

```

71         end if;
72     end case;
73 end process;
74
75 -- MISE A JOUR DU REGISTRE D'ETAT
76
77 process(reset, clk)
78 begin
79     -- RESET : asynchrone haut
80     if reset = '1' then state <= IDLE;
81     -- HORLOGE : front montant
82     elsif (clk'event and clk = '1') then
83         state <= nextstate;
84     end if;
85 end process;
86
87
88 -- MISE A JOUR DES OUTPUTS
89 rest <= '1' when (( state = DEPOSIT and success = '1' ) OR (state = IDLE) OR
90 (state = HOMING and athome = '1') ) else '0';
91 search <= '1' when (state = RESTING and aboverestth = '1' ) else '0';
92 food <= '1' when (state = MOVETOFOOD and abovesearchth = '0' and lostfood = '0'
93 and closetofood = '1') else '0';
94
95 end automate_robot;
96
97

```