

WHAT IS CLAIMED IS:

1. A computer-implemented method, comprising:
 - parsing, with at least one processor, a card image file to determine card data represented by the card image file, the card image file configured to be embedded on an integrated circuit of a payment device;
 - generating, with at least one processor, a plurality of simulated payment transactions based on the card data, each simulated payment transaction comprising simulated transaction data;
 - issuing, with at least one processor, a plurality of commands to a payment device emulator, the plurality of commands based on the simulated transaction data for the plurality of simulated payment transactions;
 - receiving, with at least one processor, a plurality of command responses generated by the payment device emulator based on the plurality of commands; and
 - verifying, with at least one processor, the card image file based on the plurality of command responses and the card data.
2. The computer-implemented method of claim 1, wherein generating the plurality of simulated payment transactions comprises identifying a subset of predefined payment transactions from a plurality of predefined payment transactions based on the card data.
3. The computer-implemented method of claim 1, wherein at least one command response of the plurality of command responses comprises dynamic card data, the dynamic card data comprising at least one of a cryptogram and a digital signature generated by the payment device emulator.
4. The computer-implemented method of claim 1, further comprising:
 - generating, with at least one processor, a report based on verifying the card image file; and
 - transmitting, with at least one processor, the report to a computing device.

5. The computer-implemented method of claim 1, wherein the card data comprises:

- application data associated with at least one supported application;
- supported transaction data associated with at least one supported transaction type; and
- account data associated with a payment account.

6. The computer-implemented method of claim 1, wherein the payment device emulator comprises a payment device or probe inserted into a card reader.

7. The computer-implemented method of claim 1, wherein verifying the card image file comprises:

- comparing the plurality of command responses to expected values based on the card data;
- validating each command response of the plurality of command responses if the command response matches an expected value; and
- verifying the card image file in response to validating each command response of the plurality of command responses.

8. A system, comprising:
a payment device emulator comprising a payment device inserted into a card reader; and

at least one processor in communication with the payment device emulator, the at least one processor programmed or configured to:

- parse a card image file to determine card data represented by the card image file, the card image file configured to be embedded on an integrated circuit of a payment device;

- generate a plurality of simulated payment transactions based on the card data, each simulated payment transaction comprising simulated transaction data;

- issue a plurality of commands to the payment device emulator, the plurality of commands based on the simulated transaction data for the plurality of simulated payment transactions;

receive a plurality of command responses generated by the payment device emulator based on the plurality of commands; and

verify the card image file based on the plurality of command responses and the card data.

9. The system claim 8, wherein the at least one processor generates the plurality of simulated payment transactions by identifying a subset of predefined payment transactions from a plurality of predefined payment transactions based on the card data.

10. The system claim 8, wherein at least one command response of the plurality of command responses comprises dynamic card data, the dynamic card data comprising at least one of a cryptogram and a digital signature generated by the payment device emulator.

11. The system claim 8, wherein the at least one processor is further configured to:

generate a report based on verifying the card image file; and
transmit the report to a computing device.

12. The system claim 8, wherein the card data comprises:
application data associated with at least one supported application;
supported transaction data associated with at least one supported transaction type; and
account data associated with a payment account.

13. The system claim 8, wherein verifying the card image file comprises:

comparing the plurality of command responses to expected values based on the card data;

validating each command response of the plurality of command responses if the command response matches an expected value; and

verifying the card image file in response to validating each command response of the plurality of command responses.

14. A computer program product comprising at least one non-transitory computer-readable medium comprising one or more instructions that, when executed by at least one processor, cause the at least one processor to:

parse a card image file to determine card data represented by the card image file;

generate a plurality of simulated payment transactions based on the card data, each simulated payment transaction comprising simulated transaction data;

issue a plurality of commands to a payment device emulator, the plurality of commands based on the simulated transaction data for the plurality of simulated payment transactions;

receive a plurality of command responses generated by the payment device emulator based on the plurality of commands; and

verify the card image file based on the plurality of command responses and the card data.

15. The computer program product of claim 14, wherein the at least one processor generates the plurality of simulated payment transactions by identifying a subset of predefined payment transactions from a plurality of predefined payment transactions based on the card data.

16. The computer program product of claim 14, wherein at least one command response of the plurality of command responses comprises dynamic card data, the dynamic card data comprising at least one of a cryptogram and digital signature generated by the payment device emulator.

17. The computer program product of claim 14, wherein the instructions further cause the at least one processor to:

generate a report based on verifying the card image file; and

transmit the report to a computing device.

18. The computer program product of claim 14, wherein the card data comprises:

application data associated with at least one supported application;

supported transaction data associated with at least one supported transaction type; and
account data associated with a payment account.

19. The computer program product of claim 14, wherein verifying the card image file comprises:

comparing the plurality of command responses to expected values based on the card data;

validating each command response of the plurality of command responses if the command response matches an expected value; and

verifying the card image file in response to validating each command response of the plurality of command responses.