论文

具有存储器的生产线的状态方程描述及其性能分析

涂奉生(1), 乞敬换(2)

(1)南开大学计算机与系统科学系,天津300071;(2)南开大学计算机与系统科学系,天津300071

摘要　　G.Cohen 等人利用极大代数上的线性系统分析法,
对具有无限存储量的一般生产线给出了系统的静态状态方程及批量生产的输入-输出动态模型;
利用矩阵的有向图中关键回路和特征值的关系,给出了系统稳定运行的一些结果.然而,对
"生产线具有无限的存储量"的要求,在实际中是很难满足的.本文借助极大代数工具,
对具有有限存储量的串行生产线给出了动态的"线性"状态方程,利用纯代数的方法,研究了系统稳定运行的性

关键词

分类号

THE STATE EQUATION DESCRIPTION OF PRODUCTION LINES WITH BUFFERS AND ITS PERFORMANCE ANALYSIS

TU FENG-ZHENG(1),QI JING-HUAN (2)

(1)Department of Computer Science and System Science,Nankai University,Tianjin 300071;(2)
Department of Computer Science and System Science,Nankai University,Tianjin 300071

Abstract　This paper is the development of [2].In this paper a state equation of production lineswith buffers is given by means of max-algebra linear systems.Based on the equation,perfor-mance analysis of the production line with buffers is carried out,and some results on stabilityare presented.Finally,it is pointed out that the results presented in this paper are useful fordiscrete event dynamic systems as well.

Key words

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