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| **TMS320 DSP Algorithm Interoperability Standard**  **QualiTI** Compliance **and** Performance **Testing** | |
| **Date** | Fri Apr 23 2010 16:40:04 GMT+0530 (GMT+05:30) |
| **Vendor** | TI |
| **Algorithm** | FIR |
| **Architecture** | C6x |
| **TI Compiler** | true |
| **Library Format** | COFF |
| **Compiler Version** | TMS320C6x C/C++ Codegen PC v6.0.14 Copyright (c) 1996-2007 Texas Instruments Incorporated |
| **Test Execution Log** | Test execution log for compiler info |
| **Algorithm Base Directory:**    /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/firtest  **Algorithm Archive(s):**    ./lib/fir\_ti.l64P  **Header File(s):** | |
| **Compliance Test Report** | |
| **Test Results** | PASS: 3 **FAIL: 2**     [ XDAIS Rule 13+   XDAIS Rule 26   ]  Skipped: 0 Not apply: 0 **Total: 5** |
| **Test Notes**    This report has been generated with QualiTI Version 6.23 - the XDAIS compliance and performance test suite. | |
| **XDAIS Rules 8, 9, 10: Namespace compliance**  **Report: Passed**  **Test Description:**  (Rule 8) All external definitions must be either API identifiers or API and vendor prefixed.  (Rule 9) All undefined references must refer either to the operations specified in Appendix B (a subset of C runtime support library functions and a subset of the DSP/BIOS HWI API functions), or TI's DSPLIB or IMGLIB functions or other XDAIS-compliant modules.  (Rule 10) All modules must follow the eXpressDSP naming conventions for those external declarations disclosed to the client.  **Test Status Details:**  Test passed.  **Test Execution Log:** XDAIS Rules 8, 9 and 10 execution log | |
| **XDAIS Rule 12: IALG interface implementation**  **Report: Passed**  **Test Description:**  All algorithms must implement the IALG interface.  **Test Status Details:**  Test passed.  **Test Execution Log:** XDAIS Rule 12 execution log | |
| **XDAIS Rule 13+: correct linker section names**  **Report: Failed to execute**  **Test Description:**  Each of the IALG methods implemented by an algorithm must be independently relocatable.  Additional rule: there should be no non-standard linker sections. (Standard linker sections are: ".cinit", ".switch", ".far", ".text", ".const", ".bss", ".pinit".)  **Test Status Details:**  An unknown command line execution error occured. Please check the execution log and try to repeat the commands in the shell to see what the problem could be. Most likely the Settings are somehow wrong.  **Test Execution Log:** XDAIS Rule 13+ execution log | |
| **XDAIS Rule 25: All C6x algorithms must be supplied in little-endian format**  **Report: Passed**  **Test Description:**  All C6x algorithms must be supplied in little-endian format.  **Test Status Details:**  Test passed.  **Test Execution Log:** XDAIS Rule 25 execution log | |
| **XDAIS Rule 26: All static/global data must be far on c6x**  **Report: Failed to execute**  **Test Description:**  All C6x algorithms must access all static and global data as far data.  **Test Status Details:**  An unknown command line execution error occured. Please check the execution log and try to repeat the commands in the shell to see what the problem could be. Most likely the Settings are somehow wrong.  **Test Execution Log:** XDAIS Rule 26 execution log | |
| **Performance Test Report** | |
| **Test Results** | PASS: 0 **FAIL: 2**     [ XDAIS Rule 20   XDAIS Rules 21, 22   ]  Skipped: 0 Not apply: 0 **Total: 2** |
| **Test Notes**    This report has been generated with QualiTI Version 6.23 - the XDAIS compliance and performance test suite. | |
| **XDAIS Rule 20: must declare worst-case stack requirements**  **Report: Failed to execute**  **Test Description:**  All algorithms must characterize their worst-case stack space memory requirements (including alignment).  **Test Status Details:**  An unknown command line execution error occured. Please check the execution log and try to repeat the commands in the shell to see what the problem could be. Most likely the Settings are somehow wrong.  **Test Execution Log:** XDAIS Rule 20 execution log | |
| **XDAIS Rules 21, 22: must characterize static data & program memory requirements**  **Report: Failed to execute**  **Test Description:**  All algorithms must characterize their static data & program memory requirements  **Test Status Details:**  An unknown command line execution error occured. Please check the execution log and try to repeat the commands in the shell to see what the problem could be. Most likely the Settings are somehow wrong.  **Test Execution Log:** XDAIS Rules 21, 22 execution log | |

Test execution log for **Compiler Info:**

Determining compiler info.

Chcking if this library was created with a TI compiler...

Running command:> /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/packages/ti/xdais/qualiti/cgtools/bin/ofd6x -x --xml\_indent=0 --obj\_display=none /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/firtest/./lib/fir\_ti.l64P | grep "<ti\_coff>"

(from "/tmp/qualiti\_runcmd\_39735.sh"

<ti\_coff>

<ti\_coff>

<ti\_coff>

<ti\_coff>

This library was created with a TI compiler.

Attempting to determine library format...

Running command:> /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/packages/ti/xdais/qualiti/cgtools/bin/ofd6x -x --xml\_indent=0 --obj\_display=none /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/firtest/./lib/fir\_ti.l64P | grep -E "<.\*coff>|<.\*elf>"

(from "/tmp/qualiti\_runcmd\_39736.sh"

<ti\_coff>

</ti\_coff>

<ti\_coff>

</ti\_coff>

<ti\_coff>

</ti\_coff>

<ti\_coff>

</ti\_coff>

The library is in COFF format.

Attempting to determine the compiler version...

Running command:> strings /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/firtest/./lib/fir\_ti.l64P|grep "Texas Instruments"

(from "/tmp/qualiti\_runcmd\_39737.sh"

TMS320C6x C/C++ Codegen PC v6.0.14 Copyright (c) 1996-2007 Texas Instruments Incorporated

TMS320C6x C/C++ Codegen PC v6.0.14 Copyright (c) 1996-2007 Texas Instruments Incorporated

TMS320C6x C/C++ Codegen PC v6.0.14 Copyright (c) 1996-2007 Texas Instruments Incorporated

TMS320C6x C/C++ Codegen PC v6.0.14 Copyright (c) 1996-2007 Texas Instruments Incorporated

The compiler is TMS320C6x C/C++ Codegen PC v6.0.14 Copyright (c) 1996-2007 Texas Instruments Incorporated.

back

Test execution log for **XDAIS Rules 8, 9 and 10:**

Running test 'XDAIS Rules 8, 9 and 10'

Extracting names of global symbols defined by the algorithm...

Running command:> /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/packages/ti/xdais/qualiti/cgtools/bin/nm6x -g /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/firtest/./lib/fir\_ti.l64P | grep " [TBCU] "

(from "/tmp/qualiti\_runcmd\_39708.sh"

00000000 T \_FIR\_TI\_exit

00000000 T \_FIR\_TI\_init

00000128 T \_FIR\_TI\_filter

00000000 U \_memcpy

00000000 T \_FIR\_TI\_activate

00000000 T \_FIR\_TI\_alloc

00000000 T \_FIR\_TI\_control

00000000 T \_FIR\_TI\_deactivate

00000000 T \_FIR\_TI\_free

00000000 T \_FIR\_TI\_initObj

00000000 T \_FIR\_TI\_moved

00000000 T \_FIR\_TI\_numAlloc

00000000 U \_IFIR\_PARAMS

00000000 U \_memcpy

00000000 B \_FIR\_TI\_IALG

00000000 B \_FIR\_TI\_IFIR

00000000 U \_FIR\_TI\_activate

00000000 U \_FIR\_TI\_alloc

00000000 U \_FIR\_TI\_control

00000000 U \_FIR\_TI\_deactivate

00000000 U \_FIR\_TI\_filter

00000000 U \_FIR\_TI\_free

00000000 U \_FIR\_TI\_initObj

00000000 U \_FIR\_TI\_moved

00000000 U \_FIR\_TI\_numAlloc

Verifying that all global symbols are named XXX\_TI\_xxx ...

and that no blacklisted external references are made

back

Test execution log for **XDAIS Rule 12:**

Running test 'XDAIS Rule 12'

Extracting names of global BSS data symbols...

Running command:> /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/packages/ti/xdais/qualiti/cgtools/bin/nm6x -g /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/firtest/./lib/fir\_ti.l64P | grep " [BD] "

(from "/tmp/qualiti\_runcmd\_39713.sh"

00000000 B \_FIR\_TI\_IALG

00000000 B \_FIR\_TI\_IFIR

Verifying that objects 'FIR\_TI\_IALG' and 'FIR\_TI\_IFIR' are defined...

Data object 'FIR\_TI\_IALG' found.

Data object 'FIR\_TI\_IFIR' found.

back

Test execution log for **XDAIS Rule 13+:**

Running test 'XDAIS Rule 13+'

Extracting names of all sections in which all algorithms' symbols are...

Running command:> /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/packages/ti/xdais/qualiti/cgtools/bin/ofd6x -x --xml\_indent=0 --obj\_display=none,sections,header /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/firtest/./lib/fir\_ti.l64P | /home/uma/dvsdk\_2\_00\_00\_22/cg\_xml\_2\_12\_00/bin/sectti --csv

(from "/tmp/qualiti\_runcmd\_39718.sh"

Reading from stdin ...

Can't locate object method "new" via package "XML::Parser" at XML/Simple.pm line 404, <STDIN> line 1.

Error: Command execution failed.

back

Test execution log for **XDAIS Rule 20:**

Running test 'XDAIS Rule 20'

Using call\_graph on ofd output to find out worst case stack...

Running command:> /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/packages/ti/xdais/qualiti/cgtools/bin/ofd6x -xg --xml\_indent=0 --obj\_display=none,header,optheader,symbols --dwarf\_display=none,dinfo /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/firtest/./lib/fir\_ti.l64P | /home/uma/dvsdk\_2\_00\_00\_22/cg\_xml\_2\_12\_00/bin/call\_graph --stack\_max

(from "/tmp/qualiti\_runcmd\_39723.sh"

Reading from stdin ...

Can't locate object method "new" via package "XML::Parser" at XML/Simple.pm line 404, <STDIN> line 1.

Error: Command execution failed.

back

Test execution log for **XDAIS Rules 21, 22:**

Running test 'XDAIS Rules 21, 22'

Using sectti on ofd output to find static data & program memory requirements...

Running command:> /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/packages/ti/xdais/qualiti/cgtools/bin/ofd6x -x --xml\_indent=0 --obj\_display=none,sections,header /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/firtest/./lib/fir\_ti.l64P | /home/uma/dvsdk\_2\_00\_00\_22/cg\_xml\_2\_12\_00/bin/sectti

(from "/tmp/qualiti\_runcmd\_39728.sh"

Reading from stdin ...

Can't locate object method "new" via package "XML::Parser" at XML/Simple.pm line 404, <STDIN> line 1.

Error: Command execution failed.

back

Test execution log for **XDAIS Rule 25:**

Running test 'XDAIS Rule 25'

Using ofd output to parse for endianness attribute...

Running command:> /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/packages/ti/xdais/qualiti/cgtools/bin/ofd6x -x --xml\_indent=0 --obj\_display=none,header /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/firtest/./lib/fir\_ti.l64P | grep "<endian>"

(from "/tmp/qualiti\_runcmd\_39733.sh"

<endian>little</endian>

<endian>little</endian>

<endian>little</endian>

<endian>little</endian>

back

Test execution log for **XDAIS Rule 26:**

Running test 'XDAIS Rule 26'

Extracting names of all used sections to see if there is a '.bss' in there.

[Using output generated by the command from test 'XDAIS Rule 13+"]:

Running command:> /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/packages/ti/xdais/qualiti/cgtools/bin/ofd6x -x --xml\_indent=0 --obj\_display=none,sections,header /home/uma/dvsdk\_2\_00\_00\_22/xdais\_6\_23/firtest/./lib/fir\_ti.l64P | /home/uma/dvsdk\_2\_00\_00\_22/cg\_xml\_2\_12\_00/bin/sectti --csv

(from "/tmp/qualiti\_runcmd\_39718.sh"

Reading from stdin ...

Can't locate object method "new" via package "XML::Parser" at XML/Simple.pm line 404, <STDIN> line 1.

[end of reused output]

Error: Command execution failed.

back