

C3: An In-Situ Time and Frequency Domain Instrumentation for Traceable Distortion Characterization of Terahertz Transceivers

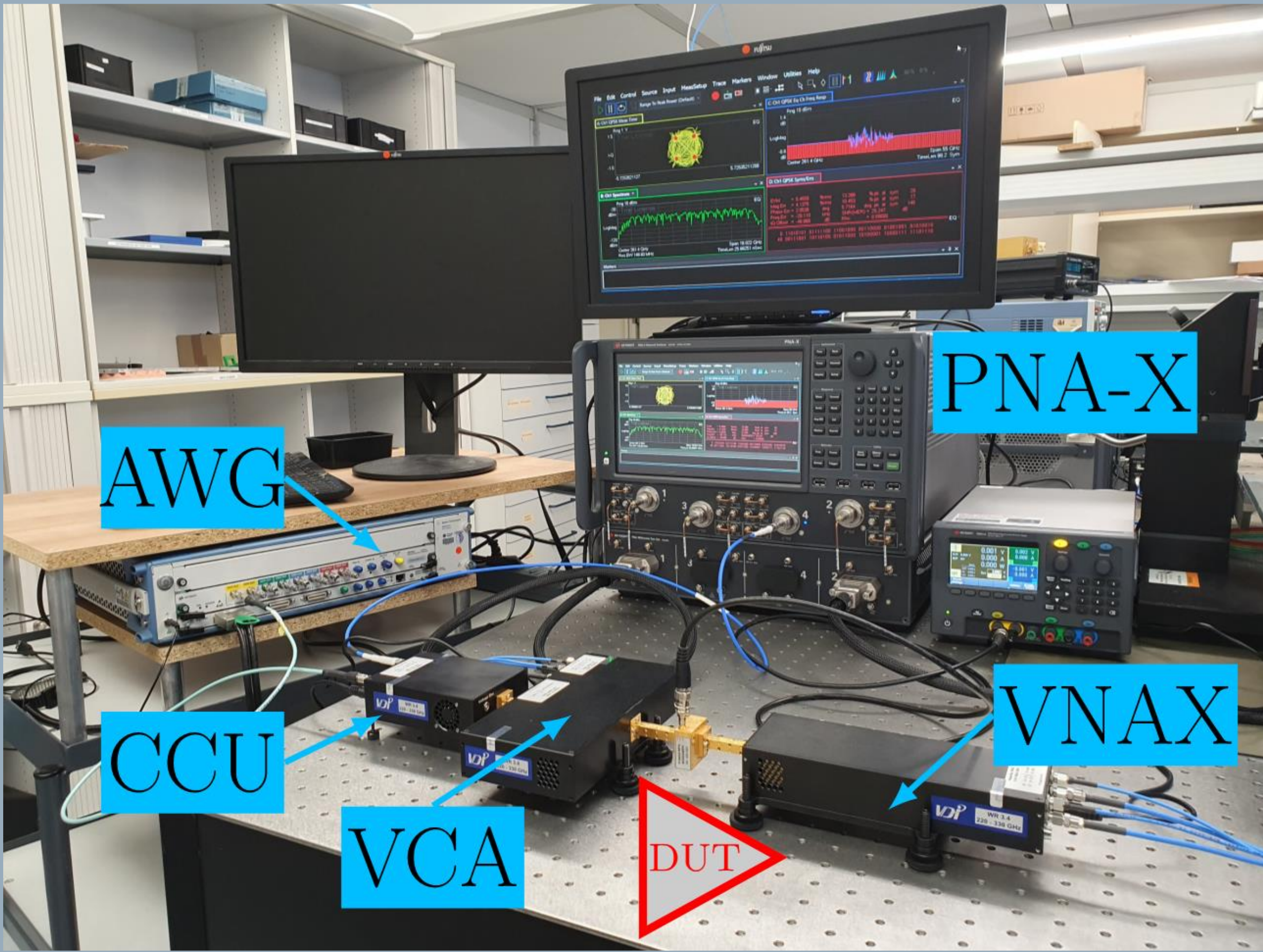
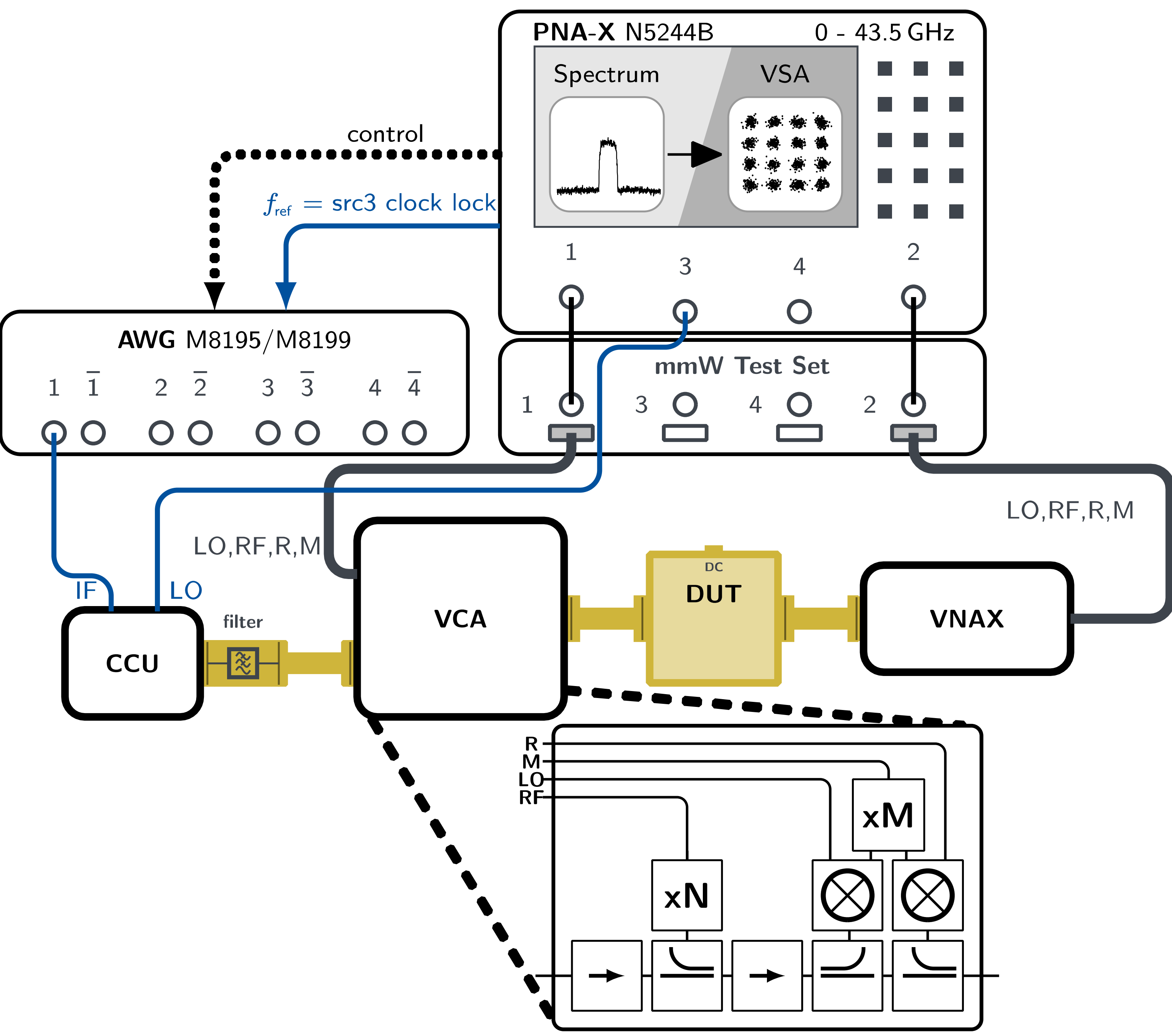
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Key Features

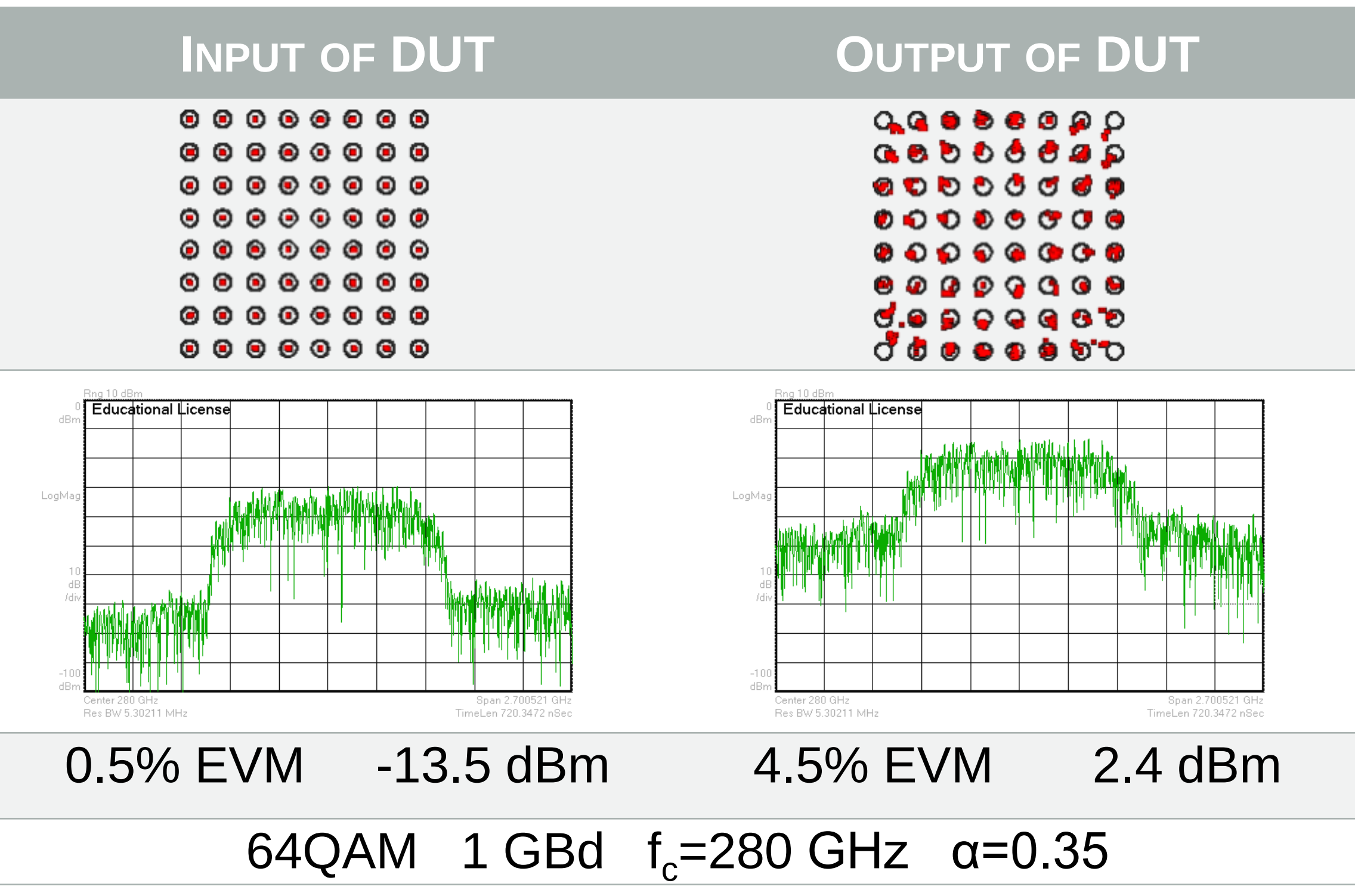
- Combination of **synchronous signal analysis in the time and frequency domain**
- **Cascade of a wideband up-converting mixer (CCU) and custom frequency extension unit (VCA) for testing under broadband complex modulated conditions**
- **Repetitive test signals** to enable vector averaging, wideband stitching, noise floor reduction
- Narrowband RF signal injection for **vectorial network analysis and calibration functionality**
- **Wideband input** for modulated signals and pass-through
- DUT characterization in
 - W-band (67 - 115 GHz)
 - D-band (110 - 170 GHz)
 - H-band (220 - 330 GHz)



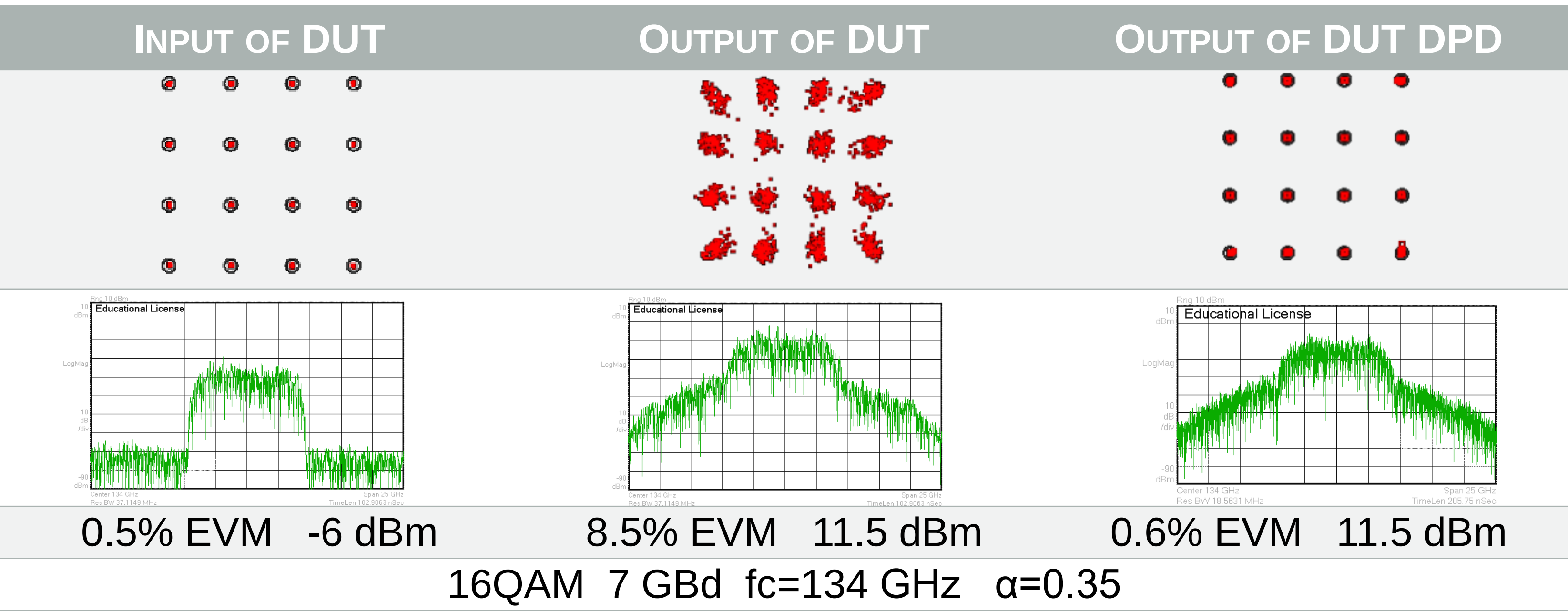
Block Diagram



H-band Amplifier Results



D-band Amplifier Results incl. DPD



Collaboration



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