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(19) **United States**(12) **Patent Application Publication**  
**Stewart**(10) **Pub. No.: US 2022/0386462 A1**(43) **Pub. Date: Dec. 1, 2022**(54) **CARD EDGE CONNECTOR WITH  
INTRA-PAIR COUPLING**(52) **U.S. CL.**  
CPC ... **H05K 1/117** (2013.01); **H05K 2201/10189**  
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Jul. 6, 2020, now Pat. No. 11,425,816.**Publication Classification**(51) **Int. Cl.**  
**H05K 1/11** (2006.01)(57) **ABSTRACT**

Systems, apparatuses, and methods related to a printed circuit board (PCB) with a plurality of layers are described. An edge connector may be formed on an end of the PCB substrate and may include contact pins on an outer layer of the plurality of layers. The edge connector may also include an intra-pair coupling block disposed on one or more interior layers such that at least a portion of the intra-pair coupling block is colinear with at least one contact pin on the outer layer. The electronic device may also include at least one integrated circuit on the PCB and electrically connected to the contact pins. The intra-pair coupling component may induce coupling of signals carried by the contact pins.

