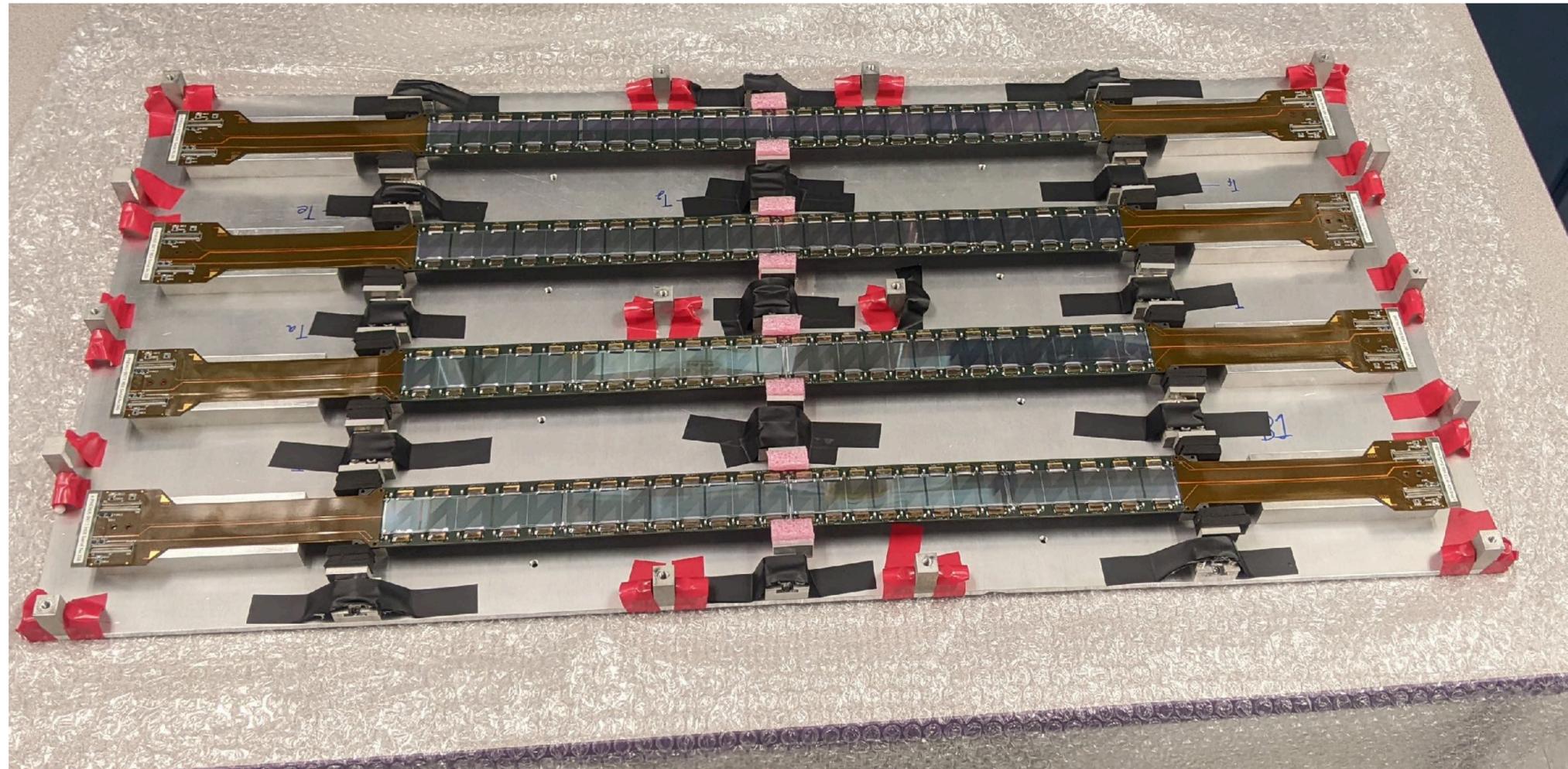


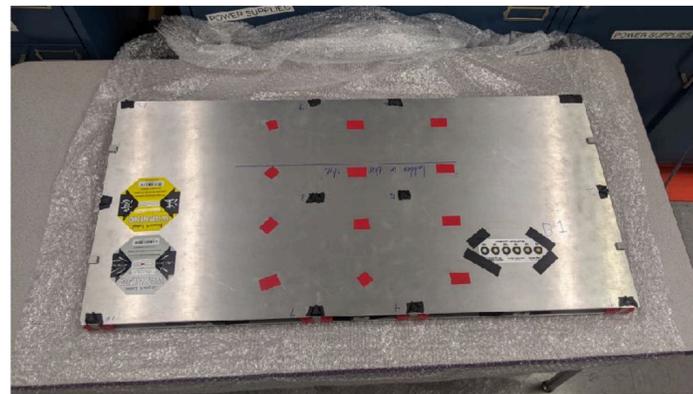
Taiwan Ladders

Calibration tests and inspection with a microscope.

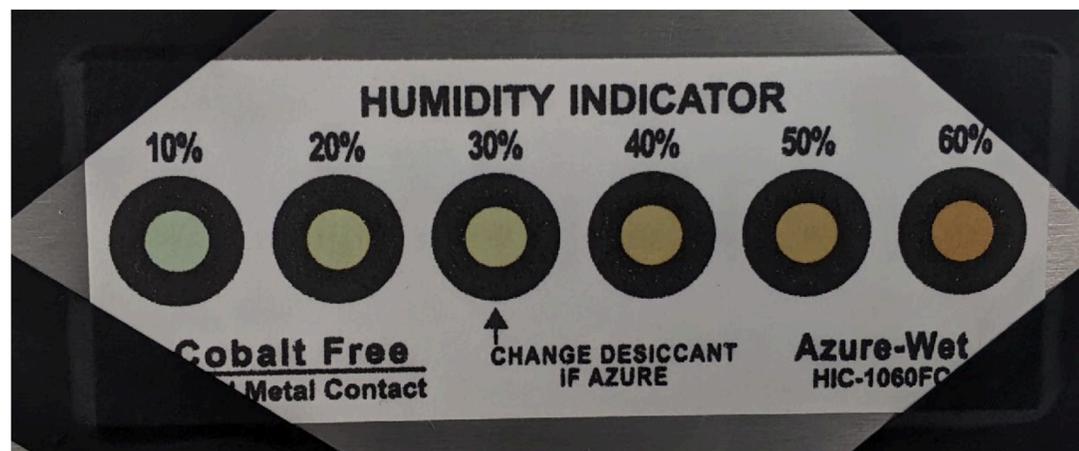
G. Nukazuka (RBRC)



Unpacking



The impact indicator was lost...?



The impact indicator (15 G) turned red
The impact indicator (25 G) was white.

The ladders

All ladders were assigned for the outer barrel. I just picked sides of HDI with smaller IDs for the north side.

Ladder	New name	HDI (North)	HDI (South)
02-0080	TPB-L040	#024	#258
02-0065	TPB-L041	#345	#349
02-0062	TPB-L042	#341	#348
02-0056	TPM2-L043	#267	#333

My assignments are opposite from Taiwan's. Should I correct it?

Inspection with a microscope and calibration measurements

Inspection



Calibration

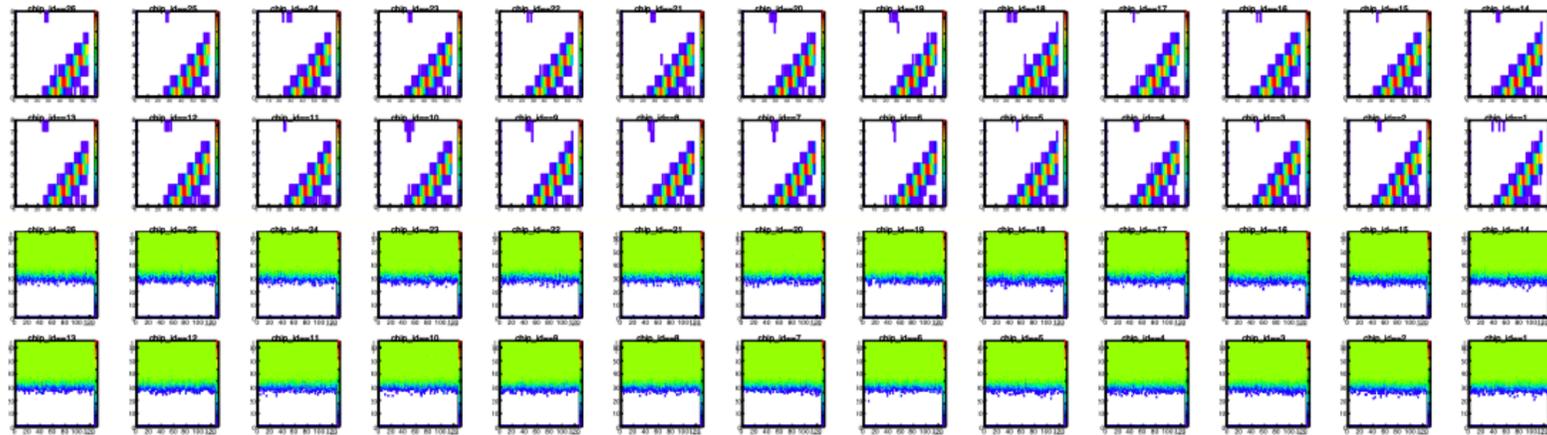
Measurements were done the same as the source test.

- ROC port C3
- 20 cm FPC conversion cable
- 111 cm bus extender
- in the dark box

Results (TPB2-L040, 02-0080)

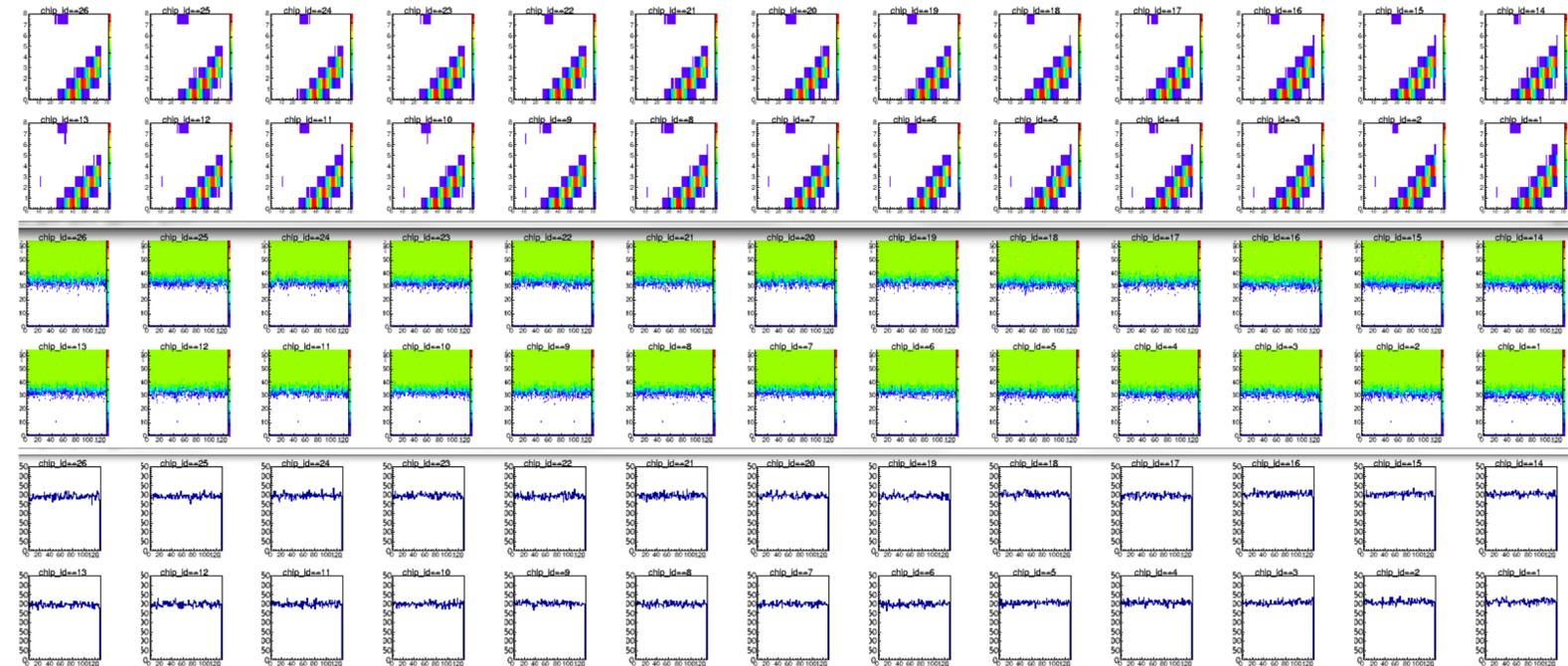
Calibration@Taiwan

North (HDI #024), Bias: 150 nA



Known bad channels: None

North (HDI #024), Bias: 120V, A = 177 nA, B = 134 nA

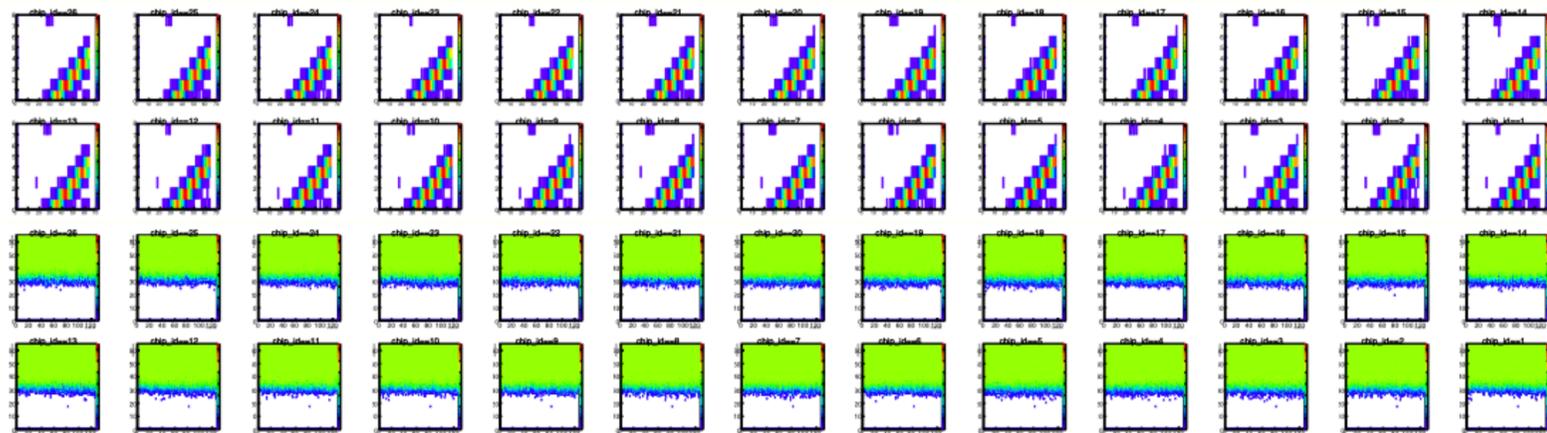


Good👍

Results (TPB2-L040, 02-0080)

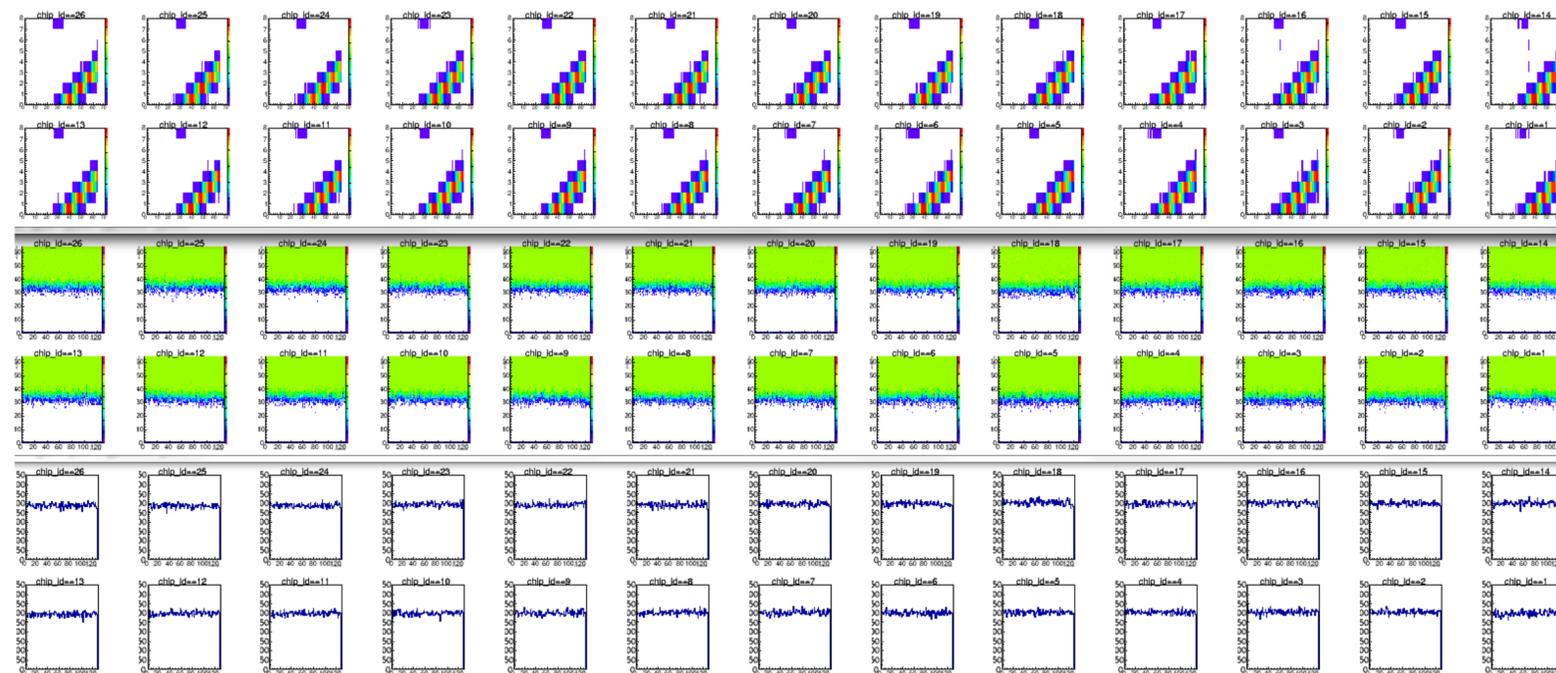
Calibration@Taiwan

North (HDI #258), Bias: 200 nA



Known bad channels: U13-104, U14-96, U14-98, U16-28

South (HDI #258), Bias: 120V, A = 267 nA, B = 211 nA

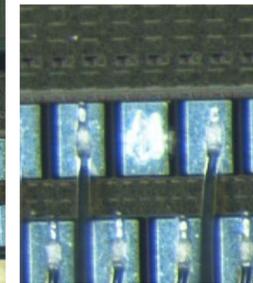
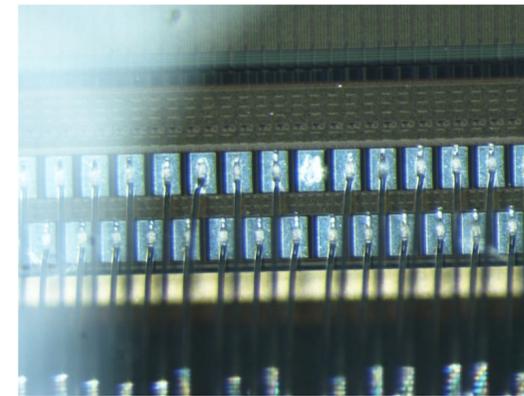


Good 🍌

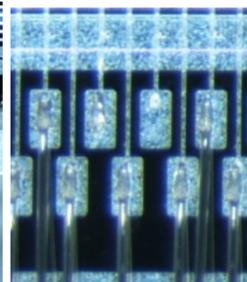
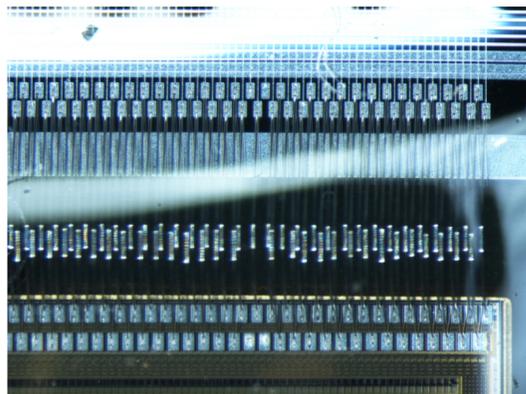
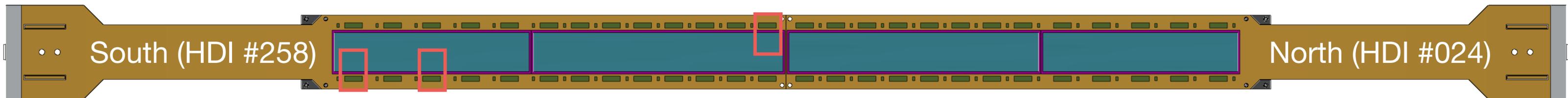
Results (TPB2-L040, 02-0080)

Ladder - bonding	
Number of total un-bonded channel :	
# of un-bonded channel	percentage
4	0.1 %

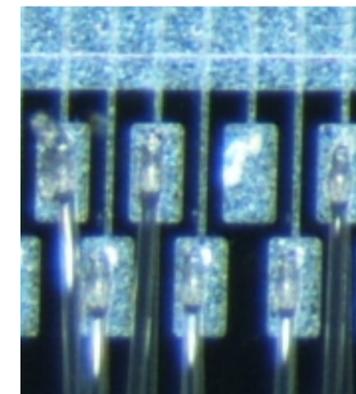
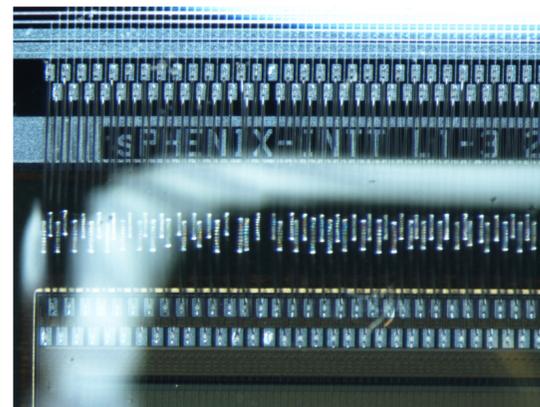
The report from the Taiwan group



South U13
b/w chip & HDI



South U14
b/w chip & sensor



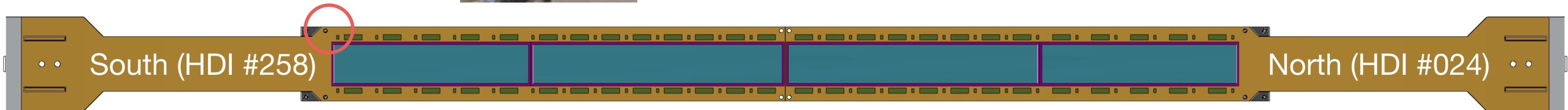
South U16
b/w chip & sensor

No additional un-bonded ch found.

Results (TPB2-L040, 02-0080)



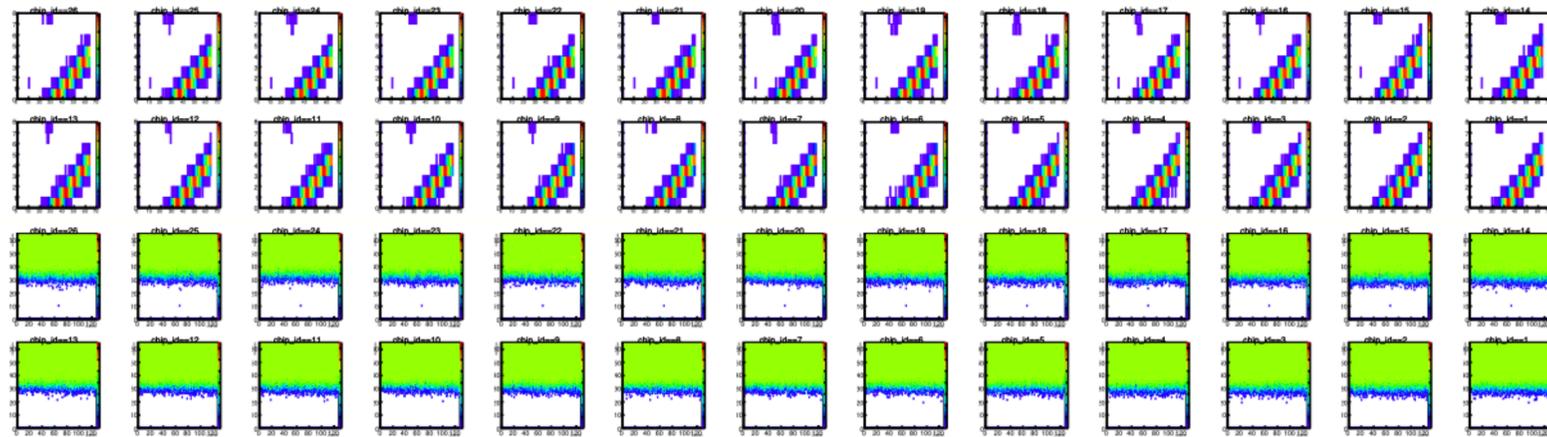
The hole is blocked by ???
A pin cannot go through the hole.
It means the screw for the barrel assembly may also not go through the hole.



Results (TPB2-L041, 02-0065)

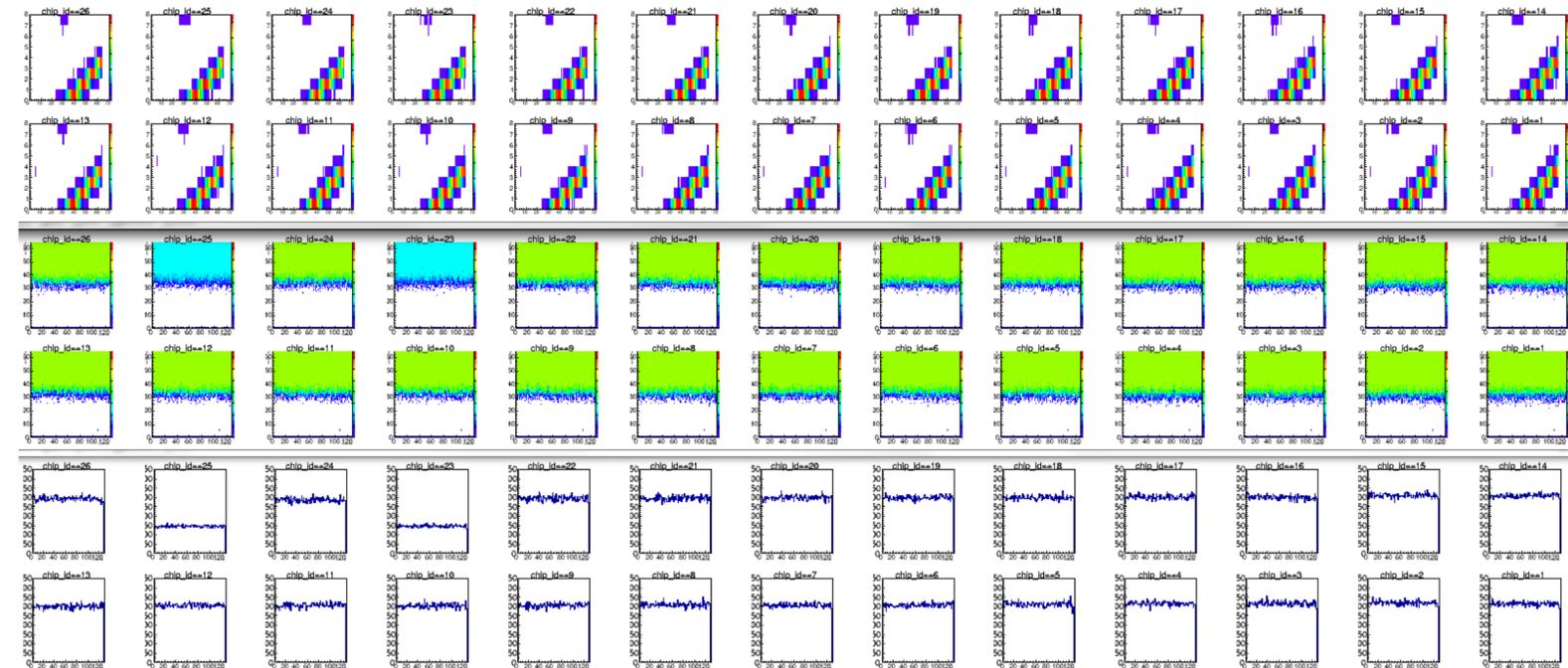
Calibration@Taiwan

North (HDI #345), Bias: 150 nA



Known bad channels: None

North (HDI #345), Bias: 120V, A = 217 nA, B = 120 nA



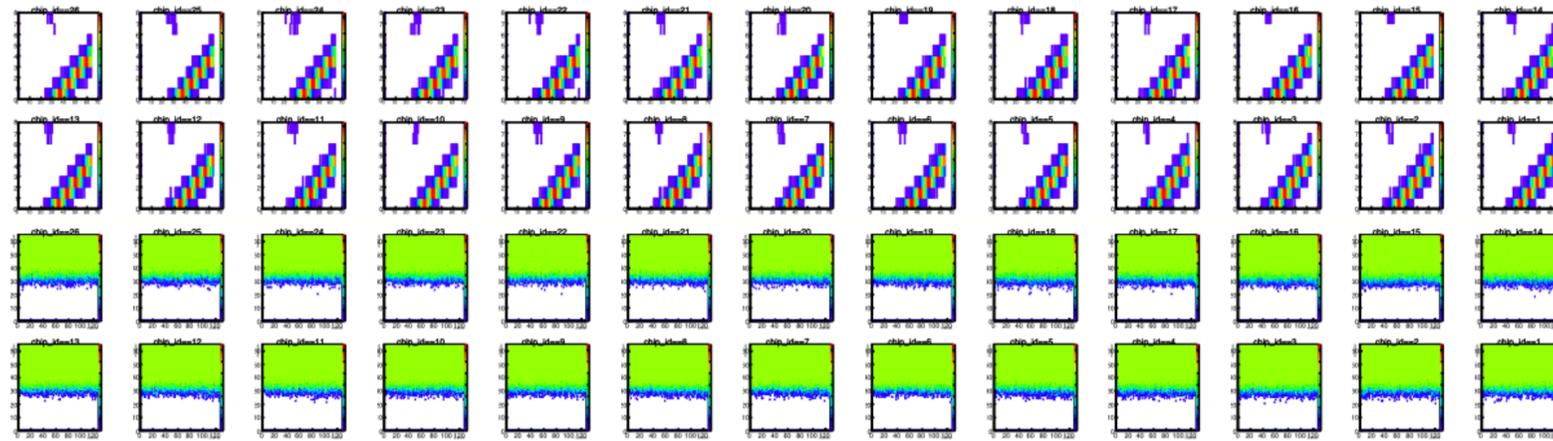
Chip23&25 always had only half entries. LVDS 8mA didn't help.

LVDS 8mA didn't help chips #23 & #25. I have no idea to explain why it happened.

Results (TPB2-L041, 02-0065)

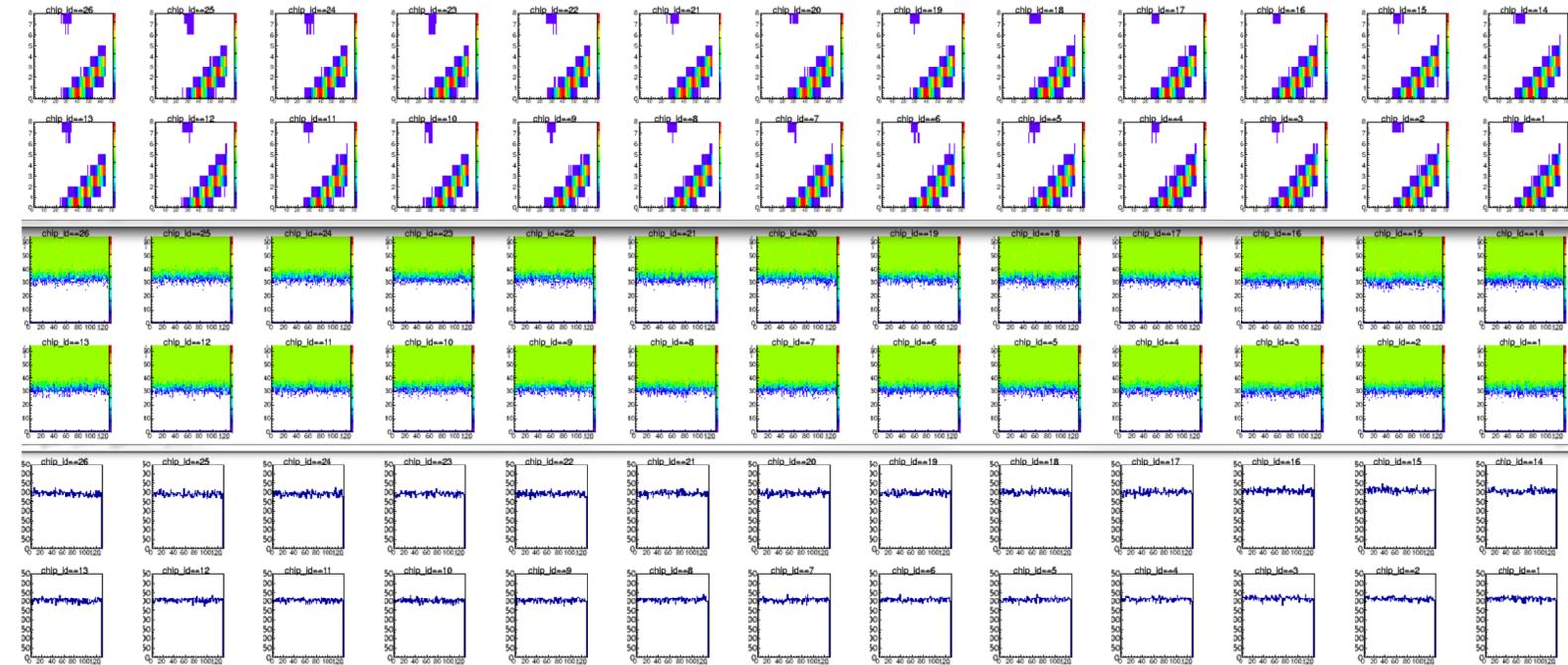
Calibration@Taiwan

South (HDI #349), Bias: 100 nA



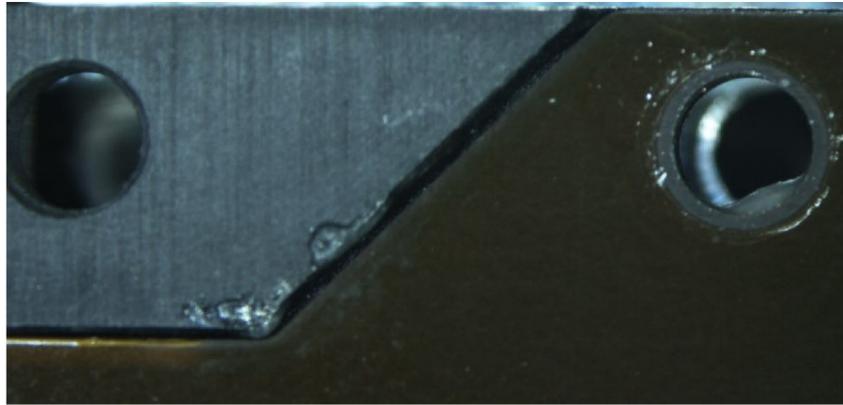
Known bad channels: None

South (HDI #349), Bias: 120V, A = 171 nA, B = 121 nA

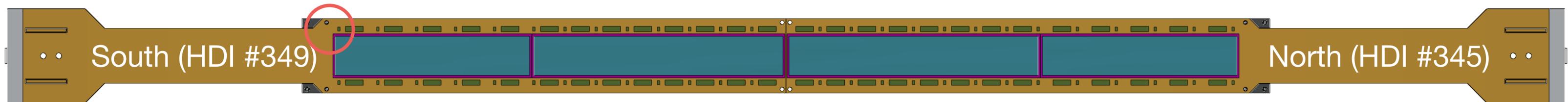


Good 🍌

Results (TPB2-L041, 02-0065)



All wires (chip—HDI, chip—sensor) look good.
The hole next to U1 on the south side was blocked by ???
A pin cannot go through the hole.

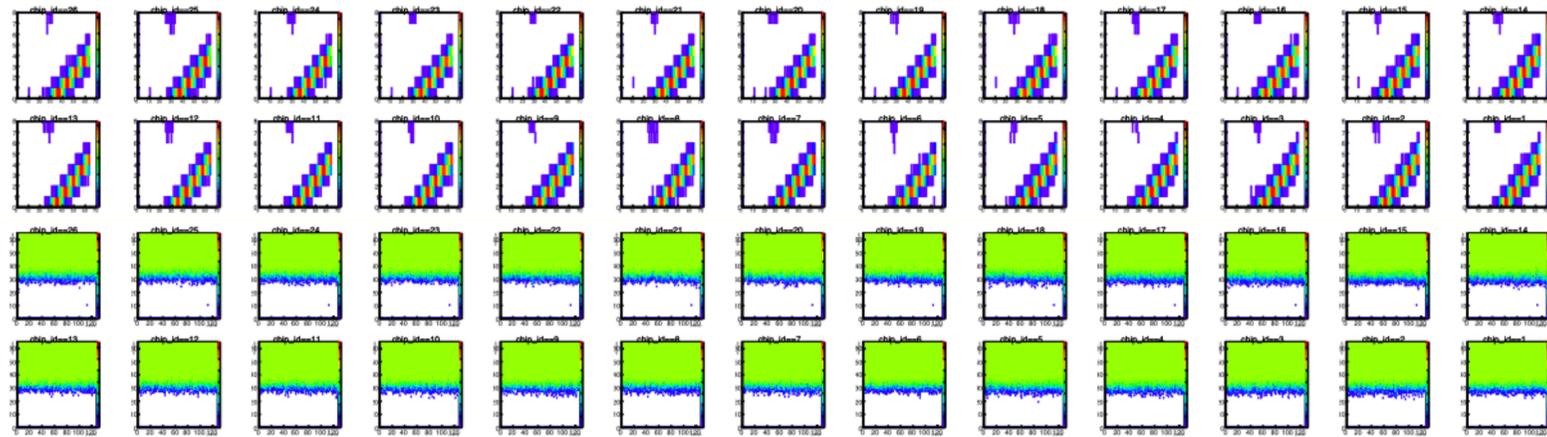


No additional un-bonded ch found.

Results (TPB2-L042, 02-0062)

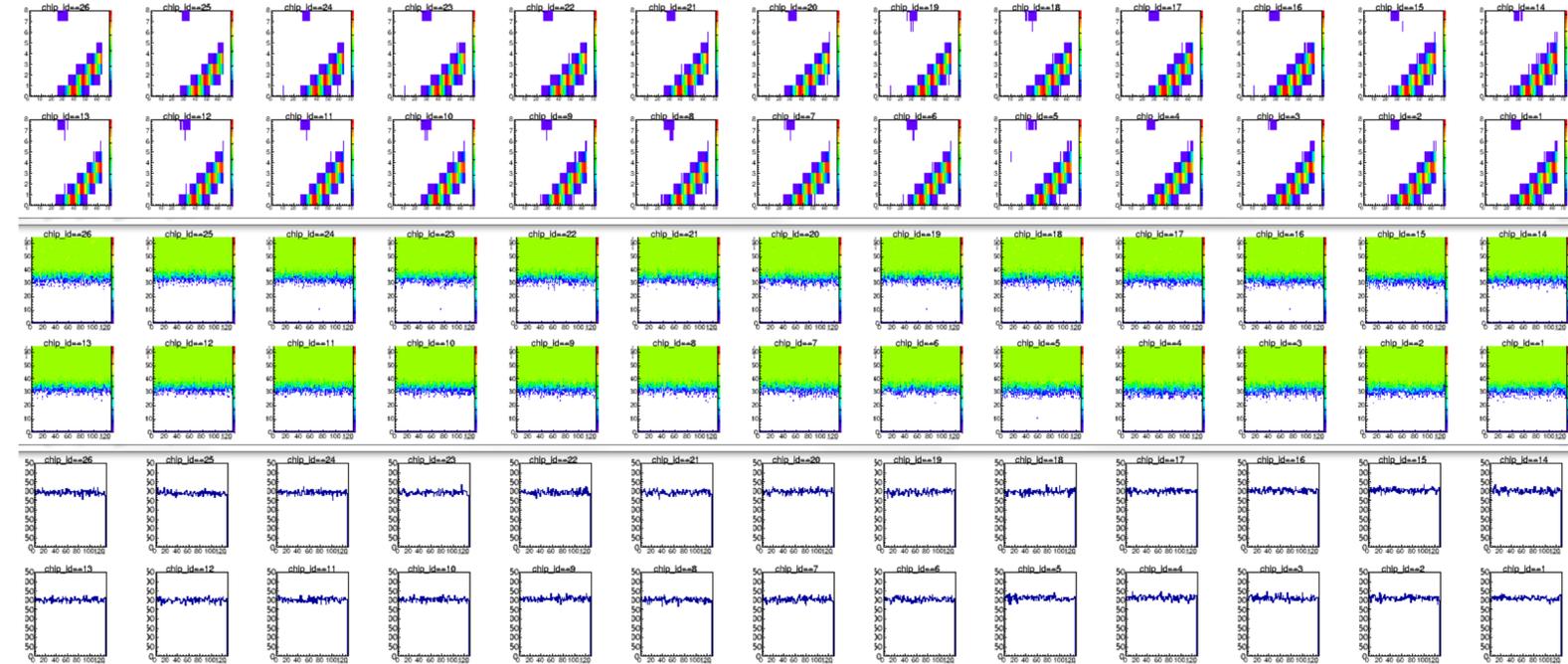
Calibration@Taiwan

North (HDI #341), Bias: 120 nA



Known bad channels: None

North (HDI #341), Bias: 120V, A = 176 nA, B = 92 nA

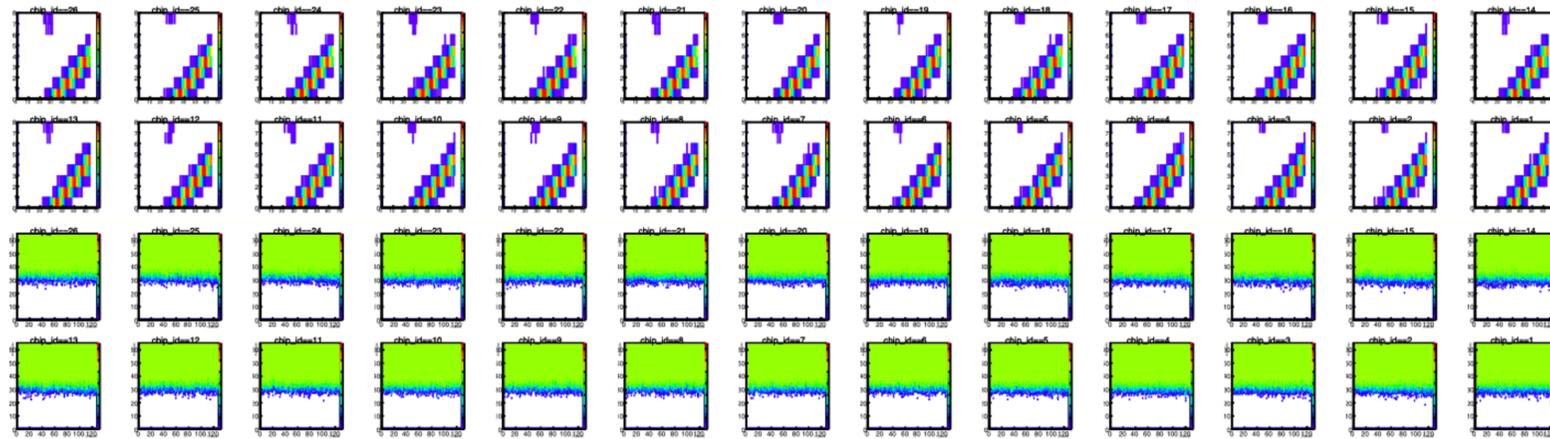


Good 🍌

Results (TPB2-L042, 02-0062)

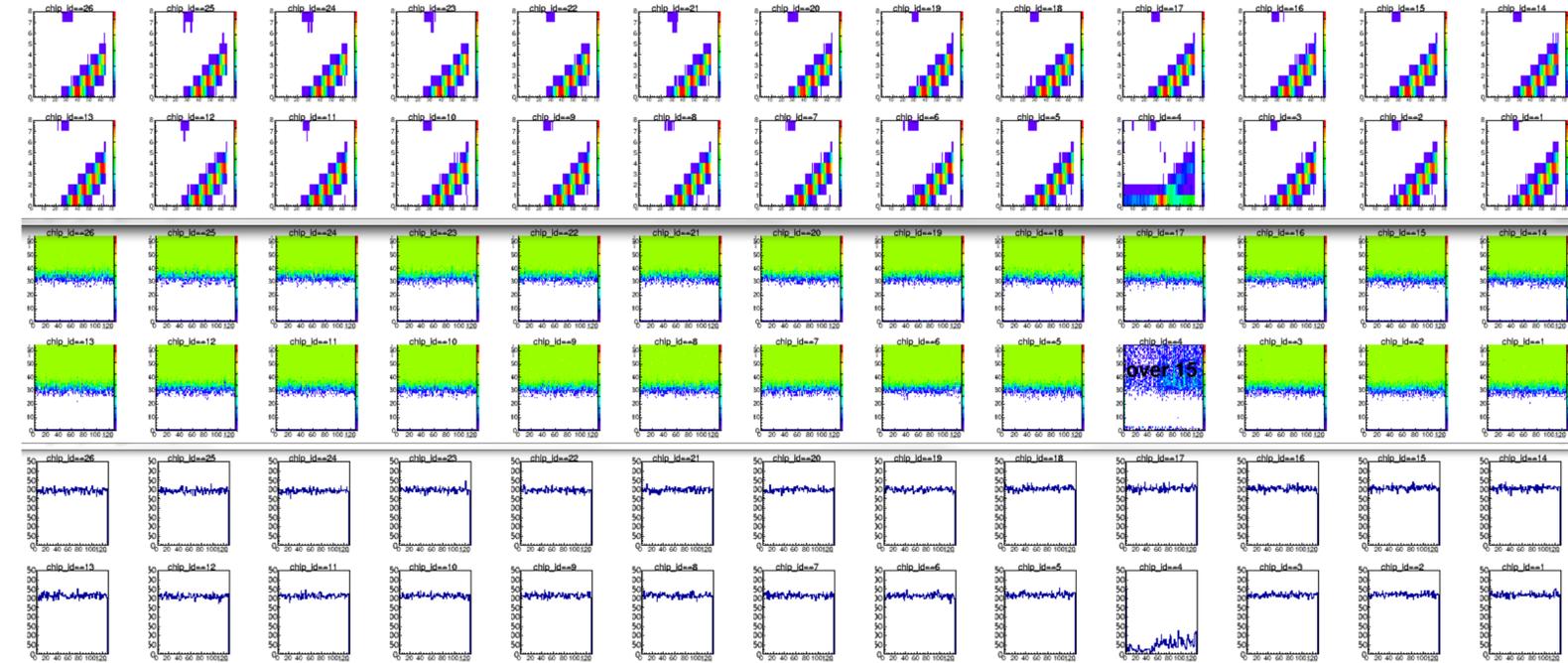
Calibration@Taiwan

South (HDI #348), Bias: 120 nA



Known bad channels: None

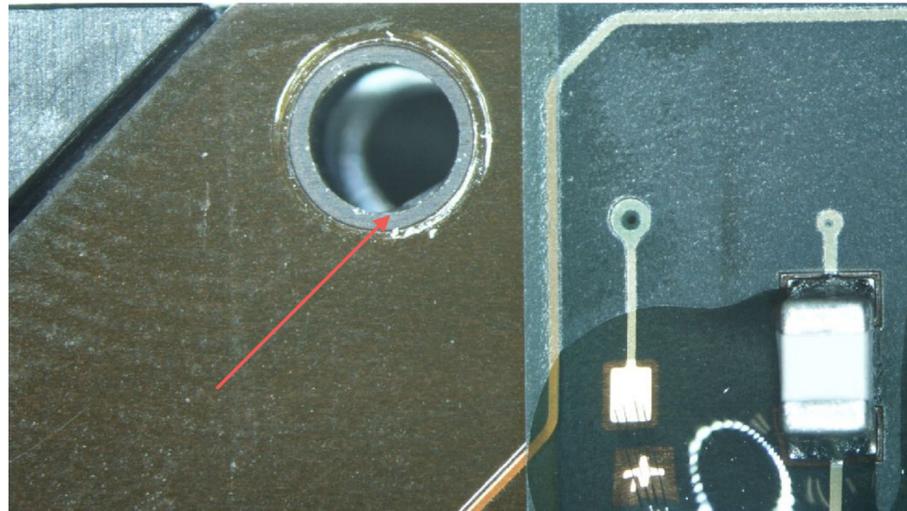
South (HDI #348), Bias: 120V, A = 158 nA, B = 106 nA



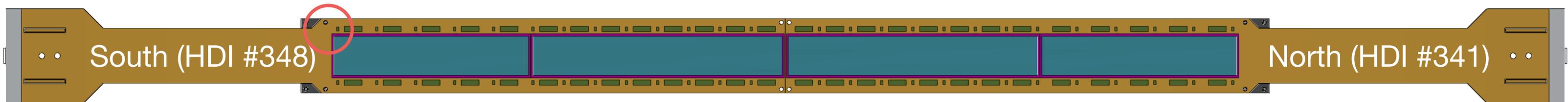
Chip4 had strange data.

Chip4 had almost no data. 3 attempts obtained the same results.

Results (TPB2-L042, 02-0062)



All wires (chip—HDI, chip—sensor) look good.
The hole next to U1 on the south side was blocked by ???
A pin cannot go through the hole. The screw may also not go.

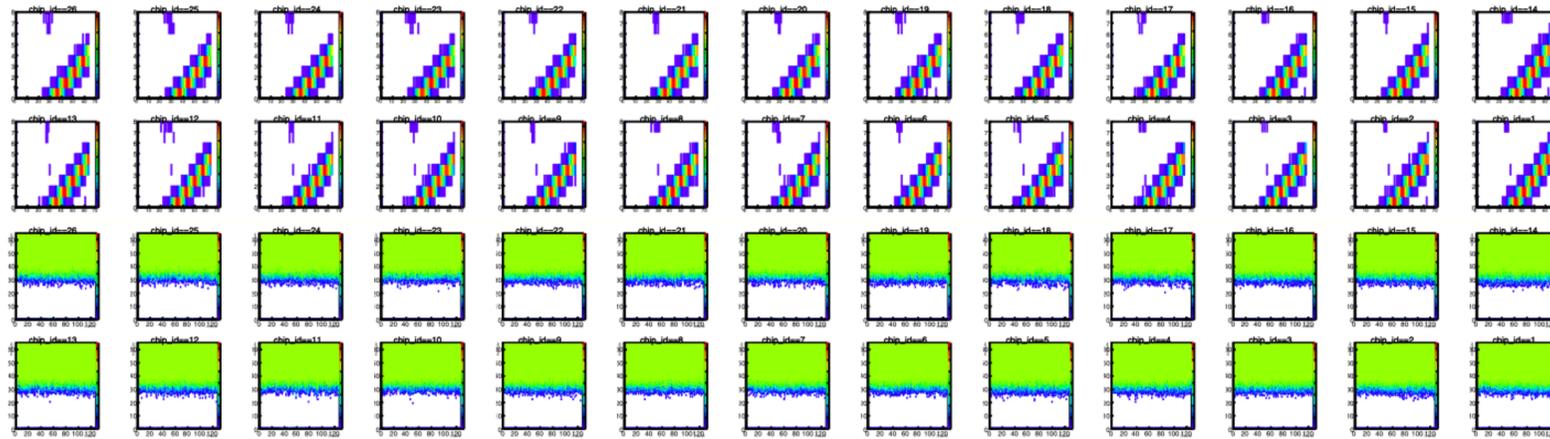


No additional un-bonded ch found.

Results (TPB2-L043, 02-0056)

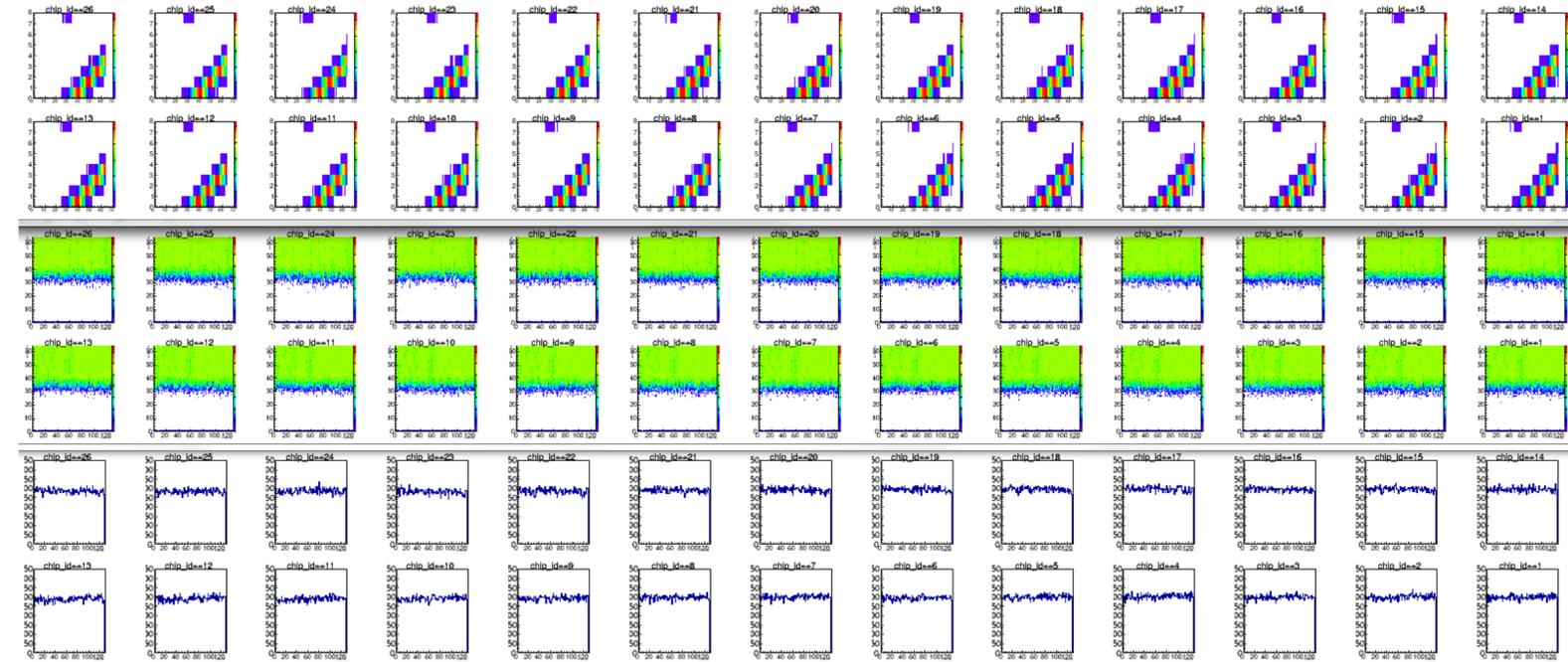
Calibration@Taiwan

North (HDI #333), Bias: 150 nA



Known bad channels: U18-99

North (HDI #333), Bias: 120V, A = 169 nA, B = 128 nA

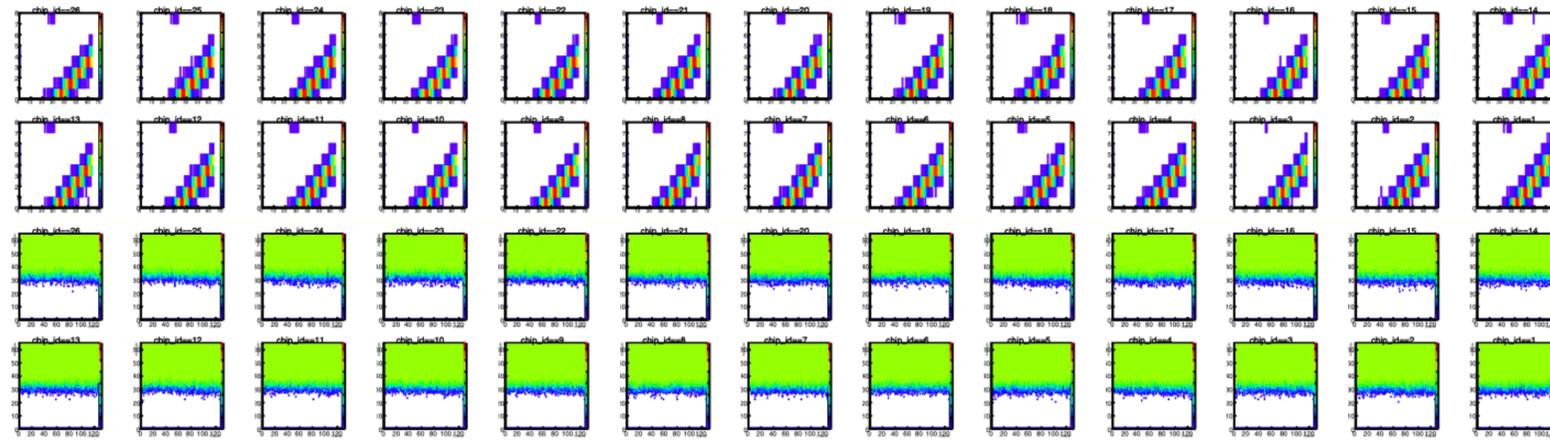


Good 🍌

Results (TPB2-L043, 02-0056)

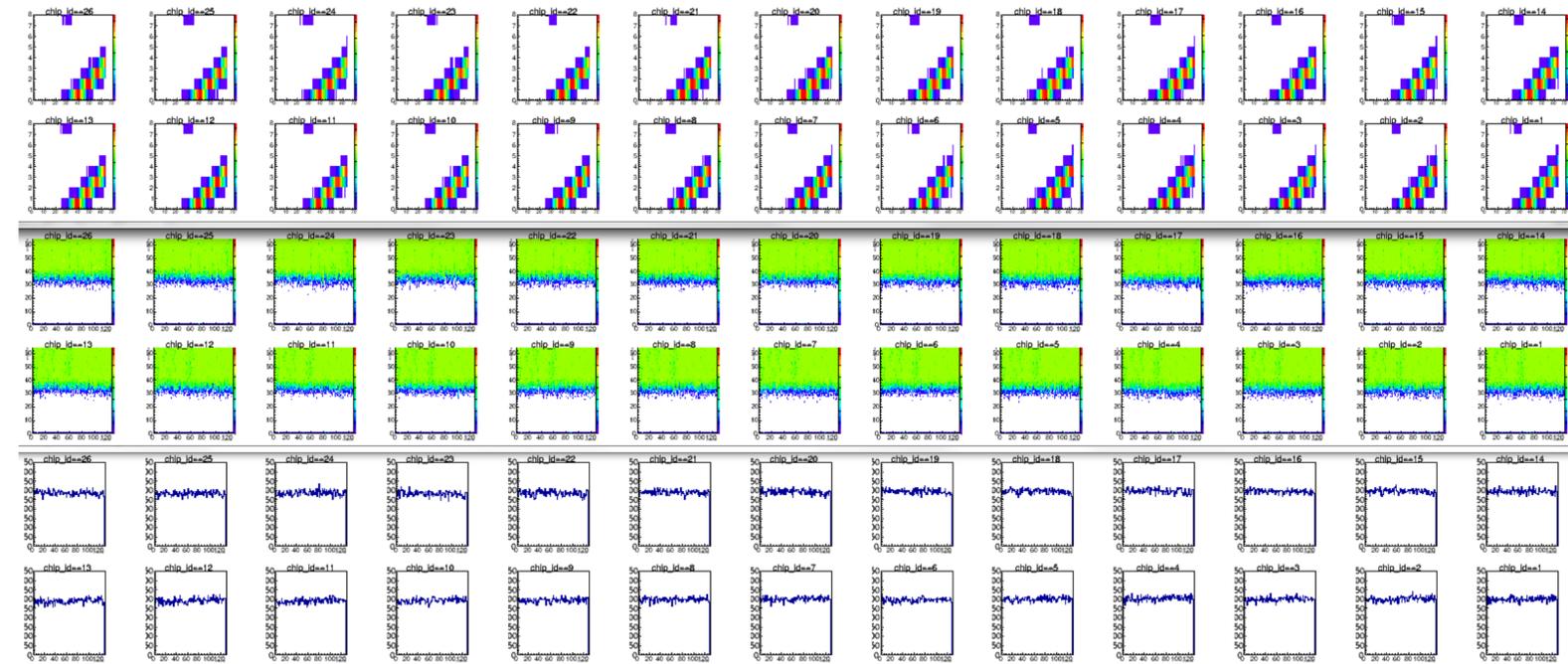
Calibration@Taiwan

South (HDI #267), Bias: 100 nA



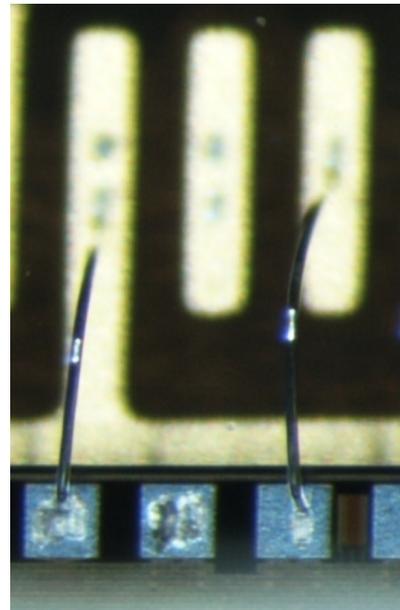
Known bad channels: None

South (HDI #267), Bias: 120V, A = 233 nA, B = 122 nA

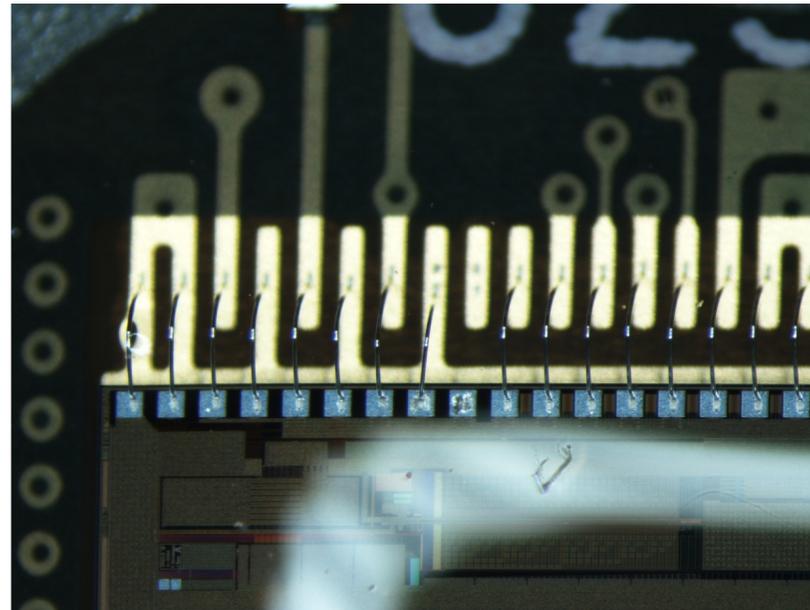


Good 🍌

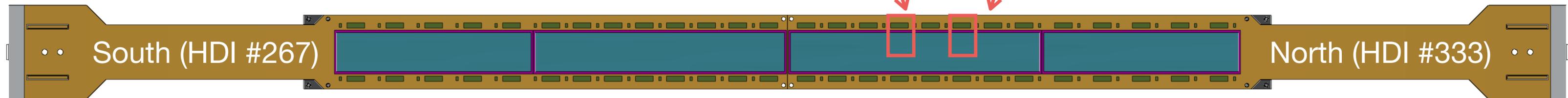
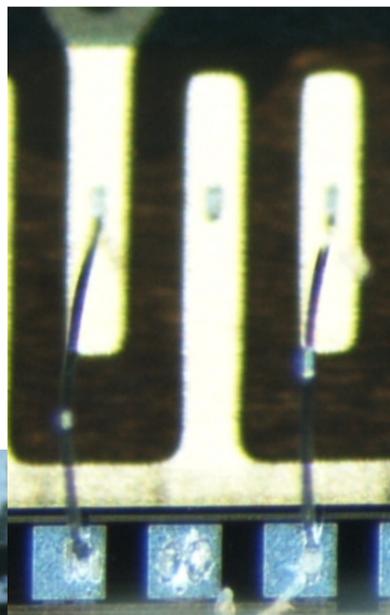
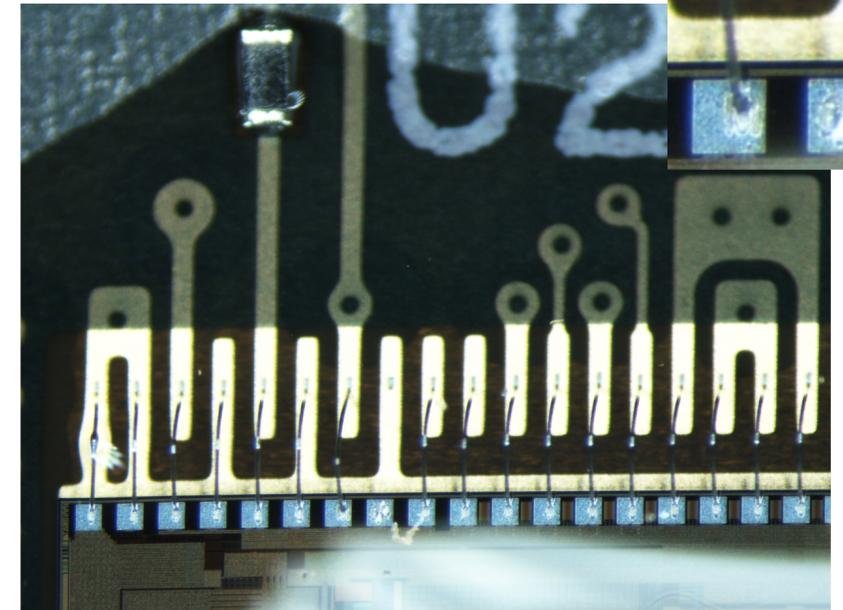
Results (TPB2-L043, 02-0056)



U23, b/w chip & HDI



U21, b/w chip & HDI



Ladder - channel classification		
Number of total bad channel :		
# of bad channel	percentage	class
2	0.0 %	Class-1

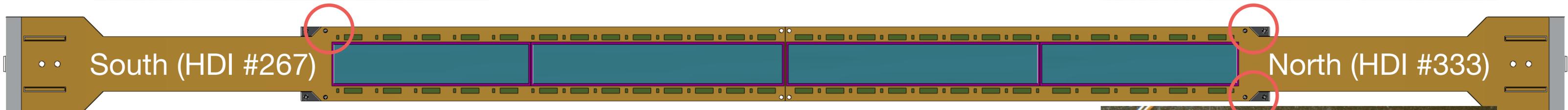
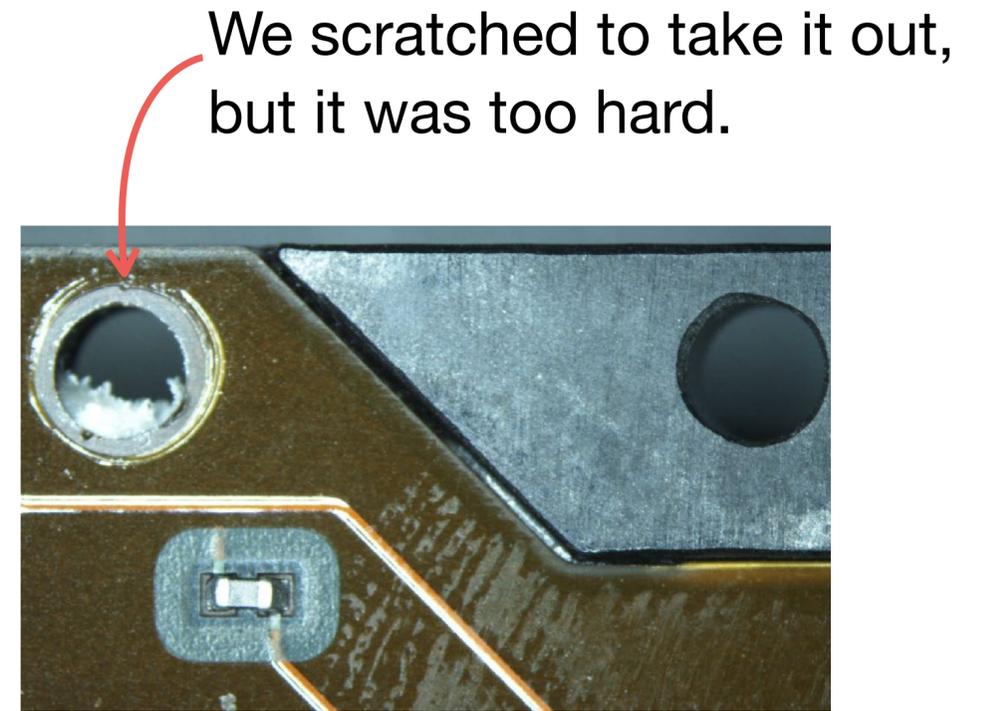
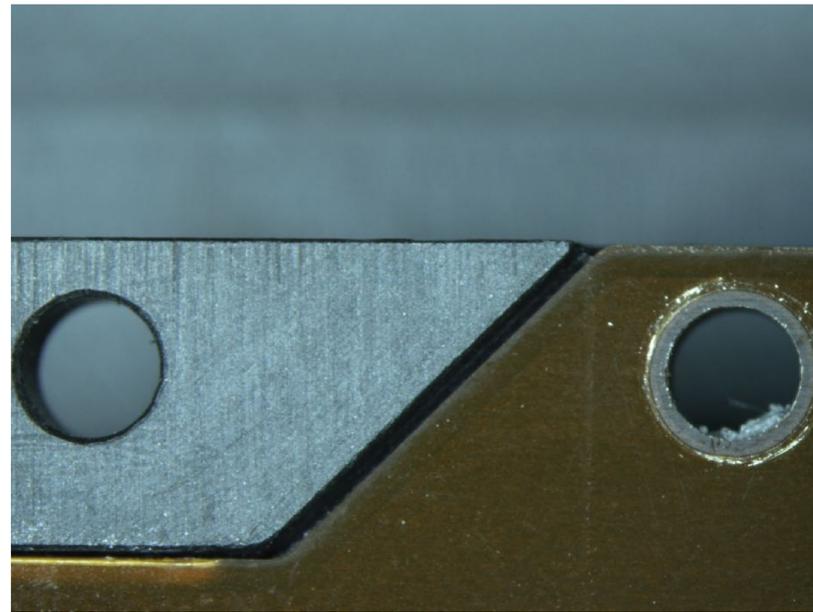
Ladder - bonding	
Number of total un-bonded channel :	
# of un-bonded channel	percentage
0	0.0 %

Known bad channels: U18-99 (North side, HDI #333)

The report from the Taiwan group

No additional un-bonded ch found?

Results (TPB2-L043, 02-0056)



Those 3 holes have something inside.
A pin cannot go through them. It means the screw
for barrel assembly may also not go through them...

