CONTRIBUTIONS

Analog and Hybrid
On the Representation of Arbitrary Functions and Their Generation...............................I. Korn and A. Nathan 483
Computer Control
An Algorithm for Nonlinear Process Stabilization and Control........................................D. Tabak 487
Switching Theory
On Static Memory Allocation in Computer Systems..........................................................D. P. Bovet and G. Estrin 492
Recursive Operators for Prime Implicant and Irredundant Normal Form Determination........E. Morreale 504
Decomposition of Asynchronous Sequential Switching Circuits..........................................L. L. Kinney 515
Systems Design
Buffer Behavior for Poisson Arrivals and Multiple Synchronous Constant Outputs.............W. W. Chu 530
Swap-Time Considerations in Time-Shared Systems.........................................................L. Kleinrock 534

SHORT NOTES

/Pattern Recognition
Peripheral Devices
A Sonic Pen: A Digital Stylus System....................................................................................A. E. Brenner and P. de Bruyne 546
Switching Theory
On Information-Lossless Discrete-Time Systems...................................................................K. L. Doty 548
A Method for the Design of Fault Detection Experiments....................................................G. Gönenç 551

CORRESPONDENCE

Is There Any Advantage of Ternary Logic as Compared with Binary?...............................P. R. Cassée and M. J. O. Strutt 559
Comment on "A Transform for Logic Networks".................................................................R. Reeves 559
Author's Reply......................................................................................................................K. S. Menger 560

(Contents continued on back cover)
CONTRIBUTORS .................................................................................... 561

REVIEWS OF PAPERS IN THE COMPUTER FIELD

A. Graph Theory

R70-9  A Graph-Theoretic Model for Periodic Discrete Structures—J. Turner. Reviewed by E. L. Lawler 563

B. Switching and Automata Theory

R70-10 The Minimalization of Tree Automata—W. S. Brainerd. Reviewed by M. A. Arbib 563
R70-11 Representation of Events in the von Neumann Cellular Model—A. Mukhopadhyay. Reviewed by H. Yamada 563
R70-12 Diagnosis of Single-Gate Failures in Combinational Circuits—G. D. Hornbuckle and R. N. Spann. Reviewed by J. P. Roth 564
R70-14 Some Results on Cascade Decomposition of Automata—B. G. Reynolds. Reviewed by W. F. Cutlip 565
R70-15 Realization of Sequential Machines with Threshold Elements—F. O. Hadlock and C. L. Coates. Reviewed by C. L. Sheng 565
R70-16 Unate Cellular Logic—A. Mukhopadhyay. Reviewed by J. Sklansky 566

ABSTRACTS OF CURRENT COMPUTER LITERATURE ........................................ 567