

```

PACKAGE AccessP1Signals ;
signal outOfService,
OK,ERR; signal unlock,unlocked; signal newCode(Integer), code(Integer);
signal step,stepDoor;
ENDPACKAGE;
  use AccessP1Signals; BLOCK accessP1 ;
    SIGNALROUTE accessp1Ename83__i
  FROM controller TO door WITH unlock,
stepDoor          ;
  FROM door TO controller WITH step ;
    SIGNALROUTE chdoorenv
  FROM door TO ENV WITH unlocked ;
    SIGNALROUTE chnewcode
  FROM ENV TO controller WITH newCode ;
    SIGNALROUTE chcntrenv
  FROM controller TO ENV WITH outOfService,
OK,ERR          ;
    SIGNALROUTE chenvcntr
  FROM ENV TO controller WITH code ;
    PROCESS Door ;
START;
NEXTSTATE doorLocked ;
STATE doorLocked ;
  INPUT unlock ;
  OUTPUT step ;
  OUTPUT unlocked ;
  NEXTSTATE doorUnlocked ;
ENDSTATE;
STATE doorUnlocked ;
  INPUT stepDoor
;
  NEXTSTATE doorLocked ;
ENDSTATE;
  ENDPROCESS;
  PROCESS Controller ;
  dcl
codeDoor,y Integer :=0;      START;
NEXTSTATE init ;
STATE stepDoor ;
  INPUT step ;
  OUTPUT stepDoor ;
  NEXTSTATE init ;
ENDSTATE;
STATE init ;
  INPUT code(y) ;
  DECISION

```

```
codeDoor<=1000      ;
( false ): DECISION
y=codeDoor          ;
( false ): OUTPUT ERR ;
  NEXTSTATE  init ;
( true ):  OUTPUT OK,unlock ;
  NEXTSTATE  stepDoor ;
  ENDDECISION;
( true ):  OUTPUT outOfService ;
  NEXTSTATE  init ;
  ENDDECISION;
  INPUT newCode(codeDoor) ;
  NEXTSTATE  init ;
ENDSTATE;
  ENDPROCESS;
ENDBLOCK;
```