



US 20240178785A1

(19) **United States**

(12) **Patent Application Publication**  
**Goldman**

(10) **Pub. No.: US 2024/0178785 A1**

(43) **Pub. Date: May 30, 2024**

(54) **POST MEASUREMENT CALIBRATING  
TRANSLATION CIRCUIT**

(52) **U.S. Cl.**

CPC ..... **H02P 29/68** (2016.02); **G01K 15/005**  
(2013.01)

(71) Applicant: **Alpha and Omega Semiconductor  
International LP**, Toronto (CA)

(57)

**ABSTRACT**

Apparatus and associated methods relate to a post temperature calibration translation circuit (PTCTC) configured to generate a signal corresponding to a predetermined temperature voltage translation relationship (TVTR). In an illustrative example, the PTCTC may be coupled to a motor controller including a control logic to regulate a power input to a motor based on the TVTR. The PTCTC further includes an input port configured to receive a temperature sensor output based on a predetermined transfer function. At least one analog corrective translation circuit (ACTC), for example, may generate temperature input signals to the motor power controller based on the temperature sensor output. The temperature input signals are generated based on a calibrated transfer function such that the temperature input signals substantially match an output according to the TVTR. Various embodiments may advantageously avoid modification of the control logic when the predetermined transfer function is altered.

(72) Inventor: **Steven J. Goldman**, Cary, NC (US)

(73) Assignee: **Alpha and Omega Semiconductor  
International LP**, Toronto (CA)

(21) Appl. No.: **18/059,887**

(22) Filed: **Nov. 29, 2022**

**Publication Classification**

(51) **Int. Cl.**  
**H02P 29/68** (2006.01)  
**G01K 15/00** (2006.01)

