

ABSTRACT

According to one embodiment, M (M represents an integer of 2 or larger) semiconductor chips and through electrodes for N (N represents an integer of 2 or larger) channels are provided. The M semiconductor chips are stacked in sequence. The through electrodes are embedded in the semiconductor chips to connect electrically the semiconductor chips in the direction of stacking. The connection destinations of the through electrodes are exchanged between one or more upper and lower layers of the semiconductor chips.