



US 20230230884A1

(19) **United States**(12) **Patent Application Publication**
Huang et al.(10) **Pub. No.: US 2023/0230884 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **INTERCONNECT STRUCTURES FOR SEMICONDUCTOR DEVICES AND METHODS OF MANUFACTURING THE SAME**(71) Applicant: **Taiwan Semiconductor Manufacturing Company Limited**,
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(62) Division of application No. 17/166,548, filed on Feb. 3, 2021, now Pat. No. 11,626,326.

(60) Provisional application No. 63/016,608, filed on Apr. 28, 2020.

Publication Classification(51) **Int. Cl.****H01L 21/8234** (2006.01)**H01L 29/417** (2006.01)**H01L 27/088** (2006.01)(52) **U.S. Cl.**CPC **H01L 21/823475** (2013.01); **H01L 21/823481** (2013.01); **H01L 29/41791** (2013.01); **H01L 27/0886** (2013.01)

(57)

ABSTRACT

A semiconductor device includes a first source/drain structure coupled to an end of a first conduction channel that extends along a first direction. The semiconductor device includes a second source/drain structure coupled to an end of a second conduction channel that extends along the first direction. The semiconductor device includes a first interconnect structure extending through an interlayer dielectric and electrically coupled to the first source/drain structure. The semiconductor device includes a second interconnect structure extending through the interlayer dielectric and electrically coupled to the second source/drain structure. The semiconductor device includes a first isolation structure disposed between the first and second source/drain structures and extending into the interlayer dielectric.

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