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Provided is a cooling apparatus for an electronic element having improved heat dissipation performance while minimizing the size. To this end, the cooling apparatus for an electronic element according to the present invention includes a first chamber in a non-vacuum state, the first chamber being configured such that a printed circuit board equipped with a heat-generating element is disposed in the first chamber, a second chamber in a vacuum state, the second chamber being configured such that a spray unit configured to spray a refrigerant and a refrigerant supply unit configured to supply the refrigerant to the spray unit are disposed in the second chamber, and an evaporation unit disposed between the first chamber and the second chamber, in which the spray unit sprays the refrigerant, which is supplied by the refrigerant supply unit and condensed in the second chamber, into the second chamber, and in which the evaporation unit evaporates the refrigerant, which is sprayed into the second chamber by the spray unit, by using sensible heat transferred from the first chamber to the evaporation unit and latent heat transferred from the evaporation unit to the second chamber.

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