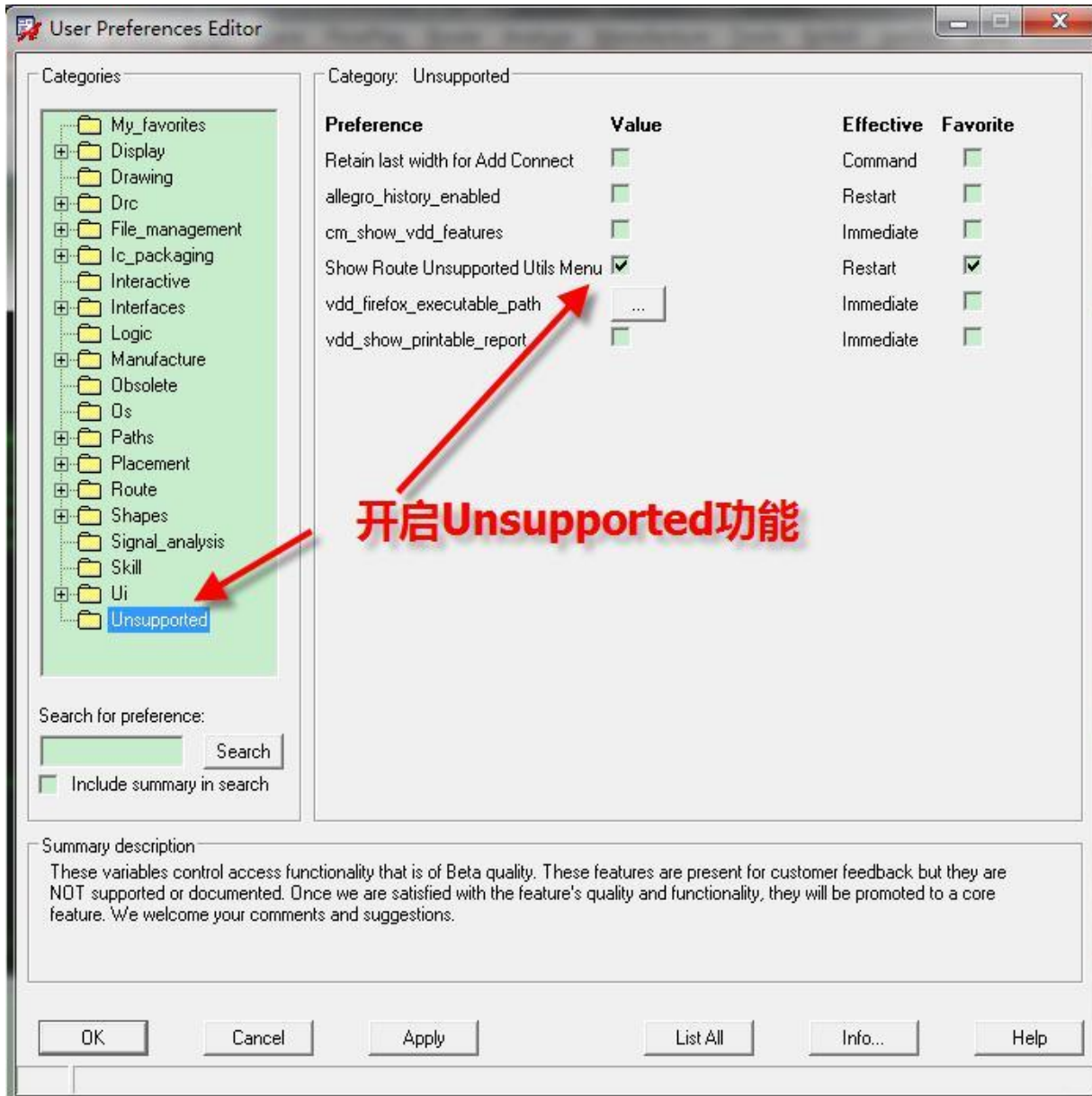


Auto Interactive Delay Tune (AiDT)——自动等长介绍

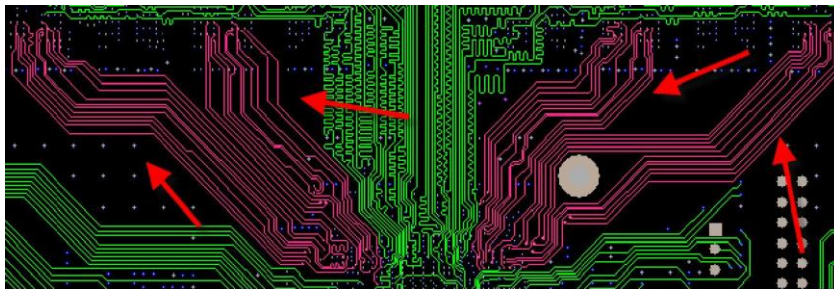
最近有人问到自动等长的一些问题，这里和大家分享一下 Allegro 的 AiDT 功能，希望有所帮助。

首先，要在 User Preferences Editor 下开启 Unsupported 功能；



其次，要在 Allegro Constraint Manager 里面加好要绕线的 BUS 和 MGrp；

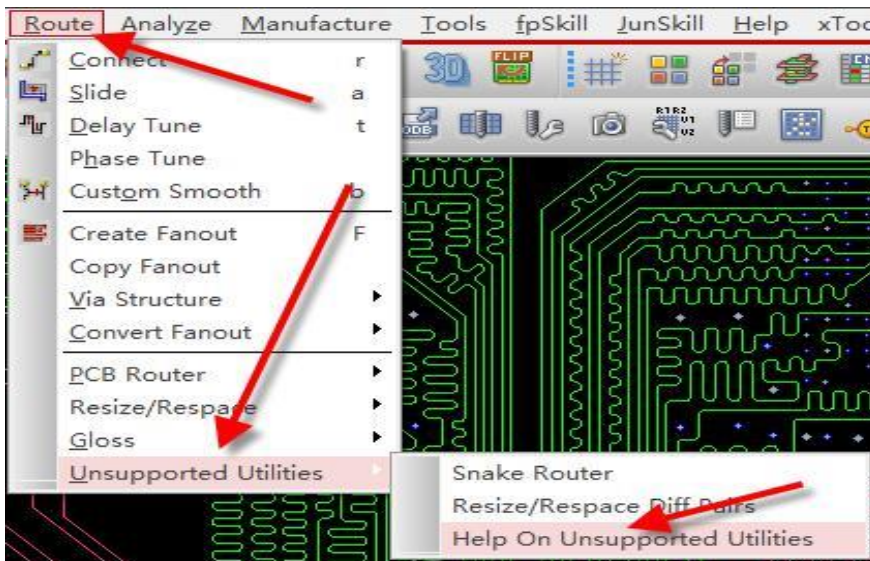
以下四组 DDR3 数据线为例：



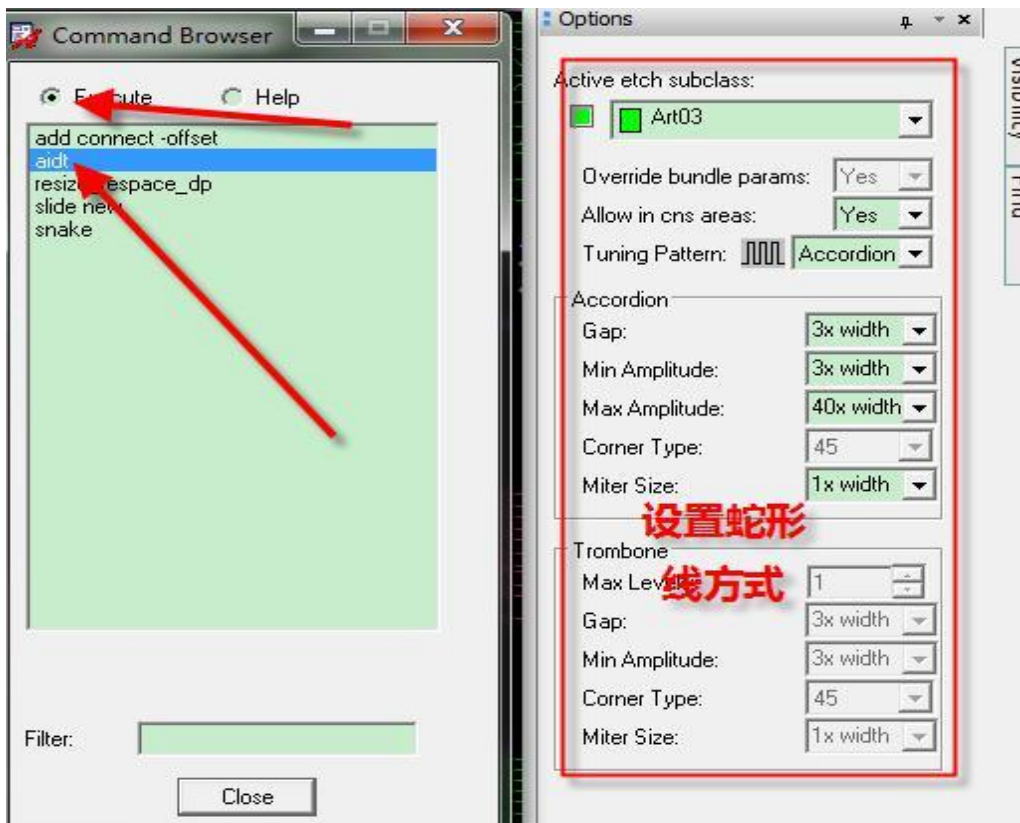
MGrp	MG_DDR0_D_0_7 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL	374.3 MIL
MGrp	MG_DDR0_D_8_15 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL	
MGrp	MG_DDR0_D_16_23 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL	296.593 MIL
MGrp	MG_DDR0_D_24_31 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL	
MGrp	MG_DDR0_U0_U8_AC (27)	All Drivers/All Rece...	Global	0.000 MIL:5.000 MIL	
MGrp	MG_DDR0_U0_U6_AC (27)	All Drivers/All Rece...	Global	0.000 MIL:5.000 MIL	
MGrp	MG_DDR0_U8_U7_AC (27)	All Drivers/All Rece...	Global	0.000 MIL:5.000 MIL	
MGrp	MG_DDR0_U8_U5_AC (27)	All Drivers/All Rece...	Global	0.000 MIL:5.000 MIL	
MGrp	MG_DDR1_D_0_7 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL	216.63 MIL
MGrp	MG_DDR1_D_8_15 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL	
MGrp	MG_DDR1_D_16_23 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL	313.783 MIL

MGrp	MG_DDR0_D_16_23 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL	296.593 MIL
DDR0_D0M2	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	75.767 MIL	
U1_G0:U8:B7	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	95.757 MIL	1536.363
DDR0_D0S2	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	119.757 MIL	
U1_B0:U8:C3	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	119.762 MIL	1542.368
DDR0_D0C29	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	116.412 MIL	
U1_A0:U8:D0	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	136.412 MIL	1545.708
DDR0_D06	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	296.893 MIL	
U1_C0:U8:B5	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	316.593 MIL	1565.127
DDR0_D07	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	179.537 MIL	
U1_A7:U8:C7	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	199.637 MIL	1482.502
DDR0_D08	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	49.24 MIL	
U1_H0:U8:C2	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	60.249 MIL	1621.896
DDR0_D09	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	151.797 MIL	
U1_B7:U8:C8	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	171.797 MIL	1519.323
DDR0_D20	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	123.952 MIL	
U1_F0:U8:E3	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	143.952 MIL	1538.167
DDR0_D21	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	173.952 MIL	
U1_D0:U8:I8	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	173.952 MIL	1602.126
DDR0_D22	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	148.166 MIL	
U1_F9:U8:D2	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	168.166 MIL	1513.954
DDR0_D23	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	49.643 MIL	
U1_E7:U8:E7	All Drivers/All Receivers	Global	0.000 MIL:20.000 MIL	69.643 MIL	1612.477
MG_DDR0_D_24_31 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL	49.643 MIL	

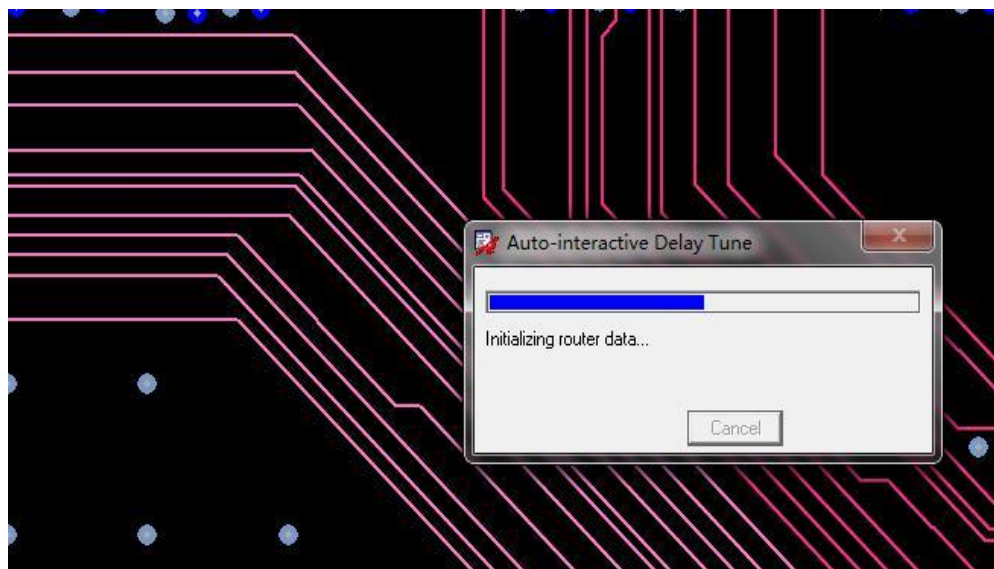
Allegro 里面的操作步骤如下：



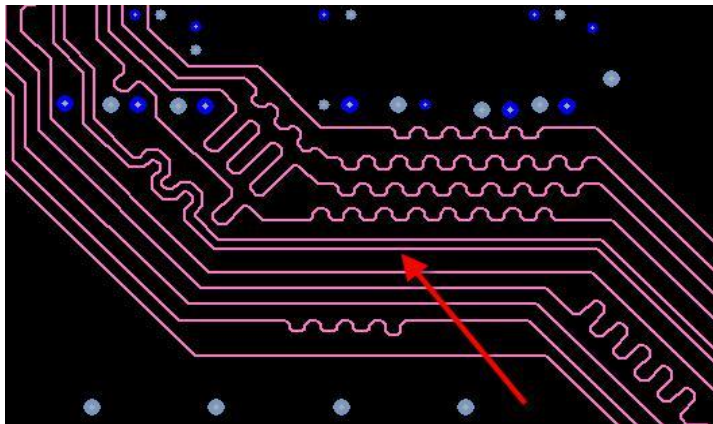
Allegro 里面的操作步骤如下：



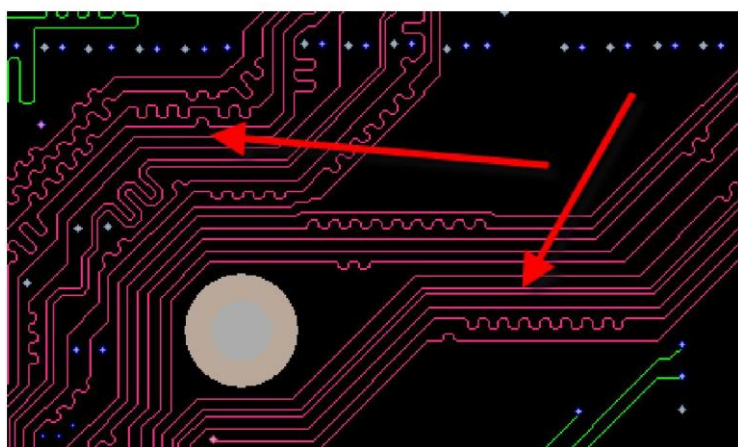
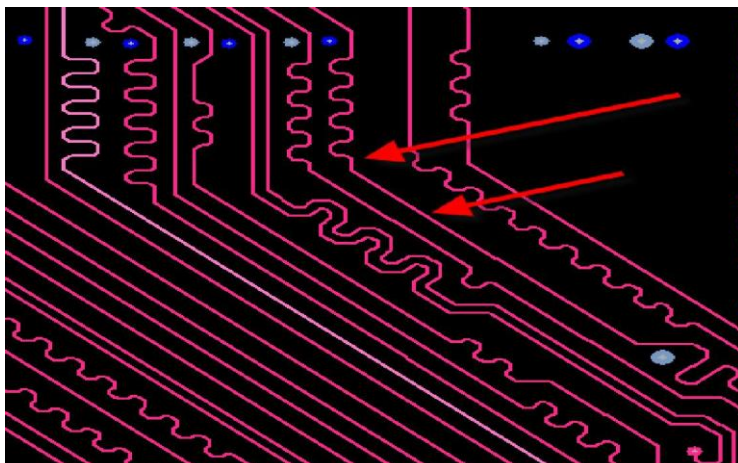
框选所要绕的 MG 组别，正在运行自动绕线工具；



片刻后，绕线 ok



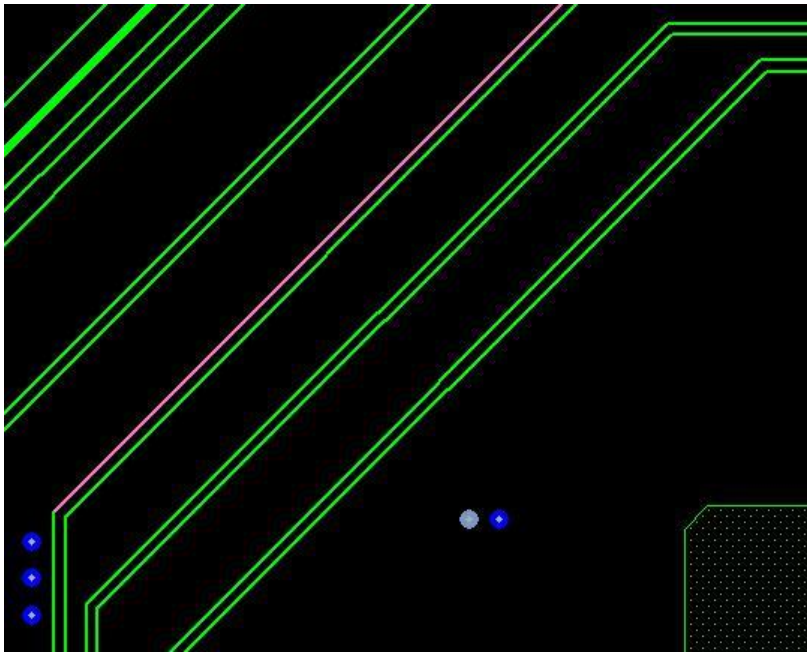
同样其他三组也很快搞定；



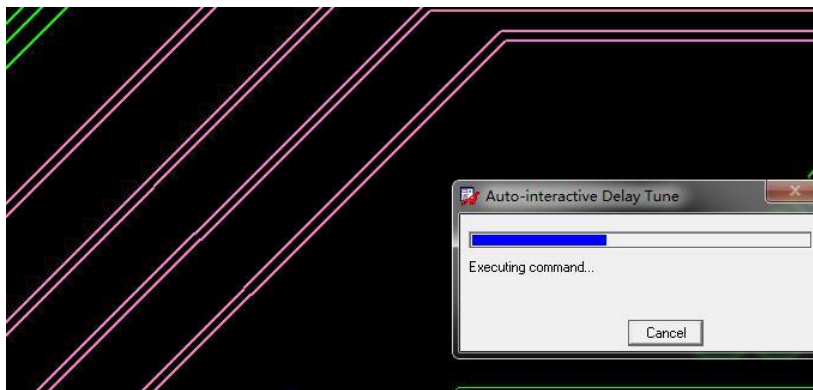
查看 Allegro Constraint Manager 全部 ok!!!

GMU-1 (10)									
MG_DDR0_D_0_7 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL						
MG_DDR0_D_8_15 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL						
MG_DDR0_D_16_23 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL						
MG_DDR0_D_24_31 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL						
MG_DDR0_U1_U9_AC (27)	All Drivers/All Rece...	Global	0.000 MIL:5.000 MIL						
MG_DDR0_U7_U6_AC (27)	All Drivers/All Rece...	Global	0.000 MIL:5.000 MIL						
MG_DDR0_U8_U7_AC (27)	All Drivers/All Rece...	Global	0.000 MIL:5.000 MIL						
MG_DDR0_U9_U8_AC (27)	All Drivers/All Rece...	Global	0.000 MIL:5.000 MIL						
MG_DDR1_D_0_7 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL						
MG_DDR1_D_8_15 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL						
MG_DDR1_D_16_23 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL						
MG_DDR1_D_24_31 (11)	All Drivers/All Rece...	Global	0.000 MIL:20.000 MIL						
MG_DDR1_U1_U13_AC (26)	All Drivers/All Rece...	Global	0.000 MIL:5.000 MIL						
MG_DDR1_U11_U10_AC (26)	All Drivers/All Rece...	Global	0.000 MIL:5.000 MIL						
MG_DDR1_U12_U11_AC (26)	All Drivers/All Rece...	Global	0.000 MIL:5.000 MIL						
MG_DDR1_U13_U12_AC (26)	All Drivers/All Rece...	Global	0.000 MIL:5.000 MIL						
MG_DVI_IN0 (8)									

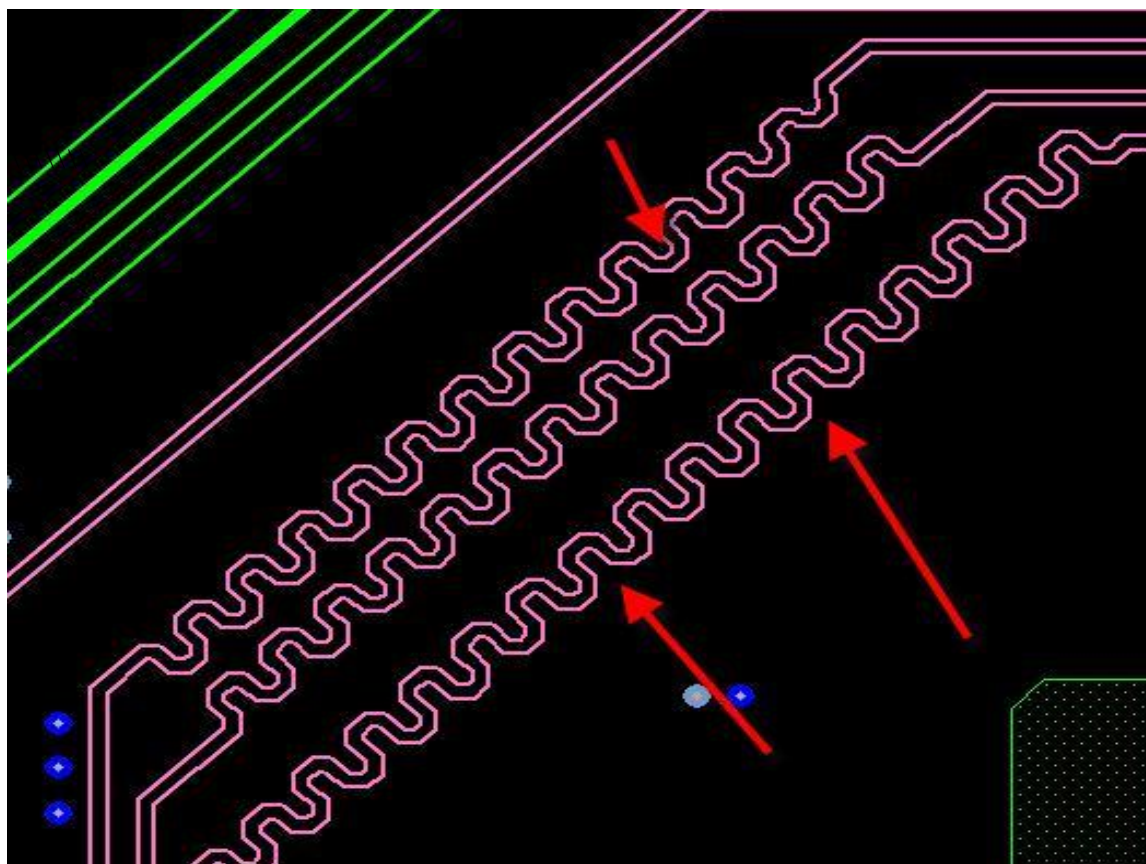
对于差分绕线也一样;



运行中.....



绕线 ok!



这个工具可极大的提高绕线效率，值得尝试！

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