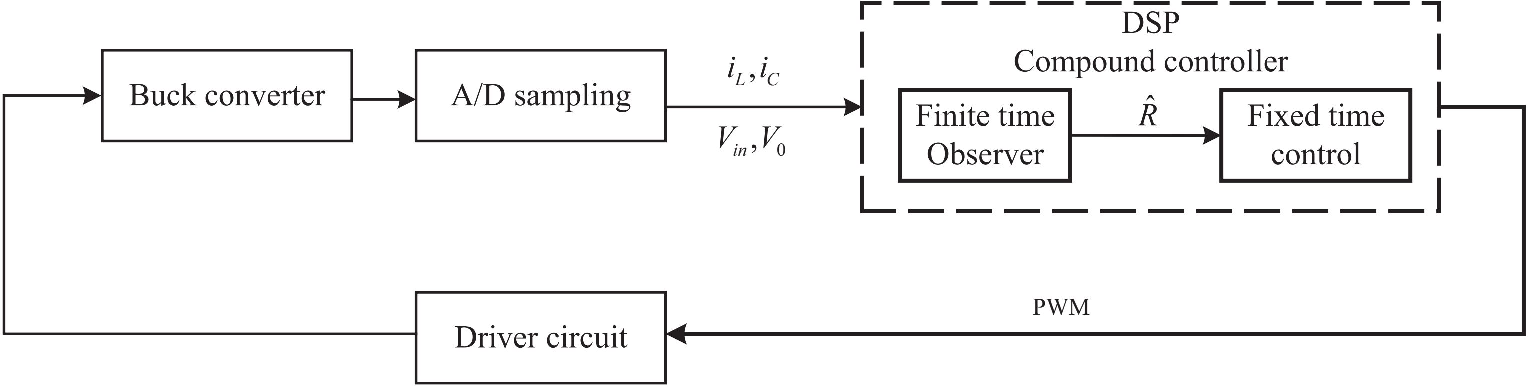

DSP
Compound controller
Buck converter
A/D sampling
i_L, i_C
V_{in}, V_0
Finite time Observer
$\hat{R}$
Fixed time control
PWM
Driver circuit