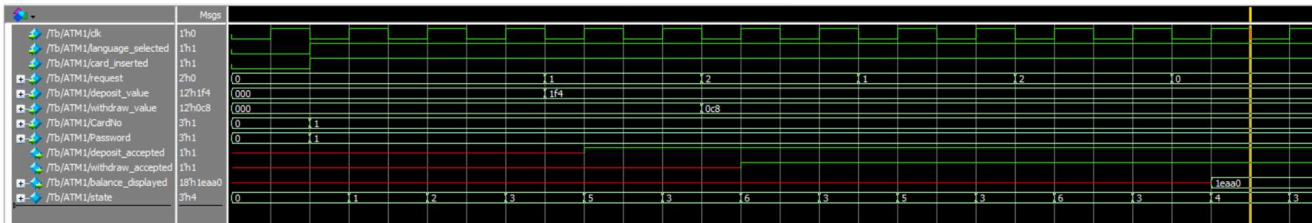


Self checking

- Case 1

Wave form:



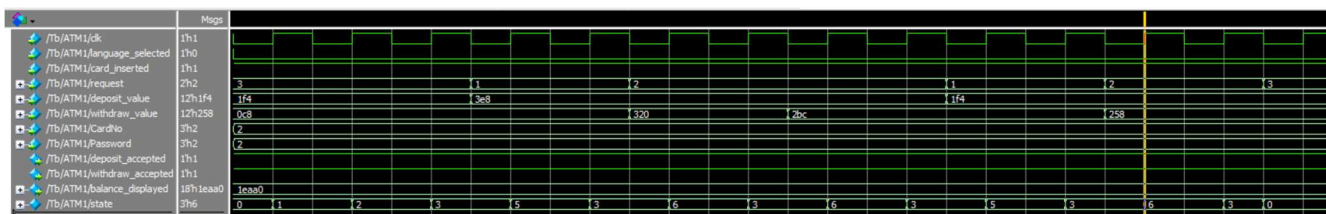
C++:

```
IDLE_STATE
card_inserted: 1
LANGUAGE_SELECTED_STATE
language_selected: 1
The language is Arabic
PASSWORD_ENTERED_STATE
CardNo: 1
Password: 1
OPERATION_SELECTED_STATE
request: 1
DEPOSIT_STATE
deposit_value: 500
deposit_accepted: 1
OPERATION_SELECTED_STATE
request: 2
WITHDRAW_STATE
withdraw_value: 200
withdraw_accepted: 1
OPERATION_SELECTED_STATE
request: 1
DEPOSIT_STATE
deposit_value: 500
deposit_accepted: 1
OPERATION_SELECTED_STATE
request: 2
WITHDRAW_STATE
withdraw_value: 200
withdraw_accepted: 1
OPERATION_SELECTED_STATE
request: 0
BALANCE_SERVICE_STATE
125600
OPERATION_SELECTED_STATE
request: 3
IDLE_STATE
Card is out
```

As shown in the previous figures when the request=1 and there is a value inserted, the deposit_accepted =1 in the wave form and the deposit_accepted =1 in the c++ model. when the request =2 and there is a value inserted , withdraw_accepted =1 in the wave form and withdraw_accepted =1 in the c++. When the request =0 the balance is displayed in both models.

- Case 2

Wave form:



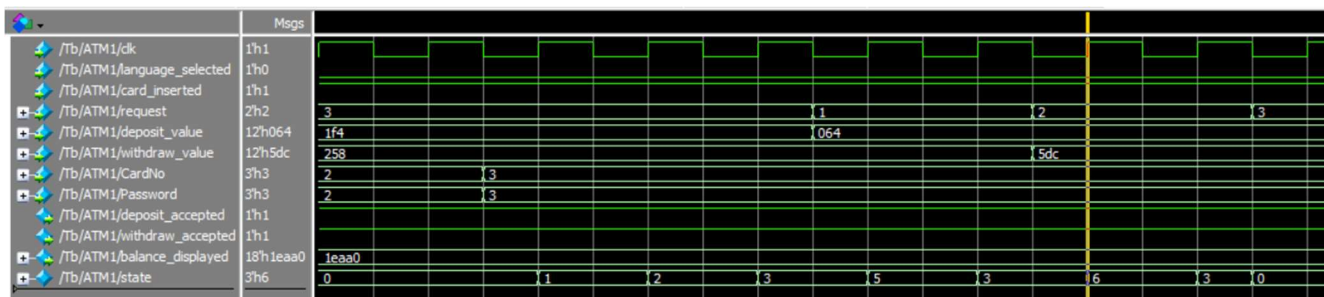
C++:

```
IDLE STATE
card inserted: 1
LANGUAGE_SELECTED_STATE
language_selected: 0
The language is English
PASSWORD_ENTERED_STATE
CardNo: 2
Password: 2
OPERATION_SELECTED_STATE
request: 1
DEPOSIT_STATE
deposit_value: 1000
deposit accepted: 1
OPERATION_SELECTED_STATE
request: 2
WITHDRAW_STATE
withdraw_value: 800
withdraw_accepted: 1
OPERATION_SELECTED_STATE
request: 2
WITHDRAW_STATE
withdraw_value: 700
withdraw_accepted: 1
OPERATION_SELECTED_STATE
request: 1
DEPOSIT_STATE
deposit_value: 500
deposit accepted: 1
OPERATION_SELECTED_STATE
request: 2
WITHDRAW_STATE
withdraw_value: 600
withdraw_accepted: 1
OPERATION_SELECTED_STATE
request: 3
IDLE STATE
Card is out
```

As shown in the previous figures when the request=1 and there is a value inserted, the deposit_accepted =1 in the wave form and the deposit_accepted =1 in the c++ model. when the request =2 and there is a value inserted, withdraw_accepted =1 in the wave form and withdraw_accepted =1 in the c++.

- Case 3

Wave form:



C++:

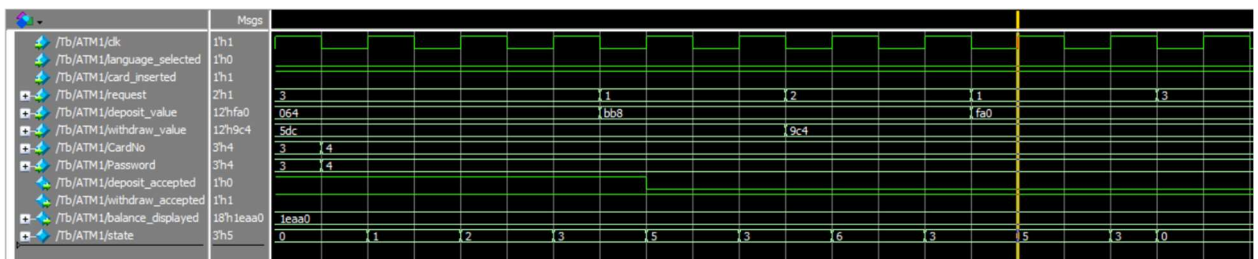
```

IDLE_STATE
card_inserted: 1
LANGUAGE_SELECTED_STATE
language_selected: 0
The language is English
PASSWORD_ENTERED_STATE
CardNo: 3
Password: 3
OPERATION_SELECTED_STATE
request: 1
DEPOSIT_STATE
deposit_value: 100
deposit_accepted: 1
OPERATION_SELECTED_STATE
request: 2
WITHDRAW_STATE
withdraw_value: 1500
withdraw_accepted: 1
OPERATION_SELECTED_STATE
request: 3
IDLE_STATE
Card is out
  
```

As shown in the previous figures when the request=1 and there is a value inserted, the deposit_accepted =1 in the wave form and the deposit_accepted =1 in the c++ model. when the request =2 and there is a value inserted, withdraw_accepted =1 in the wave form and withdraw_accepted =1 in the c++.

- Case 4

Wave form:



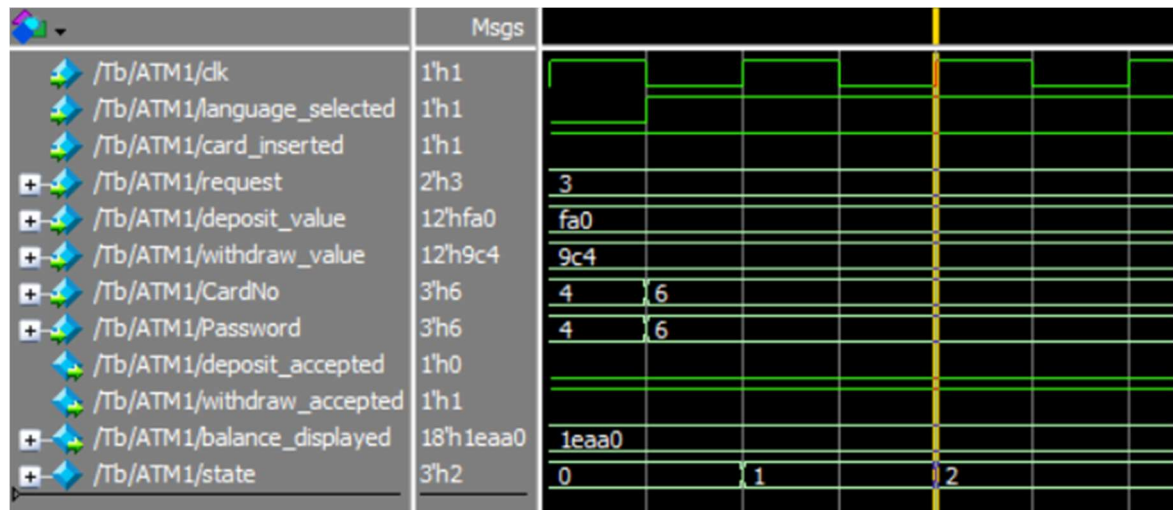
C++:

```
IDLE_STATE
card_inserted: 1
LANGUAGE_SELECTED_STATE
language_selected: 0
The language is English
PASSWORD_ENTERED_STATE
CardNo: 4
Password: 4
OPERATION_SELECTED_STATE
request: 1
DEPOSIT_STATE
deposit_value: 3000
deposit_accepted: 0
OPERATION_SELECTED_STATE
request: 2
WITHDRAW_STATE
withdraw_value: 2500
withdraw_accepted: 1
OPERATION_SELECTED_STATE
request: 1
DEPOSIT_STATE
deposit_value: 4000
deposit_accepted: 0
OPERATION_SELECTED_STATE
request: 3
IDLE_STATE
Card is out
```

When a number more than 2000 is entered as a deposit value, the deposit_accepted = 0 in both models.

- Case5

Wave form:



C++:

```
IDLE_STATE
card_inserted: 1
LANGUAGE_SELECTED_STATE
language_selected: 1
The language is Arabic
PASSWORD_ENTERED_STATE
CardNo: 6
Password: 6
Password or Card Number are not valid
PASSWORD_ENTERED_STATE
CardNo: 6
Password: 6
Password or Card Number are not valid
PASSWORD_ENTERED_STATE
CardNo: 6
Password: 6
Password or Card Number are not valid
```

When the Cardno and Password entered are not valid the sytem remains in the state of PASSWORD_ENTERED_STATE .