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(43) **Pub. Date:** **Jul. 11, 2024**(54) **TECHNIQUES FOR MODULAR DIE CONFIGURATIONS FOR MULTI-CHANNEL MEMORY**(71) Applicant: **Micron Technology, Inc.**, Boise, ID (US)(72) Inventors: **James Brian Johnson**, Boise, ID (US);  
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(2013.01); **H01L 2924/1434** (2013.01)(57) **ABSTRACT**

Methods, systems, and devices for modular die configurations for multi-channel memory are described. A semiconductor component (e.g., a semiconductor wafer) may be configured with multiple rows and multiple columns of memory arrays, and associated channels. A row of memory arrays may be associated with a contact region extending along the row direction. The semiconductor component may also include control regions extending along the column direction between at least some of the columns of memory arrays. Each control region may include control circuitry for operating memory arrays on one or both sides of the control region. The channels and memory arrays of the semiconductor wafer may be grouped into one or more independently-operable memory dies, with each memory die having at least a portion of a control region and at least a portion of a contact region for operating the memory arrays of the memory die.

