

## Maximum Induced Subgraph of an Augmented Cube

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**Abstract :** Let  $\max \zeta G(m)$  denote the maximum number of edges in a subgraph of graph  $G$  induced by  $m$  nodes. The  $n$ -dimensional augmented cube, denoted as  $AQ_n$ , a variation of the hypercube, possesses some properties superior to those of the hypercube. We study the cases when  $G$  is the augmented cube  $AQ_n$ .

**Keywords :** interconnection network, augmented cube, induced subgraph, bisection width

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