



US 20220385289A1

(19) **United States**(12) **Patent Application Publication**  
**WATANABE et al.**(10) **Pub. No.: US 2022/0385289 A1**(43) **Pub. Date: Dec. 1, 2022**(54) **INTEGRATED CIRCUIT, CIRCUIT BOARD,  
AND ELECTRONIC APPARATUS****Publication Classification**(71) Applicant: **Oki Electric Industry Co., Ltd.**, Tokyo  
(JP)(72) Inventors: **Keisuke WATANABE**, Tokyo (JP);  
**Yohei OGAWA**, Tokyo (JP); **Yukio  
ITO**, Tokyo (JP)(73) Assignee: **Oki Electric Industry Co., Ltd.**, Tokyo  
(JP)(21) Appl. No.: **17/748,798**(22) Filed: **May 19, 2022**(30) **Foreign Application Priority Data**May 24, 2021 (JP) ..... 2021-087037  
Oct. 26, 2021 (JP) ..... 2021-174914(51) **Int. Cl.**  
**H03K 19/00** (2006.01)  
**H03K 19/003** (2006.01)  
**H05K 1/02** (2006.01)  
(52) **U.S. Cl.**  
CPC ... **H03K 19/0005** (2013.01); **H03K 19/00369**  
(2013.01); **H05K 1/0246** (2013.01); **H01L**  
**23/64** (2013.01)(57) **ABSTRACT**

An integrated circuit according to one or more embodiments may include a terminal to which an impedance element and a power supply having a predetermined potential can be connected. The integrated circuit may be configured to change a potential of one of electrodes of the impedance element connected to the terminal, detect a change in electrical characteristics of the terminal based on characteristics of the impedance element when the potential of the one electrode of the impedance element is changed, to determine a setting condition among a plurality of setting conditions that are used for an operation of the integrated circuit, store the setting condition in a storage, and use the setting condition stored in the storage for the operation of the integrated circuit.

