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## **ON PARTITIONED** s - k - EP **MATRICES**

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## Abstract

Necessary and sufficient conditions are determined for a schur complement in a s - k - EP matrix to be s - k - EP. Further it is shown that in a  $s - k - EP_r$  matrix, every secondary sub matrix of rank 'r' is  $s - k - EP_r$ . Also discussed the question of expressing a matrix of rank r as a product of  $s - k - EP_r$  matrices. Necessary and sufficient conditions for products of  $s - k - EP_r$  partitioned matrices to be  $s - k - EP_r$  is given.

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Key Words : s - k - EP matrices, Partitioned matrices, Schur complements.

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