



/\* Hold \*/  
u = hold(ud);

/\* Discrete controller \*/  
when Clock() then  
 E \* xd = A \* previous(xd) + B \* yd;  
 ud = C \* previous(xd) + D \* yd;  
end when;

$$t_i \in \{0, 3, 6, \dots\}, i = 0, 1, 2, \dots$$

$$y_d(t_i) = y(t_i)$$

$$E x_d(t_i) = A x_d(t_{i-1}) + B y_d(t_i)$$

$$u_d(t_i) = C x_d(t_{i-1}) + D y_d(t_i)$$

$$u(t) = u_d(t_i), \quad t_i \leq t < t_{i+1}$$