─────────── MODULE $F18A$ ───────────

EXTENDS *Integers*
VARIABLE P Register P: program counter

$P\_IsValid \triangleq (P \in 0 .. 511)$

$Reset \triangleq (P = 170)$ $P = 0x0AA$

$Run \triangleq \ \lor \ \land P \in 0 .. 127$ RAM
$\qquad\qquad \land P' = (P + 1)\%128$
$\qquad\quad \lor \ \land P \in 128 .. 255$ *ROM*
$\qquad\qquad \land P' = ((P - 128 + 1)\%128) + 128$
$\qquad\quad \lor \ \land P \in 256 .. 511$ I/O
$\qquad\qquad \land P' = P$

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\ * Modification History
\ * Last modified *Fri Oct* 17 20:24:21 *SAST* 2014 by *tonys*
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