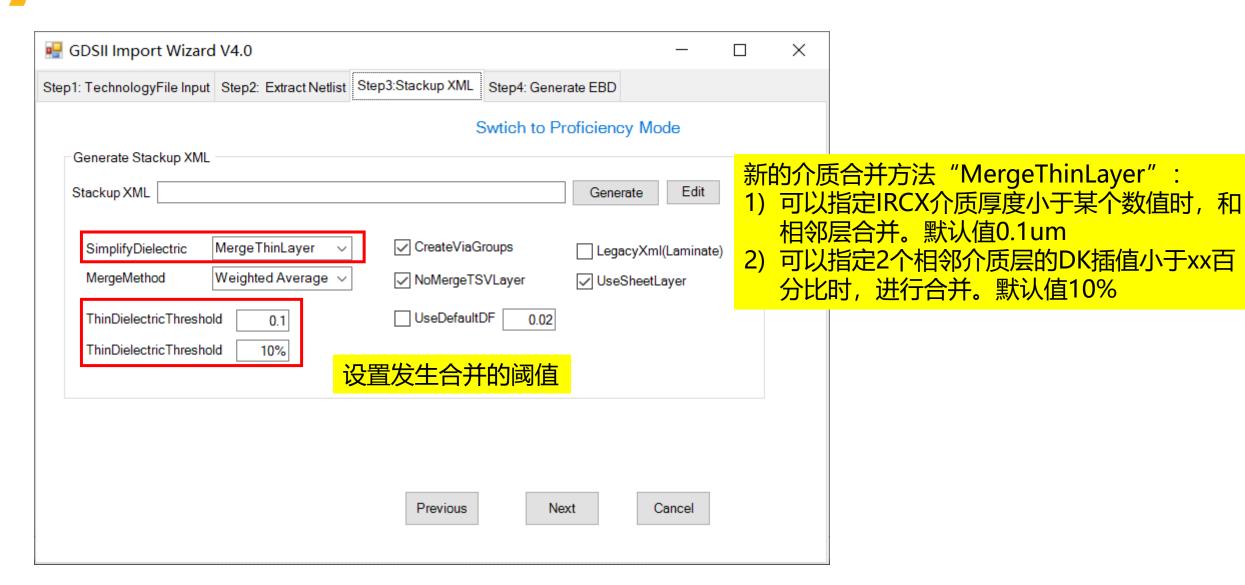
What is new in V4.0

- 新的介质层简化 (MergeThinLayer) 方式,适应性更强,更加稳定。
- 支持使用Sheet层简化薄层,比如0.001um的金属层。
- 增加Layers自动对齐功能,避免叠层运算引入的Small Gap,导致网格生成问题。
- · 引入配置文件,用户可以自定义设定值,部分UI没有展现的字段可以通过配置文件修改。
- · 修复了在V3.0反馈的小bug。



MergeThinLayer



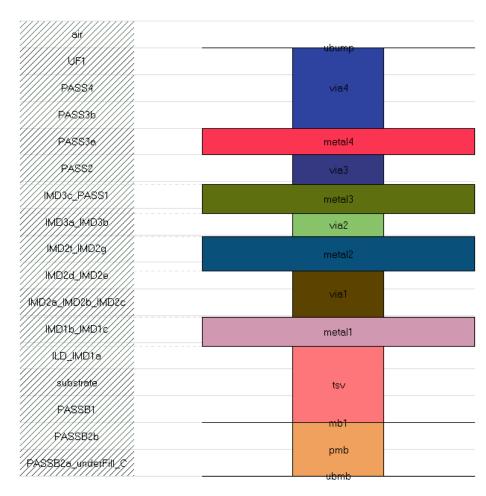


MergeThinLayer

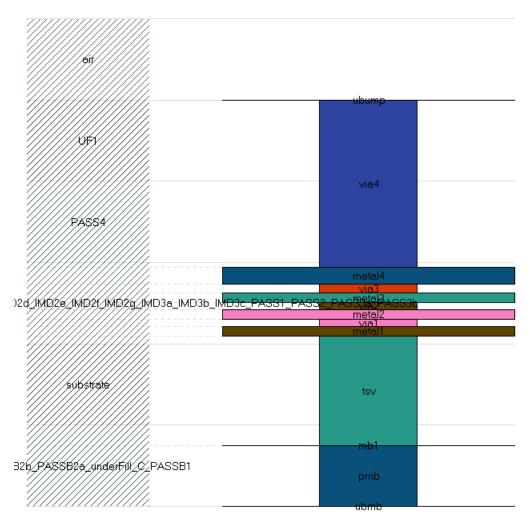
Tipe	* DIELECTRIC	25	11 (NAME: V,	TYPE:V, H	EIGHT:V,	THIC	KNESS:V,			
UF1 D 107.640000 35.000000 3.70 N/A PASS4 P 107.040000 0.600000 4.20 N/A PASS3b P 106.640000 0.400000 4.20 N/A PASS3b P 105.190000 1.450000 4.20 N/A PASS1 P 104.490000 0.700000 4.20 N/A PASS1 P 104.415000 0.075000 4.20 N/A IMD3c D 103.690000 0.725000 4.20 N/A IMD3b D 103.640000 0.950000 4.20 N/A IMD3a D 103.020000 0.620000 4.20 N/A IMD2g D 102.970000 0.950000 4.20 N/A IMD2c D 101.873000 0.725000 4.20 N/A IMD2c D 101.795000 0.950000 4.20 N/A IMD2c D 101.795000 0.080000 4.20 N/A IMD2b D 101.775000 0.080000 4.20 N/A IMD2c D 101.775000 0.080000 4.20 N/A IMD2b D 101.755000 0.200000 4.20 N/A IMD2c D 101.555000 0.050000 4.20 N/A IMD2c D 101.575000 0.200000 4.20 N/A IMD1c D 101.525000 0.050000 5.00 N/A IMD1c D 101.525000 0.050000 5.00 N/A IMD1c D 100.800000 0.725000 4.20 N/A IMD1c D 100.800000 0.755000 4.20 N/A IMD1c D 100.750000 0.050000 5.00 N/A IMD1a D 100.750000 0.050000 11.90 N/A IMD1b D 100.000000 0.750000 4.00 N/A IMD1a D 100.000000 0.750000 4.00 N/A IMD1b D 100.000000 0.750000 4.00 N/A IMD1a D 100.000000 0.750000 4.00 N/A IMD1b D 100.000000 0.750000 4.00 N/A IMD1a D 100.000000 0.750000 4.00 N/A IMD1b D 100.000000 0.750000 4.00 N/A IMD1a D 100.000000 0.750000 4.00 N/A IMD1a D 100.000000 0.750000 4.00 N/A IMD1b D 100.800000 0.750000 4.00 N/A IMD1a D 100.800000 0.750000 0.050000 8.10 N/A IMD1a D 100.800000 0.750000 4.00 N/A IMD1a D 100.000000 0.750000 4.00 N/A IMD1a D 100.800000 0.750000 4.00 N/A IMD1a D 100.800000 0.750000 0.050000 11.90 N/A IMD1a D 100.800000 0.0500000 0.050000 0.0500000 0.0500000 0.0500000 0.0500000 0.0500000 0.0500000 0.05000000 0.0500000 0.050000 0.0500000 0	FIELD	TYP	E HEIG	HT T	HICKNESS	CO	NSTANT			
PASS4 P 107.040000 0.600000 8.10 N/A PASS3b P 106.640000 0.400000 4.20 N/A PASS3a P 105.190000 1.450000 4.20 N/A PASS1 P 104.49000 0.705000 8.10 N/A IMD3c D 103.690000 0.725000 4.20 N/A IMD3b D 103.640000 0.620000 4.20 N/A IMD2g D 102.297000 0.050000 5.00 N/A IMD2g D 102.195000 0.725000 4.20 N/A IMD2d D 101.873000 0.322000 4.20 N/A IMD2c D 101.873000 0.322000 4.20 N/A IMD2b D 101.775000 0.018000 4.20 N/A IMD2c D 101.775000 0.018000 4.20 N/A IMD2b D 101.775000 0.018000 4.20 N/A IMD2c D 101.575000 0.050000 4.20 N/A IMD2a D 101.575000 0.018000 4.20 N/A IMD2a D 101.575000 0.050000 5.00 N/A IMD1b D 100.800000 0.725000 4.20 N/A IMD1b D 100.800000 0.725000 4.20 N/A IMD1b D 100.750000 0.050000 5.00 N/A IMD1b D 100.750000 0.050000 11.90 N/A IMD1b D 100.750000 0.050000 11.90 N/A IMD1b D 100.800000 0.755000 4.20 N/A IMD1b D 100.750000 0.050000 11.90 N/A IMD1b D 100.800000 0.755000 4.00 N/A IMD1b D 100.800000 0.755000 4.00 N/A IMD1b D 100.800000 0.755000 4.00 N/A IMD1b D 100.800000 0.7550000 0.0500000 4.00 N/A IMD1	NAME									
PASS3b	UF1	D	107.640000	35.000000	3	.70	N/A			
PASS3a P 105.190000 1.450000 4.20 N/A PASS2 P 104.490000 0.700000 4.20 N/A IMD3c D 103.690000 0.725000 4.20 N/A IMD3c D 103.690000 0.725000 4.20 N/A IMD3b D 103.640000 0.050000 ← 1.00 N/A IMD3a D 103.020000 0.620000 ← 1.00 N/A IMD2g D 102.970000 0.050000 ← 5.00 N/A IMD2g D 102.195000 0.725000 4.20 N/A IMD2e D 102.195000 0.050000 ← 8.10 N/A IMD2c D 101.873000 0.322000 4.20 N/A IMD2c D 101.873000 0.322000 4.20 N/A IMD2c D 101.775000 0.018000 4.20 N/A IMD2b D 101.775000 0.018000 4.20 N/A IMD2b D 101.775000 0.018000 4.20 N/A IMD2b D 101.555000 0.050000 4.20 N/A IMD1c D 101.555000 0.050000 4.20 N/A IMD1c D 101.525000 0.050000 5.00 N/A IMD1c D 100.800000 0.725000 4.20 N/A IMD1b D 100.800000 0.755000 4.20 N/A IMD1b D 100.800000 0.755000 4.20 N/A IMD1a D 100.750000 0.050000 8.10 N/A IMD1a D 100.750000 0.050000 11.90 N/A Substrate D 0.000000 0.7550000 4.00 N/A PASSB1 P -0.800000 0.800000 6.70 N/A PASSB2b P -2.800000 2.000000 6.70 N/A PASSB2b P -3.200000 0.400000 6.70 N/A	PASS4	P	107.040000	0.600000	8	.10	N/A			
PASS2	PASS3b	P	106.640000	0.400000	4	.20	N/A			
PASS1	PASS3a	P	105.190000	1.450000	4	.20	N/A			
IMD3c D 103.690000 0.725000 4.20 N/A IMD3b D 103.640000 0.050000 ← 0.10 N/A IMD2g D 102.970000 0.050000 ← 5.00 N/A IMD2f D 102.245000 0.725000 ← 8.10 N/A IMD2e D 102.195000 0.050000 ← 8.10 N/A IMD2c D 101.873000 0.322000 4.20 N/A IMD2c D 101.775000 0.080000 4.20 N/A IMD2b D 101.775000 0.018000 4.20 N/A IMD2a D 101.575000 0.200000 4.20 N/A IMD1c D 101.525000 0.050000 5.00 N/A IMD1c D 101.525000 0.050000 4.20 N/A IMD1b D 100.800000 0.725000 4.20 N/A IMD1b D 100.750000 0.050000 8.10 N/A IMD1a D 100.750000 0.050000 4.20 N/A IMD1a D 100.750000 0.050000 4.20 N/A IMD1a D 100.750000 0.050000 4.20 N/A IMD1a D 100.750000 0.050000 8.10 N/A IMD1a D 100.750000 0.750000 4.00 N/A IMD1a D 100.750000 0.750000 4.00 N/A IMD1b D 100.800000 0.750000 4.00 N/A IMD1a D 100.750000 0.750000 4.00 N/A IMD1a D 100.750000 0.750000 4.00 N/A IMD1b D 100.800000 0.750000 4.00 N/A IMD1a D 100.750000 0.750000 4.00 N/A IMD1b D 100.800000 0.750000 4.00 N/A IMD1a D 100.750000 0.750000 4.00 N/A IMD1b D 100.800000 0.750000 4.00 N/A IMD1a D 100.750000 0.750000 4.00 N/A IMD1a D 100.750000 0.750000 4.00 N/A IMD1a D 100.750000 0.750000 4.00 N/A IMD1b D 100.800000 0.750000 4.00 N/A IMD1a D 100.750000 0.750000 4.00 N/A IMD1a D 100.750000 0.750000 4.00 N/A IMD1a D 100.750000 0.750000 4.00 N/A IMD1a D 100.800000 0.750000 4.00 N/A IMD1a D 100.800000 0.750000 4.00 N/A IMD1a D 100.750000 0.800000 6.70 N/A IMD1a D 100.750000 0.800000 6.70 N/A IMD1a D 100.800000 0.800000 6.70 N/A IMD1a D 100.800000 0.750000 0.750000 4.00 N/A IMD1a D 100.750000 0.050000 0.750000 4.00 N/A IMD1a D 100.750000 0.050000 0.050000 6.70 N/A IMD1a D 100.750000 0.05	PASS2	P	104.490000	0.700000	4	.20	N/A			
IMD3b	PASS1	P	104.415000	0.075000	8	.10	N/A			
IMD3a	IMD3c	D	103.690000	0.725000	4	.20	N/A			
IMD3a	IMD3b	D	103.640000	0.050000	√ 8	.10	N/A	Thick	ness<0.1um	合并到相邻层
IMD2f IMD2e D 102.195000 0.050000 IMD2d D 101.873000 0.322000 4.20 N/A IMD2c D 101.775000 0.080000 4.20 N/A IMD2b D 101.575000 0.018000 4.20 N/A IMD2a D 101.575000 0.200000 4.20 N/A IMD1c D 101.525000 0.050000 5.00 N/A IMD1c D 100.800000 0.725000 4.20 N/A IMD1b D 100.800000 0.725000 4.20 N/A IMD1a D 100.750000 0.050000 8.10 N/A IMD1a D 100.750000 0.050000 8.10 N/A ILD D 100.000000 0.750000 4.00 N/A Substrate D 0.000000 100.000000 11.90 N/A PASSB1 P -0.800000 0.800000 6.70 PASSB2b P -2.800000 2.000000 6.70 PASSB2b P -3.200000 0.400000 6.70 PASSB2a P -3.200000 0.400000 6.70	IMD3a	D	103.020000	0.620000	4	.20	N/A			
IMD2e	IMD2g	D	102.970000	0.050000	√ 5	.00	N/A	优先 台	5开到DK值接	近的相邻层
IMD2d D 101.873000 0.322000 4.20 N/A IMD2c D 101.793000 0.080000 4.20 N/A IMD2b D 101.775000 0.018000 4.20 N/A IMD2a D 101.575000 0.200000 4.20 N/A IMD1c D 100.800000 0.725000 5.00 N/A IMD1b D 100.750000 0.050000 8.10 N/A IMD1a D 100.750000 0.750000 4.00 N/A ILD D 100.000000 0.750000 4.00 N/A substrate D 0.000000 10.000000 6.70 N/A PASSB1 P -0.800000 0.800000 6.70 N/A PASSB2a P -3.200000 0.400000 6.70 N/A N/A	IMD2f	D	102.245000		4	.20	N/A	ロバ古	<u> </u>	一一、十、十八二 寸7+5;一各
IMD2c D 101.793000 0.080000 4.20 N/A IMD2b D 101.775000 0.018000 4.20 N/A IMD2a D 101.575000 0.200000 4.20 N/A IMD1c D 101.525000 0.050000 5.00 N/A IMD1b D 100.800000 0.725000 4.20 N/A IMD1a D 100.750000 0.050000 8.10 N/A ILD D 100.000000 0.750000 4.00 N/A substrate D 0.000000 100.000000 6.70 N/A PASSB1 P -0.800000 0.800000 6.70 N/A PASSB2b P -2.800000 2.000000 6.70 N/A PASSB2a P -3.200000 0.400000 6.70 N/A	IMD2e	D	102.195000	0.050000	8	.10	N/A	DNIE:	云汉炽匹处的	刀/太近1] 干均 应身
IMD2b D 101.775000 0.018000 4.20 N/A IMD2a D 101.575000 0.200000 4.20 N/A IMD1c D 101.525000 0.050000 5.00 N/A IMD1b D 100.800000 0.725000 4.20 N/A IMD1a D 100.750000 0.050000 8.10 N/A ILD D 100.000000 0.750000 4.00 N/A substrate D 0.000000 100.000000 11.90 N/A PASSB1 P -0.800000 0.800000 6.70 N/A PASSB2b P -2.800000 2.000000 6.70 N/A PASSB2a P -3.200000 0.400000 6.70 N/A	IMD2d	D	101.873000	0.322000	4	.20	N/A			
IMD2a D 101.575000 0.200000 4.20 N/A IMD1c D 101.525000 0.050000 5.00 N/A IMD1b D 100.800000 0.725000 4.20 N/A IMD1a D 100.750000 0.050000 8.10 N/A ILD D 100.000000 0.750000 4.00 N/A substrate D 0.000000 100.000000 11.90 N/A PASSB1 P -0.800000 0.800000 6.70 N/A PASSB2b P -2.800000 2.000000 6.70 N/A PASSB2a P -3.200000 0.400000 6.70 N/A	IMD2c	D	101.793000	0.080000	4	.20	N/A			
IMD1c D 101.525000 0.050000 5.00 N/A IMD1b D 100.800000 0.725000 4.20 N/A IMD1a D 100.750000 0.050000 8.10 N/A ILD D 100.000000 0.750000 4.00 N/A substrate D 0.000000 100.000000 11.90 N/A PASSB1 P -0.800000 0.800000 6.70 N/A PASSB2b P -2.800000 2.000000 6.70 N/A PASSB2a P -3.200000 0.400000 6.70 N/DK值一致,发生合并	IMD2b	D	101.775000	0.018000	4	.20	N/A			
IMD1b D 100.800000 0.725000 4.20 N/A IMD1a D 100.750000 0.050000 8.10 N/A ILD D 100.000000 0.750000 4.00 N/A substrate D 0.000000 100.000000 11.90 N/A PASSB1 P -0.800000 0.800000 6.70 N/A PASSB2b P -2.800000 2.000000 6.70 N/A PASSB2a P -3.200000 0.400000 6.70 N/A	IMD2a	D	101.575000	0.200000	4	.20	N/A			
IMD1a D 100.750000 0.050000 8.10 N/A ILD D 100.000000 0.750000 4.00 N/A substrate D 0.000000 100.000000 11.90 N/A PASSB1 P -0.800000 0.800000 6.70 N/A PASSB2b P -2.800000 2.000000 6.70 N/A PASSB2a P -3.200000 0.400000 6.70 N/A The control of the co	IMD1c	D	101.525000	0.050000	5	.00	N/A			
ILD D 100.000000 0.750000 4.00 N/A substrate D 0.000000 100.000000 11.90 N/A PASSB1 P -0.800000 0.800000 6.70 N/A PASSB2b P -2.800000 2.000000 6.70 N/A N/A PASSB2a P -3.200000 0.400000 6.70 N/A N/A N/A	IMD1b	D	100.800000	0.725000	4	.20	N/A			
substrate D 0.000000 100.000000 11.90 N/A PASSB1 P -0.800000 0.800000 6.70 PASSB2b P -2.800000 2.000000 6.70 PASSB2a P -3.200000 0.400000 6.70	IMD1a	D	100.750000	0.050000	8	.10	N/A			
PASSB1 P -0.800000 0.800000 6.70 N/A PASSB2b P -2.800000 2.000000 6.70 N/DK值一致,发生合并 PASSB2a P -3.200000 0.400000 6.70	ILD	D	100.000000	0.750000	4	.00	N/A			
PASSB2b P -2.800000 2.000000 6.70 N/DK值一致,发生合并 6.70 DK值一致,发生合并	substrate	D	0.000000	100.00000	0 11	.90	N/A			
PASSB2a P -3.200000 0.400000 6.70 N/	PASSB1	P	-0.800000	0.800000	6	.70				
PASSB2a P -3.200000 0.400000 6.70 N/	PASSB2b	P	-2.800000	2.000000			> N/ DK/	古——致	发生合并	
underFill_C D -3.201000 0.001000 6.70 N/A		_					N/		人 土口/1	
	underFill_C	D	-3.201000	0.001000	6	.70	N/A			



MergeThinLayer



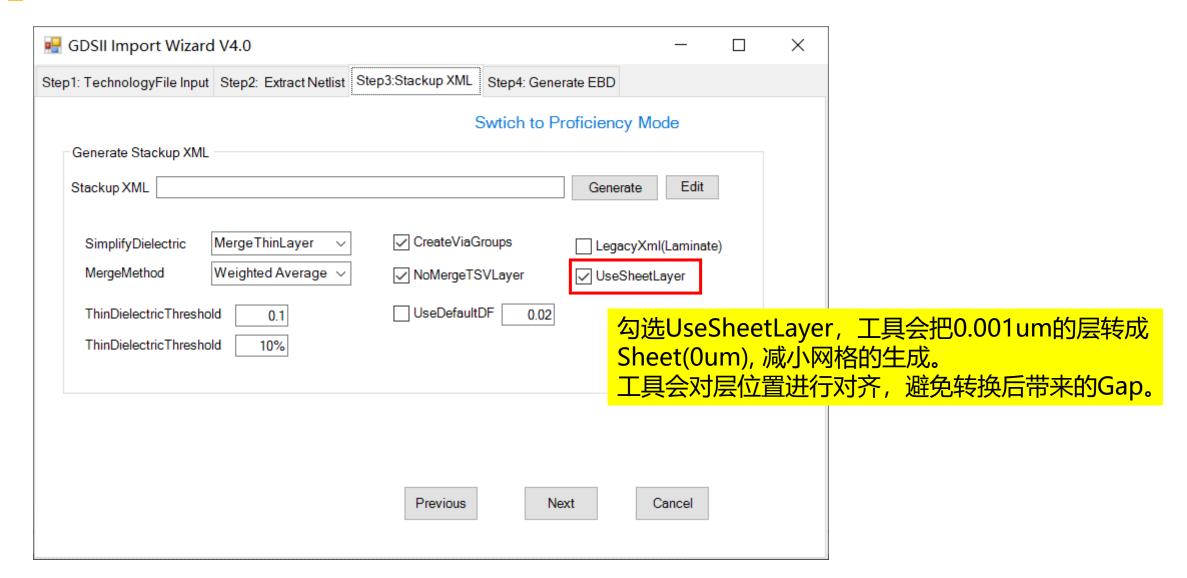
thinDielectricThreshold = 0.1 dkDeviationThreshold = -1



thinDielectricThreshold = 0.1 dkDeviationThreshold = 0.1



UseSheetLayer





Configuration字段配置 (JSON文件)

首次运行,会在工具目录下生成gds2xml.json配置文件,通过修改配置文件中的字段,可以修改工具的默认配置。



"simplifyIgnoreLayersReg": ".*tsv.*"

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Configuration字段配置 (JSON文件)

thinDielectricThreshold, dkDeviationThreshold字段,控制MergeThinLayer的行为:

	thin Dielectric Threshold	dkDeviationThreshold	Note	
1	0.1	0.1	Merge when layer thickness < 0.1 um, or 2 layers dk difference less than 10%	
2	0.05	-1	Only merge when layer thickness < 0.05 um	
3	-1	0.05	Only merge when 2 layers dk difference less than 5%	

useSheetLayer, sheetLayerThreshold字段,控制是否使用SheetLayer提示求解效率:

	default	Note
useSheetLayer	true	true: use SheetLayer, false: not use
sheetLayerThreshold	0.0015	Default value is <0.0015um will use SheetLayer if useSheetLayer is true. The unit is "um"

