On the crossing numbers of Cartesian products of paths with special graphs

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ABSTRACT.

There are known exact results of the crossing numbers of the Cartesian product of all graphs of order at most four with paths, cycles and stars. Moreover, for the path P_n of length n, the crossing numbers of Cartesian products $G \square P_n$ for all connected graphs G on five vertices and for forty graphs G on six vertices are known. In this paper, we extend these results by determining the crossing numbers of the Cartesian products $G \square P_n$ for six other graphs G of order six.

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