



## **CAM350 / DFMStream 12.2 하이라이트**

### **소개**

다운스트림 테크놀로지는 신제품 출시 전 고객들의 질문을 수렴 전폭 수렴했습니다. 따라서 현재 가장 최신 버전인 CAM350/DFMStream 12.2 는 CAM350 을 사용하고 계신 고객들의 의견을 포함해 신기능과 기술적 향상이 이루어졌습니다. CAM350/DFMStream 는 수많은 유저들이 요청한 기능들과 품질향상을 담아 출시된 제품입니다.

### **신기능**

#### **DFM Streams 에서 슬롯 확인 (Slot Checking)**

#### **직선 코너의 Mill Path 보정 옵션**

### **신기능 세부사항**

#### **Streams 에서 슬롯 확인**

드릴 스페이싱과 애뉴얼 링 확인 기능을 지원합니다.

기존 체크 기능들은 슬롯 홀을 검토할 수 있도록 업데이트 되었습니다. (57955)

다음에 포함한 슬롯 검증을 위해 드릴 스페이싱 검토가 추가되었습니다:

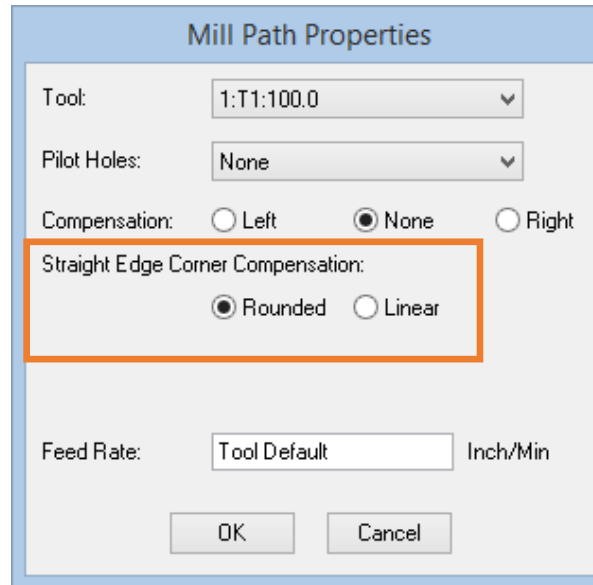
UDTHC – Unplated Through Hole Drill to Copper  
 UDTHP – Unplated Through Hole Drill to Pad  
 UDTHT – Unplated Through Hole Drill to Track  
 DTHC – Through Hole Drill to Copper  
 DTHP – Through Hole Drill to Pad  
 DTHT – Through Hole Drill to Track

기존 애뉴얼 링 확인 기능이 슬롯 검증을 위해 업데이트 되었습니다.

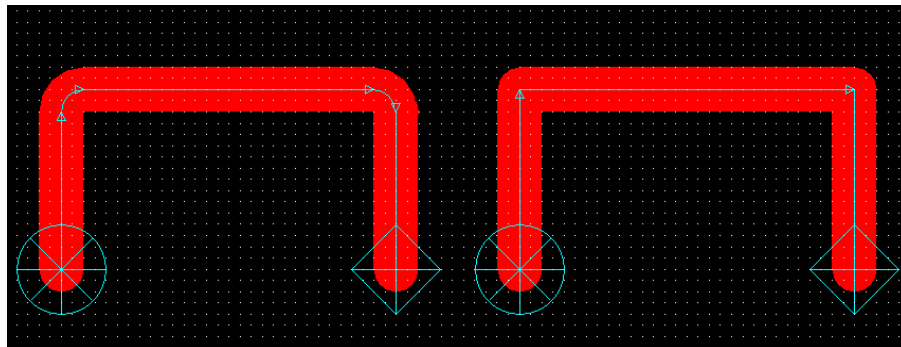
CPD - Pin Pad to Drill

### 직선 코너를 위한 Mill Path 보정 옵션

Mill Path Properties 에서 직선 코너의 원형 또는 직선 보정을 설정할 수 있습니다.  
(57918)



아래의 왼쪽 그림은 원형 보정이고, 오른쪽 그림은 직선 보정을 한 예입니다.



**Defect fixes for CAM350 V12.2**

CAM350의 품질과 신뢰성을 더욱 향상시켜 기존의 기능에 대한 소프트웨어 수정 및 개선이 이루어졌습니다.

**Build 1135**

Project	ID	Description
File Import	58750	File Import Zuken IPC-2581 polygon outline is incorrect for zero length arcs.
File Export	58733	File Export Panel Gerber Data creates incorrect Custom Aperture rotation
File Export	58642	File Export ODB++ creates incorrect pad rotation
Utilities	58294	Draw To Flash Interactive creates incorrect flash rotation for Dcode substitution when Dcode is custom
Streams RC	58656	DFMStream crash on Preprocess check
Streams RC	58666	DFMStream Minimum Gap check detects false errors for small designs.

**Build 1133**

Project	ID	Description
File Merge	58504	Mill Path data is lost after File Merge command.
File Import DXF	58614, 58618	File DXF import command fails to complete for Blocks with long names.
Netlist Extract	58611	Netlist Extract command fails to complete for Annular Ring apertures.
Netlist Extract	58630	Netlist Extract command does not recognize the connectivity for plated mill paths that define slots.
Analysis	58592	Find Pin Holes check fails to find small pin holes.
Analysis	58472	Minimum Gap check finds false errors for small designs.
Analysis	58471	Minimum Width check finds false errors for small designs.
Streams RC	58531	Pads to Drill (PD) check for Basic Streams signal check does not find errors.
Installation	58533	Silent installation options do not work for non-default installation folder.

**Build 1127**

Project	ID	Description
---------	----	-------------

ODB++ Import	58498	ODB++ import Expedition 8.1 false warnings on CAD Netlist
User Interface	58469	Layer Bar Classic displays context menu incorrectly

**Build 1124**

Project	ID	Description
ODB++ Import	58276	ODB++ import false warnings on missing SMD pads
ODB++ Import	58291	ODB++ netlist incorrect for small test point shapes
Auto Import	58293	Wrong drill data precision for PADS Layout data
Mill Import	58258	Mill import does not retain self-intersections
Mill Export	58271	Mill export failure on small arcs
Mill Export	58283	Circle Mill path lost on export
Gerber Import	58292	Gerber import error – incorrect layer polarity handling
Gerber Import	58303	Gerber import error – incorrect CAP rotation
DXF Import	58366, 58309	DXF import error – incorrect arcs for polygons with variable widths
Graphics	58329	User defined graphics lost for buttons
Panel Wizard	58262	Bad rotation on second run of Panel wizard
Undo	58308	UNDO closes CAM350
Undo	58255	Hang on UNDO
BPD Import	58248	Incorrect Panel Data on BPD load into CAM350
Mill Export	58259	NC Origin ignored on panel data export
File Merge	58058	Parts with null fields created on File Merge
Milling	58062	Compensated routes get arcs on corners
Mill Export	57918	Mill export small arcs added
Import	57955	Slots not coming across and being checked
Import	57965	Cutline polygon results in invalid data
Netlist Reports	58074	Netlist report missing pins
Draw To Raster	58370	Polygon Conversion Draw to Raster incomplete for sample vector polygons
Minimum Gap	58285	Minimum Gap check does not retain errors for invisible layers
Design Compare	54863	Run one up border work with Design Compare
Import/Export	56799	Plating not retained on ODB++ IPC-2581 export/import
Netlist Extract	56894	Milled slots in Netlist Extract
DXF Import	58366	DXF import creates bad arcs in Polygons
DXF Import	58309	DXF import problem
Highlight	58241	Highlight and Redraw problems with large objects
Selection	57951, 58306	Select all does not highlight all data
Query	58342	Query dialog does not displace for Chinese CAM350

## **Patents, Copyrights, and Trademarks**

### **Patents**

“AUTOMATED PCB MANUFACTURING DOCUMENTATION RELEASE PACKAGE SYSTEM AND METHOD”, United States Patent No. 7,409,666 B2

“ADAPTIVE TEMPLATE SYSTEM FOR AN AUTOMATED PCB MANUFACTURING RELEASE PACKAGE SYSTEM”, United States Patent No. 8,875,072 B2

### **Copyrights**

Copyright© 2005-2016 by DownStream Technologies, LLC. All rights reserved.

This information is copyrighted; all rights are reserved by DownStream Technologies, LLC. This information may not, in whole or in part, be copied, photocopied, reproduced, translated or reduced to any electronic medium or machine-readable form without the express written permission of DownStream Technologies, LLC.

DownStream Technologies, LLC, 225 Cedar Hill Street, Marlborough, Massachusetts 01752

### **Trademarks**

BluePrint, BluePrint-PCB, BluePrint for Printed Circuit Boards, and CAM350 are registered trademarks of DownStream Technologies, LLC. Adaptive Templates™ is a trademark of DownStream Technologies, LLC. Adobe, Adobe PDF Library, Adobe logo, Acrobat, PostScript, and Photoshop are either registered trademarks or trademarks of Adobe Systems Incorporated. The Postscript language is copyrighted by Adobe Systems Incorporated. DXF and Autodesk are registered trademarks of Autodesk, Inc. FLEXIm is a registered trademark of Macrovison Corporation. Omnify is a registered trademark of Omnify Software. Microsoft, Windows, Microsoft Paint, Microsoft Word, Microsoft PowerPoint, Microsoft Excel are either registered trademarks or trademarks of Microsoft Corporation. All rights reserved.

All other trademarks or registered trademarks are the property of their respective owners.

We have done our best to ensure that the material found in this publication is both useful and accurate. However, please be aware that errors may exist in this publication, and that neither the authors nor DownStream Technologies, LLC make any guarantees concerning the accuracy of the information found here or in the use to which it may be put.