

MDMAC echo mac

1.Operation Summary

It outputs echo back data input from terminal software on PC.

2.Board setting

Connect the terminal on the evaluation board as follows

CN5 1-2,3-4

3. Setting

MDMAC ch : MDMAC 7CH, 9CH

UART ch : UART CH0

UART Setting

Baud Rate :115200(bps)

Data :8(bit)

Parity : None

Stop Bit :1(bit)

Flow Control : None

4. Basic Operation

1. Unit Normal Transfer

① Initial Display

Request user input by the "Input = " prompt.

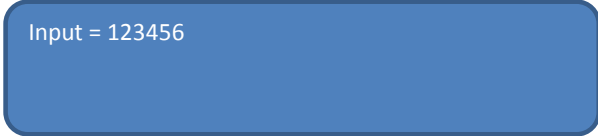
Tera Term display example

A screenshot of a Tera Term terminal window. It shows a blue background with white text. The text "Input =" is displayed at the top left of the window.

② Character Input

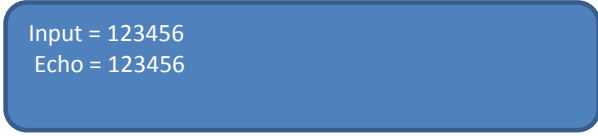
User will input characters and then press 'Enter' key.

Tera Term display example

A screenshot of a Tera Term terminal window. It shows a blue background with white text. The text "Input = 123456" is displayed at the top left of the window.

③ Echo Back Output

Display " Echo = ", followed by the display of the input characters.

A screenshot of a Tera Term terminal window. It shows a blue background with white text. The text "Input = 123456" is displayed on the first line, and "Echo = 123456" is displayed on the second line.

Repeat from ① to ③, then display "1st STEP END."

Ready data that sequence of alphabet

2.Chain Transfer

Prepare 256 bytes of data in alphabetical order in RAM, output them to UART once after transferring to different RAM.
After output it, display "2nd Step END Input 256byte"

```
ABCDEFGHIJKLMNOPQRSTUVWXYZABCDEFGHIJKLMNOPQRSTUVWXYZABCDEFGHIJKLMNOPQRSTUVWXYZ  
PQRSTUVWXYZ  
ABCDEFGHIJKLMNOPQRSTUVWXYZABCDEFGHIJKLMNOPQRSTUVWXYZABCDEFGHIJKLMNOPQRSTUVWXYZ  
PQRSTUVWXYZ
```

Input any key 257 characters. (Transfer 256 bytes of received data from URAT to different RAM once.)
Display "3rd Step END Input 16byte Ring Buffer".


After update ring buffer, output top 16byte.

The first 16 bytes of the update result of the Ring Buffer are output.

```
0123456789abcdefOPQRSTUVWXYZABCDEFGHIJKLMNOPQRSTUVWXYZ  
FGHIJKLMNOPQRSTUVWXYZ  
YZABCDEFGHIJKLMNOPQRSTUVWXYZABCDEFGHIJKLMNOPQRSTUVWXYZ  
DEFGHIJKLMNOPQRSTU  
3rd Step END Input 16byte Ring Buffer  
0123456789abcdef
```

3. Infinite Transfer.

The ring buffer of 16 bytes is sequentially updated with received data (arbitrary key) from the UART.



```
0123456789abcdef  
P  
P123456789abcdef  
Q  
PQ23456789abcdef  
R  
PQR3456789abcdef  
S  
PQRS456789abcdef  
E
```

When you type "E" at the timing when the first character of Ring Buffer is updated, "Program END" is displayed