

# Hybrids Metrology

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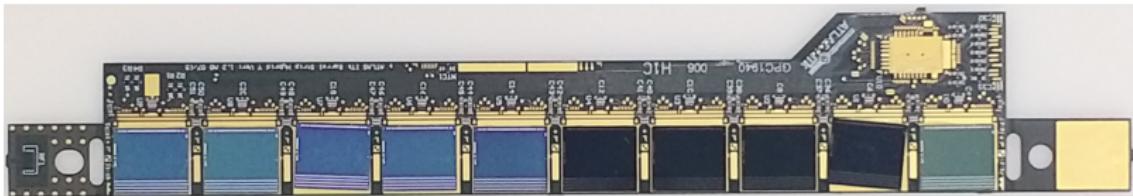


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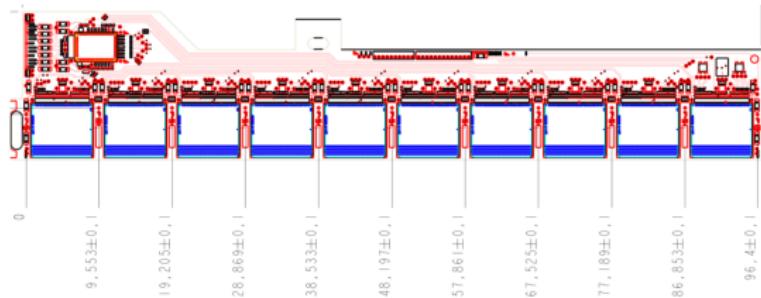
# Introduction



Y barrel hybrid (GPC1940060H1C)

- Using smartscope to measure different part of the GPC1940060H1C hybrid.**
- Such as hybrid stretch/Shrinkage, ASIC x and y position, glue height scan, etc.
- The objective:**
  - Get familiar with hybrids metrology procedures.
  - Improving the smartscope use manual "QC\_Metrology Procedures-Hybrids"

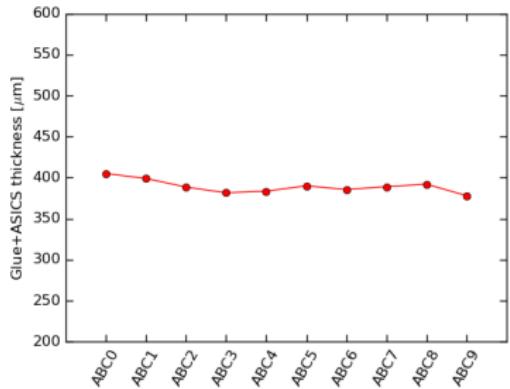
# Hybrid Stretch/Shrinkage



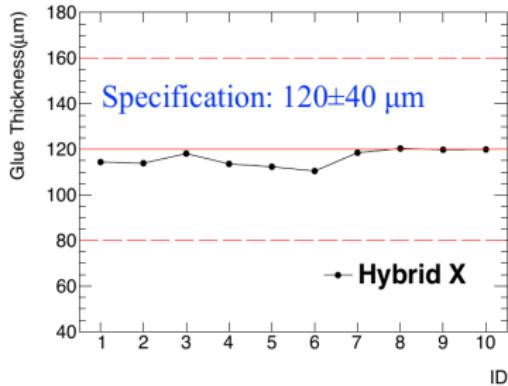
#---Position Scan:		
#Location	X [mm]	Y [mm]
Pos0	+000.00783	+000.00535
Pos1	+009.49615	-000.90219
Pos2	+019.15206	-000.89572
Pos3	+028.81398	-000.88917
Pos4	+038.47775	-000.88262
Pos5	+048.14108	-000.88257
Pos6	+057.79800	-000.87630
Pos7	+067.46193	-000.87640
Pos8	+077.12250	-000.87011
Pos9	+086.80016	-000.88912
Pos10	+096.33092	+000.00677

GPC1940060H1C

# ASICS glue height measurements



(d) GPC1940060H1C



(e) Deng Feng

- The plot on the left is measuring the glue height and the ASIC together.
- We use two points one on the ASIC and the other on the pad for each ABCStar.
- Not to be compared to the plot on the right, it's just to make sense to as how these numbers should be.

- A good start on the hybrid metrology! As getting familiar with the use of the smartscope.
- We mange to measure ASICs positions and glue and ASICs heights.

## Next ...

- Need to get the proper glue height measurements.
- Try to compare measurements with hybrid production specification for tolerance.

***Any comments or suggestions are highly appreciated!***



**Thanks!**