

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2022/0386460 A1 CHANG et al.

(43) **Pub. Date:** Dec. 1, 2022

(54) INTERLAYER CONNECTIVE STRUCTURE OF WIRING BOARD AND METHOD OF MANUFACTURING THE SAME

(71) Applicant: Unimicron Technology Corp., Taoyuan (TW)

(72) Inventors: Chi-Min CHANG, Taoyuan City (TW); Ching-Sheng CHEN, Hsinchu County (TW); Jun-Rui HUANG, Tainan City (TW); Wei-Yu LIAO, Taoyuan City (TW); Yi-Pin LIN, Taoyuan City (TW)

(21) Appl. No.: 17/377,280

(22)Filed: Jul. 15, 2021

(30)Foreign Application Priority Data

Jun. 1, 2021 (TW) 110119894

Publication Classification

(51) Int. Cl. H05K 1/11 (2006.01)H05K 1/18 (2006.01)H05K 3/42 (2006.01) (52) U.S. Cl.

CPC H05K 1/115 (2013.01); H05K 1/181 (2013.01); H05K 3/423 (2013.01); H05K 2201/09545 (2013.01)

(57)**ABSTRACT**

An interlayer connective structure is suitable for being formed in a wiring board, in which the wiring board includes two traces and an insulation part between the traces. The insulation part has a through hole. The interlayer connective structure located in the through hole is connected to the traces. The interlayer connective structure includes a column and a pair of protuberant parts. The protuberant parts are located at two ends of the through hole respectively and connected to the column and the traces. The protuberant parts stick out from the outer surfaces of the traces respectively. Each of the protuberant parts has a convex curved surface, in which the distance between the convex curved surface and the axis of the through hole is less than the radius of the through hole.



