

AES Encryption Algorithm

Simulation results:

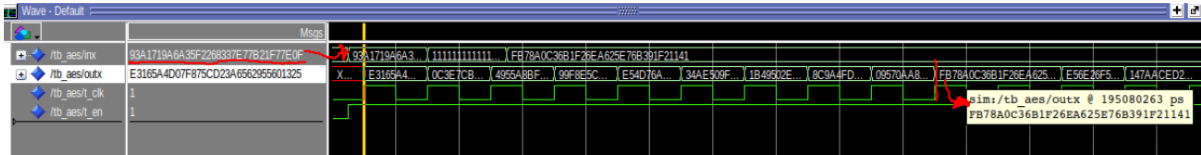


Figure 11.a. RTL simulation of encryption mode

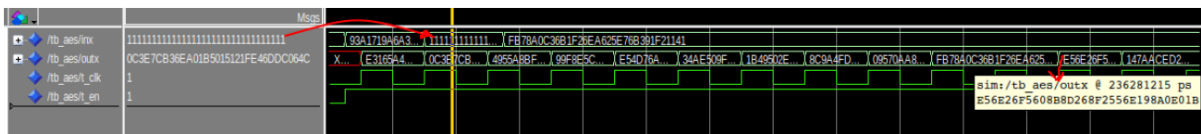


Figure 11.b. RTL simulation of encryption mode

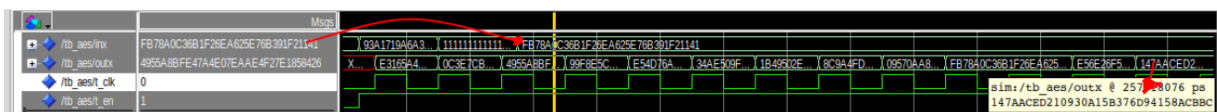


Figure 11.c. RTL simulation of encryption mode

LabsLand Result:

```
$ nios2-terminal --cable "USB-Blaster on 127.0.0.1:1321 [7-9]"
nios2-terminal: connected to hardware target using JTAG UART on cable
nios2-terminal: "USB-Blaster on 127.0.0.1:1321 [7-9]", device 1, instance 0
nios2-terminal: (Use the IDE stop button or Ctrl-C to terminate)

Data Input:
eb68ebc6 1ecea45 26aa12b 3e89d4c2
Key:
41424344 45464748 494a4b4c 4d4e4f50

Observed Encrypted Value: EE705_Encryption
Actual Encrypted Value: EE705_Encryption
```