

## Equation assignment sequence for variable $x$

no	var	equ	quations	token
17	18	-	$M^{A,\beta}_N :: \text{port variable}$	
16	17	-	$M^{A,\alpha}_N :: \text{port variable}$	
15	14	-	$K^{A,\beta}_A :: \text{port variable}$	
14	8	-	$F_{N,A} :: \text{port variable}$	
13	13	-	$K^{A,\alpha}_A :: \text{port variable}$	
12	3	-	$\# :: \text{port variable}$	
11	1	-	$t :: \text{port variable}$	
10	22	28	$\pi^{A,\beta}_N := \text{Instantiate}(\pi^{A,\beta}_N, \#)$	
9	22	8	$\pi^{A,\beta}_N := M^{A,\beta}_N . x_N$	
8	21	7	$\pi^{A,\alpha}_N := M^{A,\alpha}_N . x_N$	
7	21	27	$\pi^{A,\alpha}_N := \text{Instantiate}(\pi^{A,\alpha}_N, \#)$	
6	26	12	$\hat{x}^{A,\beta}_N := F_{N,A} \overset{A}{\star} \left( K^{A,\beta}_A . D_{N,A} \overset{N}{\star} \pi^{A,\beta}_N \right)$	
5	25	11	$\hat{x}^{A,\alpha}_N := F_{N,A} \overset{A}{\star} \left( K^{A,\alpha}_A . D_{N,A} \overset{N}{\star} \pi^{A,\alpha}_N \right)$	
4	7	4	$t_e := \text{Instantiate}(t, \#)$	
3	6	3	$t_o := \text{Instantiate}(t, \#)$	
2	29	16	$\dot{x}_N := \hat{x}^{A,\alpha}_N + \hat{x}^{A,\beta}_N$	
1	11	5	$x^o_N := \text{Instantiate}(x_N, \#)$	
0	9	20	$x_N := \int_{t_o}^{t_e} \dot{x}_N \, dt + x^o_N$	