

ABSTRACT

A mixed mode vector network analyzer (VNA) system to measure S- parameters and DC parameters of a differential device under test (DUT) is provided. The mixed mode VNA system measures mixed mode S-parameter measurements (i.e., AC measurements) using an independent resistive reflectometer bridge connected to each of the two ports of the differential DUT. The mixed mode VNA system further measures DC parameters of the differential DUT without impacting the measurement of S-parameters. In one embodiment, the mixed mode VNA system is used to measure multi-port differential DUT. Coupling capacitors provide low enough impedance to even the smallest RF frequency of AC measurement (i.e., measurement of S-parameters).

FIG. 5