

A broadband coplanar waveguide (CPW) to coplanar strip (CPS) transmission line transition directly integrated with an RF microelectromechanical systems reconfigurable multiband antenna is presented in this paper. This transition design exhibits very good performance up to 55 GHz, and uses a minimum number of dissimilar transmission line sections and wire bonds, achieving a low-loss and low-cost balancing solution to feed planar antenna designs. The transition design methodology that was followed is described and measurement results are presented.