$$\dot{x}(t) = A\underbrace{\left[e^{At}x_0 + \int_0^t e^{A(t-\tau)}Bu(\tau)d\tau\right]}_{x(t)} + \underbrace{e^{At}e^{-At}}_{I}Bu(t)$$

(6.1)

$$\dot{x}(t) = Ax(t) + Bu(t)$$

$$y(t) = Cx(t) + Du(t)$$