



# SJTAG Use Case Assessment

Categorizing and Analysis

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## Outline

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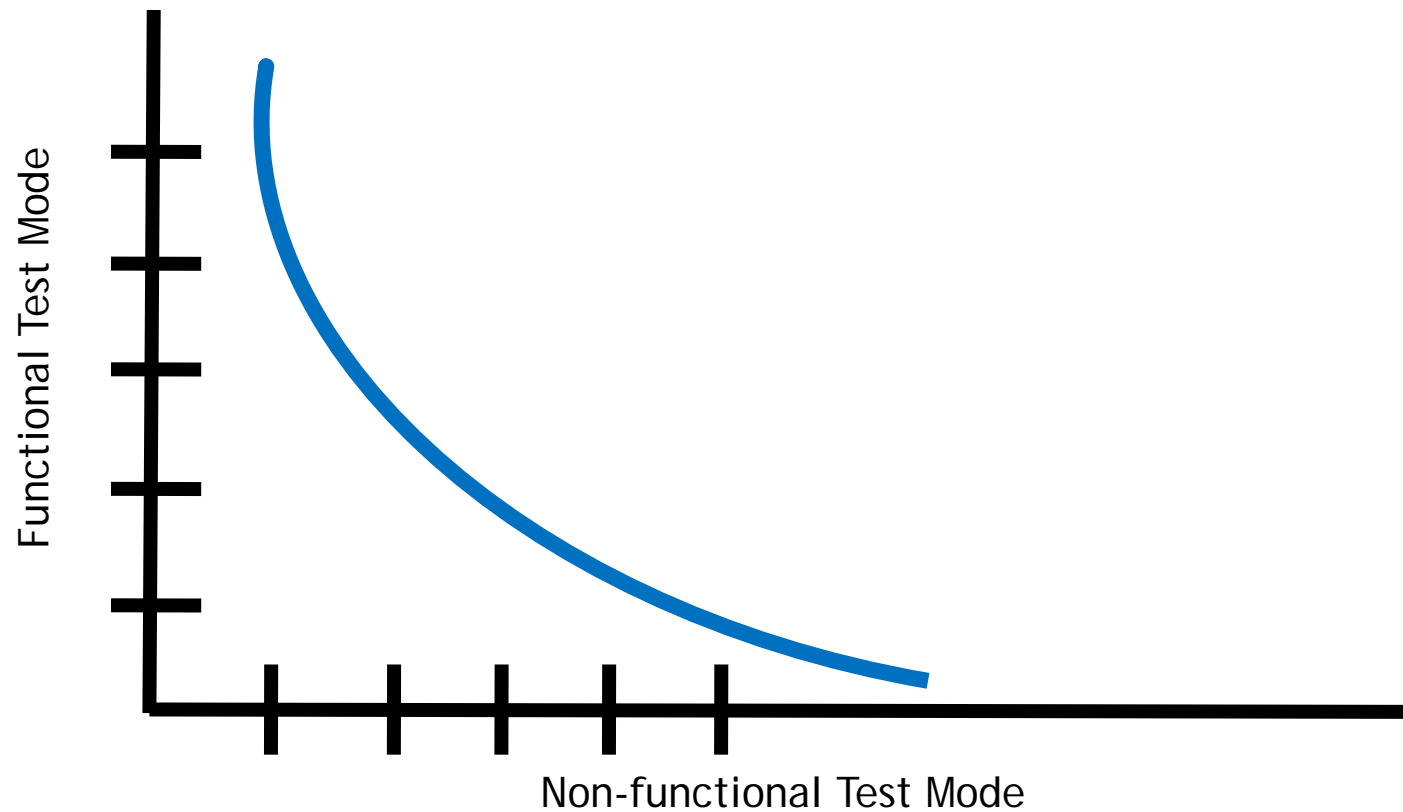
- ❑ Extend of Reach for Single Architecture Use Cases
- ❑ Active Plain Observability Functional Test vs. Non-functional Test Mode
- ❑ Use Case Inheritance Tree

## Extend of Reach for Single Architecture featuring an Intelligent Controller

Use Case Defined	In Non-functional Mode	In Functional Mode
Structural Test (ST)	Yes	No
Configuration/Tuning/Instrumentation	Yes	No
Software Debug (SD)	Non-application level with limited observability	Application level with limited lower level observability
Built-In-Test (BIST)	Yes	No
Fault Injection (FI)	Yes	Application level with limited lower level observability
Programming/Update (PU)	Yes	Yes
Root Cause Analysis/Failure Mode Analysis	Non-application level with limited observability	Application level with limited lower level observability
Power-On Self Test (POST)	Yes	Application level with limited lower level observability
Environmental Stress Test (EST)	Non-application level observability	Application level with limited lower level observability
Device Versioning (DV)	Yes	Application level with limited lower level observability

# The Active Plain Observability Objectives of Functional Test vs. Non-functional Test Mode

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- Functional Test Mode: focus is centered around application level objectives.
- Non-functional Test Mode: focus is centered around actual hardware and structural level objectives.

## Use Case Inheritance Tree

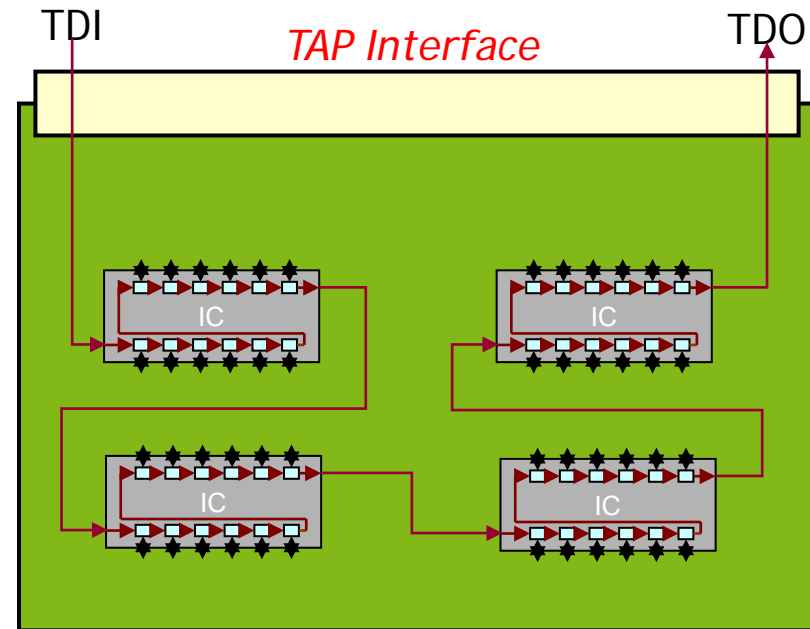
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- Power-On Self Test (POST)
  - Configuration/Tuning/Instrumentation
    - Built-In-Test (BIST)
      - Structural Test (ST)



## Structural Test (ST) Use Case Level of Knowledge

- Lowest level of Non-functional Test Use Case
- Unaware of its Board Application Function role in the System under test
  - Only comprehends test vectors and net-list
- Low-speed assessment of sUUT hardware confidence



sUUT: system Unit Under Test



The END

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Q & A