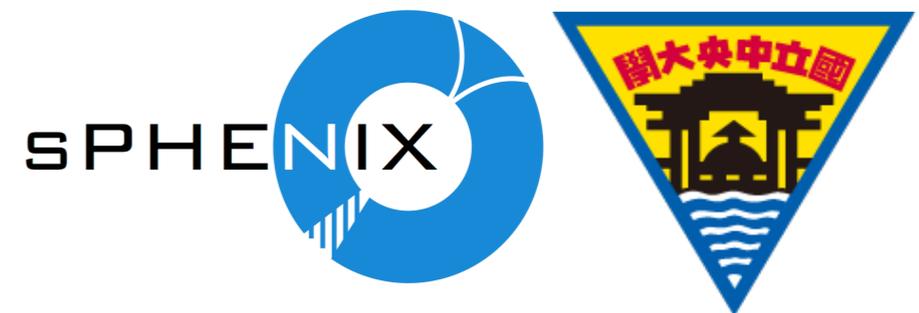


HDI pad continuity test before assembly

Cheng-Wei Shih

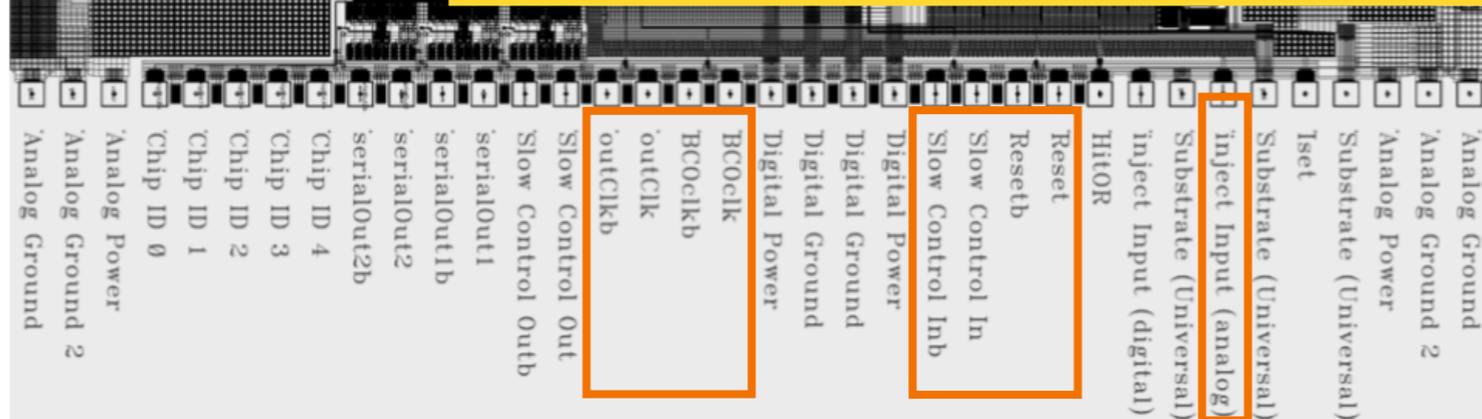
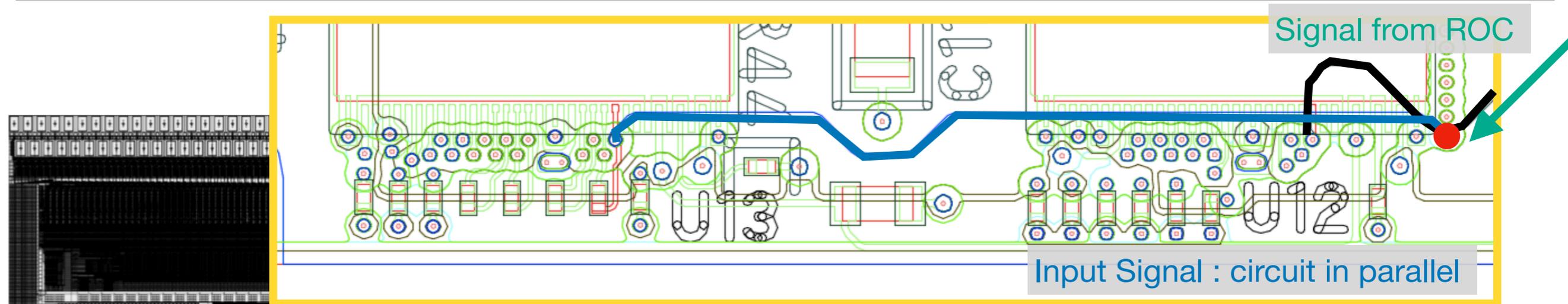
2021/05/06



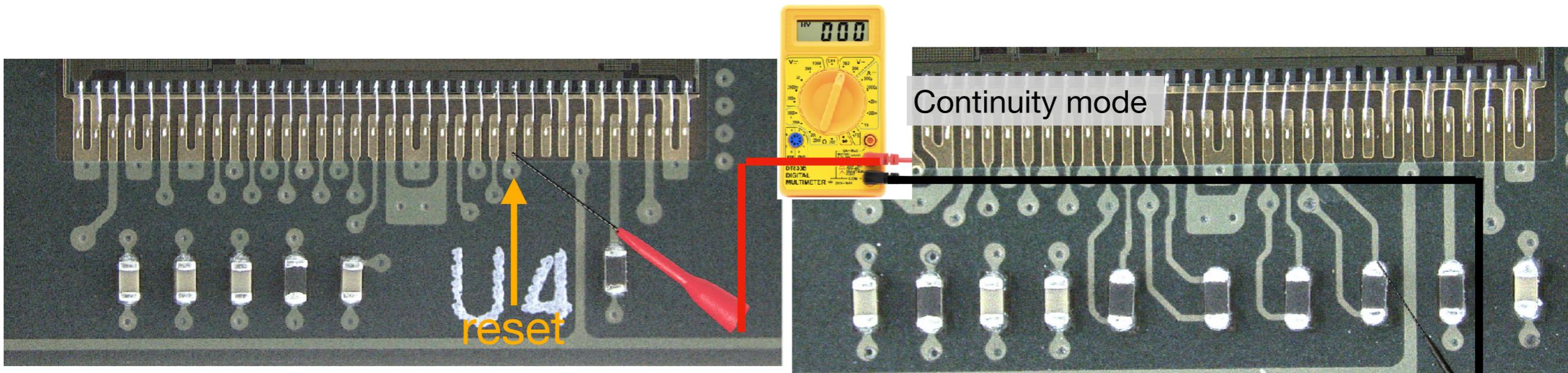
Test principle

- HDI circuit can be considered as 2 systems (circuit in parallel).
 - U1 to U13
 - U14 to U26
- HDI receives 4 LVDS signals (8 pads) :
 - Reset & Resetb
 - Slow Control In & Slow Control Inb
 - BCOclk & BCOclkb
 - Outclk & Outclkb
- The termination resistors are at U13 & U26
- We measure the pad continuity of 8 pads for each chip slot.

HDI pad continuity test

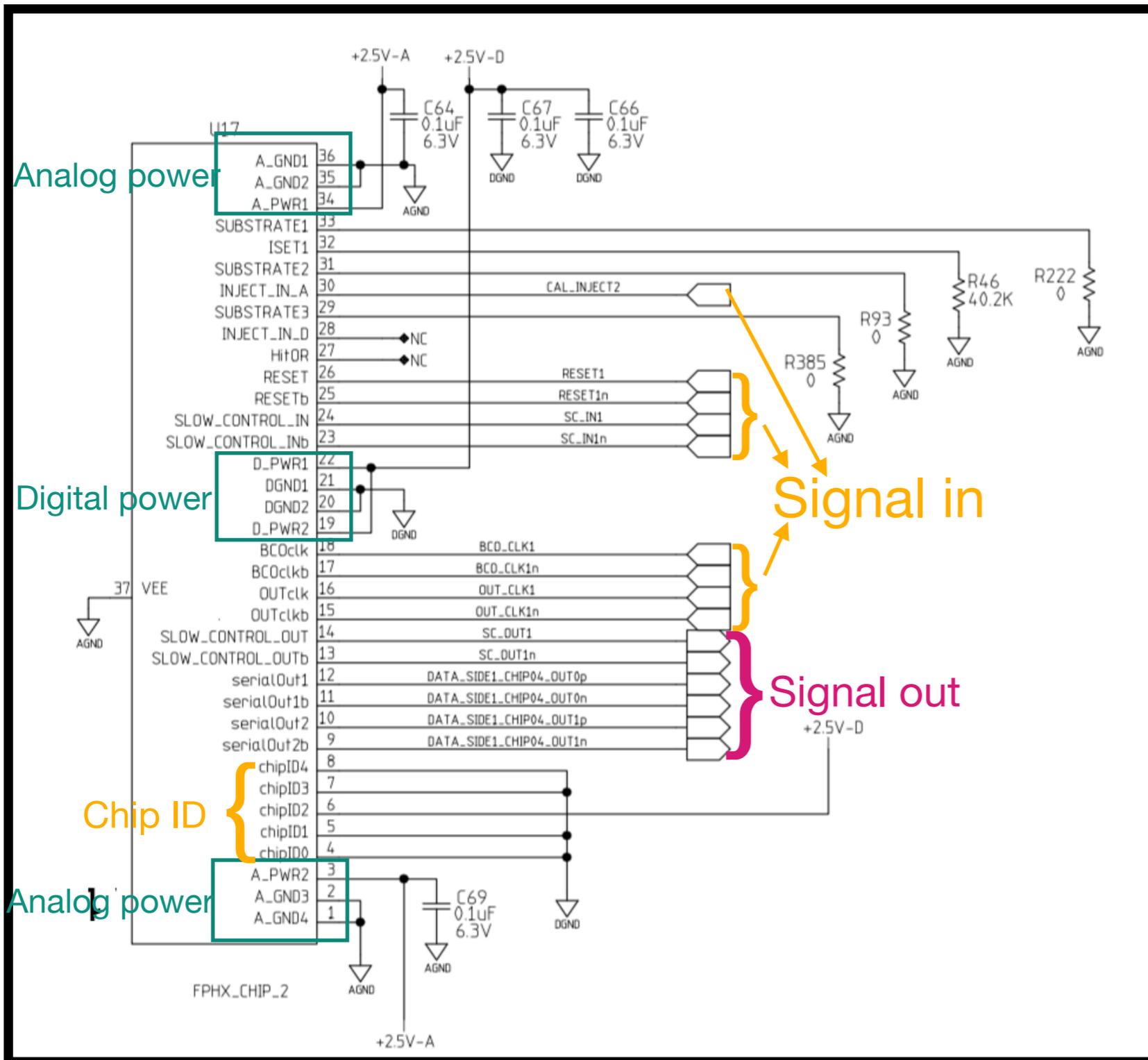


The receiver pads are tested

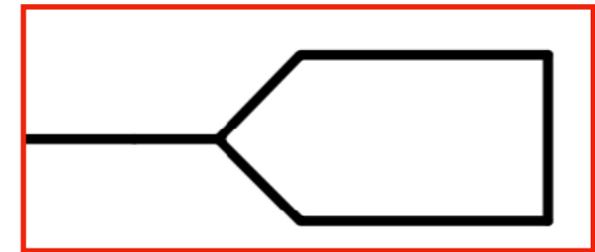


U13 or U26

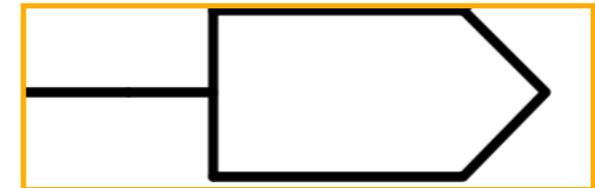
Function of each pad



Signal from ROC to HDI



Signal to ROC from HDI



Check the continuity of inner circuit of HDI

Analog power

Digital power

Signal out

9 signal in

Chip ID

Back up