SEMICONDUCTOR STRUCTURES IN MEMORY DEVICES

ABSTRACT

Methods, devices, and systems for managing layouts of semiconductor structures in memory devices are provided. In one aspect, a memory device includes a first semiconductor including a first memory bank and a second memory bank, and a second semiconductor structure. The second semiconductor structure includes a first bank circuit and a second bank circuit arranged along a first direction. The first bank circuit is coupled to the first memory bank and the second bank circuit is coupled to the second memory bank. The first bank circuit includes a first driver circuit on a boundary of the first bank circuit, and the second bank circuit includes a second driver circuit on a boundary of the second bank circuit. At least a portion of the first driver circuit is adjacent to and overlaps with at least a portion of the second driver circuit along a second direction perpendicular to the first direction.

Fig. 9C