*Example 1*

**SDD:**

This function shall return :

* ARINC\_RC\_IN\_USE in case InUseCnt > 0,
* ARINC\_RC\_FREE\_USE in case InUseCnt = 0 ,
* ARINC\_RC\_ERROR\_IN\_USE in case InUseCnt < 0 ,

Otherwise,ARINC\_RC\_ERROR\_FX.

**CODE:**

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

ARINC\_RC\_e IsARINC\_InUse(void)

{

   ARINC\_RC\_e status = ARINC\_RC\_DEFAULT;

   if(InUseCnt > 0)

   {

      status = ARINC\_RC\_IN\_USE;

   }

   else if(InUseCnt == 0)

   {

      status = ARINC\_RC\_FREE\_USE;

   }

   else if(InUseCnt < 0)

   {

      status = ARINC\_RC\_ERROR\_IN\_USE;    //ERROR: there are more false conditions than true condtions

   }

   else

   {

      status = ARINC\_RC\_ERROR\_FX;    //ERROR: function is not working properly

   }

   return status;

}

*Example 2*

**SDD:**

This function shall :

1. Increment InUseCnt by 1 in case newStat is TRUE, otherwise decrement InUseCnt by 1,
2. Return ‘ARINC\_RC\_INUSE\_SAME’ ,in case newStat is ARINC\_InUse. Otherwise set ARINC\_InUse to newStat and then return ‘ARINC\_RC\_INUSE\_CHANGE’ ,
3. Return ‘ARINC\_RC\_ERROR\_IN\_USE’ In case InUseCnt < 0.

**CODE:**

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

ARINC\_RC\_e SetARINC\_InUse(Bool newStat)

{

ARINC\_RC\_e rc = ARINC\_RC\_DEFAULT;

if(newStat == TRUE)

{

InUseCnt++;

}

else

{

InUseCnt--;

}

if(newStat == ARINC\_InUse)

{

/\* Set the return code to signify no change, arincState is already proposed state, TRUE=TRUE / FALSE=FALSE \*/

rc = ARINC\_RC\_INUSE\_SAME;

}

else if(newStat != ARINC\_InUse)

{

/\* Set the current in use state to the proposed state \*/

ARINC\_InUse = newStat;

/\* set the return code to signify a new change, arincState is now equal to proposed state \*/

rc = ARINC\_RC\_INUSE\_CHANGE;

}

else

{

/\* this condition should not be exercised, if so, then something is wrong with the type:Bool \*/

}

if(InUseCnt < 0)

{

/\* Error code, there is a an ERROR condition where there are multiple set to FALSE than set to TRUE \*/

rc = ARINC\_RC\_ERROR\_IN\_USE;

}

else

{

/\* do nothing, normal operation \*/

}

return rc;

}