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**SIGNAL TRANSMISSION CIRCUIT, CMOS SEMICONDUCTOR DEVICE,
AND CIRCUIT BOARD**

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ABSTRACT OF THE DISCLOSURE

A signal transmission circuit, a CMOS semiconductor device, and a circuit board improve the signal transmission
10 characteristic of a signal line having a large capacitance that is generated on the long signal line inside a large-scale integrated circuit when the signal line is long or when many driven circuits are connected to the signal line. The midpoint voltage of the power source voltage of the drive
15 circuit and driven circuit is output. An assist-circuit having low output impedance is then connected to the signal line. The voltage of the signal line is thus held at the midpoint voltage of the power source voltage. At the same time, a drive signal that is output from the driver circuit
20 is excited centered at the midpoint voltage (threshold voltage of the driven circuit) with a small amplitude. The driven circuit is then driven by this drive signal that is restricted to the small amplitude.

25 (Figure 6)

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