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Smallest graphs with given generalized quaternion automorphism group.

A smallest graph whose automorphism group is isomorphic to the generalized quaternion group Q_{2^n} , where $n \geq 3$, is constructed. If $n \neq 3$, such a graph has 2^{n+1} vertices and 2^{n+2} edges. In the special case $n = 3$, a smallest graph has 16 vertices but 44 edges. (Received February 15, 2016)