Given an infinite boolean algebra $A$ one can define the cardinal characteristic $a(A)$ as the least possible size of its infinite partitions. This cardinal characteristic is a generalization of well-known $a$, the least size of a MAD-family. It is easily shown that given two infinite boolean algebras $A$ and $B$, then $a(A \oplus B) \leq \min \{a(A), a(B)\}$. Natural questions arise: Does the equality always hold?, Is it possible for the inequality to be sometimes strict? In an attempt to answer these questions, a couple of lower bounds to the number $a(A \oplus B)$ were gotten and are presented here.