on the DIMM can be specified for all supported S-Parameter file types (Touchstone, Dataset, CITfile, and SMatrixIO). When using a Touchstone file, keywords corresponding to the port names for each side can be specified to automatically configure the ports.
- DDR_Controller/DDR_Memory: The Signal Property table is properly filled when the Select IBIS/EBD File is changed to a different file in the Pins tab.

SerDes

- Rx_Diff: For backward compatibility, the Custom (instead of Preset) option is selected when existing CTLE data is to be reused. This also eliminates an intermittent Amplitude Resolution message.

Design and Technology Management

- Fixed the AEL append() function allowing modifications to the second list

Design Editing

- Fixed the issue where ADS hangs while checking the physical connectivity on a design.
- Added delta gap port AEL functions.

EM Simulation

- The issue that bondwires were not passed to the EM simulator has been addressed by the fix in the AEL append() function.
- Fixed a Momentum surface current visualization issue in RFPro and PEPro.

SIPro/PIPro

- After PA-SI simulation now consistent splitting in domains happens after cache usage.
- ODB Import - Ring shaped geometry are now imported correctly.
- ODB Exporter - Fixed ADS crash while building the ODB matrix substrate description, when a routine intended to get the top and bottom layer names for a via fails.
- ABL - Fixed the out-of-range error crash for unexpected lineStyles.

ADS 2021 Update 2.1 Release Notes

Release: April 16, 2021

ADS 2021 Update 2.1 (minor update release) is a cumulative minor update release installed on ADS 2021 Update 2.0 (base release). You can upgrade your existing ADS installation (ADS 2021 Update 2.0) to ADS 2021 Update 2.1 without uninstalling any previous minor updates (if available any).

Version

532.update2.1

Following table lists the application version information:

	<i>Linux</i>	<i>Windows</i>
Design Environment	532.update2.1 Apr 7 2021 (64-bit)	532.update2.1 Apr 9 2021 (64-bit)
Data Display Server	532.update2.1 Apr 7 2021 (64-bit)	532.update2.1 Apr 9 2021 (64-bit)
hpeesofsess	532.update2.0 Mar 7 2021 (64-bit)	532.update2.0 Mar 6 2021 (64-bit)
Momentum MomEngine	2021.21.134 (*) built: Apr 1 2021	2021.21.134 (*) built: Apr 1 2021
FEM engine	392.100 2021-04-01	392.100 2021-04-01
hpeesofsim	532.update2.1 Apr 7 2021, MINT version 5	532.update2.1 Apr 9 2021, MINT version 5
	(64-bit linux built: Wed Apr 07, 2021 16:58:58 +0000)	(64-bit windows built: Thu Apr 08, 2021 20:17:00 +0000)

Platform Support

- Supported Platforms: **Windows and Linux** 64-bit.

Enhancements

ADS 2021 Update 2.1 includes enhancements related to HSD Design and RFPro.

HSD Design

- DDR
 - DDR_Controller/DDR_Memory: Enhanced the warning message when an IBIS file is changed and no warning pops up to update the settings.
 - Improved the usability for Package and DIMM Connector pin setup.
 - Memory Designer AMI model - The parameter GetWave_Exists is now editable.
 - Addressed the issue in ADS Channel Operating Margin (COM) example when replacing the Rx_AMI component with Rx_Diff component.

RFPro

- Improved the classification of semiconductors to compute finite dimensions of substrate.

Issues Addressed

ADS 2021 Update 2.1 addresses issues related to Circuit Simulation, Data Display, Design and Technology Management, Design Editing, Verification, EM Simulation, SIPro/PIPro, and RFPro.

Circuit Simulation

HSD Design

- DDR
 - S-parameter Checker - Addressed the issue of changing plot axis range and steps when the plot is in log scale.
 - Addressed the issue of determining incorrectly the DIE/BALL sides by manually setting up the Setup Package with Touchstone file for the DDR_Controller or DDR_Memory.
 - DIMM Connector: Addressed the issue when Ref Des In and Ref Des Out names (in Touchstone file) parsed to the Signal ID for Pins table are in mixed mode case.
 - MIAMB - Addressed the issue of using the GetWave2 function even though the model has GetWave in the .ami file by setting the parameter GetWave_Exists to False.
 - Addressed the reversal of component instance names issue after reopening the connected wire between DDR_PCB and DDR_Memory.
 - DDR_Memory - Addressed the issue of resetting the previous selection of Component model in the Pins parameters setup (Pins tab) after setting the RefDes to Yes (Select Reference Designator for Simulation table).
 - Addressed the issue of netlisting the subcircuits the MD_Prelayout points to even though the component is disabled.
 - DDR_PCB: Fixed the View TDR/TDT Plot issue.
- SerDes
 - Multi-lane Smart Tx/Rx: Added channel sweep functionality to redrivers. For more information, click [here](#).
 - Smart Eye Probe: Fixed the simulation terminated error when the option "Always enable main Rx output channel, independent of Enable Channel selection" and Mask Margin measurement in Measurement Setup tab are selected.
 - E-O-E solution: Fixed the minidump issue when VOL parameters are erroneously set.

- E-O-E solution: Set the limit to use command `IsCustomScriptEnabled` to VPI DS version 11.0 and higher.
- E-O-E solution: Fixed errors such as circular dependencies in parameter definition and ADS hanging up when running VPI simulation.
- E-O-E solution: Printed python environment paths for debug purpose.
- E-O-E solution: Fixed the GUI error that pops up when entering VPI string parameters as unquoted strings.

Data Display

- Expression Manager: Fixed copying and pasting the current selection.

Design and Tech Management

- Restored usage of `de_analyze()` AEL function.
- Improved performance displaying `DDR_Controller/DDR_Memory` component properties.
- Fixed column resizing for material resistivity column in material database editor.
- Fix back-annotate in Optimization Cockpit.
- Fixed potential crash during swap component.
- Fixed ADS exiting while importing GDSII file when workspace has missing libraries.

Design Editing

- Fixed the issue where inserted OA via can be offgrid when drawn as rectangle.

Verification

- LVS: Re-run after device error now does not shows unexpected errors.

EM Simulation

- FEM
 - When launching from the `emSetup` a FEM simulation over LSF, the correct Resource string is picked up.
 - `endTime` parameter is now passed to CLM code from Job manager.
- Simulation Manager
 - Circuit simulation and EM code using `sitecluster` code now checks for `core_<version>` when calling `sitecluster` API.
- RFPro
 - Using waveguides along with meshless vias and without circuit ports no longer fails internal checks.
 - Fix in setting the imaginary part of the permittivity for dielectrics when using an LTD substrate.
 - Fix in setting the mesh priority of dielectric vias in a multi-technology design.
 - The creation of sheet ports is more robust.
 - Momentum parallel simulation using RFPro now works fine while defining an AFS frequency plan along with explicit low frequencies.
 - Fixed the issue where "terminate called after throwing an instance of `lass::prim::ParameterError`" error was shown.

- Fixed the issue where in RFPro FEM shows an open circuit between the input and output pins of the inductor on a TSMC substrate.
- Fixed the near field visualization crash when no excitations available during switching of datasets in circuit excitation.

SIPro/PIPro

- General
 - Clear mesh cache option now removes vmeshData from simulation directory.
 - After simulation, emds solver process stops.
 - ODB file (.zip) import now supports space within the filename.
- PIPro
 - ODB Importer - long and complex part properties are now handles as cell names.
 - Job Manager now has a hard stop after 45 seconds instead of 15 seconds in the CLMCOMMSTATE_SUBMITJOB state.
- SIPro
 - Fixed the signal matching issue in DDR4 board.

