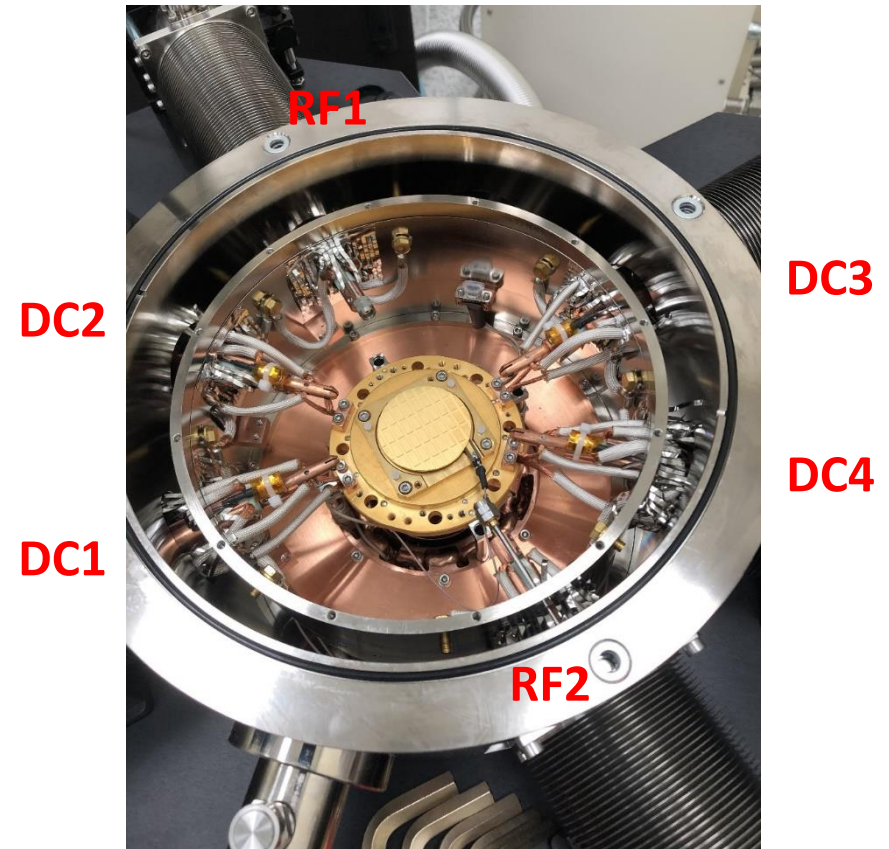
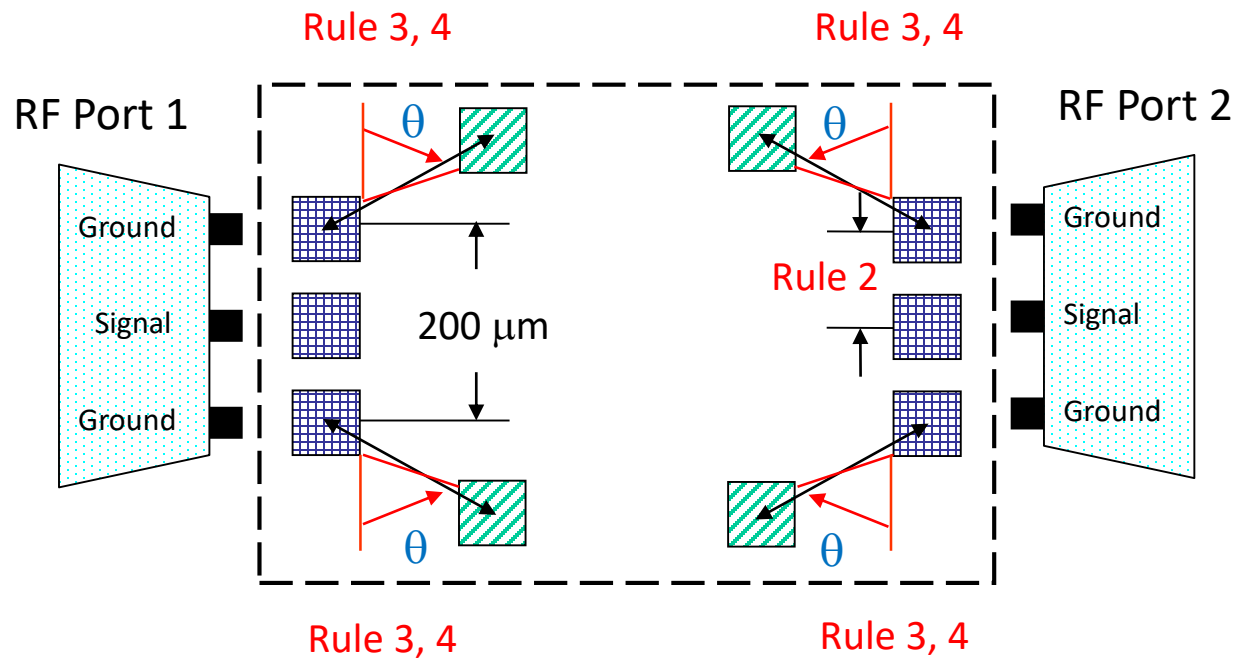


Cryogenic On-Chip Measurement System

- Temperature Range : 4K ~ 300K, (-269°C ~ 27°C)
- Sample Size :
1mm² ~ 25mm² (for DC tests)
1mm² ~ 20mm² (for RF tests)
- Pad Size :
DC pad $\geq 75\mu\text{m}$ (Max. 4 probes)
RF pad $\geq 50\mu\text{m}$ (Max. 2 probes)
- Cycle Time (Standard Operation)
Pump down time $\leq 0.5\text{hrs}$
Station cool-down $\leq 2\text{ hrs}$
Station warm-up $\leq 1.5\text{ hrs}$



Pad Layout Rule



Rule 1 \Rightarrow Minimum pad size : $75\mu\text{m} \times 75\mu\text{m}$

Rule 2 \Rightarrow $100\mu\text{m}$ pitch for RF pad (center-to-center)

Rule 3 \Rightarrow Minimum safety distance between the outermost RF pad and its nearby DC pad (if exists): $200\mu\text{m}$ center-to-center

Rule 4 \Rightarrow The Fan Angle between the outermost RF pad and its nearby DC pad (if exists) : 0° to 90°

(The Fan Angle is defined in the left figure as symbol θ .)