

ABSTRACT

To provide a novel Cu bonding wire that achieves a favorable FAB shape, and achieves favorable high-temperature and high-humidity reliability of a 1st bonding part even in a case of performing post-curing associated with sealing at a low temperature and for a short time. The Cu bonding wire includes a core material of Cu or Cu alloy, and a coating layer having a total concentration of Pt and Ni of 90 atomic% or more formed on a surface of the core material. The bonding wire is characterized in that: in a concentration profile in a depth direction of the wire obtained by performing measurement using Auger electron spectroscopy (AES) so that the number of measurement points in the depth direction is 50 or more for the coating layer, a thickness of the coating layer is 10 nm or more and 130 nm or less, an average value X is 0.3 or more and 20.0 or less where X is defined as an average value of a ratio of an Ni concentration C_{Ni} (atomic%) to a Pt concentration C_{Pt} (atomic%), C_{Pt}/C_{Ni} , for all measurement points in the coating layer, and the total number of measurement points in the coating layer whose absolute deviation from the average value X is $0.3X$ or less is 50% or more relative to the total number of measurement points in the coating layer.

[No suitable figure]