Let $X_n$ denote the unitary Cayley graph of $\mathbb{Z}/n\mathbb{Z}$. We continue the study of cases in which the inequality $\gamma_t(X_n) \leq g(n)$ is strict, where $\gamma_t$ denotes the total domination number, and $g$ is the arithmetic function known as Jacobsthal’s function. The best known result in this direction is a construction of Burcroff in 2018 which gives a family of $n$ with arbitrarily many prime factors that satisfy $\gamma_t(X_n) \leq g(n) - 2$. We present a new interpretation of the problem which allows us to use recent results on the computation of Jacobsthal’s function to construct $n$ with arbitrarily many prime factors that satisfy $\gamma_t(X_n) \leq g(n) - 16$. We also present new lower bounds on the domination numbers of direct products of complete graphs, which in turn allow us to derive new asymptotic lower bounds on $\gamma(X_n)$, where $\gamma$ denotes the domination number. Finally, resolving a question of Defant and Iyer from 2017, we completely classify all graphs $G = \prod_{i=1}^t K_{n_i}$ satisfying $\gamma(G) = t + 2$. (Received September 14, 2019)