

Running your code:  
Go to the code file location and type:  
NuSMV -int

Then, running the file:  
NuSMV > read\_model -i [filename.smv](#)  
NuSMV > go

1. file: sol3ch\_csatimer

// TRUE. No counterexample with a system with mitm

```
check_ltlspec -p "F((STA_location = STA_AP_Con_ChX & AP_location = AP_STA_Con_ChX) | (STA_location = STA_AP_Con_ChY & AP_location = AP_STA_Con_ChY) | (STA_location = STA_AP_Con_ChZ & AP_location = AP_STA_Con_ChZ) | (STA_location = STA_Discon & AP_location = AP_Discon))"
```

2. file: sol3ch\_preambletimer

// False – counterexample will show that a wrong combination of preamble bits (i.e., random wrong combination of a signature slice, etc.) leads to “failed” connection establishment

```
check_ltlspec -p "F((STA_location = STA_AP_Con_ChX & AP_location = AP_STA_Con_ChX) | (STA_location = STA_AP_Con_ChY & AP_location = AP_STA_Con_ChY) | (STA_location = STA_AP_Con_ChZ & AP_location = AP_STA_Con_ChZ))"
```

3. file: sol3ch\_frametimer

False, connection will fail as fake\_frame (break in chaining, spoofed frame elements, etc.) does not carry the correct slice

```
check_ltlspec -p "F((STA_location = STA_AP_Con_ChX & AP_location = AP_STA_Con_ChX) | (STA_location = STA_AP_Con_ChY & AP_location = AP_STA_Con_ChY) | (STA_location = STA_AP_Con_ChZ & AP_location = AP_STA_Con_ChZ))"
```