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(54) SELF-ALIGNED LINE-AND-VIA STRUCTURE AND METHOD OF MAKING THE SAME

(71) Applicant: SANDISK TECHNOLOGIES LLC, ADDISON, TX (US)

(72) Inventor: Takashi YAMAHA, Yokkaichi (JP)

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(57)ABSTRACT

An integrated line-and-via structure includes a metal line structure including a first metal and having a pair of lengthwise metal line sidewalls that laterally extend along a first horizontal direction, a metallic capping plate including a metallic capping material and overlying the metal line structure and having a pair of lengthwise metal cap sidewalls that are vertically coincident with the pair of lengthwise metal line sidewalls, and a metal via structure including a second metal and having a pair of lengthwise metal via sidewalls that is vertically coincident with the pair of lengthwise metal cap sidewalls and having a lateral extent along the first horizontal direction that is less than a lateral extent of the metal line structure along the first horizontal direction.

