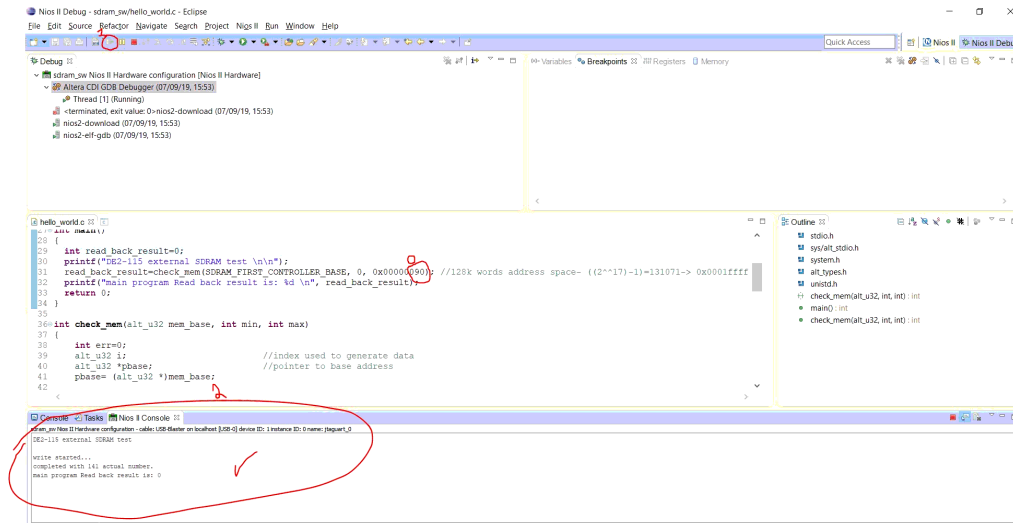
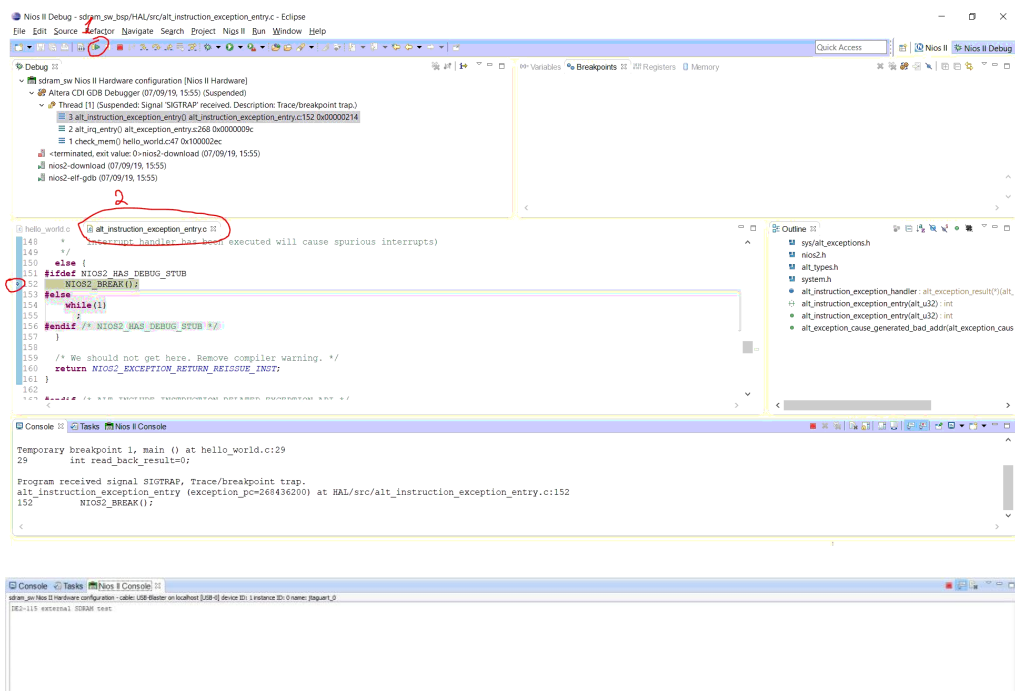
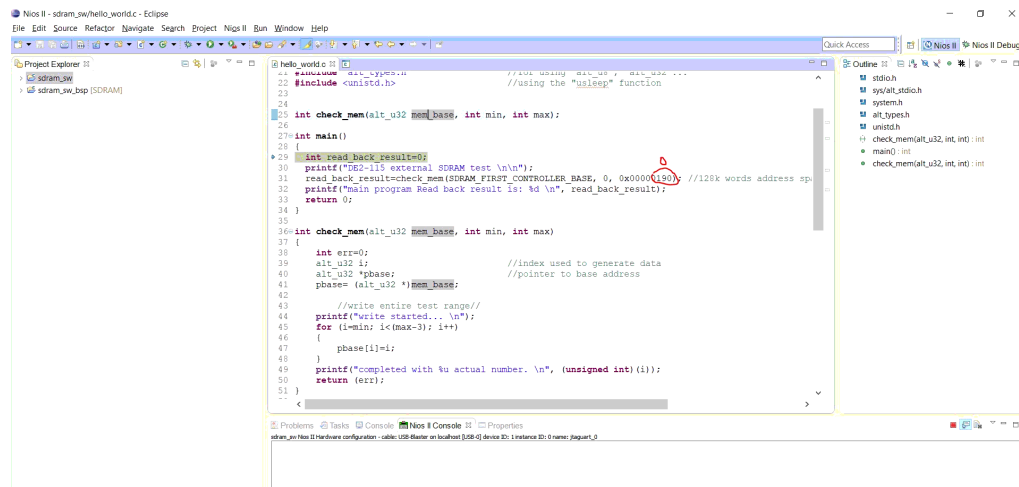


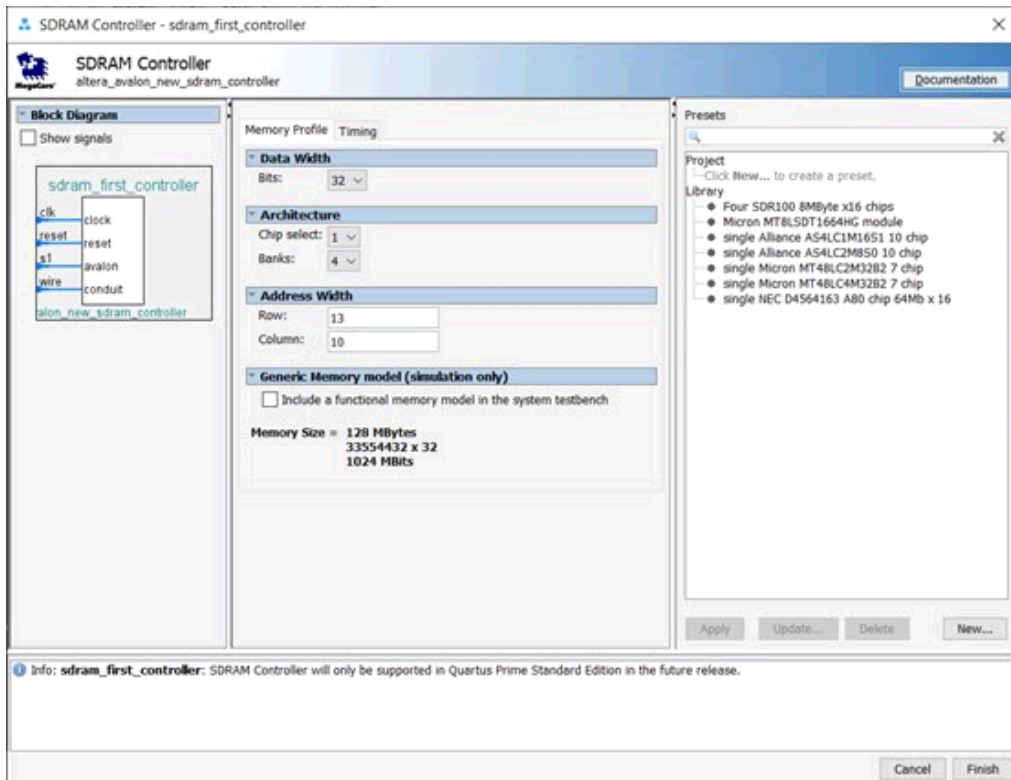
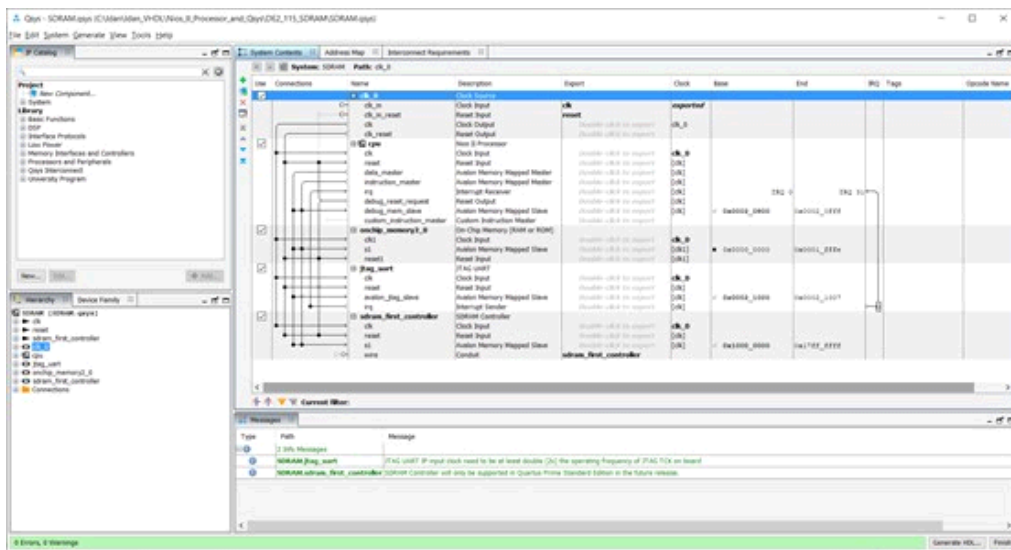
Attaché 1- writing successfully from 0 to max=0x90h (~144 cycles) of the SDRAM (massages is rightfully written on the "NIOS II Console"):



## Attaché 2- writing unsuccessfully from 0 to max=0x190h (~400 cycles) of the SDRAM (messages stopped written on the "NIOS II Console"):



Attaché 3- General configuration (I have used two 50MHz PLL's: one for NIOS and one for external SDRAM (leading by -3.46 deg):



SDRAM Controller - sdram\_first\_controller

SDRAM Controller  
altera\_avalon\_new\_sdram\_controller

Documentation

**Block Diagram**

Show signals

sdram\_first\_controller

clk clock  
reset reset  
s1 avalon  
wire conduit  
avalon\_new\_sdram\_controller

**Memory Profile Timing**

CAS latency cycles:  1  
 2  
 3

Initialization refresh cycles:

Issue one refresh command every:  us

Delay after powerup, before initialization:  us

Duration of refresh command (t<sub>rfc</sub>):  ns

Duration of precharge command (t<sub>rp</sub>):  ns

ACTIVE to READ or WRITE delay (t<sub>rcd</sub>):  ns

Access time (t<sub>ac</sub>):  ns

Write recovery time (t<sub>wr</sub>, no auto precharge):  ns

**Presets**

Project  
Click New... to create a preset.

Library

- Four SDR100 8MByte x16 chips
- Micron MT8LSDT1664HG module
- single Alliance AS4LC1M1651 10 chip
- single Alliance AS4LC2M850 10 chip
- single Micron MT48LC2M3282 7 chip
- single Micron MT48LC4M3282 7 chip
- single NEC D4564163 A80 chip 64Mb x 16

Apply Update... Delete New...

Info: **sdram\_first\_controller**: SDRAM Controller will only be supported in Quartus Prime Standard Edition in the future release.

Cancel Finish