Applying pcb configuration to wireless mouse power

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Abstract

This paper discusses the printed circuit board (PCB) winding of the contact-less power transmission system compared with the traditional transformer power transmission system. In this study, the contactless power transmission system is successfully applied to the wireless mouse for stable power supply. To examine the feasibility of the proposed system in this paper, a contactless power transmission system is developed with 10 W of contactless coupling transformer in primary input power and 0.2 W of secondary output power, which are about 2% efficiency. However, the design of contactless power supply for wireless mouse can be used under the mouse pad to decrease battery consumption and reach the purpose of energy saving, carbon reduction and environmental protection.

Key words: Contactless; PCB; Transformer; Wireless mouse