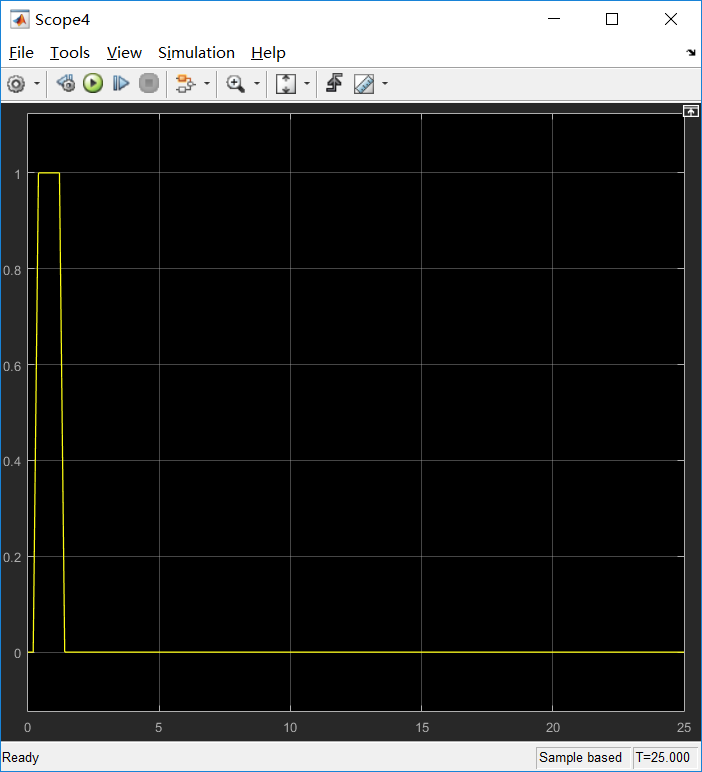
**SIL测试报告**

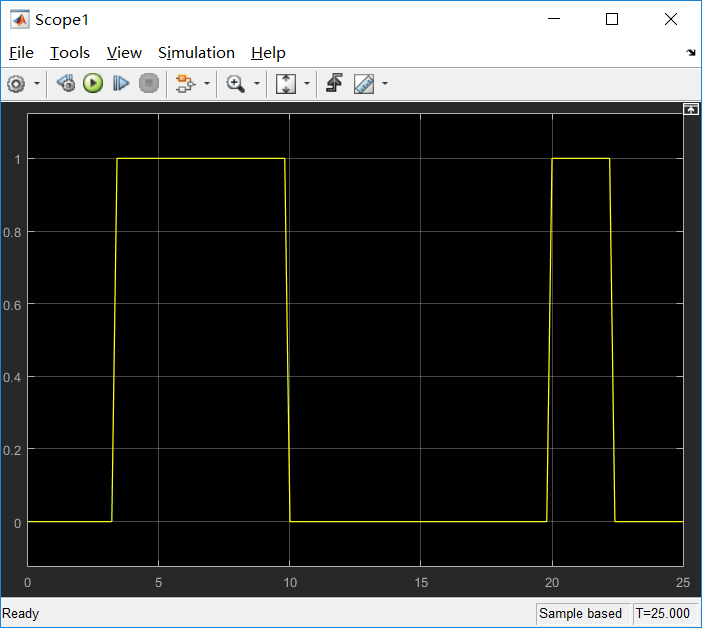
二零一七年十一月四日

**SIL结果**

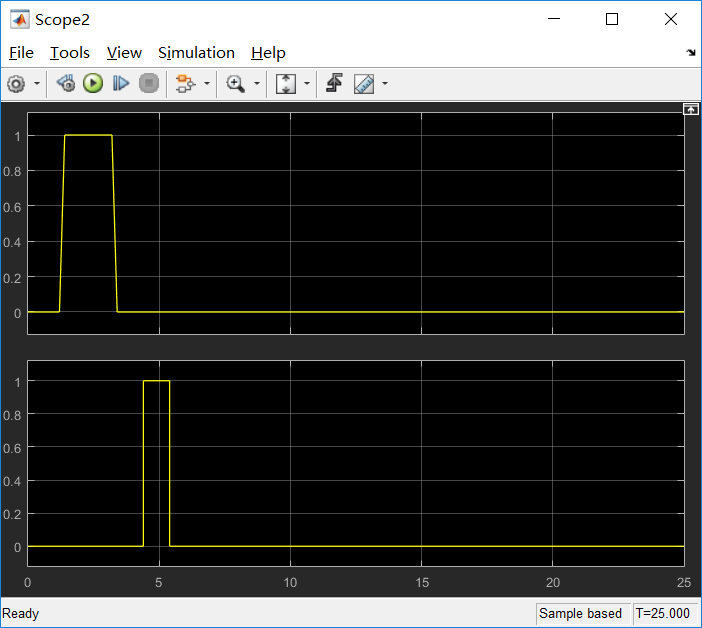
在未进行SIL分析，6个状态机的状态下的相对应的示波器的图像如图所示



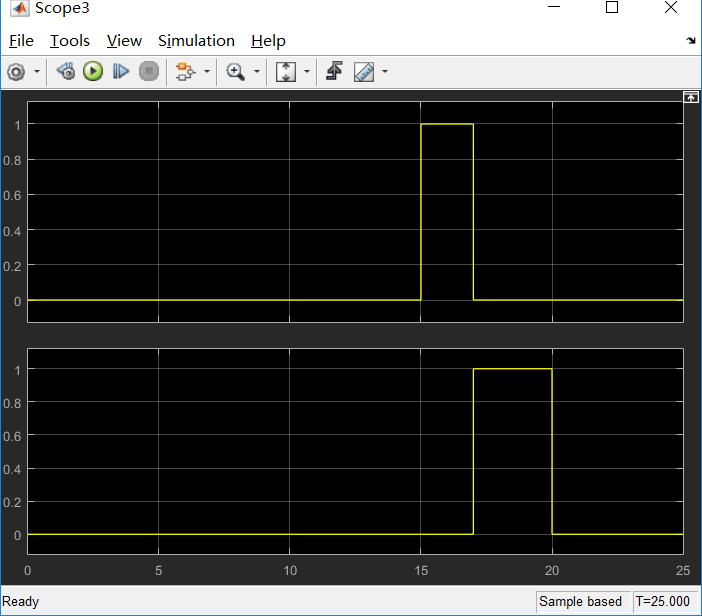
Conveyor\_Motor1波形



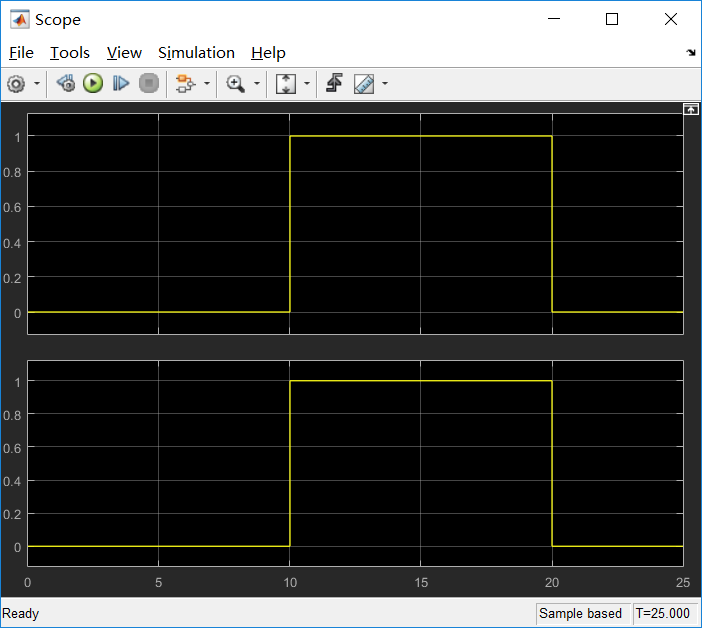
Conveyor\_Motor波形



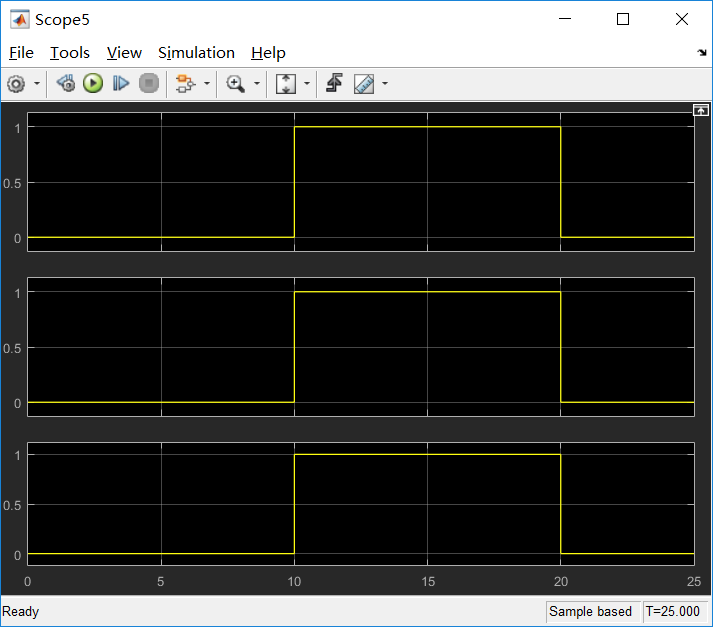
Feeder\_Motor波形



Mix波形

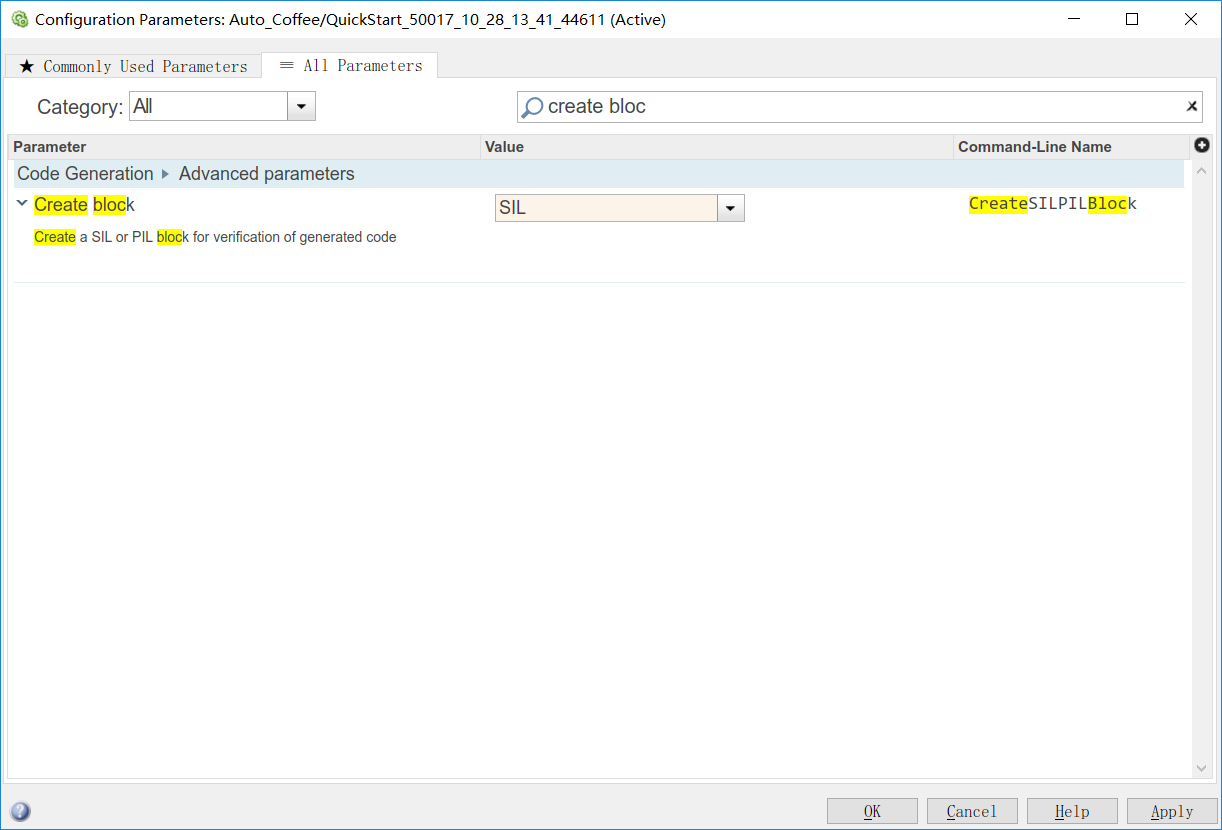


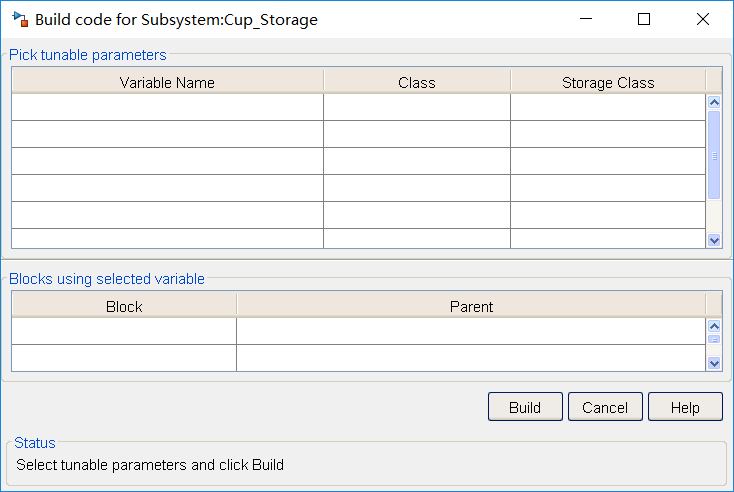
HOT WATER波形

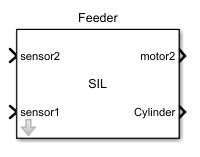
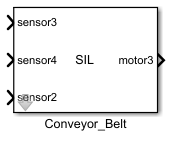
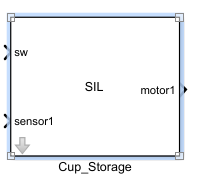


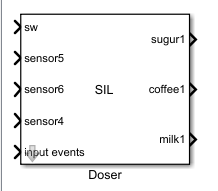
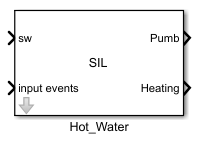
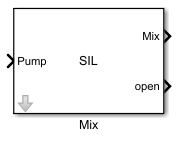
Doser波形

接着进行SIL测试，查阅资料之后，决定使用block的办法仿真

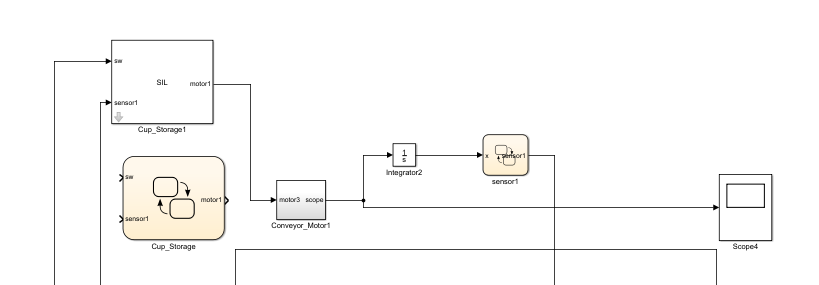


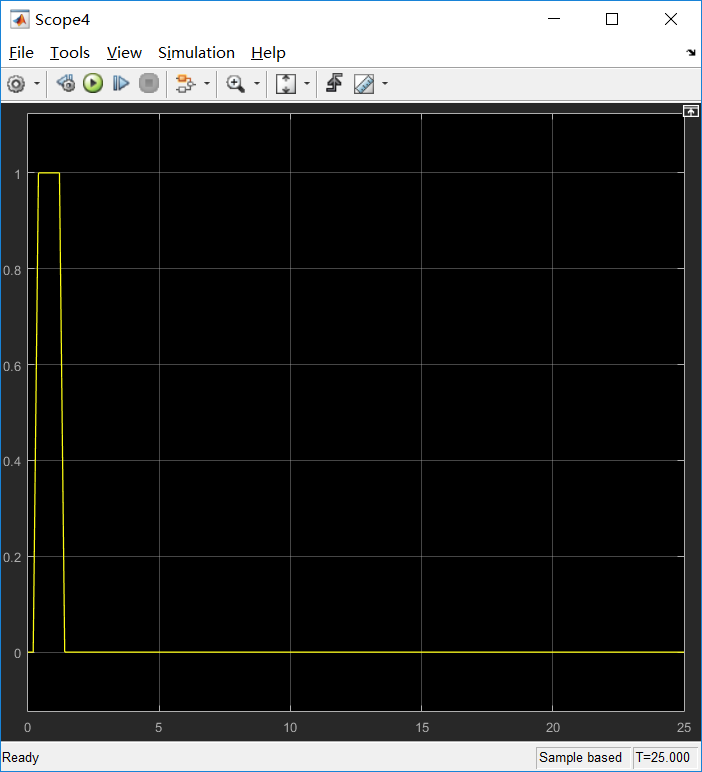




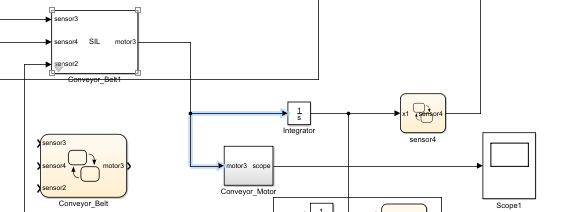
 

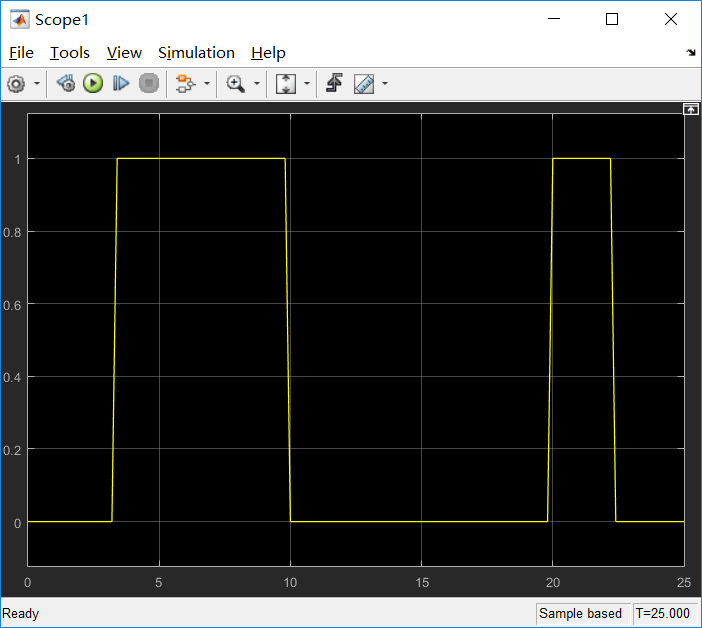
按照上图的方法生成各个状态机对应的block，先一个个带入看是否会有问题。



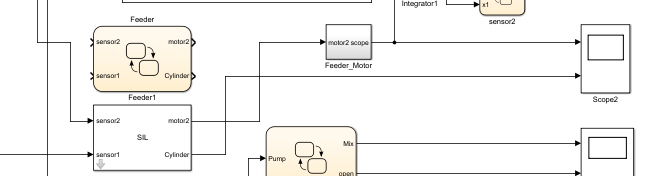


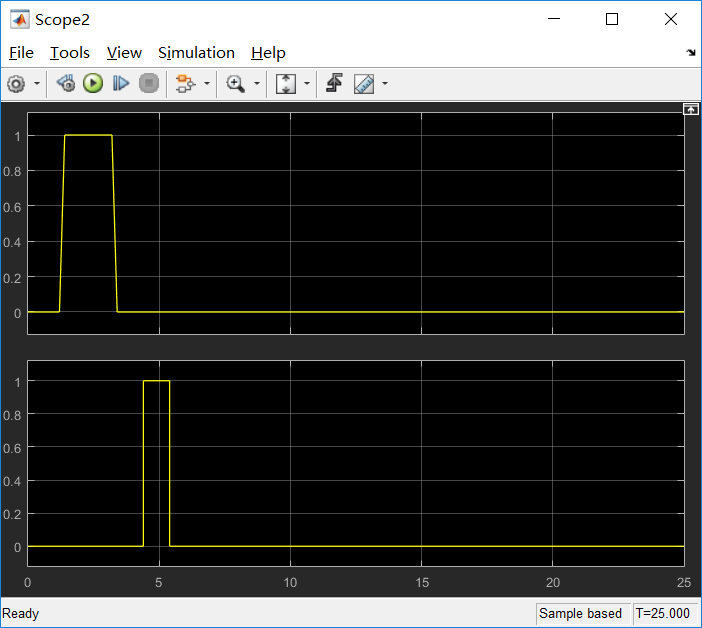
Conveyor\_Motor1



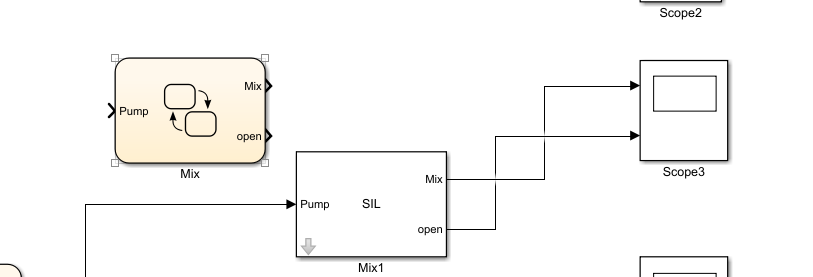


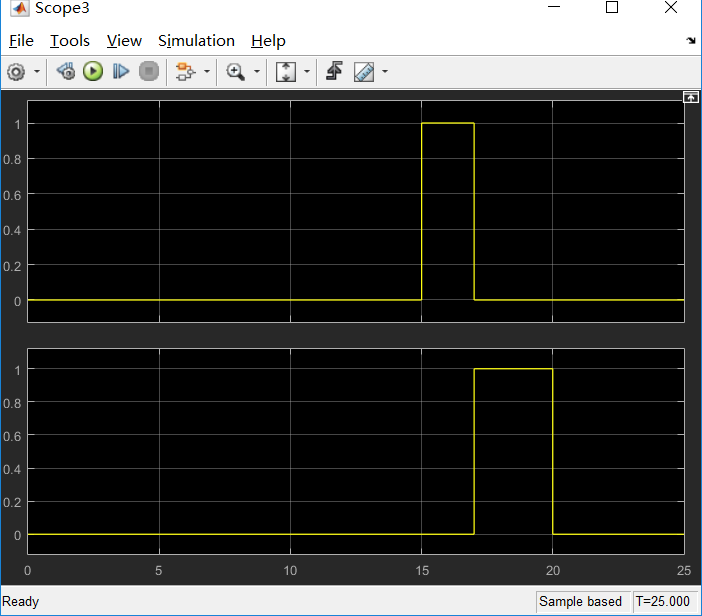
Conveyor\_Motor



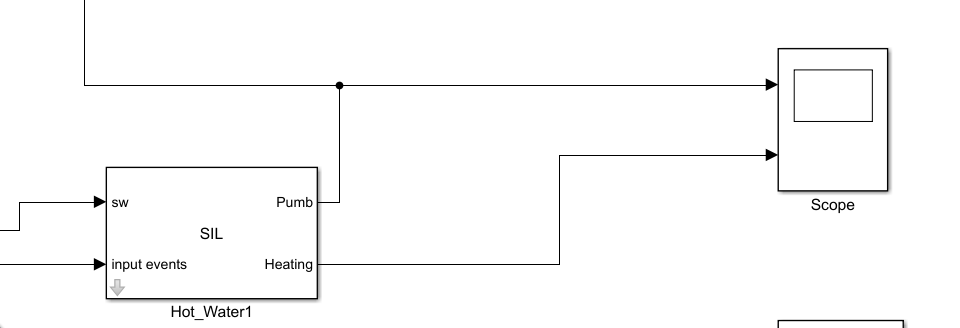


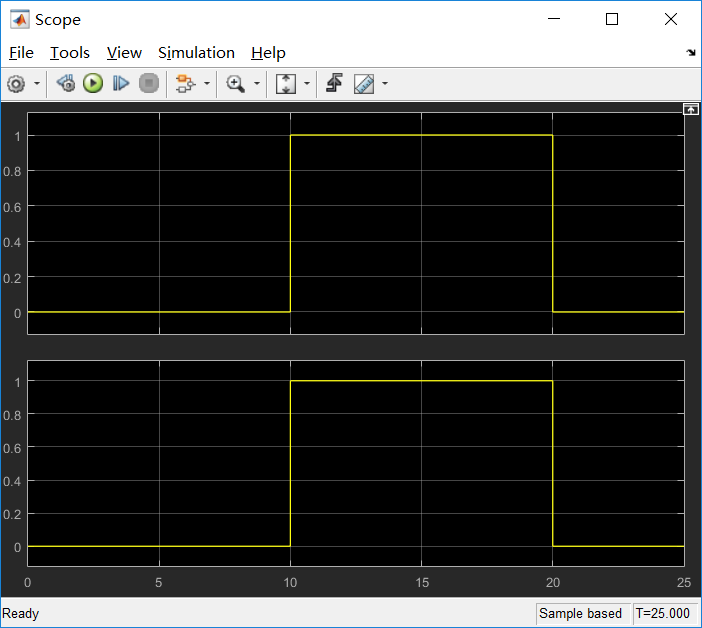
Feeder\_Motor



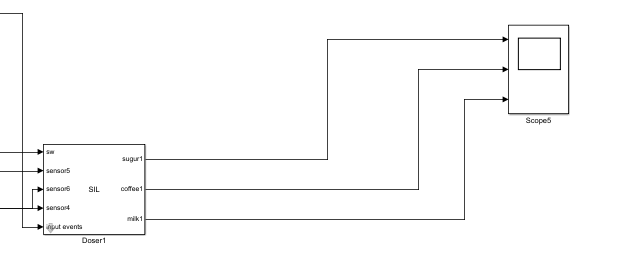


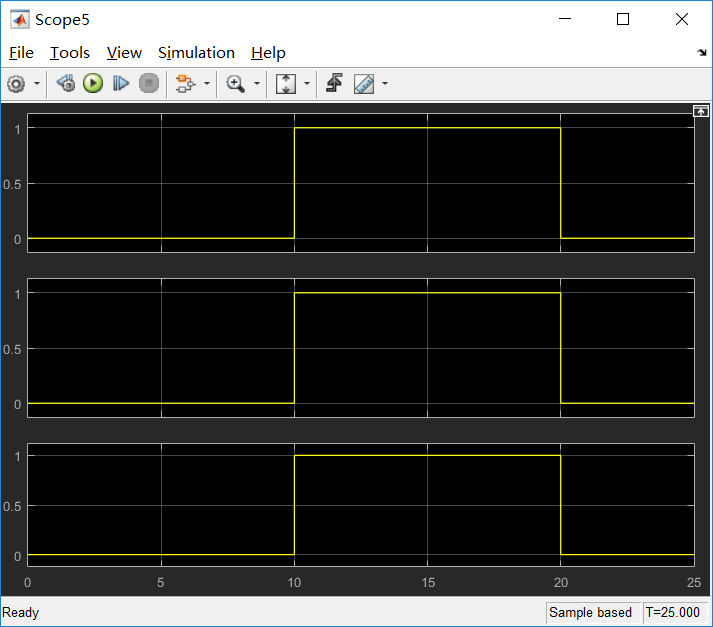
Mix



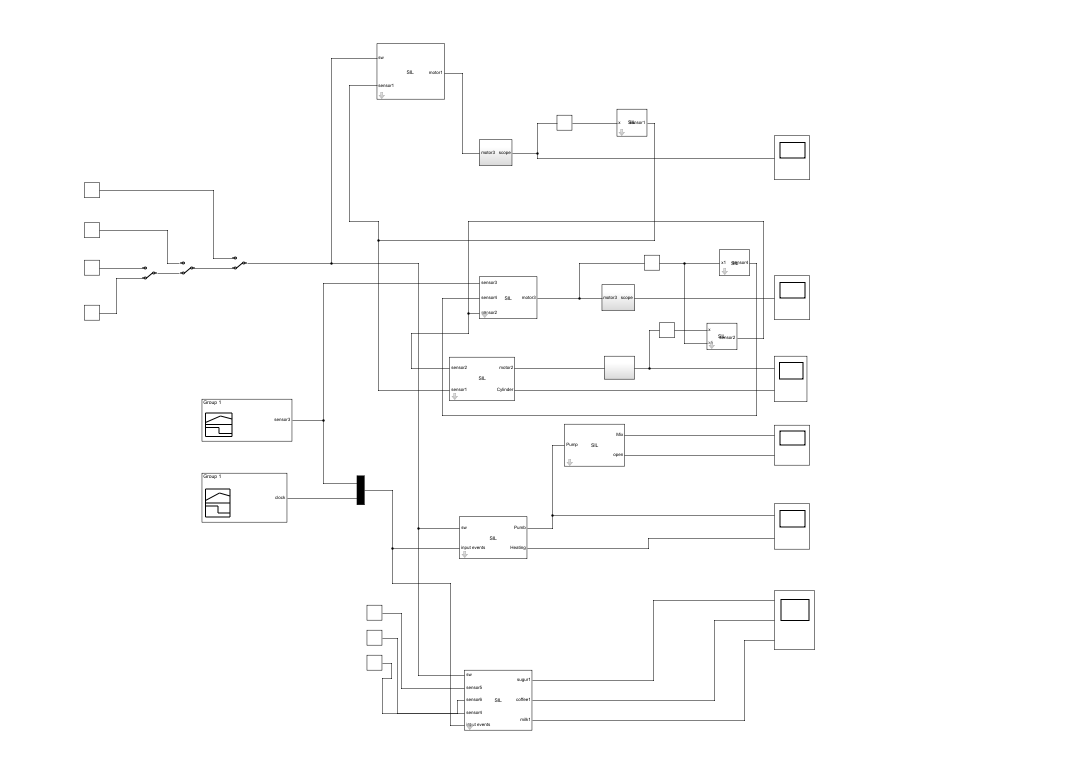


HOT WATER

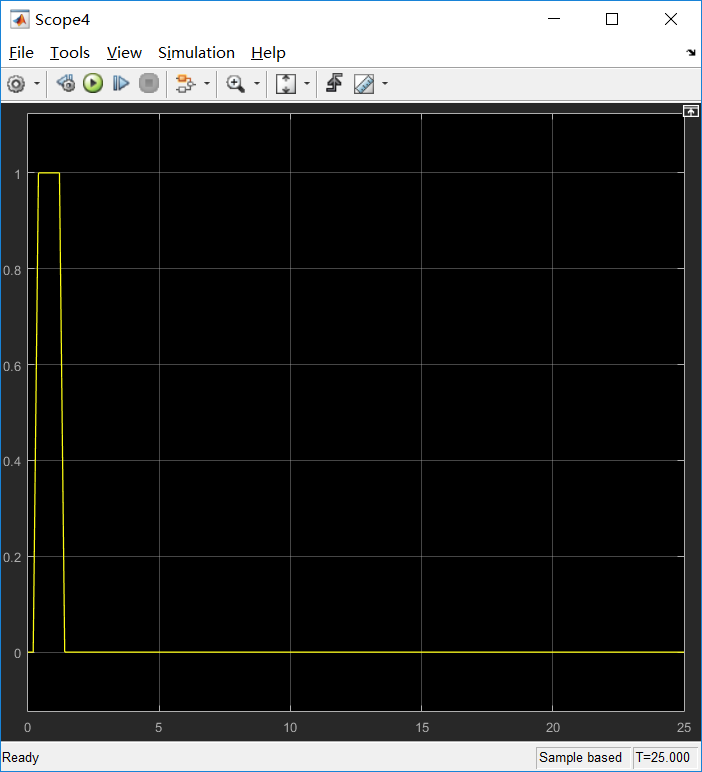




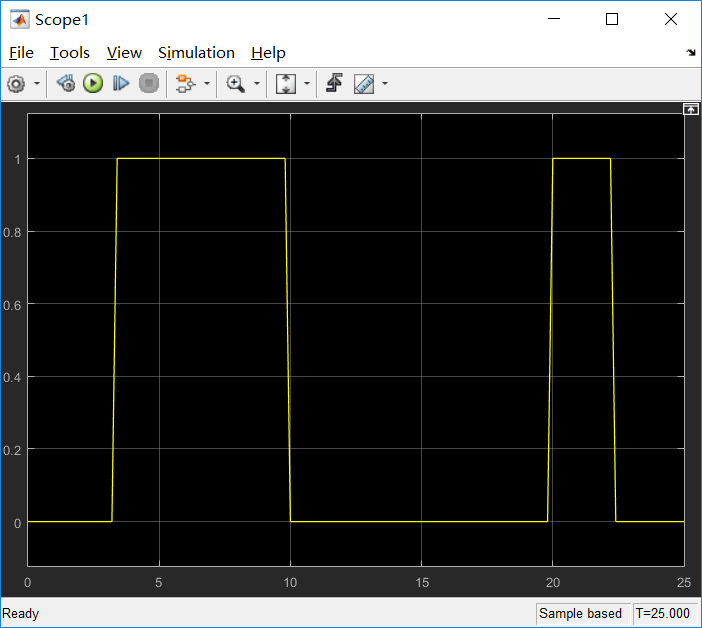
Doser



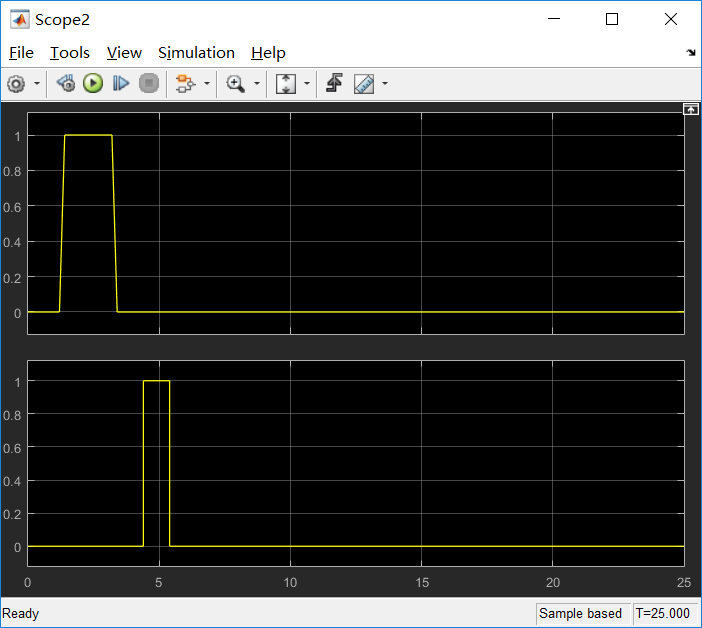
在每个部分检测没有问题之后，将所有block装入，再次查看是否会有问题。



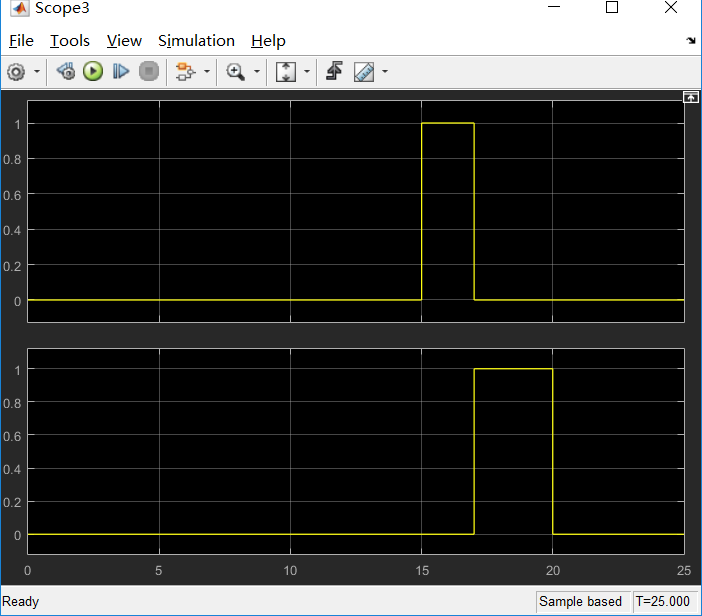
Conveyor\_Motor1



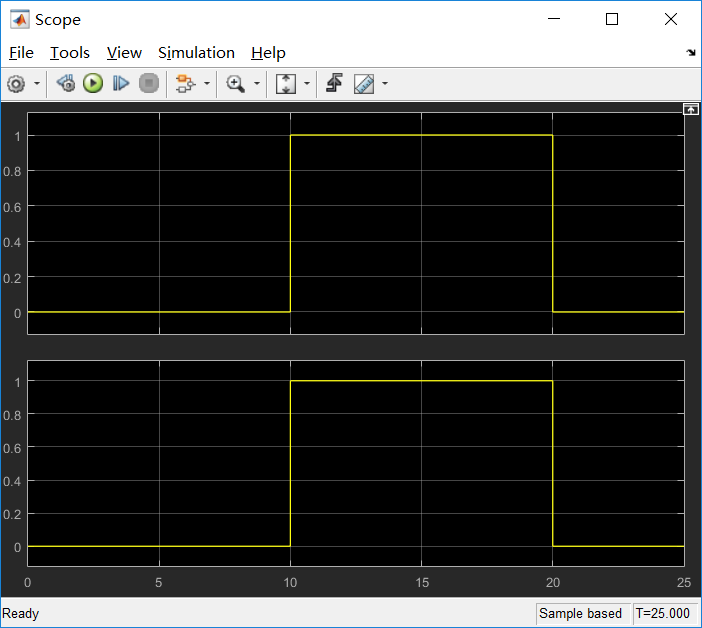
Conveyor\_Motor



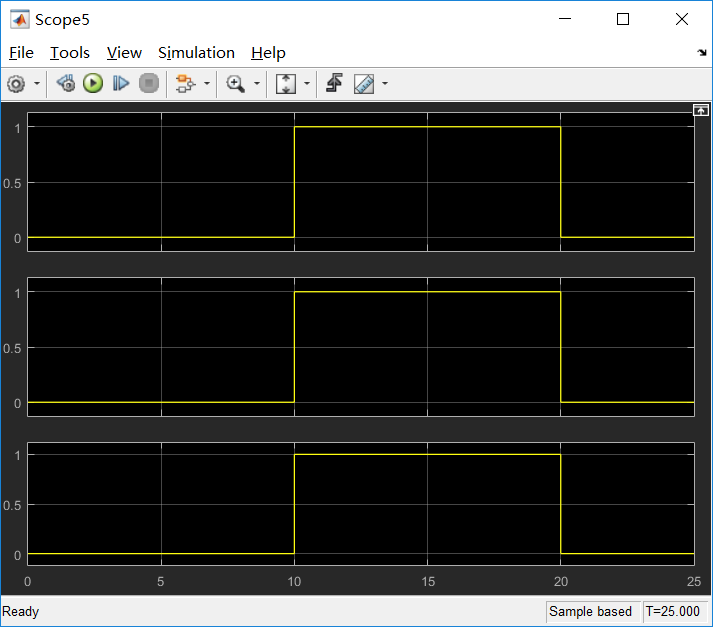
Feeder\_Motor



Mix

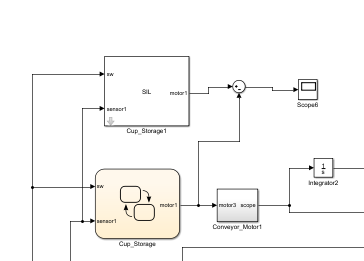


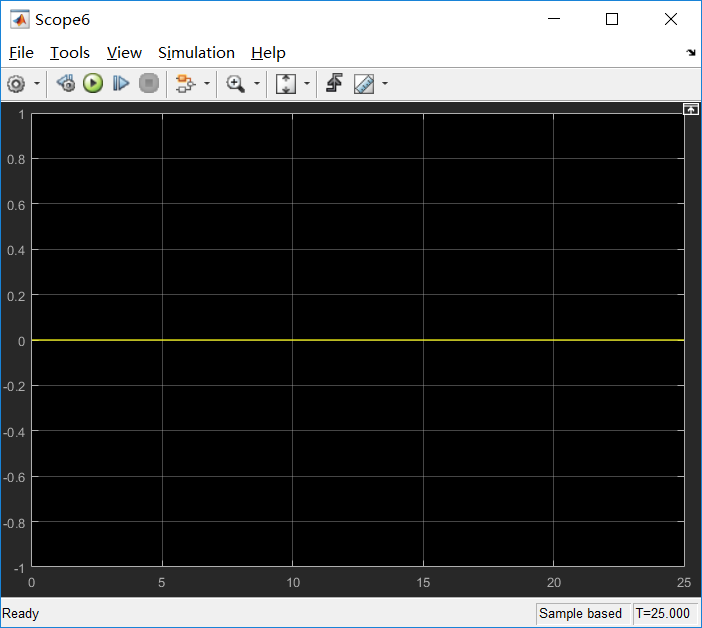
HOT WATER



Doser

接着进行比较

这样并联之后，观察波形

发现求差是一条直线，故结果满足条件，之后六个波形的结果都是如此，就不一一列出。

**结论：比较三种情况下的六个示波器的情况，不难发现，波形没有变化，即生成的SIL测试是对比测试，测试过程中，我们给代码编译成的可执行文件和用于代码生成的模型相同的输入，我们观测它们的输出是否一致，如果输入信号数量足够大，能够覆盖各种路径，涵盖各种信号范围，并且两者的输出结果一致，我们可以大致认为代码和模型做行为上是一致的。**