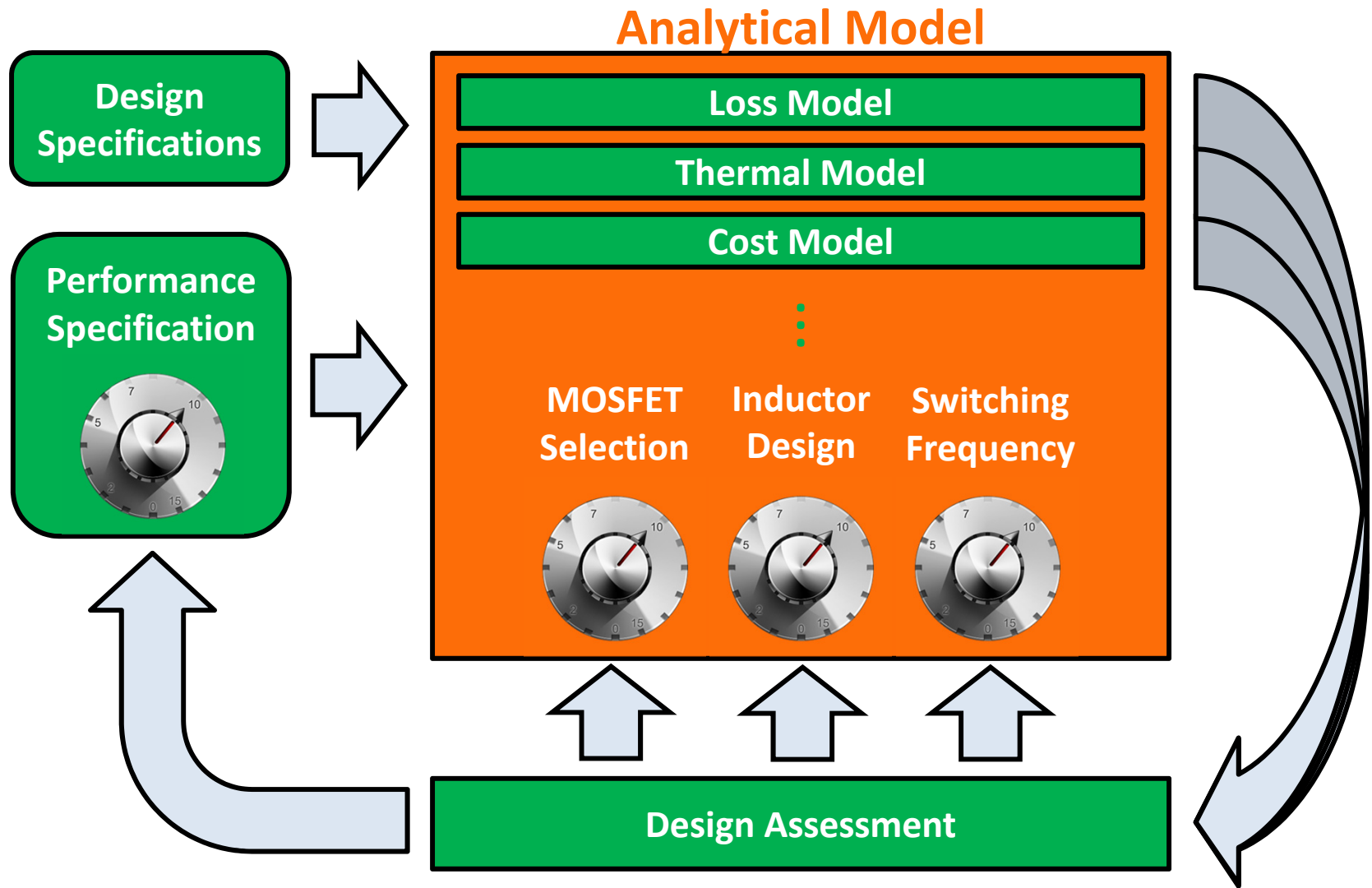


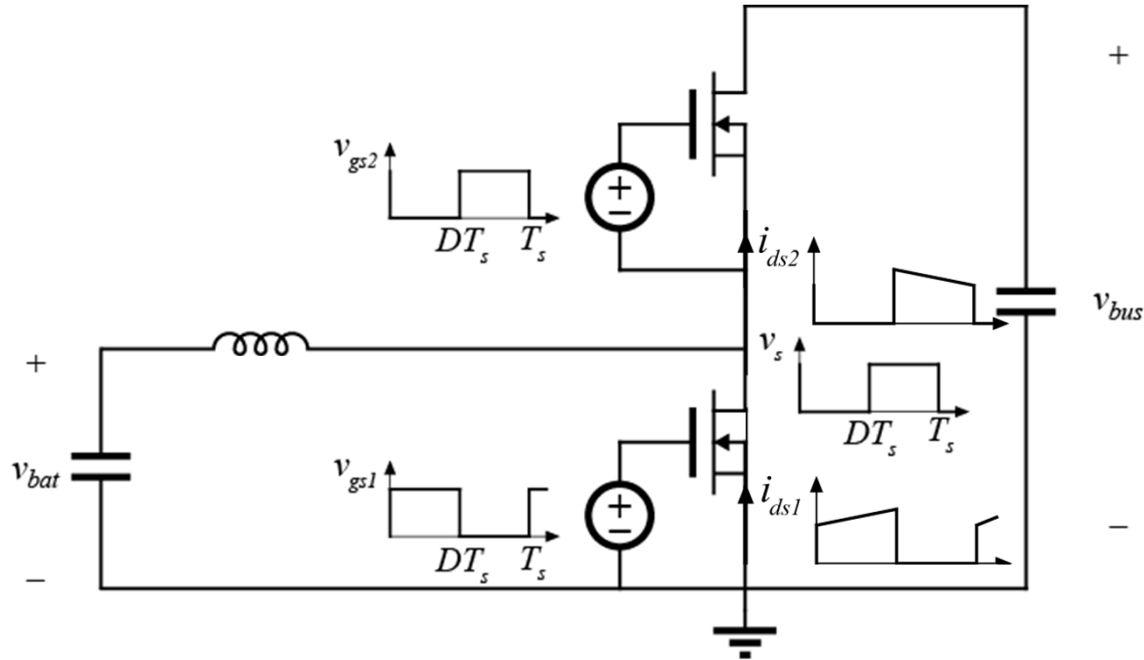
# Converter Design



# Analytical Loss Modeling

- High efficiency approximation is acceptable for hand calculations, as long as it is justified
  - Solve ideal waveforms of lossless converter, then calculate losses
- Argue which losses need to be included, and which may be neglected
  - “Rough” approximation to gain insight into significance

# Boost Converter Loss Analysis



- Begin by solving important waveforms throughout converter assuming lossless operation

# Power Stage Losses

