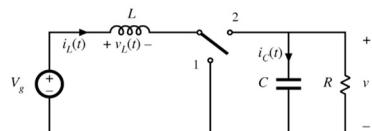


## (2) Linearization Via Taylor Series Expansion



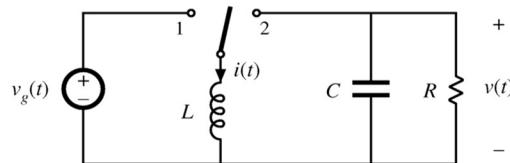
## Boost Converter Equivalent Circuit Modeling





## Buck Boost AC Modeling

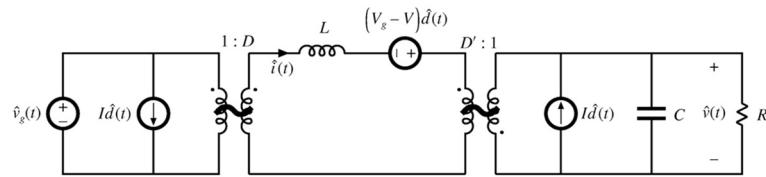
*Buck-boost converter example*



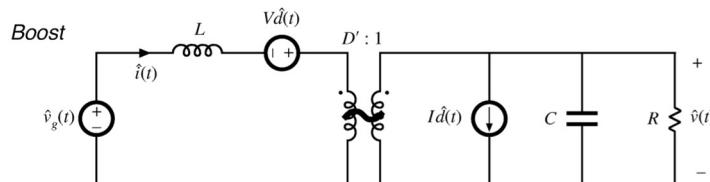
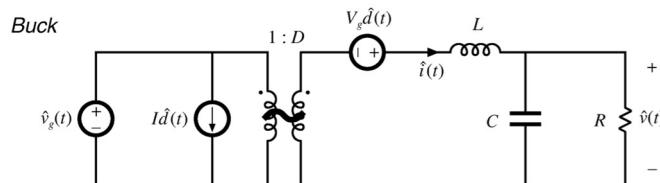


## Buck-Boost Small-Signal AC Equivalent Circuit

*Buck-boost*

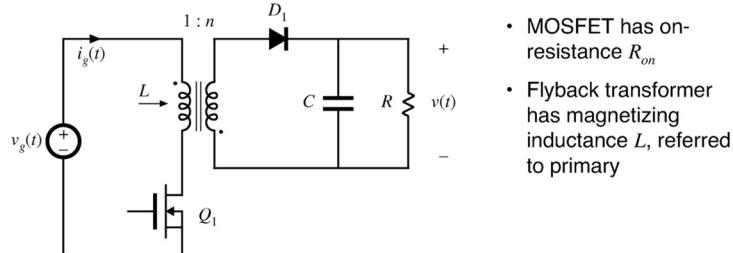


### 7.2.8 Results for Several Basic Converters



## 7.2.9: Nonideal Flyback Modeling

*Flyback converter example*



- MOSFET has on-resistance  $R_{on}$
- Flyback transformer has magnetizing inductance  $L$ , referred to primary

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*Chapter 7: AC equivalent circuit modeling*

