

## Equation assignment sequence for variable $\theta$

| no | var | equ | quations                                                                                     | token |
|----|-----|-----|----------------------------------------------------------------------------------------------|-------|
| 17 | 1   | -   | $\# :: \text{port variable}$                                                                 |       |
| 16 | 55  | 138 | $k_{yNS}^d := \text{Instantiate}(k_{yNS}^d, \#)$                                             |       |
| 15 | 54  | 137 | $k_{xNS}^d := \text{Instantiate}(k_{xNS}^d, \#)$                                             |       |
| 14 | 52  | 136 | $k_{zN}^c := \text{Instantiate}(k_{zN}^c \cdot \#, -)$                                       |       |
| 13 | 51  | 135 | $k_{yN}^c := \text{Instantiate}(k_{yN}^c, \#)$                                               |       |
| 12 | 50  | 134 | $k_{xN}^c := \text{Instantiate}(k_{xN}^c, \#)$                                               |       |
| 11 | 36  | 133 | $k_{zN}^q := \text{Instantiate}(k_{zN}^q, \#)$                                               |       |
| 10 | 35  | 132 | $k_{yN}^q := \text{Instantiate}(k_{yN}^q, \#)$                                               |       |
| 9  | 34  | 131 | $k_{xN}^q := \text{Instantiate}(k_{xN}^q, \#)$                                               |       |
| 8  | 71  | 154 | $\rho_N := \text{Instantiate}(\rho_N, \#)$                                                   |       |
| 7  | 58  | 139 | $h_{NS} := \text{Instantiate}(h_{NS}, \#)$                                                   |       |
| 6  | 57  | 44  | $k_{NS}^d := \text{Stack}(k_{xNS}^d, k_{yNS}^d, k_{zNS}^d)$                                  |       |
| 5  | 53  | 40  | $k_N^c := \text{Stack}(k_{xN}^c, k_{yN}^c, k_{zN}^c)$                                        |       |
| 4  | 37  | 25  | $k_N^q := \text{Stack}(k_{xN}^q, k_{yN}^q, k_{zN}^q)$                                        |       |
| 3  | 29  | 142 | $\lambda_S := \text{Instantiate}(\lambda_S, \#)$                                             |       |
| 2  | 149 | 141 | $cv_N := \text{Instantiate}(cv_N, \#)$                                                       |       |
| 1  | 148 | 140 | $cp_N := \text{Instantiate}(cp_N, \#)$                                                       |       |
| 0  | 154 | 143 | $\theta := \text{MixedStack}(k_N^q, k_N^c, k_{NS}^d, h_{NS}, cp_N, cv_N, \lambda_S, \rho_N)$ |       |