



US 20220361316A1

(19) **United States**

(12) **Patent Application Publication**

Azizian et al.

(10) **Pub. No.: US 2022/0361316 A1**

(43) **Pub. Date: Nov. 10, 2022**

(54) **AUTONOMOUS VEHICLE COMPUTING
DEVICE WITH BARRIER LAYER**

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(21) Appl. No.: **17/307,696**

(22) Filed: **May 4, 2021**

Publication Classification

(51) **Int. Cl.**
H05K 1/02 (2006.01)
H05K 1/18 (2006.01)
H05K 7/20 (2006.01)

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

CPC **H05K 1/0203** (2013.01); **H05K 1/181**
(2013.01); **H05K 7/2039** (2013.01); **H05K**
2201/066 (2013.01)

(57)

ABSTRACT

Various technologies described herein pertain to an autonomous vehicle computing device for an autonomous vehicle. The autonomous vehicle computing device includes a printed circuit board, a heat sink, and a thermal interface material layer between the printed circuit board and the heat sink. The autonomous vehicle computing device further includes a barrier layer between the thermal interface material layer and the printed circuit board. The thermal interface material layer can be formed of a two-part thermal interface material that cures in place. The barrier layer between the thermal interface material layer and the printed circuit board enables separation of the printed circuit board from the thermal interface material layer if reworking or modification of the autonomous vehicle computing device is desired. The barrier layer can enable the printed circuit board to be separated from the thermal interface material layer in a manner that mitigates damage to the printed circuit board.

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