

C++ AMP Conformance Test Suite

Readme

W v f s v f f f ff f
f v f v) v^s vP v W v ff open v f
v s v f f W v v v^s v v
s f v v f W f v v v v v v
s v v s v

W v s v f v s v s f f v
f] f v v f
] v v f

f v 'Tests' 'TestsWithProp' v s f v v v v
s v f v f v v v^s
'TestsWithProp' v^s v v s f v v
s v W f W v f v v v^s 'Tests' f s v v
v s v

W v v v v^s s f v v
f v v^s 2_Cxx_Language_Extensions\2_1_Syntax\2_1_3_Type_Specifiers
f v v 2.1.3 Type Specifiers

f v v v v^s 2_Cxx_Language_Extensions\2_x_general
v v v v v^s v^s v W v) v
f f v

v v v v v f test.cpp f) W f fs s f f f v W v v v
v ff f v f v f
v v v^s f v

v v v v s v s w

/// <tags>tag[,tag[...]]</tags>

v v^s v v w f v

/// <summary>Text</summary>

W v v v f v^f v v v v s v v^f v
f f

File Name	Description
V f	fs V f V V f f V
V	fs V V f f V f f V
V	f V V
V	V s f f V s V V ff s V V ff s V s] V V [

V ff f fs

```
my $cflag_compile_only = '/c';
```

```
    V      f  f  s V      f      V V s      f      s f      ) s V      V      ff  
    ]
```

```
system("$CC $cflag_compile_only test.cpp");
```

```
my $cflag_define = '/D%s#"%s"';
```

```
    V V      f  f  s V      s f      W      W s f  f  
    V  s V      ff      V  f      V  V      ff      V      ]
```

```
$actual_flag_1 = sprintf($cflag_define, 'name', 'value, possibly with whitespaces');  
$actual_flag_2 = sprintf($cflag_define, 'name_2', ''); # empty definition  
system("$CC $actual_flag_1 $actual_flag_2 test.cpp");
```

```
my $test_exec = 'test.exe';
```

```
    V s f      s      f  V      s  f ) s V      V      ff      V      ]
```

```
system("$CC test.cpp");  
system("$test_exec");
```

```
V  V      ff      s      f  test.conf) f      V      V      V  
V  V s      f
```

```
s      V]
```

```
•      f  f  fs ]  )  V  s f      V      V  V  ff      f      f  
      f  f  f  ff  s V      s      ff      s  
•      V  V      fs      V  V)  V  s f      V  V  
ff  V      f      f      s  s  f  W  V  f  f      f      V  
      fs      s V  V      W      fs [      V  V  
ff      f      s      s      f      W      V  
f  ]
```

```
%config = (  
    'compile_only' => 1,  
    'definitions' => [  
        { 'AMP_RESTRICTION' => 'amp' },  
        { 'AMP_RESTRICTION' => 'cpu,amp', 'EXTRA' => '' }  
    ]  
);
```

V V s f) V V ff f V V
s V V W f) s f V^s f V
V]

```
c1.exe /c /DAMP_RESTRICTION#"amp" test.cpp
c1.exe /c /DAMP_RESTRICTION#"cpu,amp" /DEXTRA#" test.cpp
```

f s V s V V^s W) V
V f fs
V V s f s V s ff V]
• V^s W^s f s [
• s V s f V f f [
• s fs

V V V * V f V V V V^s s
V V s V s f V V V V^s f)
f f V V^s W

Note: the actual text in an “Expects” line is currently ignored, any compilation error is treated as success, you may want to fine tune this mechanism for your compiler.

W v)3 W v s f v)3W f f f]
] f v v s V s f v V
w W