Freescale MQX Example Guide
RNGA example

This document describes RNGA example application, it handles one task which demonstrates how to generate random data by calling RNGA API functions.

Running the example

Start a terminal application on your PC.
Start RNGA example on the target platform.

Explanation of the example

This example will print out introduction message firstly, followed by 10 random data, then print out 2 random data after the RNGA module is seeded. After that, the RNGA module falls into sleep, only one last random data can be read out. The internal random data generator does not work until the module wakes up from sleep mode. After that, RNGA restarts to generate 10 random data, followed with example ends message.

You are supposed to see printed message like below:

---------- *RNGA driver example* ----------

This example application demonstrates usage of RNGA driver.
It is used to generate random data.
Entropy can be inserted into rnga to seed its pseudorandom algorithm.
Get N.O 1 random data a7ecc5d5.
Get N.O 2 random data d352bacd.
… …
Get N.O 10 random data 65cc02bb.
Get a random data 15f5a07c after rnga being seeded.
Get another random data d802364a after rnga being seeded.
rnga falls into sleep mode.
SUCCESS, rnga in sleep mode.
First reading in sleep mode, still get a random data f780c961.
Second reading in sleep mode, no random data any more.
rnga quits from sleep mode.
SUCCESS, rnga in normal mode.
rnga generates random data after waking up.
Get N.O 1 random data f7a43f31.
Get N.O 2 random data 6afcd949.
… …
Get N.O 10 random data aeaa72ec.
rnga driver test finished.