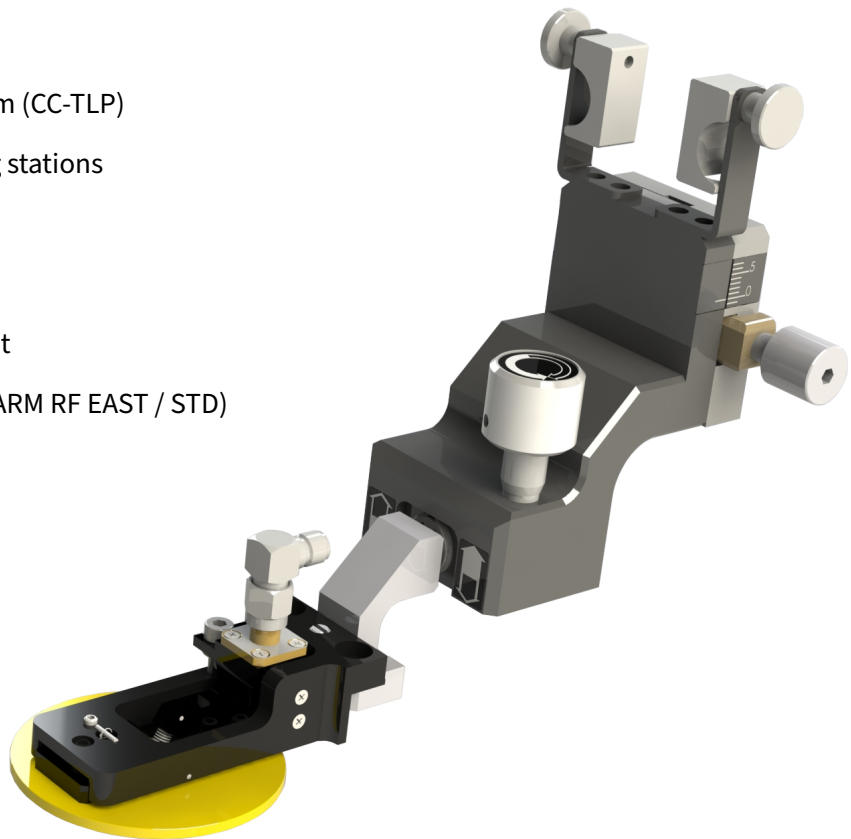
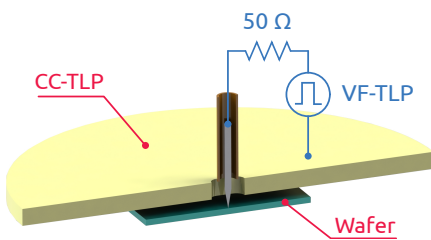


Probe CC-TLP-50-A1

Advanced TLP/HMM/HBM Solutions

1 Features

- Capacitively coupled TLP probearm (CC-TLP)
- Compatible with standard probing stations
- 18 GHz SMA connector
- Tilt angle adjustment
- Calibration gauge for needle height
- MPI RF probe arm PA-R-E (PROBE ARM RF EAST / STD)



2 Description

The CC-TLP-50-A1 probearm is used for CC-TLP measurements in order to investigate the CDM performance of the device under test [1], [2], [3], [4], [5]. For that purpose the TLP pulse has to have a pulse width less than 1 ns and a rise time of about typical 100 ps. DUT voltage and current have to be measured using a VF-TLP setup.

Fig. 1 shows the comparison of a typical CC-TLP waveform generated with a 1 ns long pulse and CDM.

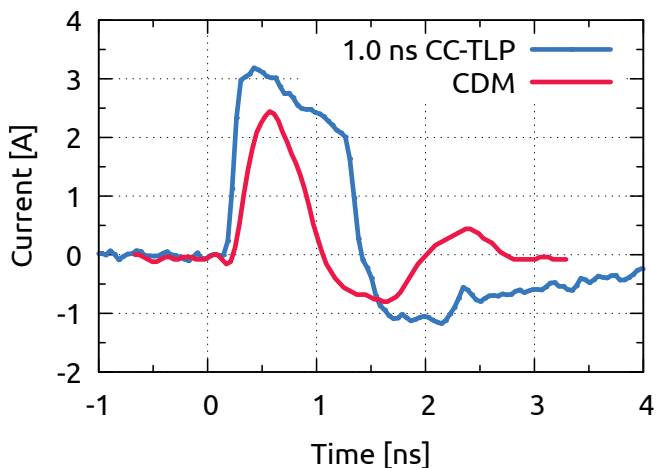


Figure 1: Comparison CC-TLP with CDM

References

- [1] H. Gieser, "Method and device for charging integrated circuits and structures with a pulsed heavy current," US6512362B1.
- [2] H. Wolf, H. Gieser, W. Stadler, and W. Wilkening, "Capacitively coupled transmission line pulsing cc-tlp, a traceable and reproducible stress method in the cdm-domain," in *Electrical Overstress/Electrostatic Discharge Symposium, 2003. EOS/ESD '03.*, Sep. 2003, pp. 1–8.
- [3] H. Wolf, H. Gieser, K. Bock, A. Jahanzeb, C. Duvvury, and Y. Y. Lin, "Capacitive coupled tlp (cc-tlp) and the correlation with the cdm," in *EOS/ESD Symposium, 2009 31st*, Jul. 2009, pp. 1–8.
- [4] K. Esmark, R. Gaertner, S. Seidl, F. zur Nieden, H. Wolf, and H. Gieser, "Using cc-tlp to get a cdm robustness value," in *2015 37th Electrical Overstress/Electrostatic Discharge Symposium (EOS/ESD)*, Sep. 2015, pp. 1–10. doi: 10.1109/EOSESD.2015.7314799.
- [5] H. Gieser, H. Wolf, and F. Iberl, "Comparing arc-free capacitive coupled transmission line pulsing cc-tlp with standard cdm testing and cdm field failures," in *ESD-Forum*, Berlin, 2005, pp. 11–18.

Probe CC-TLP-50-A1

Advanced TLP/HMM/HBM Solutions

3 Dimensions

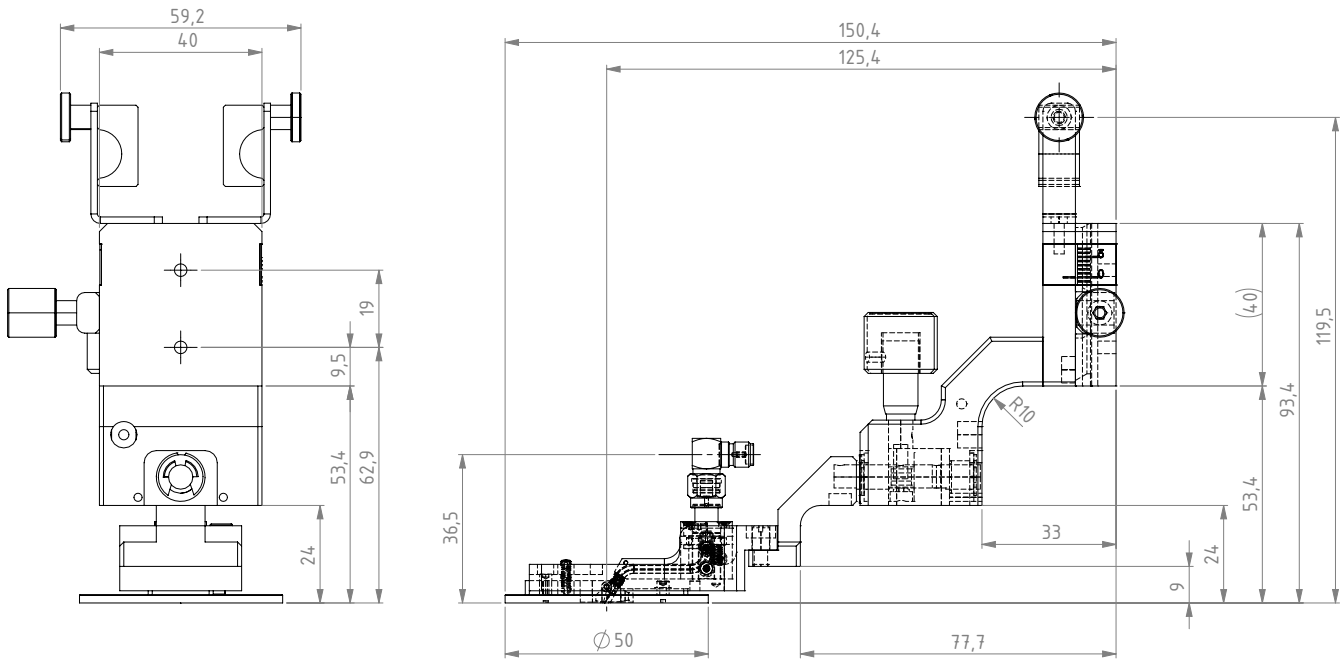


Figure 2: CC-TLP-50-A1 dimensions in [mm]

4 Ordering Information

Pos.	Description	Part No.
01	Probe CC-TLP-50-A1 including calibration gauge	CC-TLP-50-A1

General

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