

$$\begin{aligned}
& \text{demod } \llbracket id, ((id_c \text{ phase}_c) (id_n \text{ phase}_n) \dots), \\
& \quad ((\text{module } id (req_m \dots) (code_{m0} \dots (0 \text{ expr}_m) code_{mn} \dots)) \\
& \quad (\text{module } id_c ((\text{require } id_r @ \text{ phase}_r) req_c \dots) (code_c \dots)) \\
& \quad (\text{module } id_r (req_r \dots) (code_{r0} \dots (\text{phase}_c \text{ expr}_r) code_{rn} \dots)) \\
& \quad mod_n \dots) \rrbracket \\
& = \text{demod } \llbracket id, ((id_r (- \text{ phase}_c \text{ phase}_r)) (id_c \text{ phase}_c) (id_n \text{ phase}_n) \dots), \\
& \quad ((\text{module } id (req_m \dots) (code_{m0} \dots (0 (\text{begin } \text{expr}_r \text{ expr}_m)) code_{mn} \dots)) \\
& \quad (\text{module } id_c (req_c \dots) (code_c \dots)) \\
& \quad (\text{module } id_r (req_r \dots) (code_{r0} \dots (\text{phase}_c \text{ expr}_r) code_{rn} \dots)) \\
& \quad mod_n \dots) \rrbracket \\
\\
& \text{demod } \llbracket id, ((id_c \text{ phase}_c) (id_n \text{ phase}_n) \dots), \\
& \quad ((\text{module } id (req_m \dots) (code_m \dots)) \\
& \quad (\text{module } id_c ((\text{require } id_r @ \text{ phase}_r) req_c \dots) (code_c \dots)) \\
& \quad (\text{module } id_r (req_r \dots) (code_r \dots)) \\
& \quad mod_n \dots) \rrbracket \\
& = \text{demod } \llbracket id, ((id_r (- \text{ phase}_c \text{ phase}_r)) (id_c \text{ phase}_c) (id_n \text{ phase}_n) \dots), \\
& \quad ((\text{module } id (req_m \dots) (code_m \dots)) \\
& \quad (\text{module } id_c (req_c \dots) (code_c \dots)) \\
& \quad (\text{module } id_r (req_r \dots) (code_r \dots)) \\
& \quad mod_n \dots) \rrbracket \\
\\
& \text{demod } \llbracket id, ((id_c \text{ phase}_c) (id_n \text{ phase}_n) \dots), \\
& \quad ((\text{module } id (req_m \dots) (code_m \dots)) \\
& \quad (\text{module } id_c () (code_c \dots)) \\
& \quad mod_n \dots) \rrbracket \\
& = \text{demod } \llbracket id, ((id_n \text{ phase}_n) \dots), \\
& \quad ((\text{module } id (req_m \dots) (code_m \dots)) \\
& \quad (\text{module } id_c () (code_c \dots)) \\
& \quad mod_n \dots) \rrbracket
\end{aligned}$$