

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2022/0361326 A1

Nov. 10, 2022 (43) **Pub. Date:**

(54) SEMICONDUCTOR PACKAGE DEVICE AND METHOD OF MANUFACTURING THE SAME

(71) Applicant: Advanced Semiconductor

Engineering, Inc., Kaohsiung (TW)

Inventors: Ming-Ze LIN, Kaohsiung (TW); Chia

Ching CHEN, Kaohsiung (TW); Yi Chuan DING, Kaohsiung (TW)

(73) Assignee: Advanced Semiconductor

Engineering, Inc., Kaohsiung (TW)

Appl. No.: 17/873,088 (21)

(22) Filed: Jul. 25, 2022

Related U.S. Application Data

(63) Continuation of application No. 16/888,316, filed on May 29, 2020, now Pat. No. 11,399,429, which is a continuation of application No. 15/621,964, filed on Jun. 13, 2017, now Pat. No. 10,687,419.

Publication Classification

(51) Int. Cl. (2006.01)H05K 1/02 H05K 1/11 (2006.01)

H05K 3/46	(2006.01)
H01L 21/48	(2006.01)
H01L 23/14	(2006.01)
H01L 23/498	(2006.01)

(52) U.S. Cl.

CPC H05K 1/0298 (2013.01); H05K 1/115 (2013.01); H05K 3/4623 (2013.01); H01L 21/4857 (2013.01); H01L 23/145 (2013.01); H01L 23/49822 (2013.01); H05K 2203/1438 (2013.01); H01L 2224/16225 (2013.01)

(57)**ABSTRACT**

A semiconductor package device includes a first dielectric layer, a first interconnection layer, a second interconnection layer, and a second dielectric layer. The first dielectric layer has a first surface, a second surface opposite to the first surface and a lateral surface extending between the first surface and the second surface. The first interconnection layer is within the first dielectric layer. The second interconnection layer is on the second surface of the first dielectric layer and extends from the second surface of the first dielectric layer into the first dielectric layer to electrically connect to the first interconnection layer. The second dielectric layer covers the second surface and the lateral surface of the first dielectric layer and the second interconnection layer.

