

C " : 72"



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C "	"	"	"

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O'	"	"	"

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© 4 7:



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© 5 7:



© 6 7:



© 7 7:



© 8 7:



© 9 7:



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303" " " "

" "	'Y' 'Y' ''

© : **7**:



4" ""

408" / "

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40808" / " "

"	" "	" " "	"

© 7:



5" "

508" " "

504" " "

© 32 7:



505" "C "

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	С		
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	С	•	
		44 C	
		"	
	С	"	
		"	



	FALSE CallTrustedFunction CallNonTrustedFunction
C "	

© 34 7:



50508" " /C " 5" " 6 "

	" "	
	"	
	"	
	С	
	2 5 "	

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50504"	" /C	"	5" " 6'	•
		.,		
		••		
		"		

<u>"</u> "

"

© 36 7:



566" "				
			" "	
56608" "	/C	"		
			"	
			37 9"	
50604"		/C	"	
			"	
			37 9"	
			2"	



507" "C "

50708" " /C "

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"" C "

	" "	

"

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508" C "C "

	2 5 "	

50808" C " "

/C	" "	"	II .
		"	
		••	



509" "C "

50" " " 5" " 6"

0 "

0 "

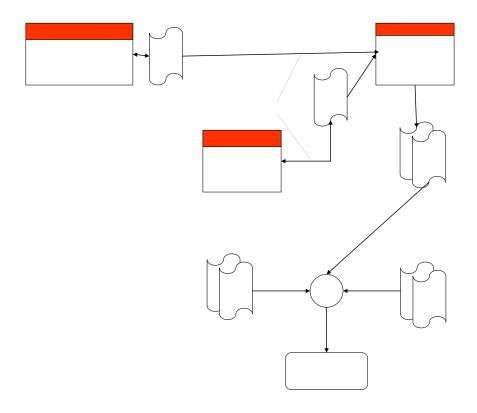
0 "

0 '

0 "



6" " "



© 3 7:



6**œ**''

OILFileNam RTIDebugSupport OILFileNam

© 42 7:



7" " "

708" " "

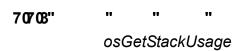
704" " "

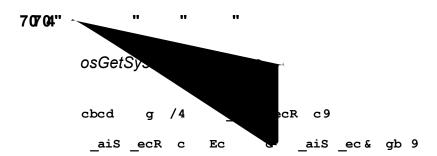
705" " "

766" " "

707" " " "







70705" " " "

osGetISRStackUsage



8"	"	"		
	"			

808" " "

- . Cac g Tca R_ ca V<
- , CGGLRTca R_ ca V<
- , c

80808" " "

80804" " "



804" 8**65**'' "3" 8ŒŒ"

For EIINT, you can use either of the following methods to declare a function as an interrupt routine:

- Place #pragma ghs interrupt immediately before the function.
- Prepend the __interrupt keyword to the function definition.

80504"



866" "4"

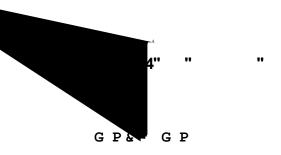
86603" " "

3" 5 "
EnableNesting

6 "

EnableNesting

86604" " "



-(GPd ag b (-

807" "

.. <u>..</u>

SECONDSPERTICK

not

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© 47 7:



9" " 5" " 6 " 908" " "

"	"	**	11	"	"	"	"

90800" " "2"

90304" " " "



90805" " " "

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© 49 7:



:":72" "

: 08" " "

: 04" " " "

: 05"



" " "

08" C " "

0808" C "

3" 5 " DisableAllInterrupts

6 " DisableAllInterrupts

0804" C "

3" 5 " EnableAllInterrupts

DisableAllInterrupts

6 " EnableAllInterrupts

DisableAllInterrupts

0805" C "

3" " 5 " SuspendAllInterrupts

6 " SuspendAllInterrupts

0806" C "

3" " 5 " ResumeAllInterrupts

SuspendAllInterrupts

6 " ResumeAllInterrupts

SuspendAllInterrupts

®07" "

SuspendOSInterrupts

© 4 7:



®®"

ResumeOSInterrupts SuspendOSInterrupts

**	"			
	"			

39" "

080 " "

080" C D "

882" "

08083" "

-

•

•



04" "C"

040808"" """

© 53 7:



040804" " "

void osWritePeriphera	al8 (osuint16	area,	osuint32	address,	osuint8 v	alue)
void osWritePeriphera	al16(osuint16	area,	osuint32	address,	osuint16	value)
void osWritePeriphera	al32(osuint16	area,	osuint32	address,	osuint32	value)
area						
address						
value						
" "						
None						
" "						
m .						
•						
" "	**			_		
"						
· ·						
·						
"						

© 54 7:



040805" " "

**

<pre>void osModifyPeripher osuint8 setmask)</pre>	cal8 (osuin	t16 area,	osuint32	address,	osuint8 d	clearmask,	
void osModifyPeripheral16(osuint16 area, osuint32 address, osuint16 clearmask, osuint16 setmask)							
<pre>void osModifyPeripher osuint32 setmask)</pre>	cal32(osuin	t16 area,	osuint32	address,	osuint32	clearmask,	
"							
area							
address							
clearmask							
setmask							
" "							
None							
" "							
"							
"							
" "	"						
"							
"							
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"							

© 55 7:



O5" " 5" " 6 "

" "	C " "
в/ -в/к	DDDC C + DDDC C 1C &CGA. CGA1/
	DDDD .2. + DDDD /DC &CGA10 CGA033
C/ -C/K	DDDC C + DDDC C 1C &CGA. CGA1/
	DDDD .2. + DDDD 1DC &CGA10 CGA3//
C/ +Daa0	DDDC C + DDDC C 1C &CGA. CGA1/
	DDDD .2. + DDDD 1DC &CGA10 CGA3//
D/F	DDDC C + DDDC C 1C &CGA. CGA1/
	DDDD . 2. + DDDD 0 A &CGA10 CGA13.
D/	DDDD 7 + DDDD 7.1C &CGA. + CGA1/
	DDDD .2. + DDDD 010 &CGA10+ CGA06/
D/K	DDDC C + DDDC C 1C &CGA. CGA1/
	DDDD .2. + DDDD 03A &CGA10 CGA075
N/K	DDDC C + DDDC C 1C &CGA. CGA1/
	DDDD .2. + DDDD 0DC &CGA10 CGA161

© 56 7:



: "

gb U g cGAP6 & g 10 _bb * g 6 _ 9

___bb ____
__
gb ____
(& g 6(_bb ; & g 6 _ 9

••

38"

© 57 7:



••

**

© 58 7:



**

	"	
gb	c GAPK_ i&g 10 _bb 9	
	"	
_bb		
	"	
gb		
	" "	
(& g	6(_bb ; & g 6 . 6.9	

**

	"					
gb	A c_	GAPK	_ i& c	, 10	_bb	9
	**					
_bb						
	" "					
gb						
	"		"			
(& g	6(_b	b ;	& g	6.	5D9	

© 59 7:



••

**

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gb A c_ GAPPc & g 10 _bb 9

"
_bb
Pc A bc
gb
"
(& g 6(& bb . . / ; & g 6 . CD9

© 5: 7:



0506" ." " " "D " " " "

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		"									
	gb	Ec	G	CG& g	/4	g bc	9				
		"									
g	bc										
		"	"								
g	₁ 6										
		•		"							
С	!	&	g	6 &GK	CGKI	g bc	< 9)			

••

		"			
ç	gb	С	GKL CG& g	/4 g bc	9
		"			
g l	oc				
	"	•			
ç	gb				
		"	11		
GK1	CGK	I g	bc < ; /9)	

••

```
gb Ac_GK_CG&g /4 g bc 9

"
g bc
"
gb
"
"
GK_CGKI g bc < ; . 9
```

© 5 7:



0507" "" "

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	**											
gb	υg	c GKP (6 & g	10	_bb	* g	6	_	9			
	**											
_bb												
_												
	**											
gb												
	**		**									
(& g	6(_b	b ;	& g	6	_ 9							

38"

gb UgcGKP/4&g 10 _bb * g /4 _ 9

"
_bb
_
"
gb |
(&g /4(_bb ; &g /4 _ 9)

54"

© 62 7:



66" " **66**08" **06 04'' 66**65" **66**6" **0607''** " 3" " 0608" C "osTimerInterrupt"

void PreAlarmHook(void)

/* user specific code */

© 63 7:



(6) (2) " 3" "

660" " 3" "

060 " 5" " 6 "



07''		" " "		" "
0703) "		С	•

g	6	AfcaiKNS aac	&a.	g 6(_bb
		· ·		

© 65 7:



0704" " C "

		**								
_	R	С	2	Afcai	bPcd	c fKi	NS &	gb		
		**								
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© 66 7:



		**								
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_	R	С		Afcai	bP	cd c	fRy	C 8	<u>S</u>	gb
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© 67 7:



32" / " 5" " 6 "

3203" "

© 68 7:



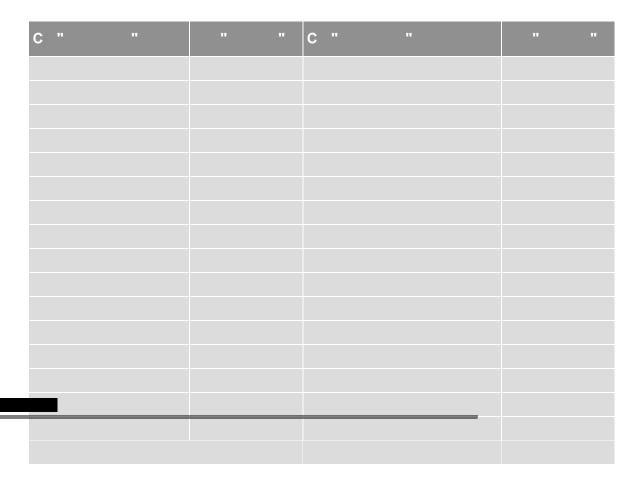
3204" C "

	**	
C+a+ncm	trong carra	lNonTrustedFunction(NonTrustedFunctionIndexType FunctionIndex,
		onParameterRefType FunctionParams);
2,0111145	"	
"	"	
E OK		
	RVICEID	
		"
void NO	NTRUSTED	<pre><name function(nontrustedfunctionindextype,<="" non-trusted="" of="" pre="" the=""></name></pre>
NonTrus	tedFuncti	onParameterRefType);
	tedFuncti	onParameterRefType);

© 69 7:

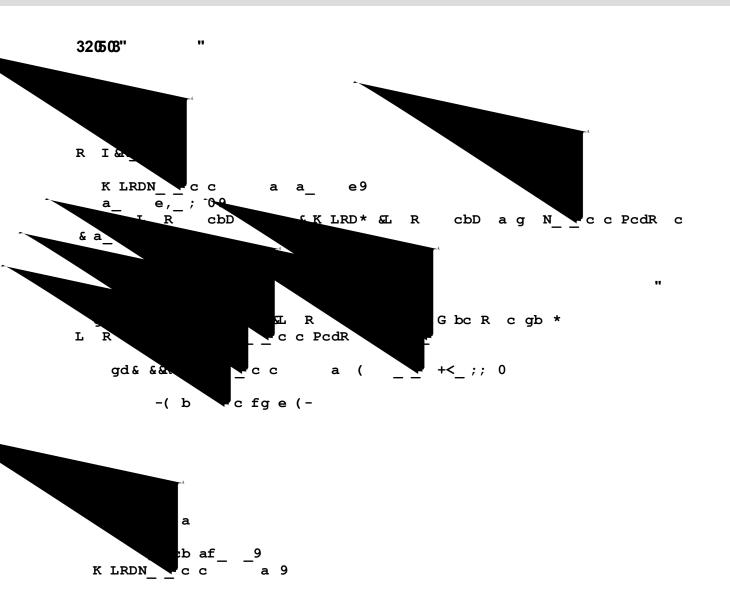


3205" " "



© 6: 7:







33" 3303" 330808" " " GetCoreID(). 3304" / " / " osInitSlaveCore() osInitMultiCoreOS() osInitMultiCoreOS() osInitSlaveCore() StartCore() StartNonAutosarCore() M RK. AKN M RK. AKN

© 72 7:



```
330403" D
  gb main()
   [...]
     g af (GetCoreID())
   {
        a_ c OS_CORE_ID_0:
             [...]
             osInitMultiCoreOS();
             StartCore(OS CORE ID 1);
             StartOS (OSDEFAULTAPPMODE);
               c_i;
        a c OS CORE ID 1:
             [...]
             osInitSlaveCore();
             StartOS(OSDEFAULTAPPMODE);
              c_i;
        bcd_
             [...]
               c_i;
   [...]
        " 3"
330404"
  gb main()
   [...]
     g af (GetCoreID())
   {
        a_ c OS_CORE_ID_0:
             [...]
             osInitMultiCoreOS();
             StartNonAutosarCore(OS CORE ID 1); /* may be called later */
             StartOS (OSDEFAULTAPPMODE);
               c_i;
        a_ c OS CORE ID 1:
             [...]
             osInitSlaveCore();
             [...]
              c_i;
        bcd_
               :-
             [...]
               ci;
   [...]
}
```

© 73 7:



```
330405" " 4"
 gb main()
  [...]
    g af (GetCoreID())
  {
       a_ c OS_CORE_ID_0:
            [...]
            osInitMultiCoreOS();
            StartCore(OS_CORE_ID_1);
              c_i;
       a_ c OS_CORE_ID_1:
            [...]
            osInitSlaveCore();
            osInitMultiCoreOS();
            StartNonAutosarCore(OS CORE ID 0); /* adjusts the state of PE1*/
            StartOS (OSDEFAULTAPPMODE);
             c_i;
       bcd_
            ·
[...]
  [...]
```

© 74 7:



34" " 6 "

3408" "C "
: 72" " 6" "

TimingProtectionTimerClock

TimingProtectionTimerClock = 20000

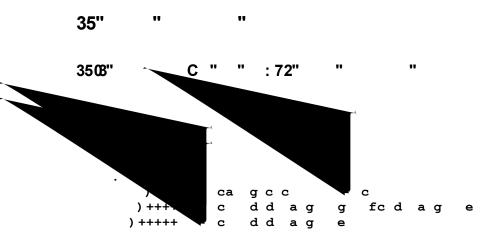
3404" " " 6" "

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350808" : 72" " " "

"	**	



"	"	"	"

© 77 7:



36" "

3608" " "

" "	"	3''	5"	6"
		**	"	••
			**	"
		1311	••	••

¹ Only for multi core systems



3604" " "

" "	"	3"	5"	6"
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		"	"	
		••	••	••
		••	••	••

© 79 7:



37" "

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© 7: 7: