

(19) **United States**
(12) **Patent Application Publication** (10) **Pub. No.: US 2023/0230923 A1**
Pasdast et al. (43) **Pub. Date: Jul. 20, 2023**

(54) **MICROELECTRONIC DIE INCLUDING SWAPPABLE PHY CIRCUITRY AND SEMICONDUCTOR PACKAGE INCLUDING SAME**

Publication Classification

(51) **Int. Cl.**
H01L 23/538 (2006.01)
H01L 25/16 (2006.01)
H01L 23/00 (2006.01)
(52) **U.S. Cl.**
CPC *H01L 23/5382* (2013.01); *H01L 23/5386* (2013.01); *H01L 24/16* (2013.01); *H01L 25/16* (2013.01); *H01L 2224/16225* (2013.01)

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(21) Appl. No.: **17/824,974**

(22) Filed: **May 26, 2022**

(30) **Foreign Application Priority Data**

Dec. 30, 2021 (IN) 202141061702

(57) **ABSTRACT**

A microelectronic device, a semiconductor package including the device, an IC device assembly including the package, and a method of making the device. The device includes a substrate; physical layer (PHY) circuitry on the substrate including a plurality of receive (RX) circuits and a plurality of transmit (TX) circuits; electrical contact structures at a bottom surface of the device; signal routing paths extending between the electrical contact structures on one hand, and, on another hand, at least some of the RX circuits or at least some of the TX circuits; and electrical pathways leading to the PHY circuitry and configured such that at least one of: an enable signal input to the device is to travel through at least some of the electrical pathways to enable a portion of the PHY circuitry; or a disable signal input to the device is to travel through at least some of the electrical pathways to disable a corresponding portion of the PHY circuitry.

