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Miyaji(10) **Pub. No.: US 2024/0213183 A1**(43) **Pub. Date: Jun. 27, 2024**(54) **SEMICONDUCTOR DEVICE HAVING DIE RING CONDUCTOR****Publication Classification**(51) **Int. Cl.***H01L 23/58* (2006.01)*G11C 11/4074* (2006.01)*H01L 23/00* (2006.01)*H01L 25/18* (2006.01)(52) **U.S. Cl.**CPC *H01L 23/585* (2013.01); *G11C 11/4074*(2013.01); *H01L 23/562* (2013.01); *H01L**25/18* (2013.01)(71) Applicant: **MICRON TECHNOLOGY, INC.,**
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(57)

ABSTRACT

An apparatus that includes first and second circuit blocks integrated on a semiconductor chip, and a die ring conductor provided along edges of the semiconductor chip so as to surround the first and second circuit blocks. The first circuit block includes a first die ring controller. The second circuit block includes a second die ring controller. One of the first and second die ring controllers is coupled to the die ring conductor such that another of the first and second die ring controllers is isolated from the die ring conductor.

