GDS Import Wizard使用说明

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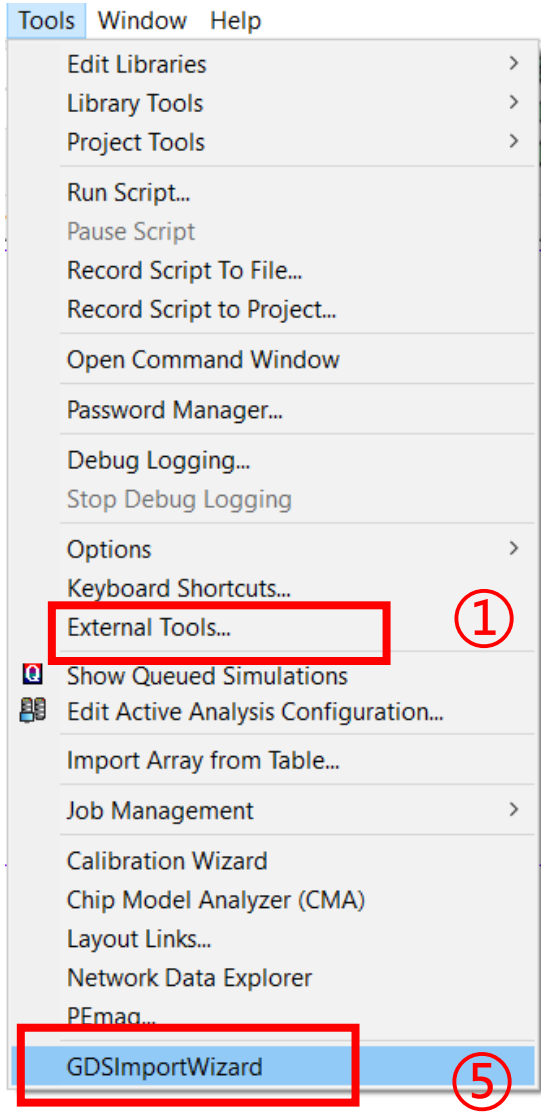
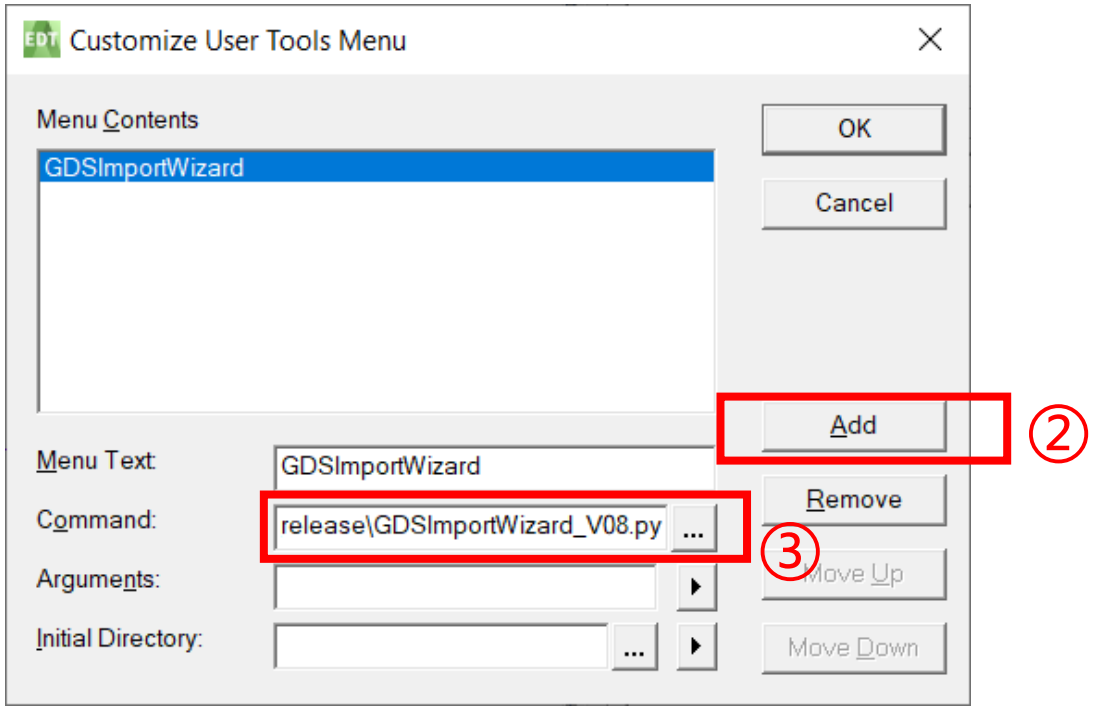
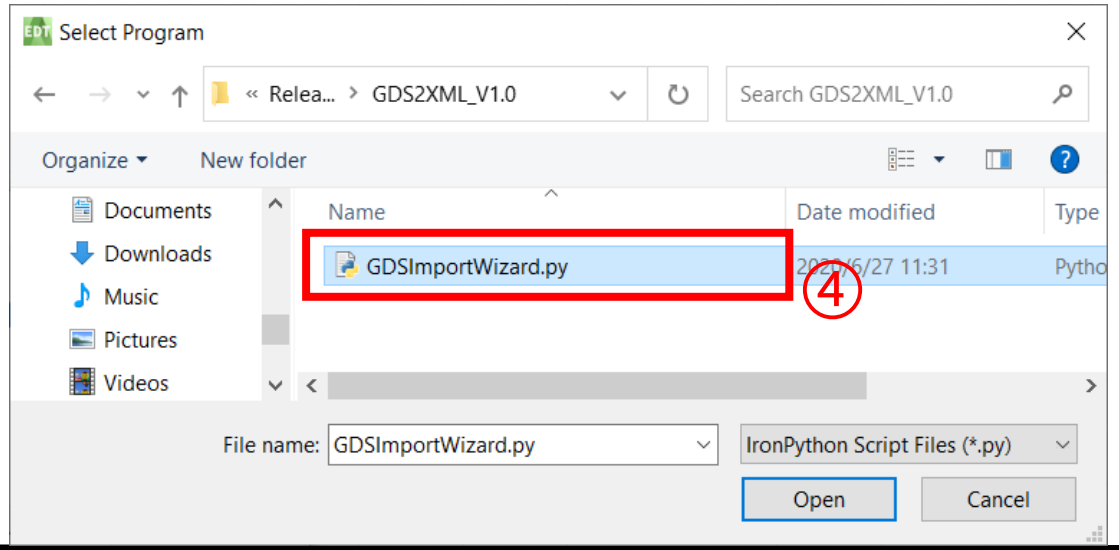
工具的运行


Tools
Window
Help
Edit Libraries
Library Tools
Project Tools
Run Script...
Pause Script
Record Script To File...
Record Script to Project...
Open Command Window
Password Manager...
Debug Logging...
Stop Debug Logging
Options
Keyboard Shortcuts...
External Tools...
Show Queued Simulations
Edit Active Analysis Configuration...
Import Array from Table...
Job Management
Calibration Wizard
Chip Model Analyzer (CMA)
Layout Links...
Network Data Explorer
PEmag...
GDSImportWizard
①
⑤


Customize User Tools Menu
Menu Contents
GDSImportWizard
OK
Cancel
Add
②
Menu Text:
GDSImportWizard
Command:
release\GDSImportWizard_V08.py
③
Remove
Arguments:
Move Up
Initial Directory:
Move Down


Select Program
Relea... › GDS2XML_V1.0
Search GDS2XML_V1.0
Organize
New folder
Documents
Downloads
Music
Pictures
Videos
Name
Date modified
Type
GDSImportWizard.py
④
File name: GDSImportWizard.py
IronPython Script Files (*.py)
Open
Cancel

命令行

Windows 命令行

set path=%path%;"C:\Program Files\AnsysEM\AnsysEMxx.x\Win64\common\IronPython"

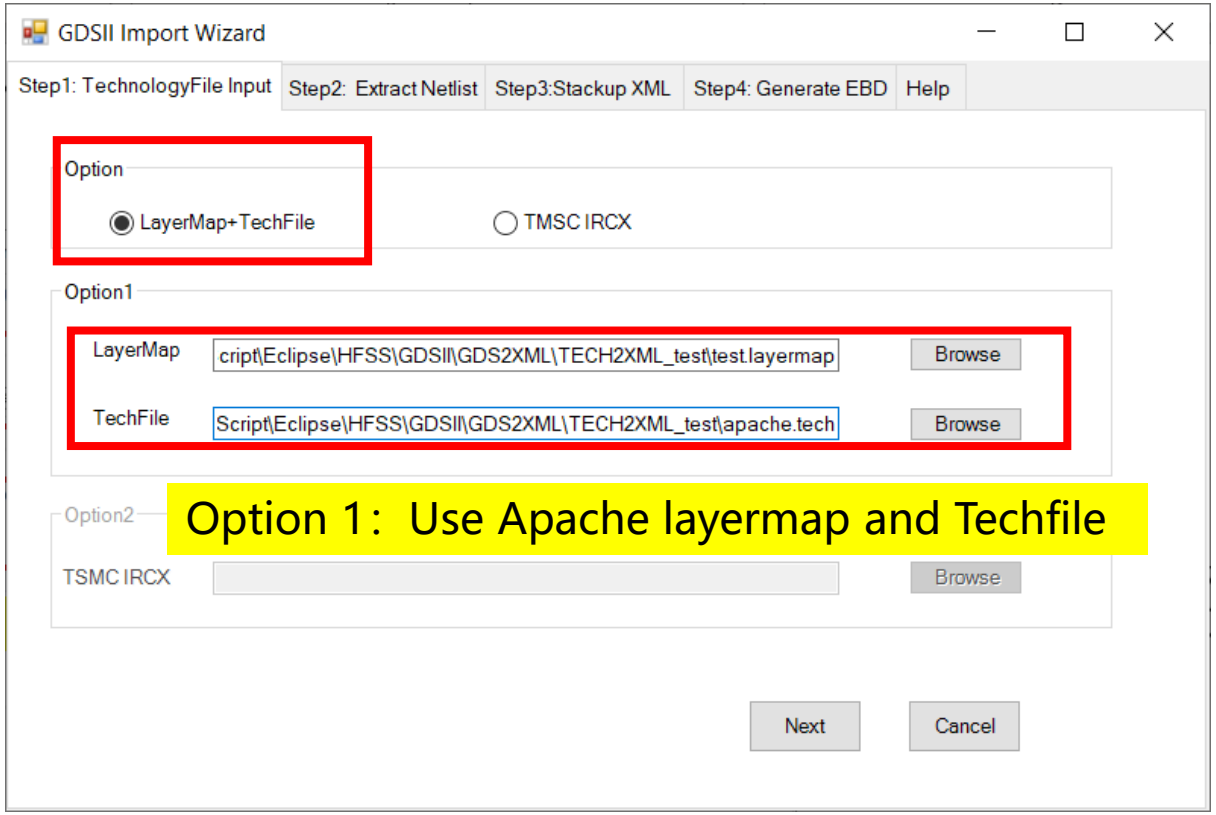
Ipy64 .\GDSImportWizard.py

Linux 命令行

export ipy64="/nfs/apps/packages/ansys_inc/AnsysEMxx.x/Linux64/common/mono/Linux64/bin/mono /nfs/apps/packages/ansys_inc/AnsysEM20.1/Linux64/common/IronPython/ipy64.exe"

$ipy64 .\GDSImportWizard.py

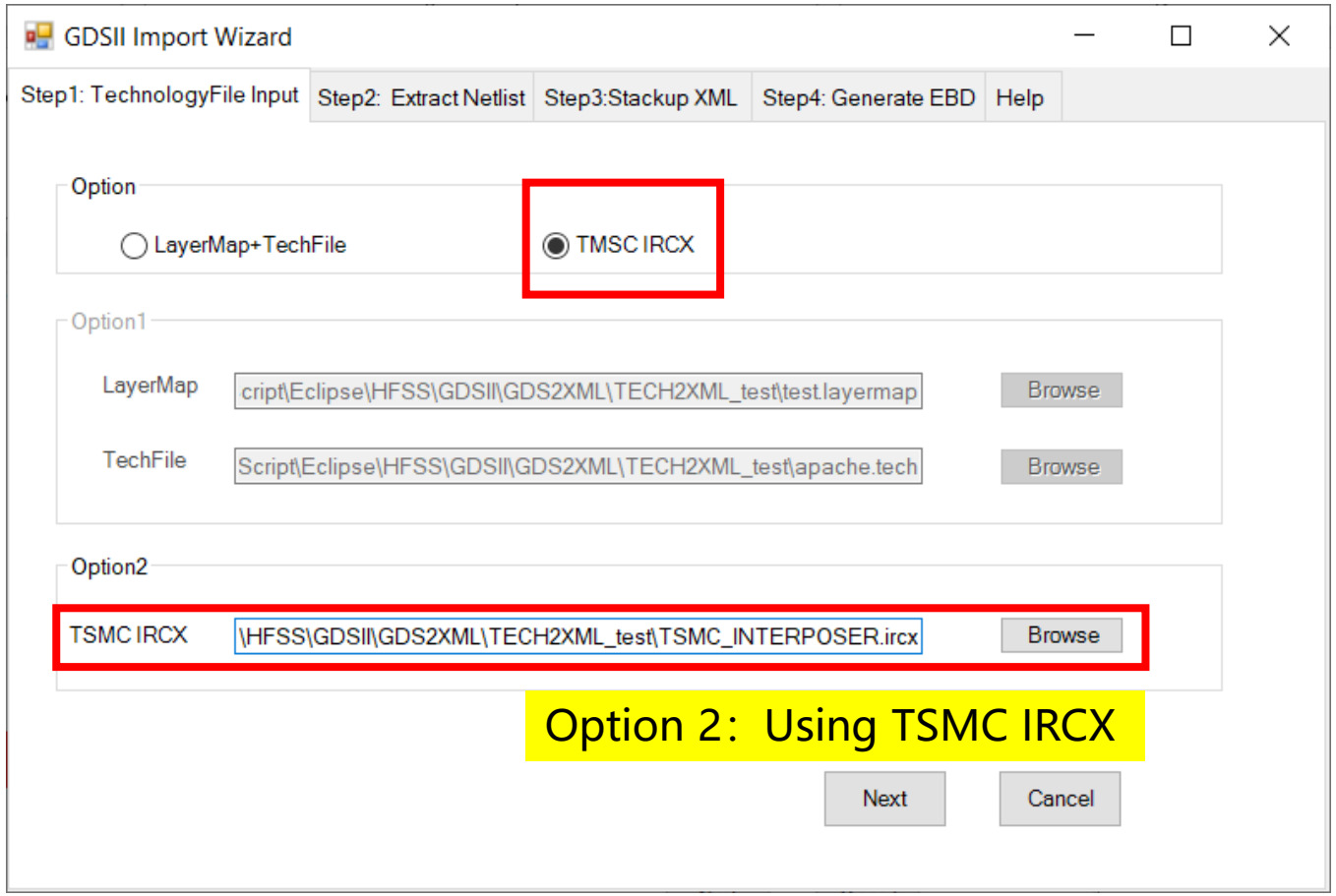
Step1: 定义Technology File



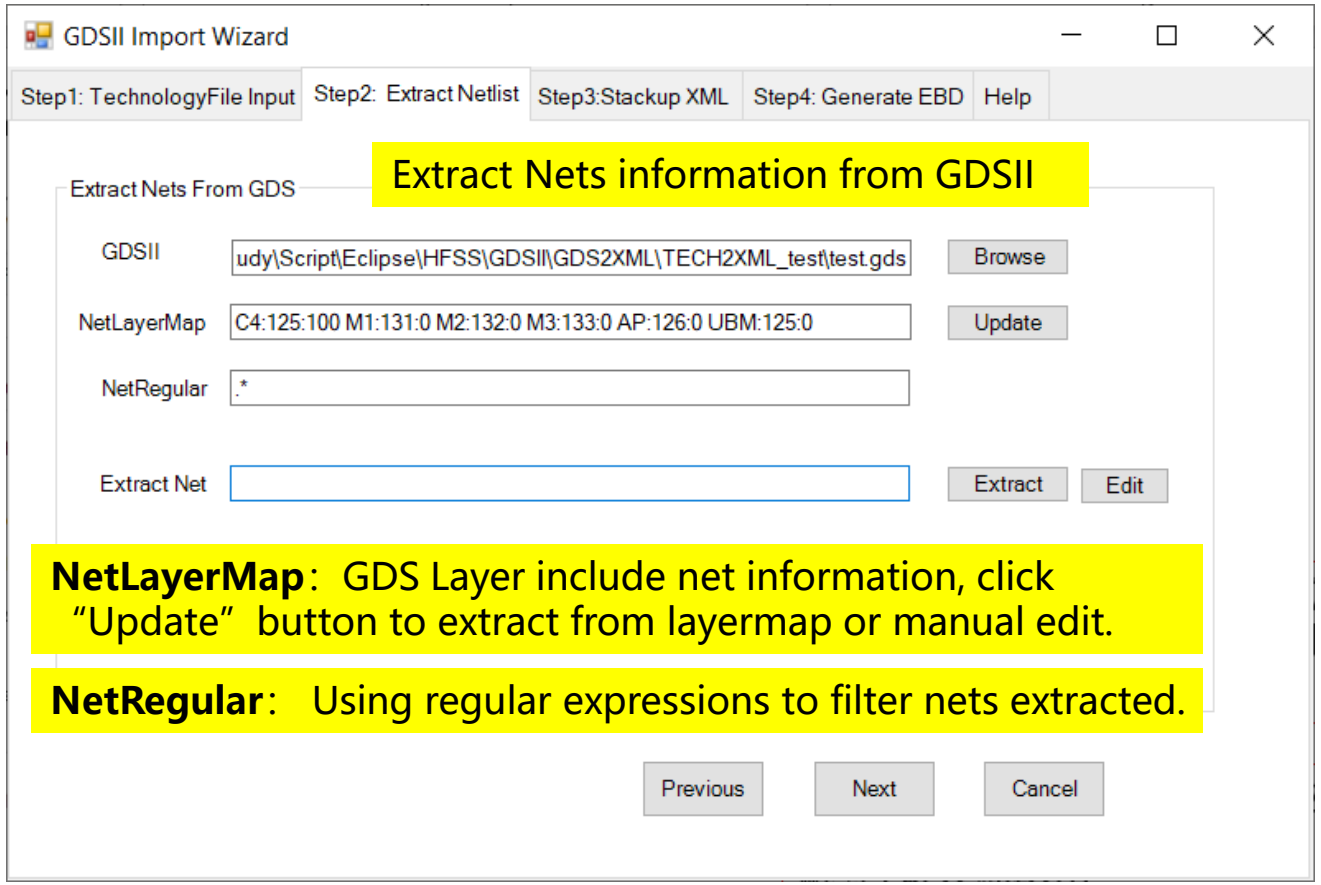
Option 1：Use Apache layermap and Techfile

两个文件主要用于输出材料参数的stackup layer定义
Layermap和Techfile的layer Name需要一致

Step1: 定义Technology File



Step2：定义输入的Nets

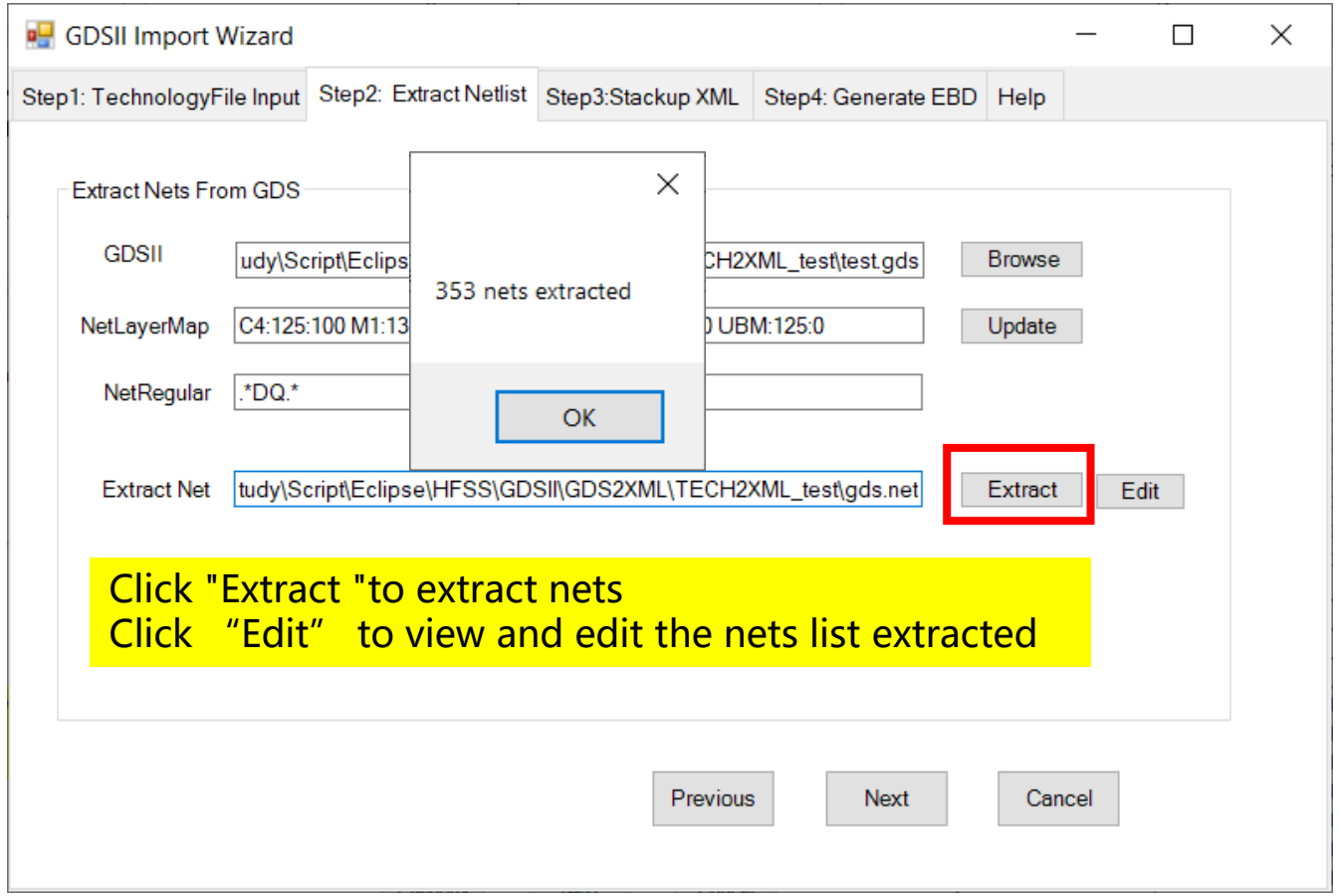


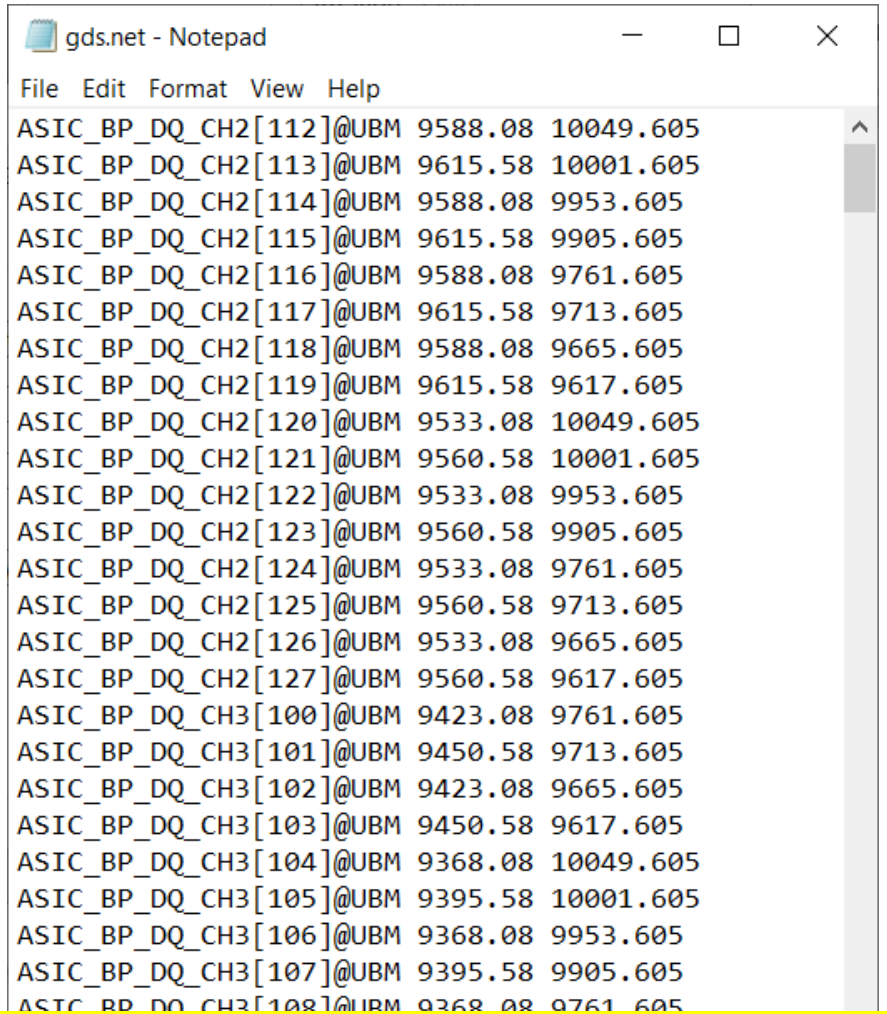
NetLayerMap指定Net信息位于的LayerName:LayerMap
可以从Step 1中Update,也可以手动进行修改和删减，注意格式

NetRegular可以定义正则表达式过滤输出的Net
忽略大小写
默认(.*)全部输出

https://en.wikipedia.org/wiki/Regular_expression

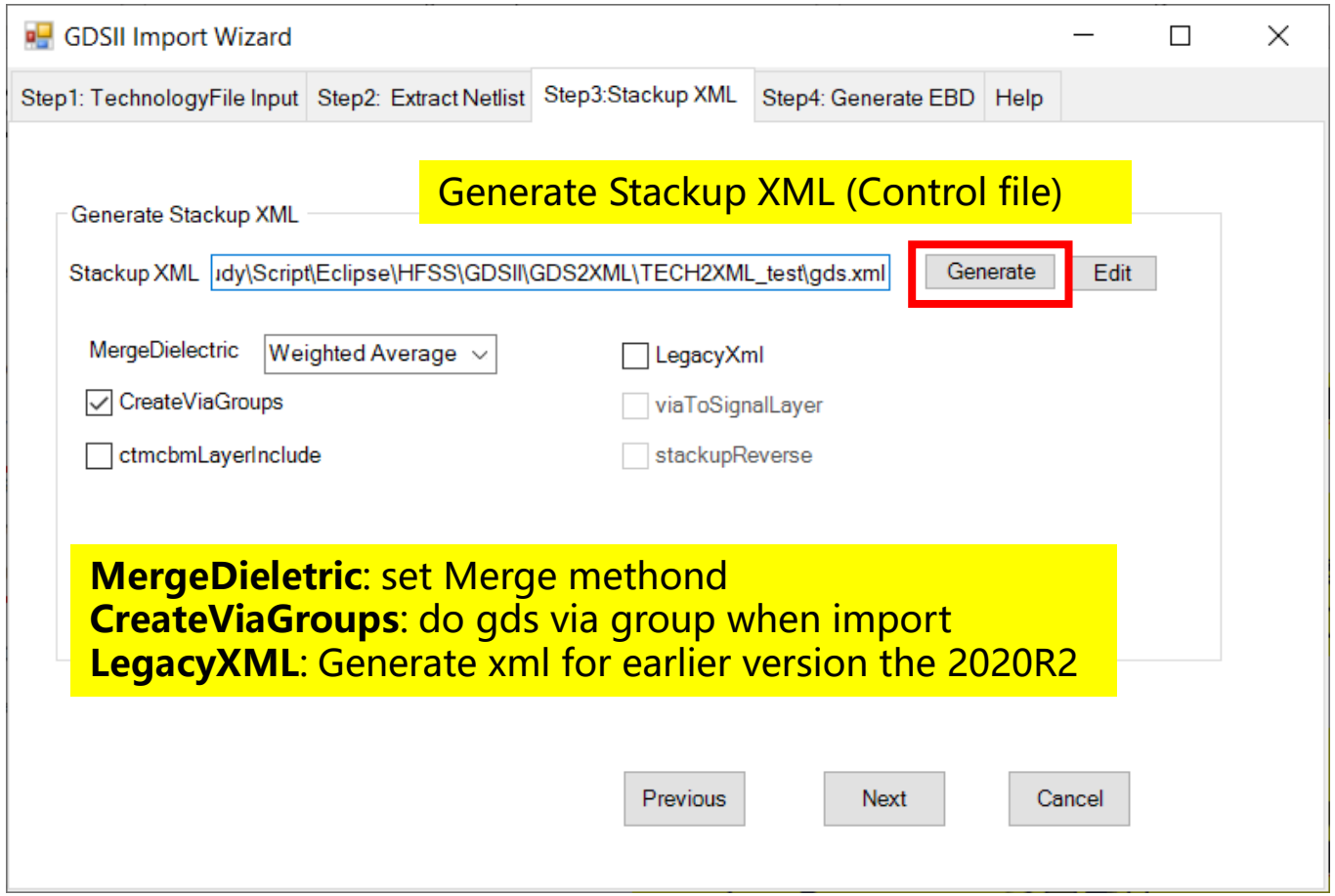
Step2：定义输入的Nets





点击Extract按照设定提出网络列表，可以对网络列表进一步编辑

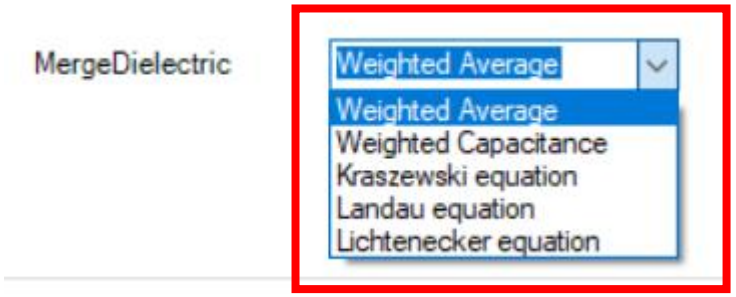
Step3：生成Stackup Control XML文件

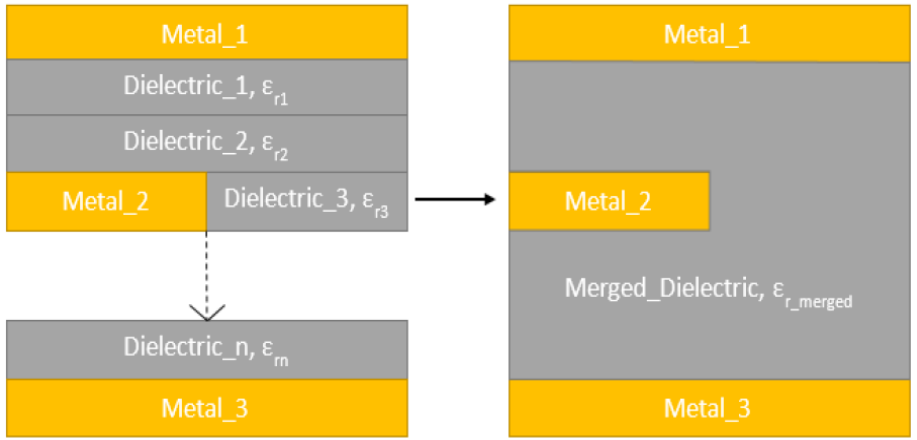


点击Generate完成Stackup Control file的生成

Legacy选项
不勾选（默认）：生成2020R2新版本XML文件
打勾： 生成2020R1之前版本的XML文件

Merge Dieletric Method





Method	Equation
Weighted Capacitance	$\varepsilon_{r\_merged} = \frac{\sum_{i=1}^{n} h_i}{\sum_{i=1}^{n} \frac{h_i}{\varepsilon_i}}$
Weighted Average	$\varepsilon_{r\_merged} = \frac{\sum_{i=1}^{n} h_i \varepsilon_i}{\sum_{i=1}^{n} h_i}$

There are Kraszewski (Kraszewski equation)

$$\sqrt{\varepsilon^*} = v_1\sqrt{\varepsilon_1} + v_2\sqrt{\varepsilon_2} + v_3\sqrt{\varepsilon_3} \qquad (1)$$

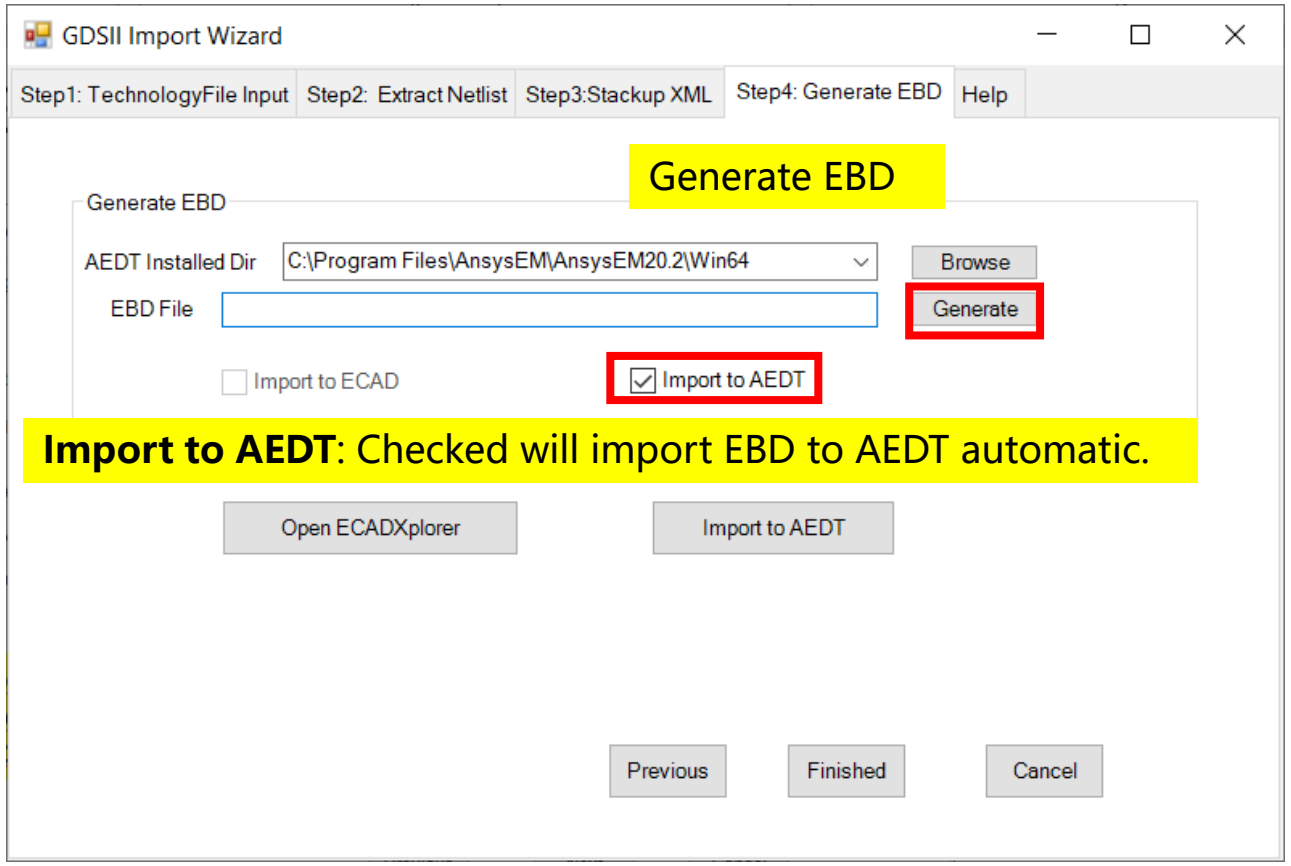
Landau, Lifshitz and Looyenga, (Landau equation)

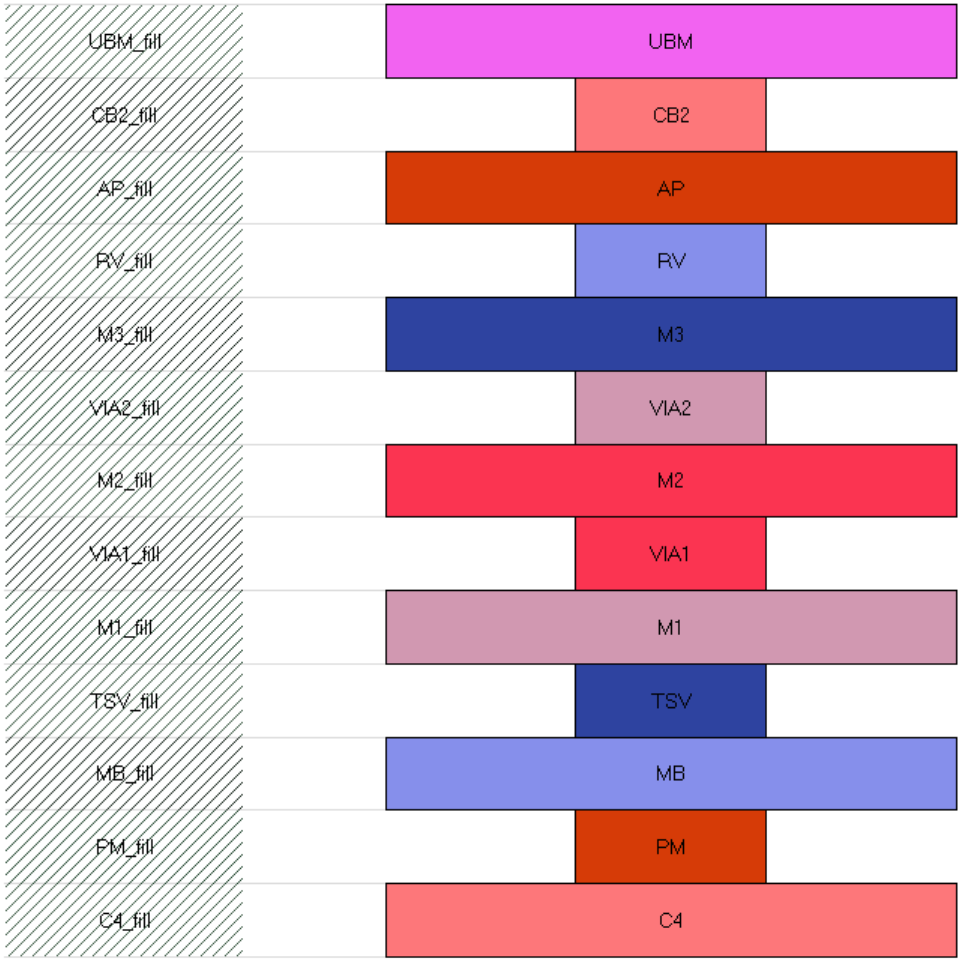
$$\sqrt[3]{\varepsilon^*} = v_1\sqrt[3]{\varepsilon_1} + v_2\sqrt[3]{\varepsilon_2} + v_3\sqrt[3]{\varepsilon_3} \qquad (2)$$

Lichtenecker, (Lichtenecker equation)

$$\ln \varepsilon^* = v_1 \ln \varepsilon_1 + v_2 \ln \varepsilon_2 + v_3 \ln \varepsilon_3 \qquad (3)$$

Step3：生成EBD文件





点击Generate生成对应的EBD文件，后台执行无提示，GDS可能需要较长时间生成。