

## MARTe2-core - User story #122

**MARTe-EX-F-1.1.7: A framework developer shall be capable of querying the number of CPU cores available in the system where MARTe is running.**

29.05.2015 14:19 - André Neto

<b>Status:</b> Closed	<b>Start date:</b>
<b>Priority:</b> Normal	<b>Due date:</b>
<b>Assignee:</b>	<b>% Done:</b> 0%
<b>Category:</b>	<b>Estimated time:</b> 4.00 hours
<b>Target version:</b> 0.2	<b>Spent time:</b> 0.00 hour
<b>Git branch (link):</b>	<b>SVN commit (link/?p=rev):</b>
<b>Git merge to develop (link):</b>	

### Description

Implement requirement MARTe-EX-F-1.1.7 based on the original MARTe implementation

Note: Being able to know the number of CPU cores available allow framework developers to take run-time decisions about the distribution of resources (e.g. threading affinity).

### Source code files modified

- Source\Core\L0Portability\Architecture\x86\_cl\ProcessorA.h
- Source\Core\L0Portability\Architecture\x86\_gcc\ProcessorA.h
- Source\Core\L0Portability\OperatingSystem\Linux\ProcessorOS.h
- Source\Core\L0Portability\OperatingSystem\Windows\ProcessorOS.h
- Source\Core\L0Portability\Processor.cpp
- Source\Core\L0Portability\Processor.h
- Source\Core\L0Portability\ProcessorType.cpp
- Source\Core\L0Portability\ProcessorType.h
- Test\Core\L0Portability\ProcessorTest.h
- Test\Core\L0Portability\ProcessorTest.cpp
- Test\Core\L0Portability\ProcessorTypeTest.h
- Test\Core\L0Portability\ProcessorTypeTest.cpp
- Test\GTest\ProcessorGTest.cpp
- Test\GTest\ProcessorTypeGTest.cpp

### Architecture & design review

**Date of the review:** 12/06/2015

**Person who did the review:** André Neto

**Version of architecture & design document:** N/A. As per the original MARTe implementation, this is a support function and does not require formal design in UML.

**Result of review:** N/A

**List of non-conformities:** N/A

### Code and documentation review

**Date of the review:** 18/06/2015

**Person who did the review:** Ivan Herrero

**Result of review:** PASS

**List of non-conformities:** N/A

# Unit test review

**Date of the review:** 01/07/2015

**Person who did the review:** Andre Neto

**Result of coverage tests review:** PASS

**Result of functional tests review:** PASS

**Result of review:** PASS

**List of non-conformities:** N/A

---

## Associated revisions

**Revision 58852254 - 15.06.2015 11:53 - Giuseppe Ferrò**

Added processor related functions. #122 #123

**Revision bdcff817 - 15.06.2015 16:38 - Giuseppe Ferrò**

Added const to functions and operators that does not change class attributes.  
#122

**Revision 142aa3bd - 17.06.2015 13:23 - Giuseppe Ferrò**

Formatted code using new templates.  
#122 #123

**Revision 886334a7 - 17.06.2015 14:59 - Giuseppe Ferrò**

Moved a global variable into the class.  
#122 #123

**Revision 3573b526 - 18.06.2015 10:24 - Giuseppe Ferrò**

Fixed errors accordingly with revision.  
#122 #123

**Revision 3d7d5f94 - 26.06.2015 11:58 - Giuseppe Ferrò**

Added Processor and ProcessorType tests.  
#122 #123

**Revision 95c810f0 - 26.06.2015 11:59 - Giuseppe Ferrò**

Added Processor and ProcessorType GTests.  
#122 #123

**Revision 3ce66bf7 - 07.07.2015 17:04 - Llorenç Capella**

#122 documentation improvement

line 58

**Revision 88afe86d - 09.07.2015 15:37 - Llorenç Capella**

#122 ProcessorTypeTest modifications & #113 HighResolutionTimerTest and SleepTest

List of changes of #122: \* Test added in ProcessorTypeTest.cpp \* Documentation improvements in ProcessorTypeTest.h \* Format ProcessorTypeTest.cpp, ProcessorTypeTest.h, ProcessorTest.cpp

List of changes #113: \* Name of the sleep functions modified based on the Ivan comments. \* Small modifications in HighResolutionTimer::Counter32. \* TestCounter32 input parameter changed in order to avoid overflow.

---

## History

**#1 - 03.06.2015 10:43 - Riccardo Vitelli**

- Target version changed from Backlog to 0.1

- Start date deleted (29.05.2015)

- Estimated time set to 4.00 h

**#2 - 12.06.2015 10:31 - Riccardo Vitelli**

- Status changed from New to Arch: Rev

**#3 - 12.06.2015 11:15 - Riccardo Vitelli**

- Assignee set to André Neto

**#4 - 12.06.2015 18:28 - André Neto**

- Description updated

**#5 - 15.06.2015 10:10 - Riccardo Vitelli**

- Status changed from Arch: Rev to Code: Impl

**#6 - 15.06.2015 10:10 - Riccardo Vitelli**

- Assignee changed from André Neto to Giuseppe Ferro

**#7 - 17.06.2015 12:23 - Ivan Herrero**

- Description updated

**#8 - 17.06.2015 18:24 - Ivan Herrero**

- Description updated

**#9 - 18.06.2015 09:35 - Ivan Herrero**

- Status changed from Code: Impl to Code: Rev

**#10 - 18.06.2015 14:58 - Ivan Herrero**

- Description updated

**#11 - 18.06.2015 15:08 - Ivan Herrero**

- Status changed from Code: Rev to Unit: Impl

**#12 - 18.06.2015 15:10 - Ivan Herrero**

- Assignee deleted (Giuseppe Ferro)

**#13 - 18.06.2015 15:19 - Ivan Herrero**

- Description updated

**#14 - 18.06.2015 18:18 - Ivan Herrero**

Code and documentation review passed. Unit testing implementation pending.

**#15 - 25.06.2015 17:22 - Riccardo Vitelli**

- Status changed from Unit: Impl to Unit: Rev

**#16 - 01.07.2015 08:28 - André Neto**

- Assignee set to André Neto

**#17 - 01.07.2015 08:43 - André Neto**

- Description updated

**#18 - 01.07.2015 09:00 - André Neto**

- Description updated

**#19 - 01.07.2015 10:07 - Riccardo Vitelli**

- Status changed from Unit: Rev to Unit: Impl

**#20 - 01.07.2015 10:07 - Riccardo Vitelli**

- Assignee deleted (*André Neto*)

**#21 - 02.07.2015 18:06 - Riccardo Vitelli**

- Target version changed from 0.1 to 0.2

**#22 - 07.07.2015 17:11 - Llorenc Capella**

- Assignee set to *Llorenc Capella*

**#23 - 10.07.2015 11:03 - Riccardo Vitelli**

- Status changed from *Unit: Impl* to *Unit: Rev*

- Assignee deleted (*Llorenc Capella*)

**#24 - 13.07.2015 16:26 - Ivan Herrero**

- Assignee set to *Ivan Herrero*

**#25 - 13.07.2015 18:17 - Ivan Herrero**

- Description updated

**Unit test review made on a4ac939:**

The issues from the last review have been corrected.

New issues detected and corrected on the fly on 1ef7999.

**#26 - 14.07.2015 12:36 - Riccardo Vitelli**

- Status changed from *Unit: Rev* to *Closed*

**#27 - 14.07.2015 12:36 - Riccardo Vitelli**

- Assignee deleted (*Ivan Herrero*)