

## Equation assignment sequence for variable $x$

no	var	equ	quations	token
19	18	-	$M^{A,\beta}_N :: \text{port variable}$	
18	17	-	$M^{A,\alpha}_N :: \text{port variable}$	
17	14	-	$K^{A,\beta}_A :: \text{port variable}$	
16	8	-	$F_{N,A} :: \text{port variable}$	
15	36	-	$D_{N,A} :: \text{port variable}$	
14	13	-	$K^{A,\alpha}_A :: \text{port variable}$	
13	3	-	$\# :: \text{port variable}$	
12	1	-	$t :: \text{port variable}$	
11	22	8	$\pi^{A,\beta}_N := M^{A,\beta}_N . x_N$	
10	76	63	$u_A := \text{Instantiate}(u_A, \#)$	
9	21	7	$\pi^{A,\alpha}_N := M^{A,\alpha}_N . x_N$	
8	5	2	$0 := \text{Instantiate}(\#, \#)$	
7	26	12	$\hat{x}^{A,\beta}_N := F_{N,A} \overset{A}{\star} \left( K^{A,\beta}_A . D_{N,A} \overset{N}{\star} \pi^{A,\beta}_N \right)$	
6	25	11	$\hat{x}^{A,\alpha}_N := F_{N,A} \overset{A}{\star} \left( u_A . K^{A,\alpha}_A . D_{N,A} \overset{N}{\star} \pi^{A,\alpha}_N \right)$	
5	7	4	$t_e := \text{Instantiate}(t, \#)$	
4	6	3	$t_o := \text{Instantiate}(t, \#)$	
3	29	32	$\dot{x}_N := \text{Instantiate}(\dot{x}_N, 0)$	
2	29	16	$\dot{x}_N := \hat{x}^{A,\alpha}_N + \hat{x}^{A,\beta}_N$	

*Continued on next page*

no	var	equ	quations	token
1	11	5	$x_N^o := \text{Instantiate}(x_N, \#)$	
0	9	20	$x_N := \int_{t_o}^{t_e} \dot{x}_N \, dt + x_N^o$	