

TITLE OF THE INVENTION: SEMICONDUCTOR PACKAGE ASSEMBLY AND METHOD FOR FORMING THE SAME

Abstract

A semiconductor package assembly and a method for forming the same are provided. The assembly includes: a first semiconductor package including a first substrate and a first electronic component mounted on a front surface of the first substrate; a cooling device including a cooling pipe, the cooling pipe being mounted on the first semiconductor package with a lower surface of the cooling pipe thermally coupled to the first electronic component; a second semiconductor package including a second substrate and a second electronic component mounted on a front surface of the second substrate, the second semiconductor package being mounted on the cooling pipe with the second electronic component thermally coupled to an upper surface of the cooling pipe; an encapsulant formed between the front surface of the first substrate and the front surface of the second substrate to encapsulate the first, second electronic components, and a portion of the cooling pipe.

[FIG. 1A]