# Scrutiny Library – Readme

Folder Structure:

* ../ScrutinyLib/scrutiny\_drv
  + Driver code, only for Atlas Base mode switches
* ../ScrutinyLib/scrutiny\_lib
  + Scrutiny Library source code
* ../ScrutinyLib/scrutiny\_libtest
  + Library test application source

**Compilation Steps for Library and Test application:**

1. Make sure you have installed Linux development package
2. Navigate to “../ScrutinyLib/”
3. Change the permission by running “chmod +x compile.sh”
4. To compile, execute “./compile.sh”
   1. will compile library first and later test application

If library has to be compiled separately, then follow below steps

1. Navigate to “../ScrutinyLib/scrutiny\_lib/build/linux”
2. Execute
   1. make clean
   2. make LIB\_SUPPORT\_SWITCH=1 LIB\_SUPPORT\_EXPANDER=1
3. Binary will be available in “../linux/bin/<arch>/”

**Compilation Steps for SLIFF driver:**

Driver compilation is needed only for Base mode switches. If synthetic mode then below driver compilation steps are not needed.

1. Make sure you have installed Linux kernel development package
2. Navigate to the driver directory
   1. “../ScrutinyLib/scrutiny\_drv/sdrv/linux”
3. Execute "make"
4. Upon compilation, execute "insmod SliffDriver.ko"
5. Make sure you have "/dev/SliffDriver" created

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| **S.No** | **Category** | **API** | **SG interface (Synthetic) MPT endpoint** | **Base Mode via PCIe** | **via SDB** |
| 1 | Diagnostic API's (log collection) | ScrutinySwitchGetLogs | Y | N/A | N/A |
| ScrutinyGetFirmwareCliOutput | Y | N/A | N/A |
| ScrutinyGetCoreDump | Y | N/A | N |
| ScrutinyEraseCoreDump | Y | N/A | N |
| ScrutinyGetTraceBuffer | Y | N/A | N/A |
| ScrutinyGetHealthLogs | Y | Y | Y |
| 2 | Error Counters | ScrutinySwitchGetPciPortErrorStatistics | Y | Y | N |
| 3 | Port Properties | ScrutinySwitchGetPciePortProperties | Y | Y | Y |
| 4 | Temperature Monitoring | ScrutinyGetTemperature | Y | N | N |
| 5 | Health Monitoring API's | ScrutinySwitchGetHealth | Y | N | N |
| ScrutinySwitchHealthCheck | Y | N | N |
| 6 | Signal Integrity API's | ScrutinySwitchRxEqStatus | Y | Y | Y |
| ScrutinySwitchTxCoeff | Y | Y | Y |
| ScrutinySwitchHardwareEyeStart | Y | Y | Y |
| ScrutinySwitchHardwareEyePoll | Y | Y | Y |
| ScrutinySwitchHardwareEyeGet | Y | Y | Y |
| ScrutinySwitchHardwareEyeClean | Y | Y | Y |
| ScrutinySwitchSoftwareEye | Y | Y | Y |
| 7 | Register Access API's (BLA) | ScrutinySwitchGetPowerOnSense | Y | Y | Y |
| ScrutinySwitchGetCcrStatus | Y | Y | Y |
| 8 | Pass-through API's | ScrutinySwitchScsiPassthrough | Y | N/A | N/A |
| ScrutinySwitchGetConfigPage | Y | N/A | N/A |
| ScrutinySwitchMemoryRead | Y | Y | Y |
| ScrutinySwitchMemoryWrite | Y | Y | Y |
| 9 | Lane Margining API's | ScrutinySwitchGetLaneMarginCapacities | Y | Y | N/A |
| ScrutinySwitchPerformLaneMargining | Y | Y | N/A |
| 10 | Aladin Capture API's | ScrutinySwitchSetAladinConfiguration | Y | Y | Y |
| ScrutinySwitchGetAladinTracedump | Y | Y | y |
| ScrutinySwitchPollAladinTrigger | Y | Y | Y |
| ScrutinySwitchStopAladinCapture | Y | Y | Y |
| 11 | Switch Reset | ScrutinyResetDevice | Y | Y | Y |

**Supported API List:**

|  |  |
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| Support Statement | |
| Y | Supported |
| N | Not Supported and if needed we can support it |
| N/A | API not applicable to that mode/interface |