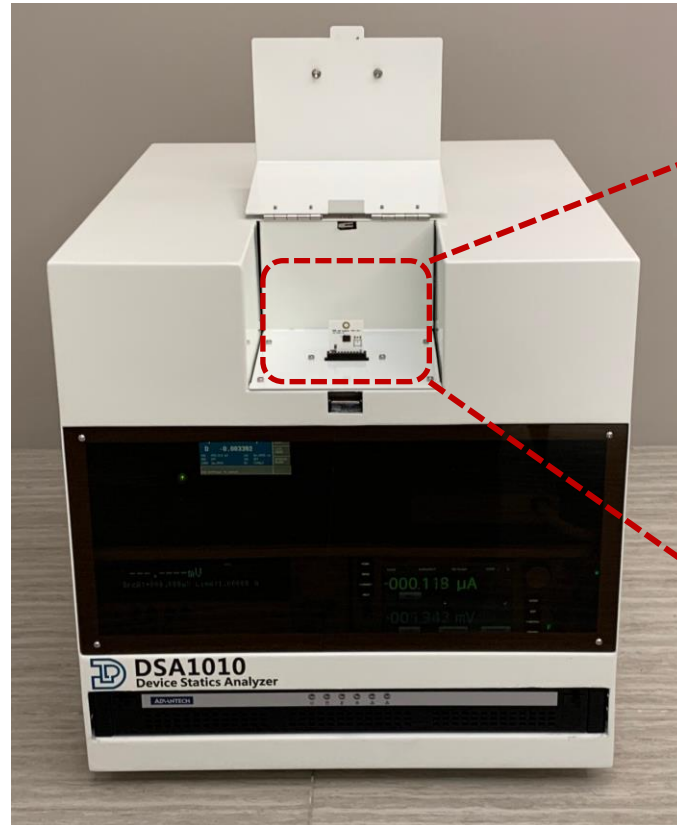


Device Statics Analyzer (DSA1010)



Output to Package



Output to Wafer

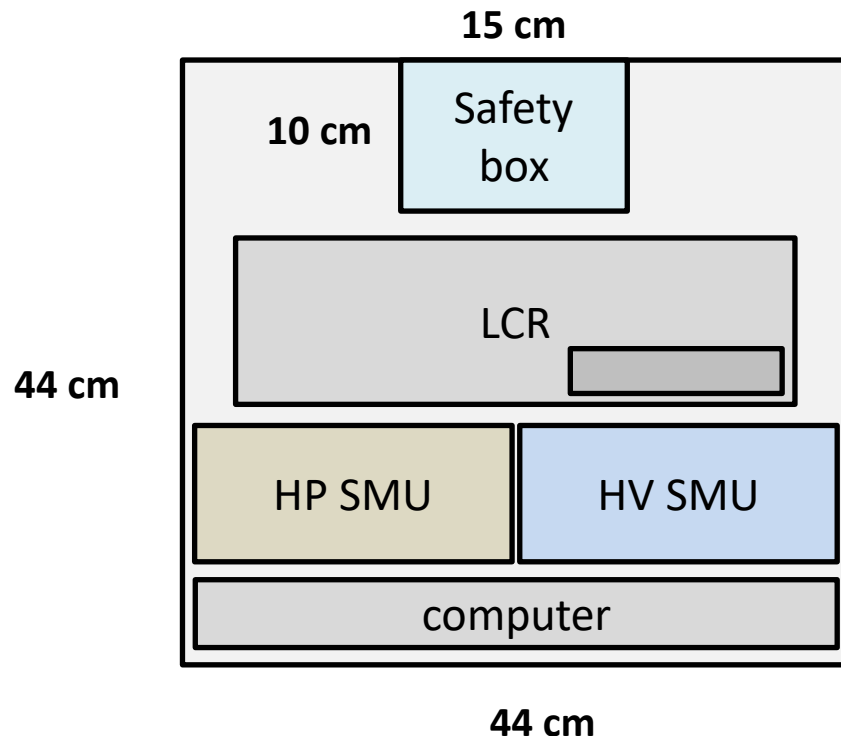


Device Statics Analyzer (DSA1010) : Mechanics

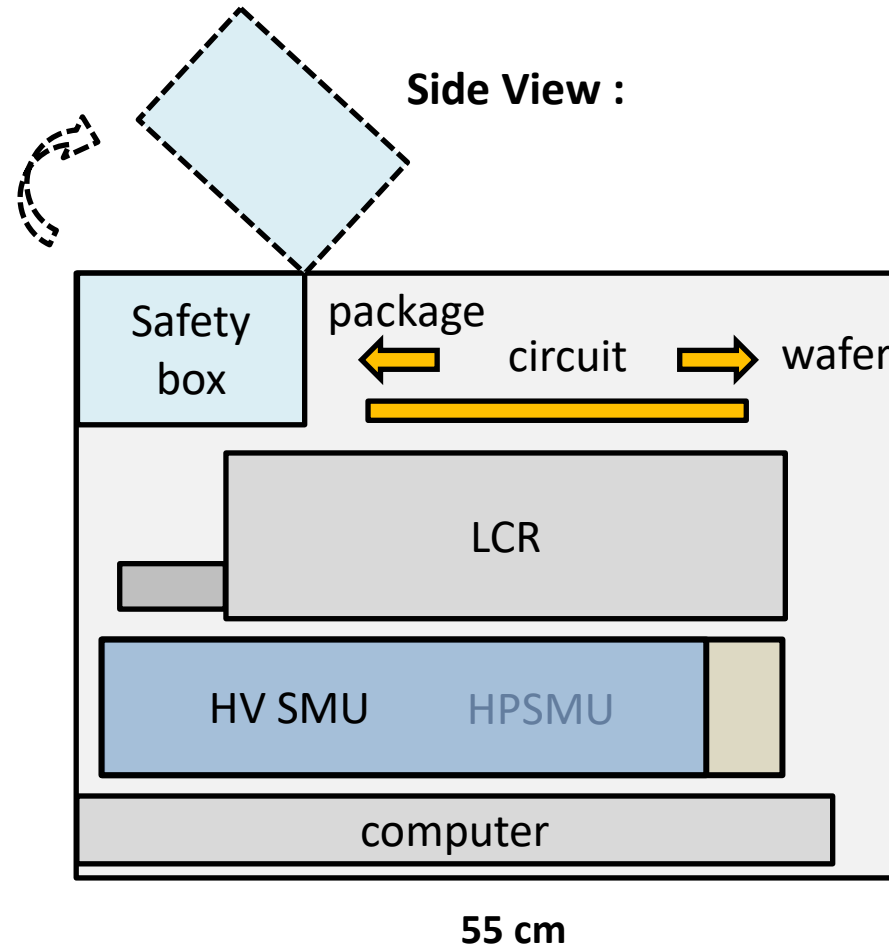


- Package or Wafer
- Standard Rack fitted

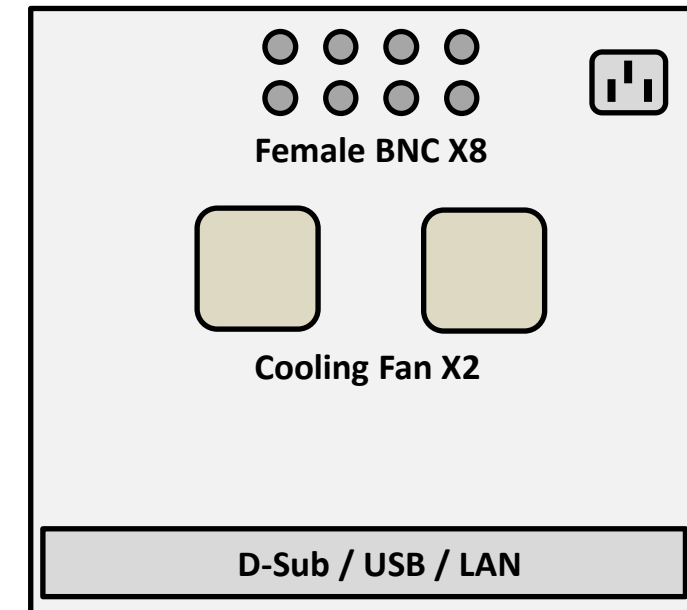
Front View :



Side View :



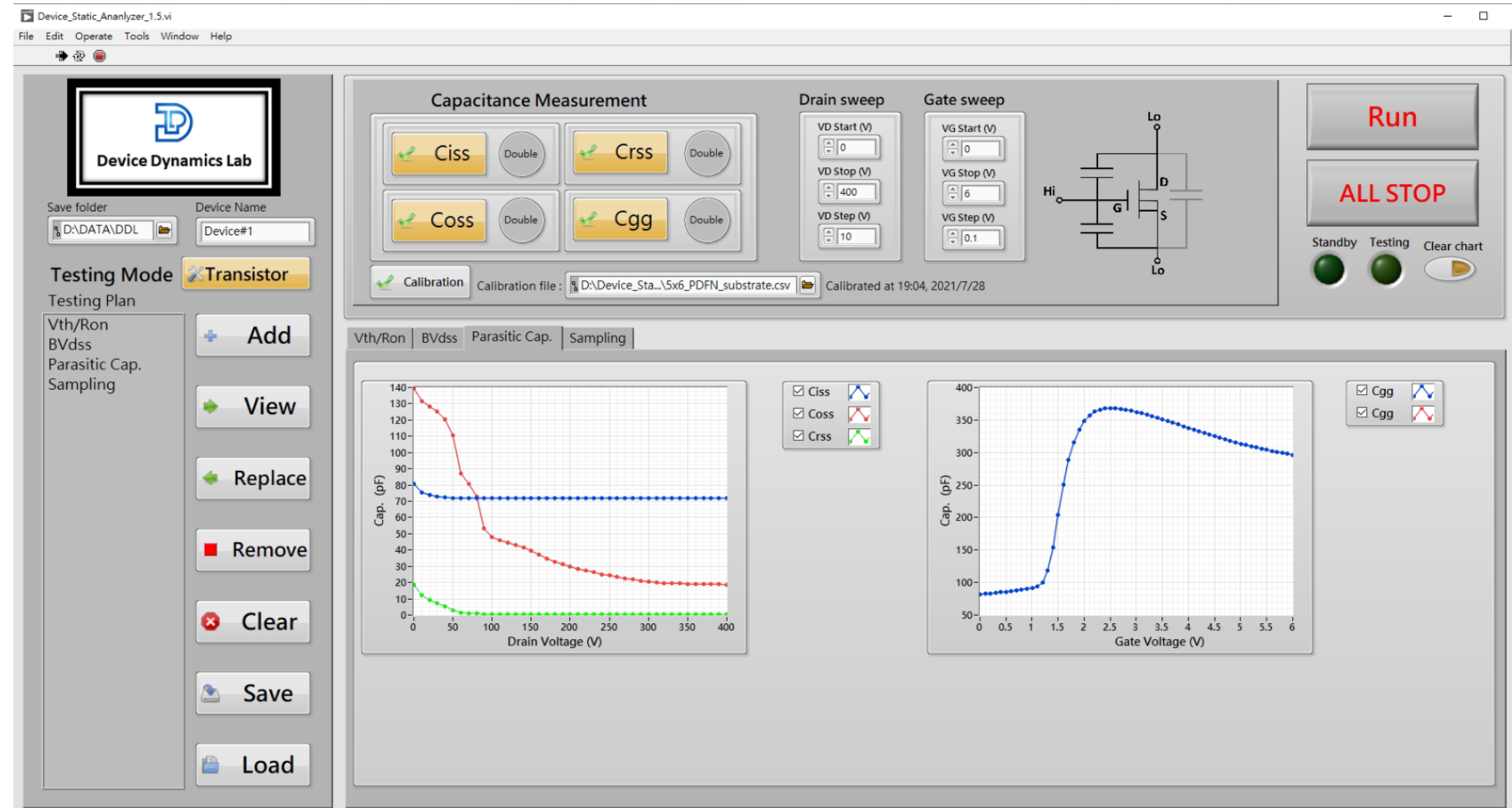
Rear View :



DSA1010 : Features

Features :

- **Friendly user interface**
 - Transistor mode or Diode mode
 - Testing Plan for series tests
- **Flexible DUT connection**
 - Package-Level
 - Wafer-Level
- **I-V & C-V automation**
 - SMU + CMU auto switch
 - HV Bias-Tee integrated
- **DC & Pulse automation**
 - DC SMU + Pulse SMU auto switch
- **Specification**
 - DC : 1000V/10mA, 40V/3A
 - Pulse : 20V/10A, 35V/5A



DSA1010 : Device FOM Benchmark



FOM	Transphorm	GaN Systems	Infineon	Unit
Rdson	116	123	136	mΩ
Qoss	36	18.9	15.7	nC
Qgd	1.69	0.55	0.62	nC
Eoss	3.84	2.22	2.56	μJ
Ron*Qoss	4176	2325	2135	mΩ*nC
Ron*Qgd	196.0	67.7	84.3	mΩ*nC
Ron*Eoss	445.4	273.1	348.2	mΩ*μJ

Figure of Merit (FOM) :

- Normalized to Rdson for size independent
- $R_{dson} \times \text{Die size} = R_{sp}$ for wafer cost
- $R_{dson} \times Q_{oss}$ for reverse (diode) switching loss
- $R_{dson} \times Q_{gd}$ for turn-on speed (switching loss)
- $R_{dson} \times E_{oss}$ for turn-off switching loss

