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The Relationship between $(16,6,3)$-BIBDs and $(25,12)$ Binary Self-Orthogonal Codes
The ( $6 \lambda-2,2 \lambda, \lambda$ )-designs are a family where for most of the family their existence is not known. Each incidence matrix for members of this family can be used to generate a binary self-orthogonal code. If there are no such codes "containing" the $(v, k, \lambda)$ design, then there are no such designs. This was how the (22,8,4)-design was shown to be non-existent. Now the next two members of the family do exist but only one non-isomorphic design per parameter is known. Before extensive programming is attempted to find all non-isomorphic designs with these two parameter sets, it would be wise to see the relationship between the previous design in the family; i.e., $(16,6,3)$ and the related $(12,25)$ binary self-orthogonal code. This we do.

