Scope

This document describes how to test USB MSD command example.

Preparation

Host

A board, i.e. twrk22f120m, which is running host_msd_cmd_twrk22f120m example.

Device

A U-disk.

Steps

Follow the steps to run the MSD cmd demo.

1. Run the host_msd_cmd_twrk22f120m and you will see the printed guide note.

2. Plug-in the U-disk and you will see some attach information printed out. And then you will see the command test result. Such as:

   ================ START OF A NEW SESSION ================

   Testing: GET MAX LUN Command...OK
   Testing: TEST UNIT READY Command...OK
   Testing: REQUEST SENSE Command...OK
   Testing: INQUIRY Command...OK
   Testing: REQUEST SENSE Command...OK
   Testing: READ FORMAT CAPACITIES Command...OK
   Testing: REQUEST SENSE Command...OK
   Testing: READ CAPACITY Command...OK
   Testing: REQUEST SENSE Command...OK
   Testing: READ(10) Command...OK
   Testing: MODE SENSE Command...OK
   Testing: PREVENT-ALLOW MEDIUM REMOVAL Command...OK
   Testing: REQUEST SENSE Command...OK
   Testing: VERIFY Command...OK
   Testing: WRITE(10) Command...OK
   Testing: REQUEST SENSE Command...OK
   Testing: START-STOP UNIT Command...OK

   Test done!

3. If you want to test throughput, you should set TEST_SECTOR_READ_WRITE_SPEED as (1) in file msd_commands.h. Then an additional 64K ram is required to test the throughput,

the macro is unsupported for the board that doesn’t have the enough ram. Note: This macro is unsupported in Vybrid series board. Then run the demo the result is as follows:

================ START OF A NEW SESSION ================

.....

Testing: Start Test READ Throughput...(Test data size: 102400 KB(104857600B). Read n sectors at a time.)

Test results: Time = 206248ms, Speed = 508KB/s

Testing: Start Test READ Throughput... Test data size: 102400 KB(104857600B) :

Testing: REQUEST SENSE Command...OK

Testing: REQUEST SENSE Command...OK

Testing: REQUEST SENSE Command...OK

Testing: Start Test WRITE Throughput... Test data size: 102400 KB(104857600B).

Testing: REQUEST SENSE Command...OK

Testing: REQUEST SENSE Command...OK

Testing: REQUEST SENSE Command...OK

Testing: Start Test WRITE Throughput...(Test data size: 102400 KB(104857600B). Write n sectors at a time.)

Test results: Time = 209453ms, Speed = 500KB/s

Testing: REQUEST SENSE Command...OK

Testing: WRITE(10) Command...OK

Testing: REQUEST SENSE Command...OK

Testing: START-STOP UNIT Command...OK

Test done!