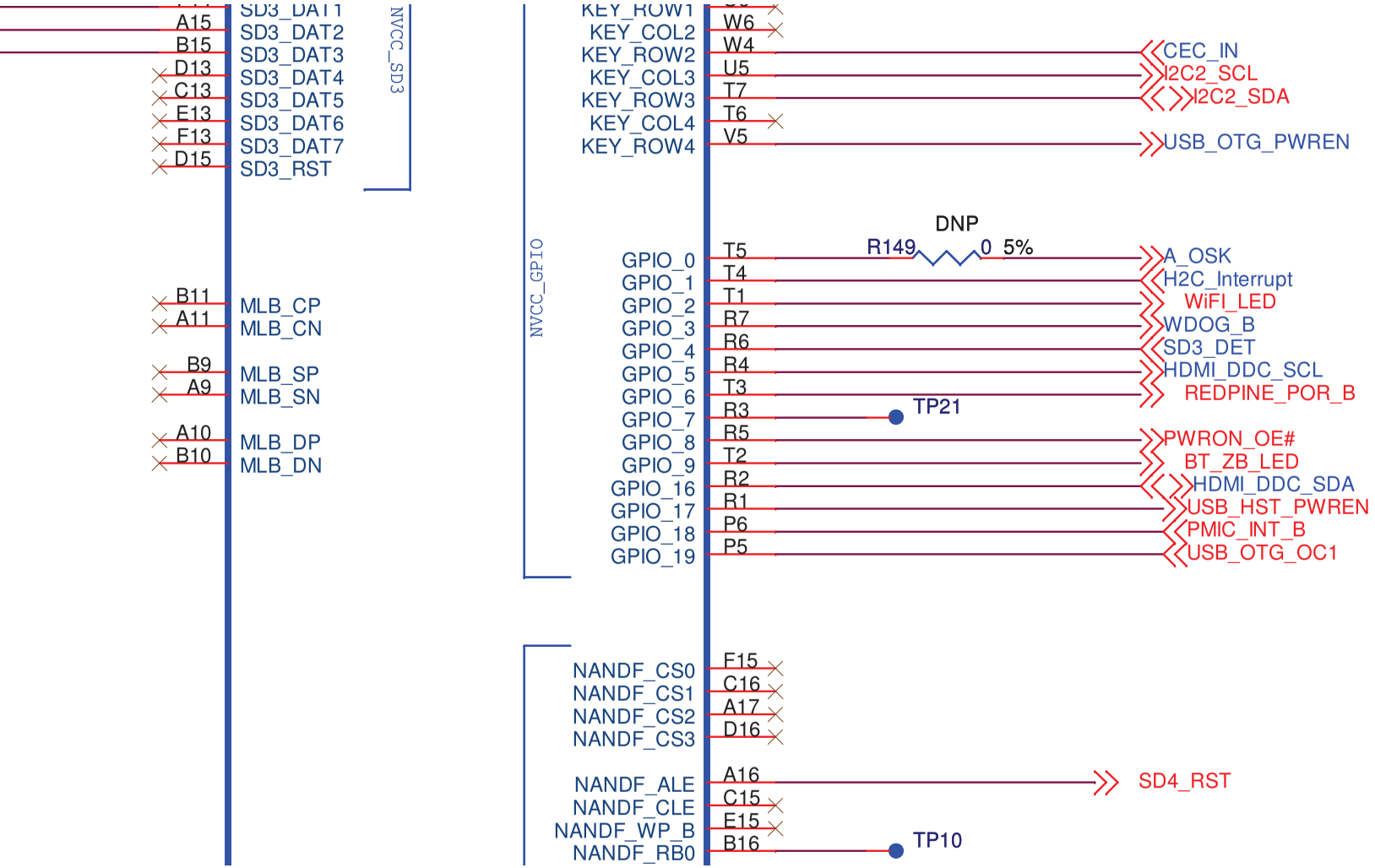TPS ARE GIVEN TO G
FOR TESTABILITY ON