

# Testing for NPI

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# Before Tape Out

## ❖ Hardware/Software development

- What type of package
- How many sites to test and what's the estimated test time
- Discuss with Designer about all the test items and test methods
- Create a preliminary test plan and make sure all the test items meet the requirement of datasheet.

# After Tape Out

## ❖ Test solution debug and delivery

- Usually FT test solution delivered first and probe next.
- For those devices that have trim function at probe, probe solution comes first.
- Device Validation and Correlation with bench test.

## ❖ Qualification support

- Support the pre-qual and post -qual test. Work with Designer and PE to make sure all the test items needed are covered in the qual program.
- Sometimes also need to support the stress pattern for HTOL. But this can be covered by PE.

# After Tape Out

## ❖ Characterization

- Confirm part performance at different process corners, voltage corners and temperature corners.
- Set the temperature guard band based on the characterization data.

## ❖ Production

- Repeatability and Reproducibility check (GRR)
- Spike check to see if there is any voltage spike when running the program on each pin.
- Cpk and Yield check

# Q & A



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Thank You !