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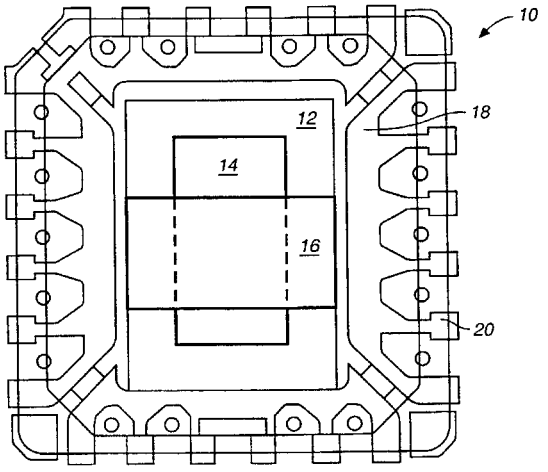
(54) Title: DUAL-DIE INTEGRATED CIRCUIT PACKAGE



(57) Abstract: A dual-die integrated circuit package (10) having two integrated circuit chips (14, 16) "flip chip" attached to each other and with one of the chips (14) being aligned at a specified angle in relation to the other chip (16) to allow access to bonding pads on the surface of each chip for wirebonding connection into the chip package. In a first embodiment, the two chips are rectangular in shape and are aligned at an angle of 90 degrees with respect to each other, thus allowing the end portions of the bottom chip to be accessible for connection into the chip package. Other embodiments maintain the chips at angles of less than 90 degrees, such that corner portions of each chip are accessible for connection into the chip package. The invention allows two identically constructed chips to be used for doubling or even greater multiplication of the functionality or memory of the IC package, while still using the same package footprint as for a single chip. Also, being able to use two chips that are identically constructed from a wafer fabrication standpoint provides the advantage of requiring only one IC design process.

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