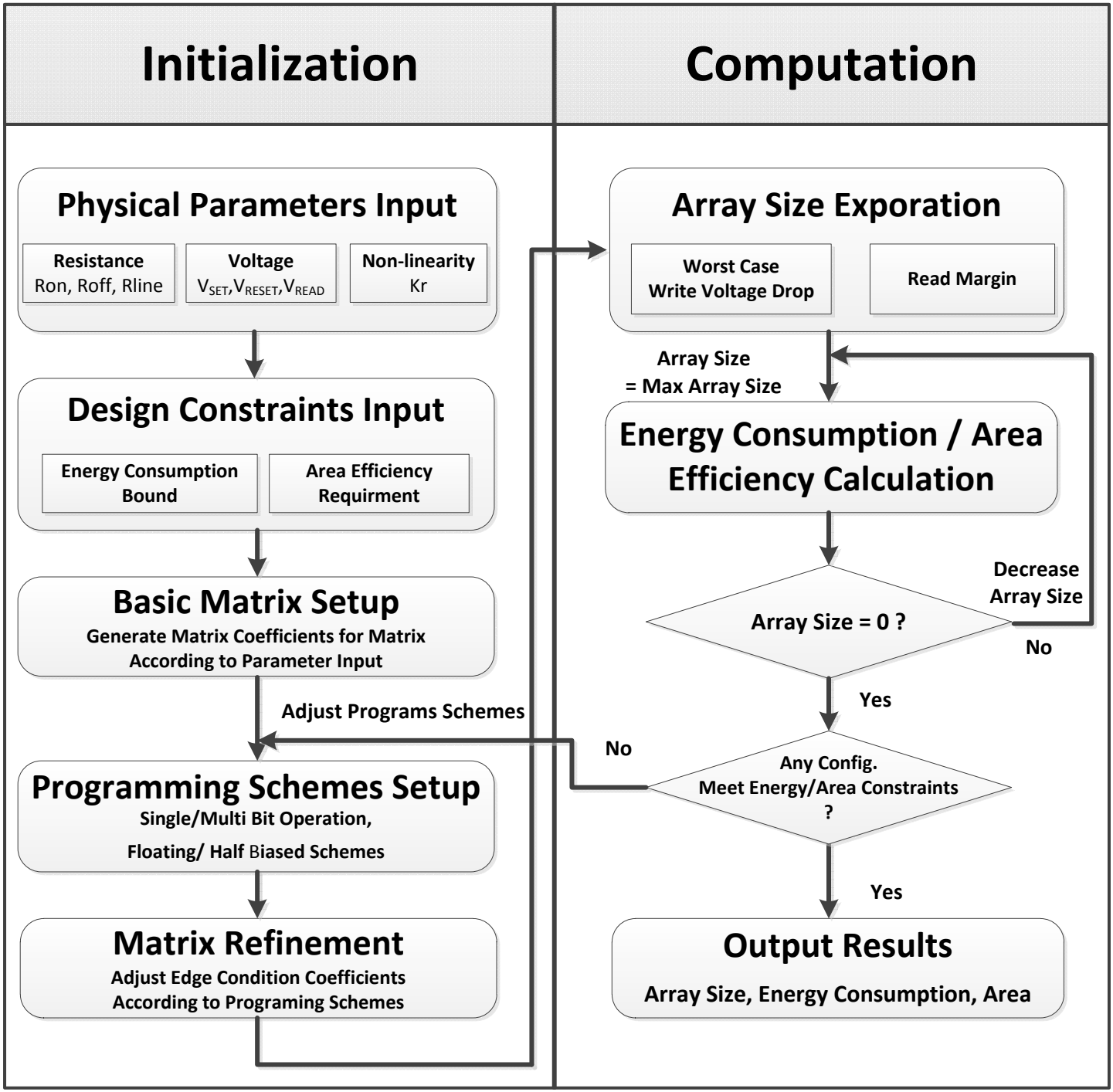
Initialization
Computation
Physical Parameters Input
Resistance
Ron, Roff, Rline
Voltage
V_{SET},V_{RESET},V_{READ}
Non-linearity
Kr
Design Constraints Input
Energy Consumption Bound
Area Efficiency Requirment
Basic Matrix Setup
Generate Matrix Coefficients for Matrix According to Parameter Input
Adjust Programs Schemes
Programming Schemes Setup
Single/Multi Bit Operation,
Floating/ Half Biased Schemes
Matrix Refinement
Adjust Edge Condition Coefficients According to Programing Schemes
Array Size Exporation
Worst Case Write Voltage Drop
Read Margin
Array Size = Max Array Size
Energy Consumption / Area Efficiency Calculation
Array Size = 0 ?
Decrease Array Size
No
Yes
No
Any Config. Meet Energy/Area Constraints ?
Yes
Output Results
Array Size, Energy Consumption, Area