

MODULE <i>clock</i>
EXTENDS <i>TLC, Naturals</i> VARIABLE <i>hr</i> $HCini \triangleq hr \in (1 \dots 12)$ $HCnext \triangleq hr' = \text{IF } hr = 12 \text{ THEN } 1 \text{ ELSE } hr + 1$ $HC \triangleq HCini \wedge \Box[HCnext]_{hr}$
THEOREM $HC \Rightarrow \Box HCini$