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(54) **THERMAL MANAGEMENT OF
THREE-DIMENSIONAL INTEGRATED
CIRCUITS**

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ABSTRACT

A 3D integrated circuit device can include a substrate, a thermal interface layer and at least one die, at least one device layer bonded between the thermal interface layer and the at least one die, wherein the thermal interface layer enhances conductive heat transfer between the at least one device layer and the at least one die, and a heat sink located adjacent to a heat spreader, wherein the thermal interface layer, the at least one die and the at least one device layer are located between the heat spreader and the substrate.

