

# Package Document Generation Tool's User Manual

*May 20, 2011*

*Revision 0.10*

**Preliminary Draft**

THIS SPECIFICATION IS PROVIDED "AS IS" WITH NO WARRANTIES WHATSOEVER, INCLUDING ANY WARRANTY OF MERCHANTABILITY, NONINFRINGEMENT, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY WARRANTY OTHERWISE ARISING OUT OF ANY PROPOSAL, SPECIFICATION OR SAMPLE. Except for a limited copyright license to copy this specification for internal use only, no license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted herein.

Intel disclaims all liability, including liability for infringement of any proprietary rights, relating to implementation of information in this specification. Intel does not warrant or represent that such implementation(s) will not infringe such rights.

Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined." Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them.

This document is an intermediate draft for comment only and is subject to change without notice. Readers should not design products based on this document.

Intel and the Intel logo are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

\*Other names and brands may be claimed as the property of others.

Copyright © 2008 Intel Corporation.

# Contents

---

1	Installation .....	1
2	Usage .....	3

## *Revision History*

---

<b>Revision Number</b>	<b>Description</b>	<b>Revision Date</b>
0.01	Initial document	05/13/2009
0.10	Format clean-up and tool build prerequisite inserted at the beginning of the Introduction.	05/20/2010

# 1 Installation

---

This chapter introduces you on how to install the package documentation generation tools.

Prior to installation, it is necessary to follow the steps outlined in the “freeze\_steps.txt” file located in the “src” root directory of the Packaging Documentation Tool repository.

The steps for installing the package documentation generation tool are:

- 1) copy the executable file “packagedocapp.exe” to a local folder in Windows, for example: c:\doxygentools
- 2) Download and install python 2.5.4 from:

<http://www.python.org/download/>

to a folder in Windows, for example: c:\python25

- 3) Copy the following binary files (create directories as required):

c:\Python25\DLLs\\_socket.pyd

to: c:\doxygentools\\_socket.pyd

c:\Python25\DLLs\\_ssl.pyd

to: c:\doxygentools\\_ssl.pyd

c:\Python25\DLLs\select.pyd

to: c:\doxygentools\select.pyd

- 4) Download and install wxPython 2.8.9.2 from:

<http://www.wxPython.org/>

to a Python subfolder,

for example: c:\python25\lib\site-packages\wx

- 5) Download and install .NET framework from:

<http://msdn.microsoft.com/en-us/netframework/aa731542.aspx>

- 6) Copy following binary files (create directories as required):

c:\Python25\lib\site-packages\wx-2.8-msw-unicode\wx\\_controls\_.pyd

to: c:\doxygentools\wx.\_controls\_.pyd

c:\Python25\lib\site-packages\wx-2.8-msw-unicode\wx\wxmsw28uh\_adv\_vc.dll

to: c:\doxygentools\wxmsw28uh\_adv\_vc.dll

c:\Python25\lib\site-packages\wx-2.8-msw-unicode\wx\wxbase28uh\_vc.dll  
to: c:\doxygentools\wxbase28uh\_vc.dll

c:\Python25\lib\site-packages\wx-2.8-msw-unicode\wx\wxmsw28uh\_core\_vc.dll  
to: c:\doxygentools\wxmsw28uh\_core\_vc.dll

c:\Python25\lib\site-packages\wx-2.8-msw-unicode\wx\\_core\_.pyd  
to: c:\doxygentools\wx.\_core\_.pyd

c:\Python25\lib\site-packages\wx-2.8-msw-unicode\wx\wxbase28uh\_net\_vc.dll  
to: c:\doxygentools\wxbase28uh\_net\_vc.dll

c:\Python25\lib\site-packages\wx-2.8-msw-unicode\wx\\_gdi\_.pyd  
to: c:\doxygentools\wx.\_gdi\_.pyd

c:\Python25\lib\site-packages\wx-2.8-msw-unicode\wx\\_misc\_.pyd  
to: c:\doxygentools\wx.\_misc\_.pyd

c:\Python25\lib\site-packages\wx-2.8-msw-unicode\wx\\_stc\_.pyd  
to: c:\doxygentools\wx.\_stc\_.pyd

c:\Python25\lib\site-packages\wx-2.8-msw-unicode\wx\wxmsw28uh\_stc\_vc.dll  
to: c:\doxygentools\wxmsw28uh\_stc\_vc.dll

c:\Python25\lib\site-packages\wx-2.8-msw-unicode\wx\\_windows\_.pyd  
to: c:\doxygentools\wx.\_windows\_.pyd

c:\Python25\lib\site-packages\wx-2.8-msw-unicode\wx\wxmsw28uh\_html\_vc.dll  
to: c:\doxygentools\wxmsw28uh\_html\_vc.dll

c:\windows\system32\python25.dll  
to: c:\doxygentools\python25.dll

## 2 Usage

This chapter introduces you on how to use the package document generation tools. The steps are:

- 1) Download the edk2 packages from:

<https://edk2.tianocore.org/svn/edk2/trunk/edk2>

to a local workspace folder, for example: n:\r9\_combo

- 2) Download doxygen tool from:

<http://www.stack.nl/~dimitri/doxygen/download.html#latestsrc>

and install it to a local folder, for example: C:\Program Files\Doxygen

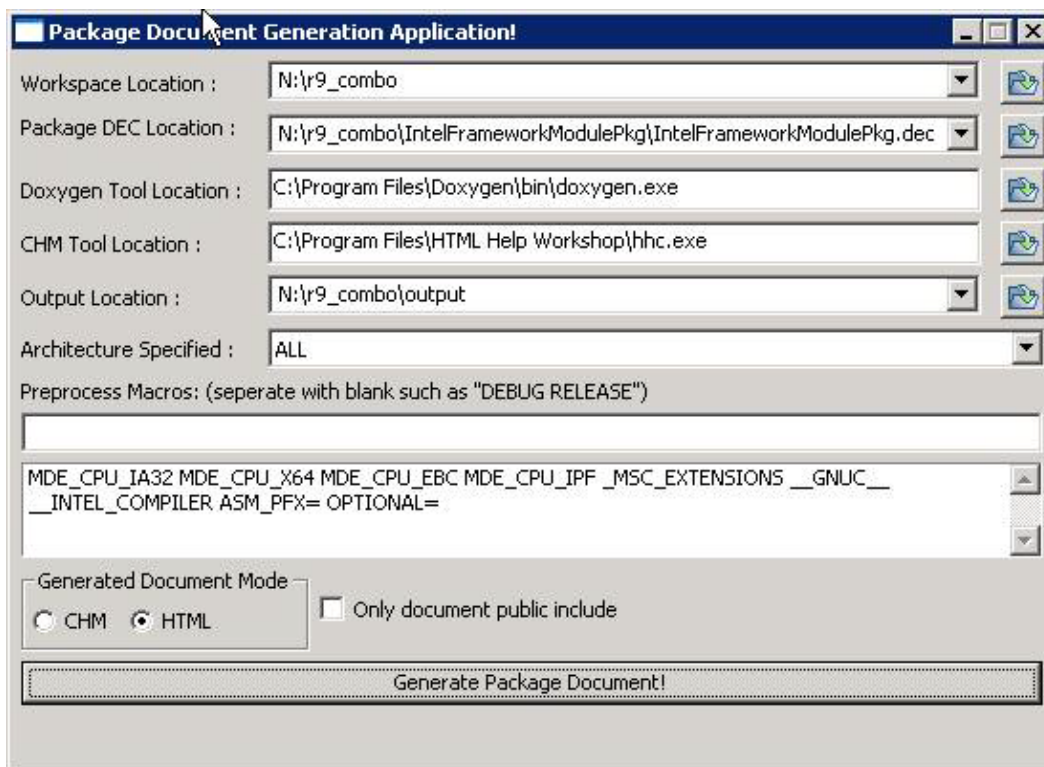
**Note:** the version of doxygen should be greater than 1.5.7. doxygen 1.5.6 contains bugs that cannot analyze function prototype correctly.

- 3) In order to create Compressed HTM (CHM), you must download "Microsoft Workshop Tools" from:

<http://www.microsoft.com/downloads/details.aspx?FamilyID=00535334-c8a6-452f-9aa0-d597d16580cc&displaylang=en>

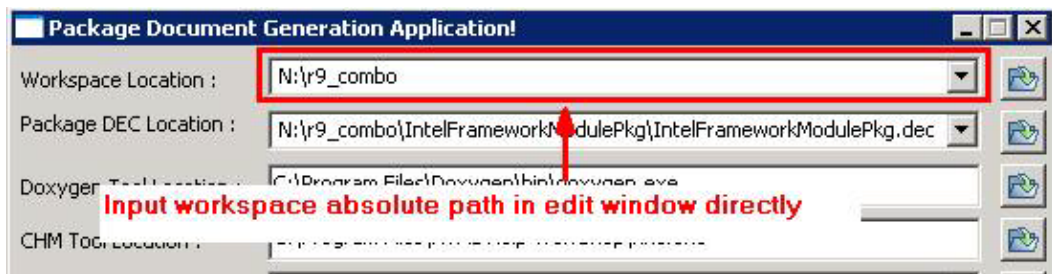
and install it to a local directory, for example "C:\Program Files\HTML Help Workshop\"

- 4) Launch the doxygen execution file "packagedocapp.exe" by double click mouse or run it from command line, the main UI looks like:

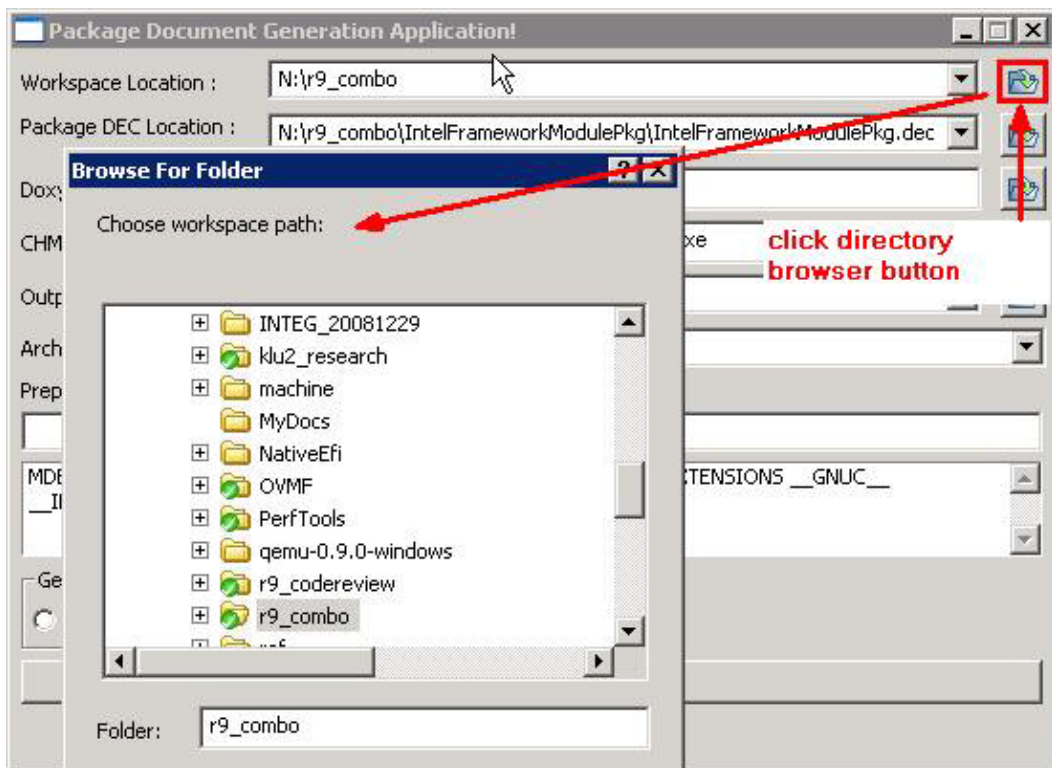


5) Select workspace location in below two optional ways:

a. Input absolute path for workspace contains edk2 packages as:



b. Click directory browser button to select directory.



6) Select Package DEC file absolute path, there are two optional ways.

a. Input dec file absolute path in edit window directly

b. Click file browser button to select directory

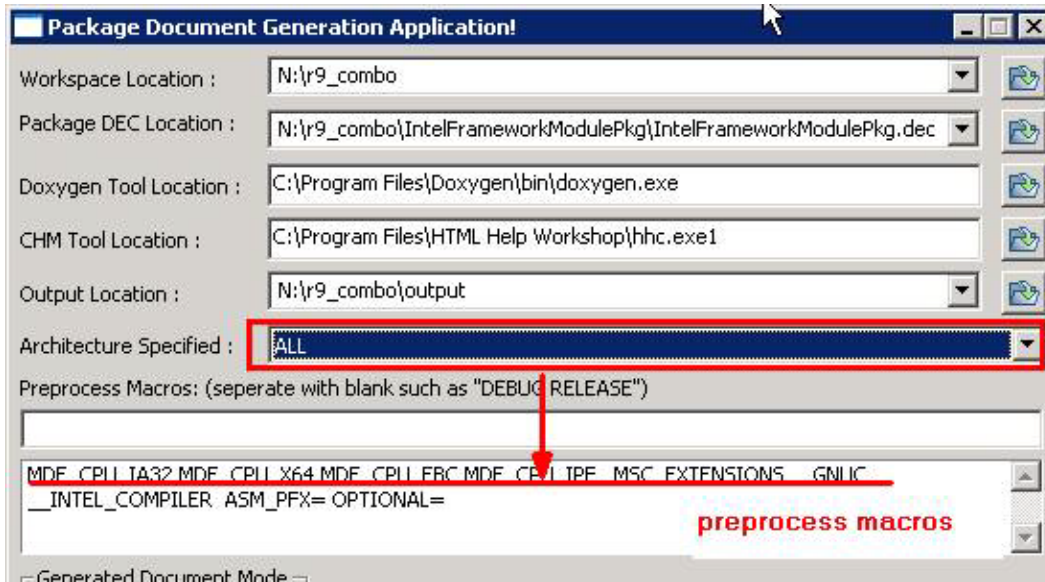
7) Select Doxygen Tools Location for example: C:\Program Files\Doxygen\bin\doxygen.exe

8) Select Microsoft HTML workshop tools location for example: C:\Program Files\HTML Help Workshop\hhc.exe

9) Select output path for example: N:\r9\_combo\output

10) Select "Architecture Specified", this selection will lead different macros is used for preprocessing the source code when generating package document.

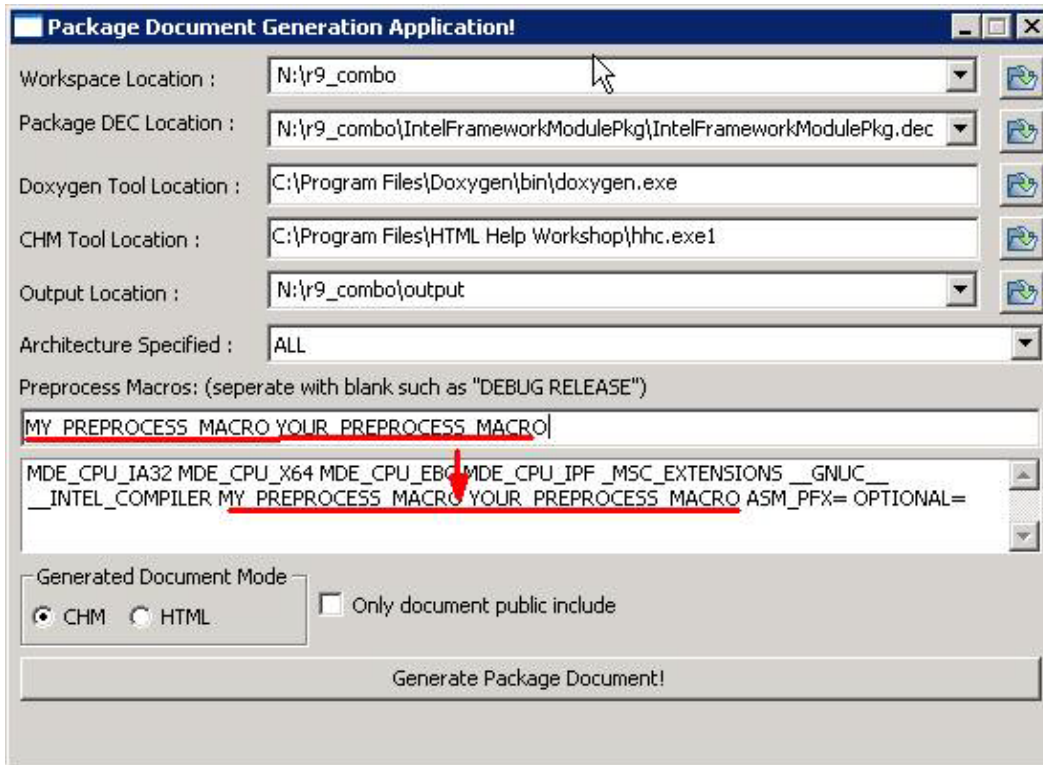




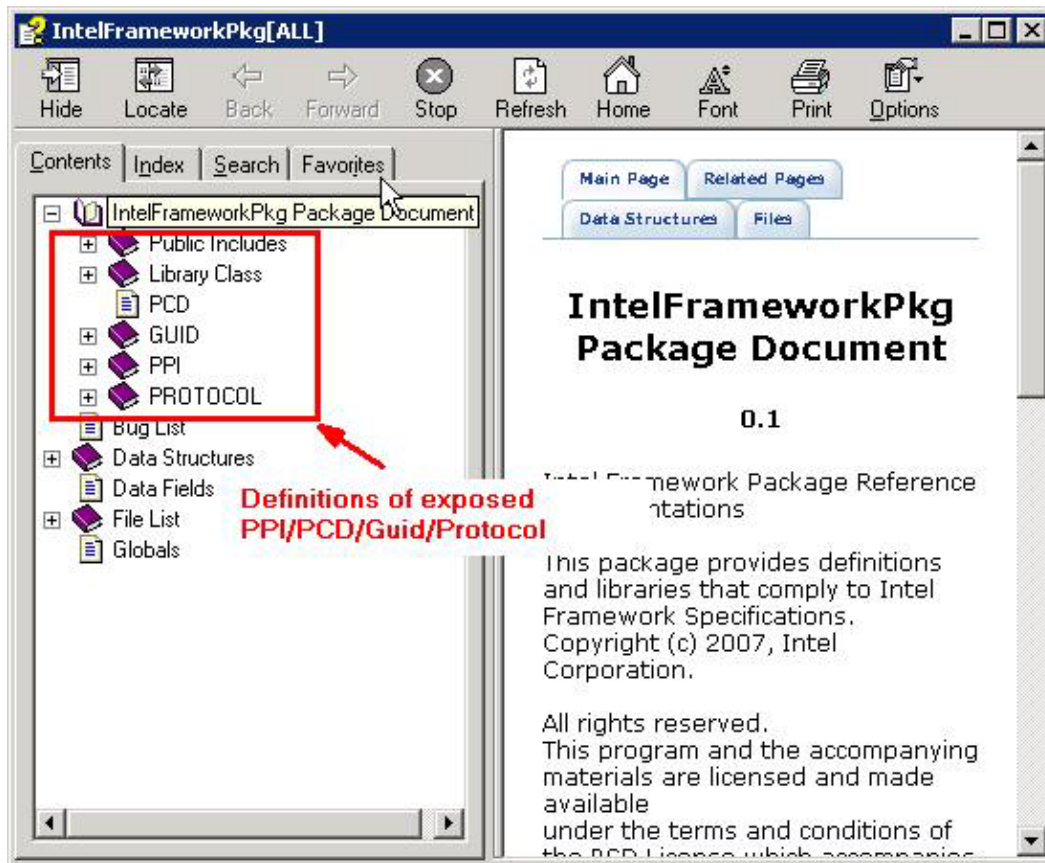
There are following selections:

- a. IA32/Microsoft: lead MDE\_CPU\_IA32 \_MSC\_EXTENSION are used for preprocessing
- b. IA32/GCC lead MDE\_CPU\_IA32 \_\_GNUC\_\_ are used for preprocessing
- c. X64/Microsoft: lead MDE\_CPU\_X64 \_MSC\_EXTENSIONS are used for preprocessing
- d. X64/GCC lead MDE\_CPU\_X64 \_\_GNUC\_\_ are used for preprocessing
- e. IPF/Microsoft: lead MDE\_CPU\_IPF \_MSC\_EXTENSIONS are used for preprocessing
- f. IPF/GCC: lead MDE\_CPU\_IPF \_\_GNUC\_\_ are used for preprocessing
- g. EBC/Intel: lead MDE\_CPU\_EBC \_\_INTEL\_COMPILER are used preprocessing
- h. ALL: lead MDE\_CPU\_IA32 MDE\_CPU\_X64 MDE\_CPU\_EBC MDE\_CPU\_IPF \_MSC\_EXTENSIONS \_\_GNUC\_\_ \_\_INTEL\_COMPILER are used for preprocessing

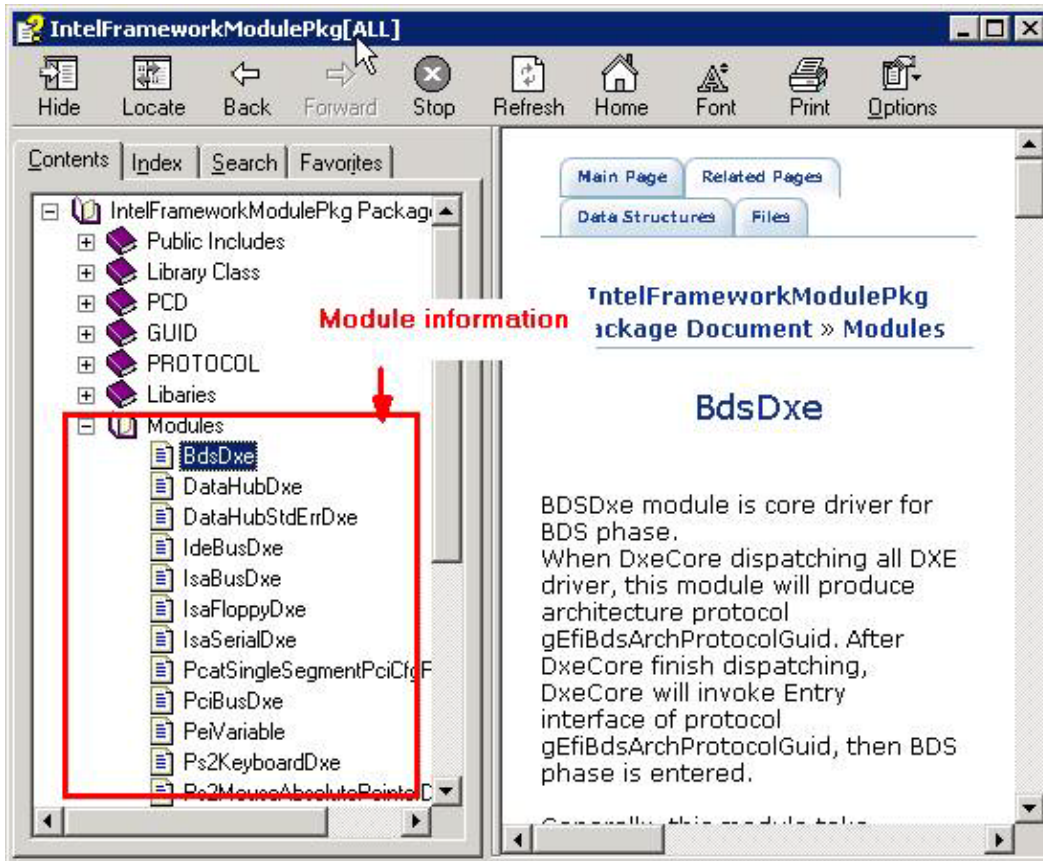
11) Add customization macros separated by blank as follows:



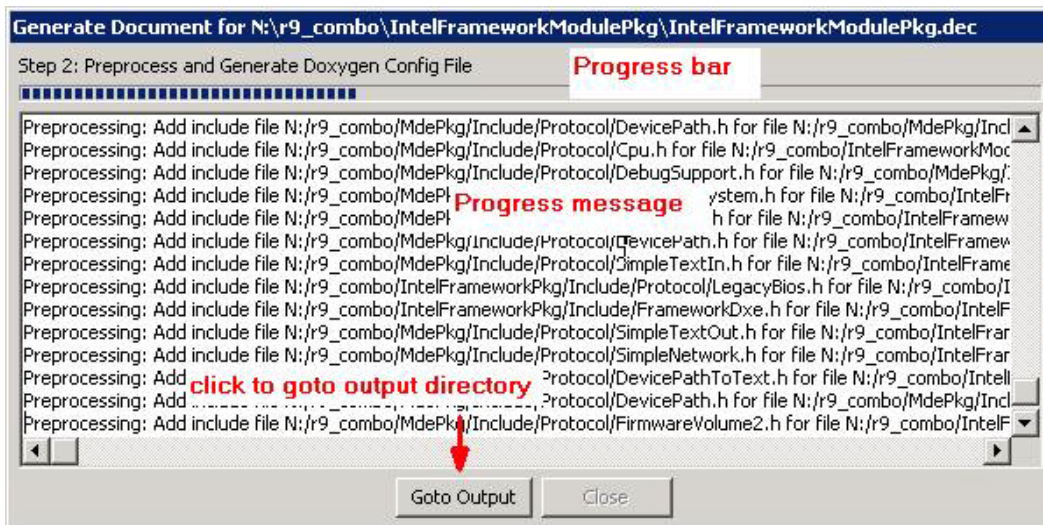
- 12) Select document mode. There are two document generation mode: CHM and HTML.
  - a. HTML: HTML pages. The package documents are consisted by many html files where index.html is the main page.
  - b. CHM: Compress HTML file. The package documents are compressed into only one file which postfix is .CHM
- 13) Choose whether only generate package document based on package's include folder files.
  - a. If yes, the generated package document only contains definitions for PPI/Protocol/PCD/Guid information exposed by this package



b. If no, the generated package document also contains modules document besides of definitions information of exposed PPI/Protocol/PCD/Guid



- 14) Click “Generate Package Document” button, the whole process is:
- Preprocess the package’s DEC file and generate doxygen configuration file under output directory.
  - Launch doxygen.exe command line to generated doxygen document to output/html directory
  - If selecting CHM document mode, launch “Microsoft HTML workshop” tools to generate CHM file to output/html directory.



15) After finishing document generating, the index.html will be opened automatically in default web browser if in "HTML" document mode or "index.chm" file will be opened automatically if in "CHM" document mode.