

# Embedding quadratization gadgets on Chimera and Pegasus graphs

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We group all known quadratizations of cubic and quartic binary optimization problems into five and seven unique graphs respectively. We then perform a minor embedding of these graphs onto the well-known Chimera graph, and the brand new *Pegasus* graph. In cases where two or more graphs have a minor embedding with the same number of overhead in terms of auxiliary variables, we make recommendations for which gadgets are best to use for certain problems.

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