

Eg data:

your current tmk : 0123456789ABCDEFFEDCBA9876543210

your current bdk: 0123456789ABCDEFFEDCBA9876543210

your curren ksn :08115080100001E00000

A group of data:

Plaintext of IPEK : B579E9C92E84D7BF129DD468290D5FD8

You can get:

checkValue :57EFA5B7DC4F3E4E

EncodeIPEK :6FD626A167FACCD35391E4CDF14D8D37

you should get checkValue like this:

The tool link is : <http://www.emvlab.org/descalc/>

The screenshot shows the 'descalc' tool interface. The 'Key' field is set to '0123456789ABCDEFFEDCBA9876543210'. The 'Plaintext' field is set to 'B579E9C92E84D7BF129DD468290D5FD8'. The 'IV' field is set to '0000000000000000'. The 'Input Data' field is set to '8 bytes of 0'. The 'Output Data' field shows the result '57EFA5B7DC4F3E4E'. The 'ECB' radio button is selected, and the 'Encrypt' button is highlighted.

Key (e.g. '0123456789ABCDEFFEDCBA9876543210')	plaintext
B579E9C92E84D7BF129DD468290D5FD8	
IV (only used for CBC mode)	of IPEK
0000000000000000	
Input Data	
8 bytes of 0	
Output Data	
57EFA5B7DC4F3E4E	
your checkValue	

you can get your encode IPEK like this:

The screenshot shows a web-based cryptographic tool interface. It includes the following elements:

- Key:** A text input field containing the hexadecimal string `0123456789ABCDEFEDCBA9876543210`. A red oval highlights this field, and a red label `tmk` points to it.
- IV (only used for CBC mode):** A text input field containing the hexadecimal string `0000000000000000`.
- Input Data:** A text input field containing the hexadecimal string `B579E9C92E84D7BF129DD468290D5FD8`. A red oval highlights this field, and a red label `plaintext of IPEK` points to it.
- Mode Selection:** Two radio buttons are present: `ECB` (selected) and `CBC`.
- Operation:** Two buttons, `Encrypt` and `Decrypt`, are located below the mode selection.
- Output Data:** A text output field containing the hexadecimal string `6FD626A167FACCD35391E4CDF14D8D37`. A red oval highlights this field, and a red label `encode IPEK` points to it.

Finally you can use the method `pos.doUpdateIPEKOperation(ipekgroup, trackksn, trackipek, trackipekCheckvalue, emvksn, emvipek, emvipekCheckvalue, pinksn, pinipek, pinipekCheckvalue);`

```
pos.doUpdateIPEKOperation("00", "08115080100001E00000", "6FD626A167FACCD35391E4CDF14D8D37", "57EFA5000000000000",
    "08115080100001E00000", "6FD626A167FACCD35391E4CDF14D8D37", "57EFA5000000000000", "08115080100001E00000",
    "6FD626A167FACCD35391E4CDF14D8D37", "57EFA5000000000000");
```