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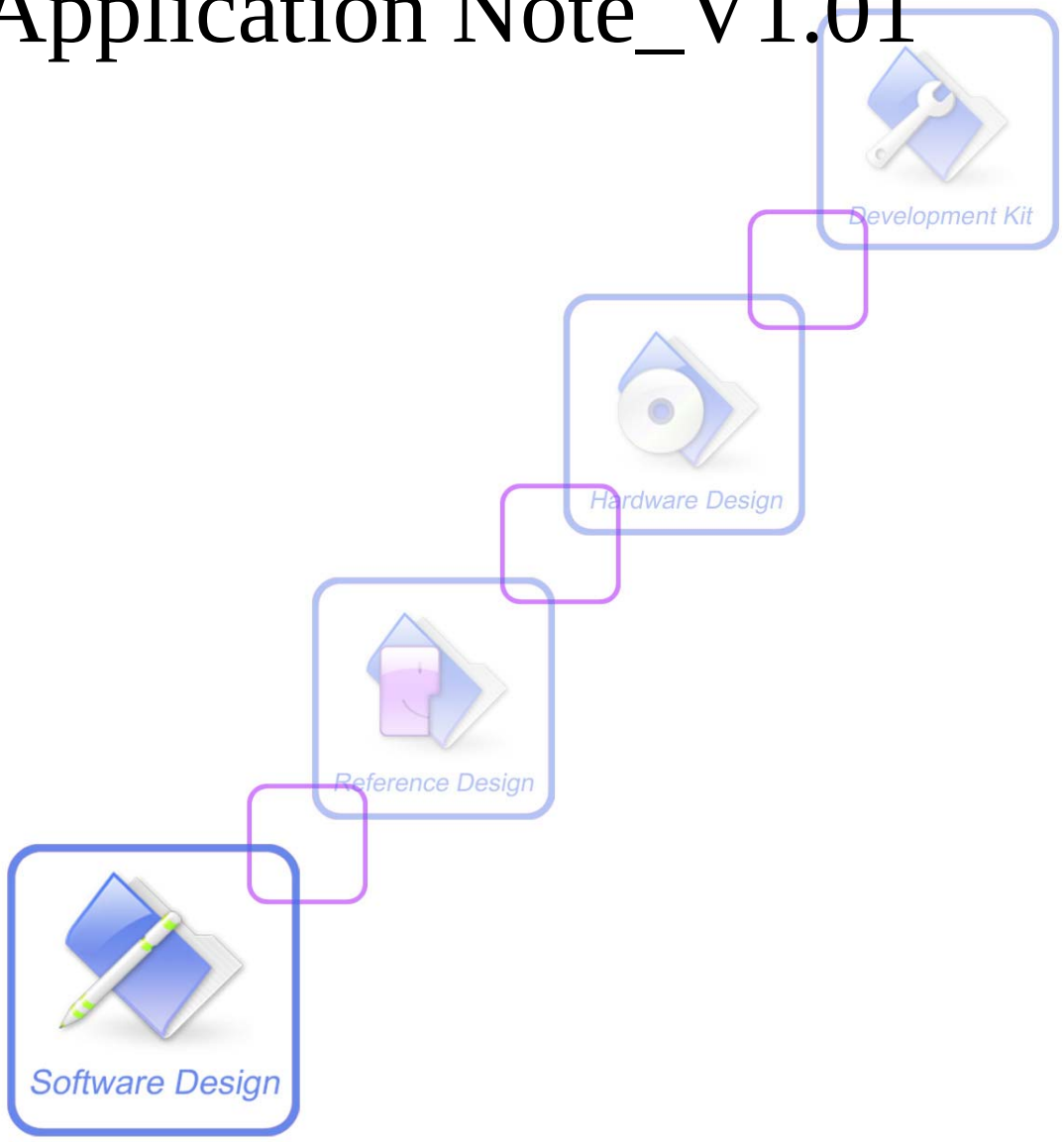
SIM900_SIMDevIDE_ Application Note_V1.01



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General Notes

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CONTENTS

Revision history

Revision	Date	Description of change	Author
1.00	2010-09-06	Initial	MXN
1.01	2012-02-08	Update	Chenyang

SCOPE

This document describes how to use the IDE tool to develop user's own application.
Examples are also given for reference. This document can be used for SIM900 serial modules, like SIM900, SIM900D, SIM900B and SIM900A.

This document is subject to change without notice at any time.

1 Introduction

SIMDevIDE is an IDE tool developed by SIMCom to integrate its core Embedded AT environment with customer's application development process. SIMDevIDE allows customers to edit, compile, link core libraries and download MOT file effortlessly. SIMDevIDE works with all versions of Windows.

2 Getting Started

Before installing SIMDevIDE tool, user should install arm complier tool first.

2.1 Install SimDevIde

Uncompress the rar file (e.g."1137B02V01SIM900A64_ST_EAT.rar"). Execute installation file (e.g. "SIM900ADevIDE V1.01 (1137B02V01SIM900A64_ST_EAT).exe") and follow the install instructions. After completion of the installation, click the desktop shortcut icon to start SIMDevIDE.

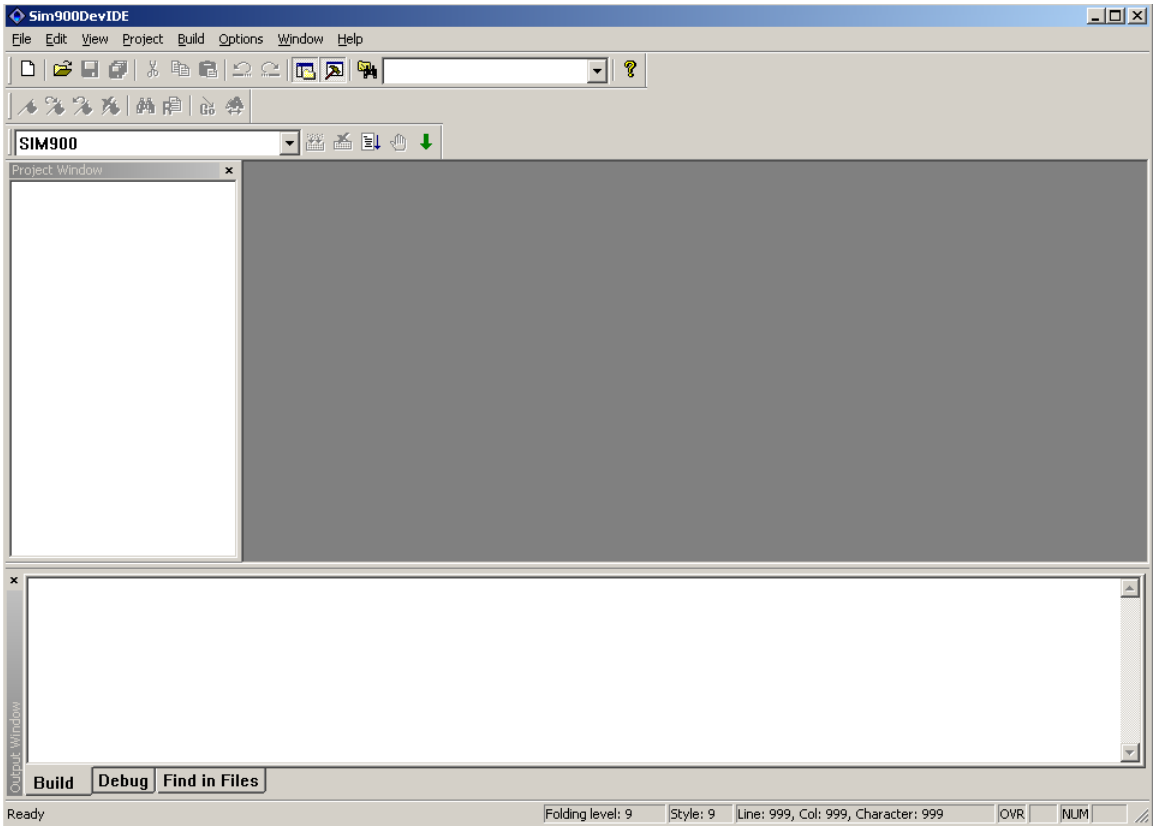

Figure 1

2.2 Set Compiler Environment

1. Choose “Options->Compiler option” menu.
2. Confirm complier tool path. If it is not default path, navigate to the correct path by click “…” button.

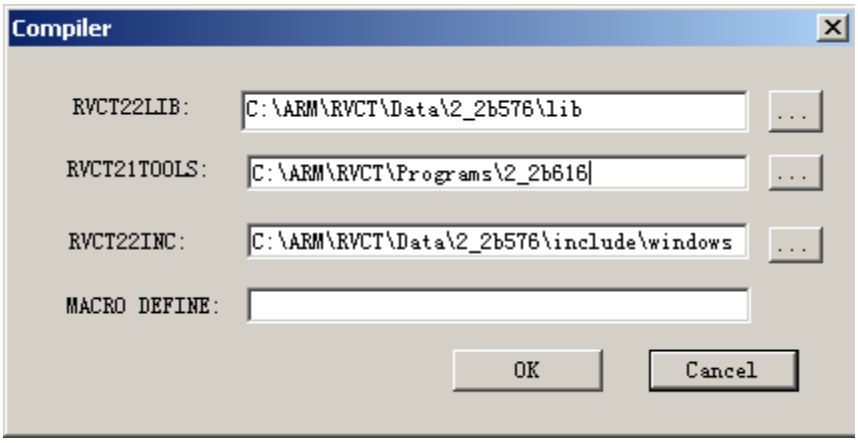

Figure 2

Note: “RVCT21TOOLS” is the path compiler tool with version number 2_2b616 and “RVCT22INC” is the path of standard lib with version number 2_2b576.

2.3 Create a new project

1. Choose “File->New” menu.
2. Type in the name of the project in the “Project name” box.
3. Select a demo project based on the type of the module used for the project.

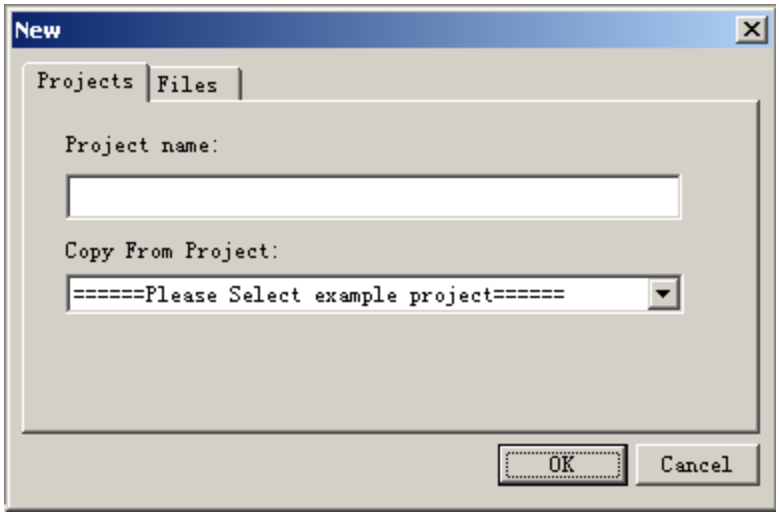

Figure 3

4. Press “OK” then a new project folder is created automatically in the path “..\SIM900DevIDE\yourproject”.

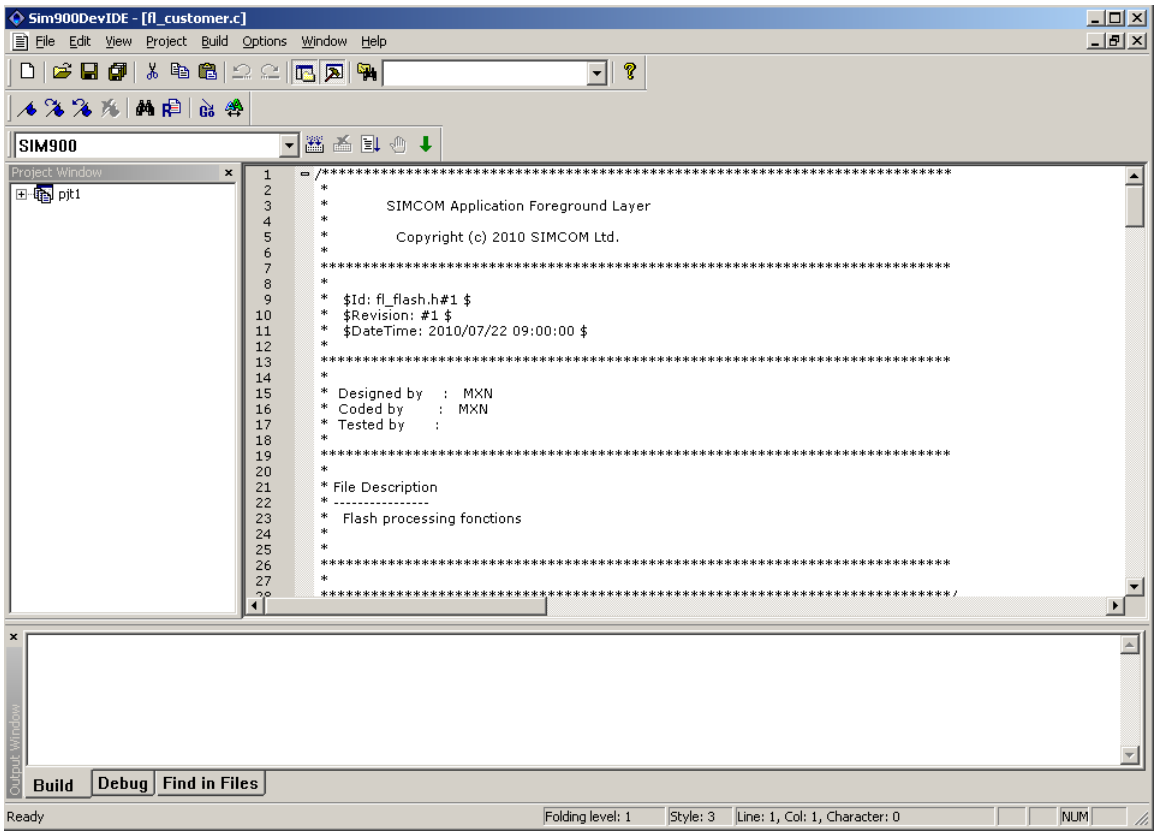

Figure 4

2.4 Add Files to the Project

1. Choose “File->New” menu, select “Files” tab.

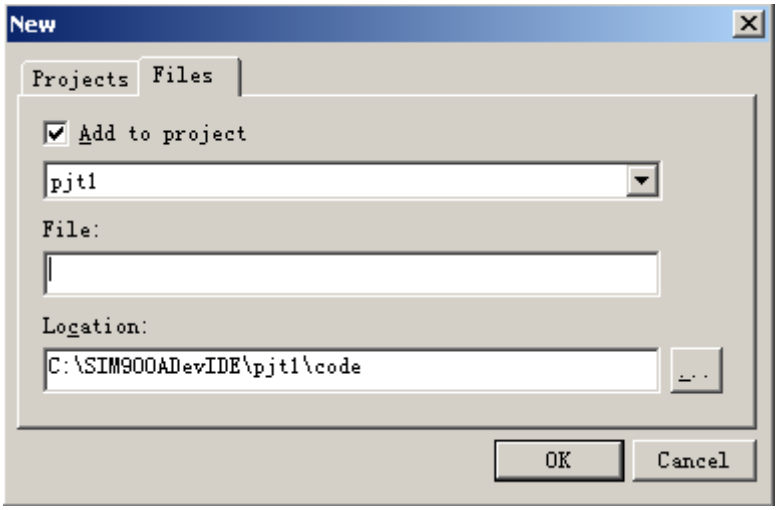

Figure 5

2. Add source file according to its type (header/code), and select its location appropriately.

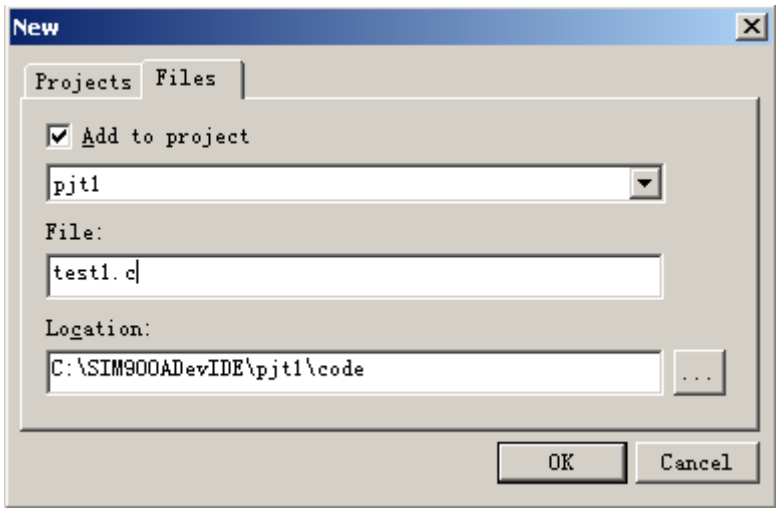

Figure 6

3. Press “OK”, the file is added to the project successfully.

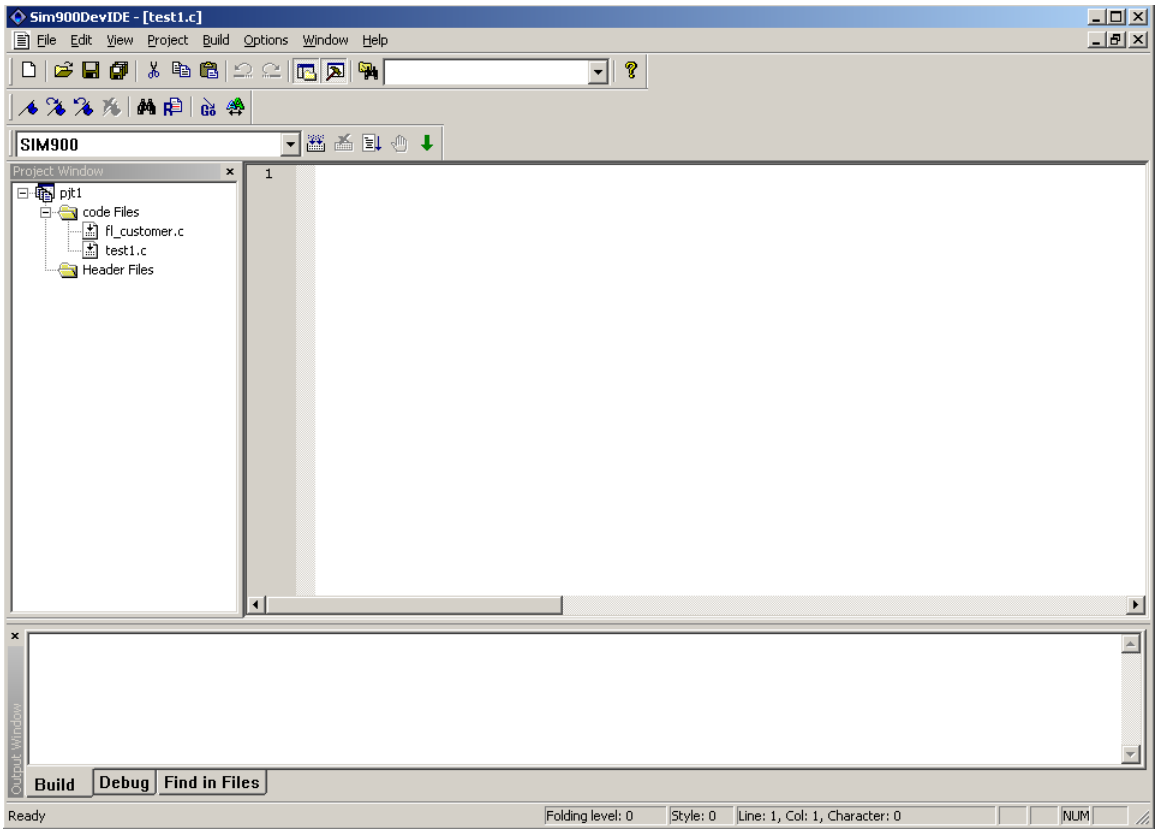

Figure 7

2.5 Add a Global Macro

1. Select “Options->Compiler Option” menu.
2. Type the macros in the “MACRO DEFINE” box, separate them with comma.

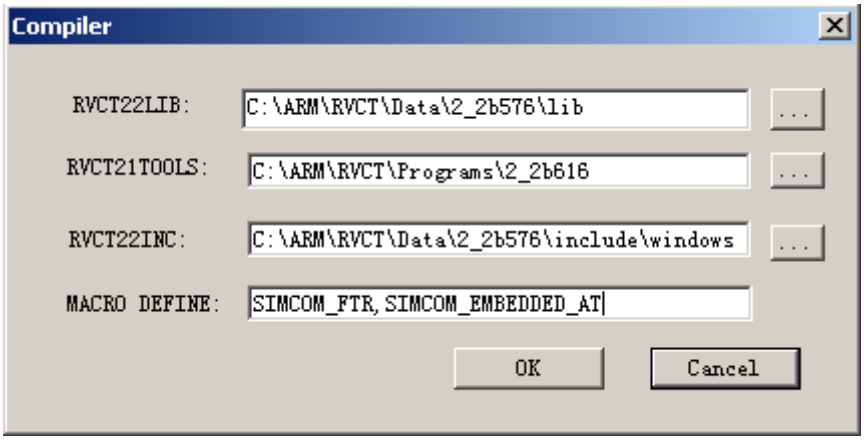

Figure 8

3. Press “OK”, then the macros are added in the file “..\SIM900DevIDE\pjt1\mak\ generalfeatures.opt”.

2.6 Build an Existing Project

1. Choose “File->Open Project” to open an existing project.

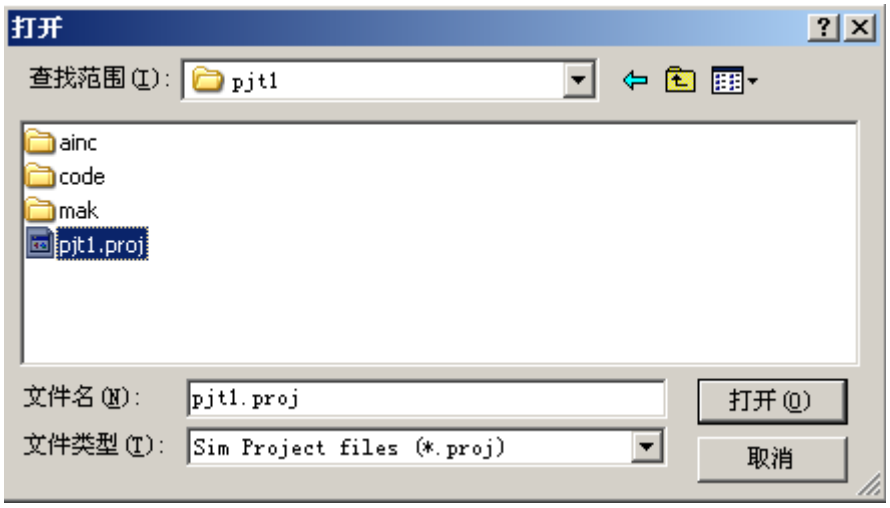

Figure 9

2. Select “Build->Build All” menu.

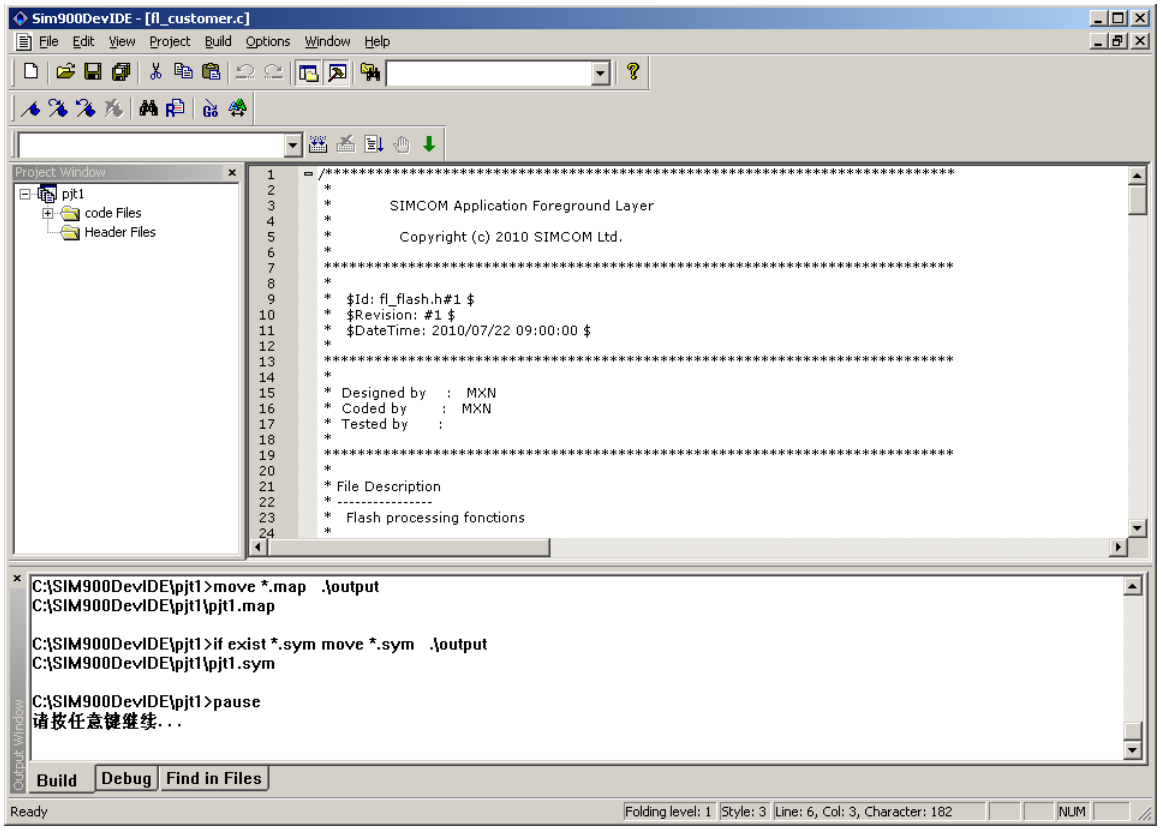

Figure 10

3. If compile is successful, the output files “pjt1.cla”, “pjt1.elf”, “pjt1.map”, “pjt1.sym” are created in “..\SIM900DevIDE\pjt1\output\”.

2.7 Download to SIMCom Module

1. Select “Build->Download” menu.
2. Configure the options as below. It is recommended to use the default value for the options “Baud Rate” and “FileCount”.

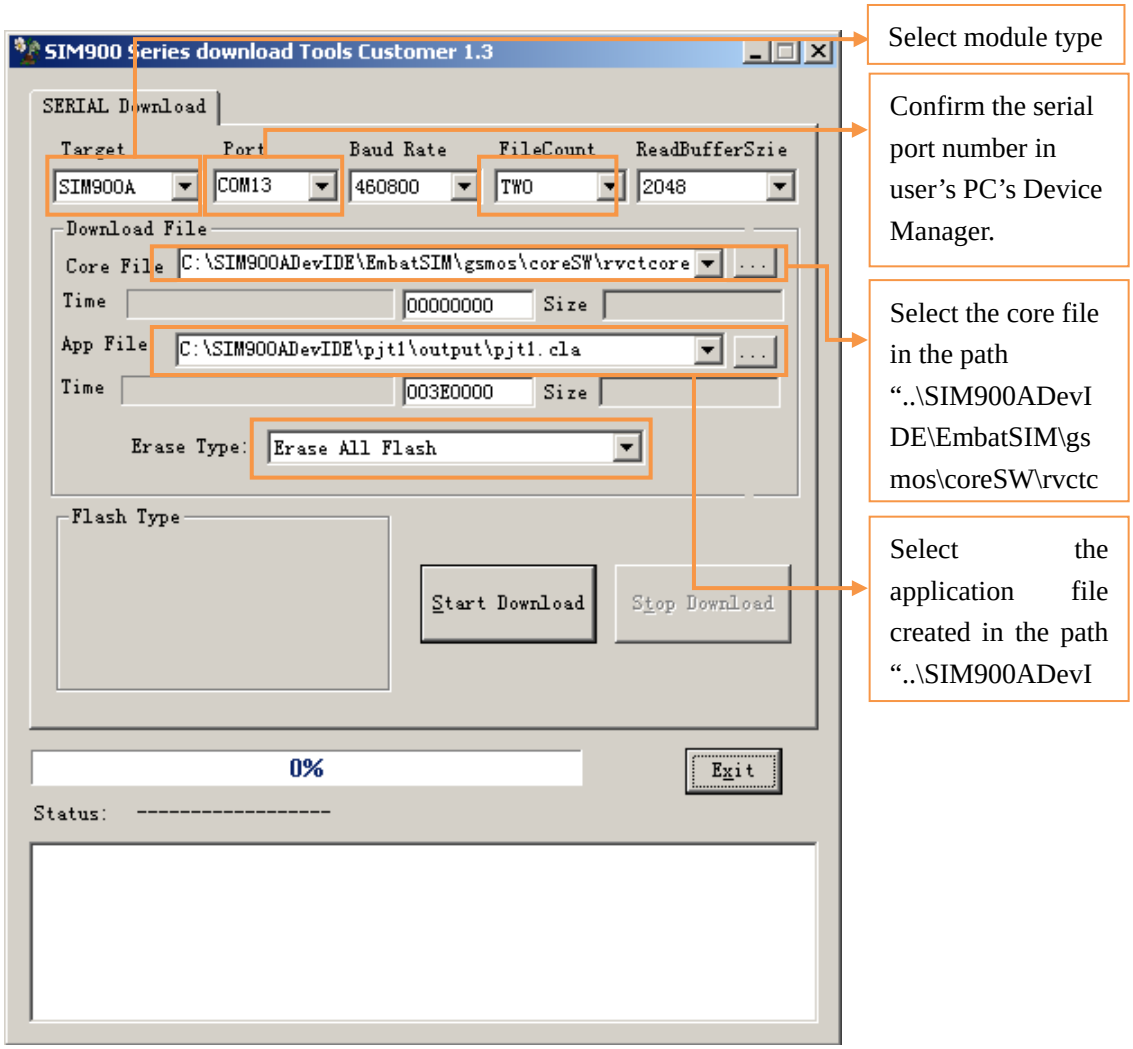

Figure 11

3. Download user's application to the module by pressing "Start Download" button.

Note: If user only needs to download the application file, set the "File Count" option to "ONE" and "Erase Type" to "Erase User Data and Code".

2.8 Debug Process

1. Enable debug tool by adding “ebdat7_00EnterDebugMode()” function in customer’s program code. See “SIM900_Embedded AT Application Note_V1 00” for the details of this function.
2. Set debug port and baud rate by selecting “Project->COM Setting…”.

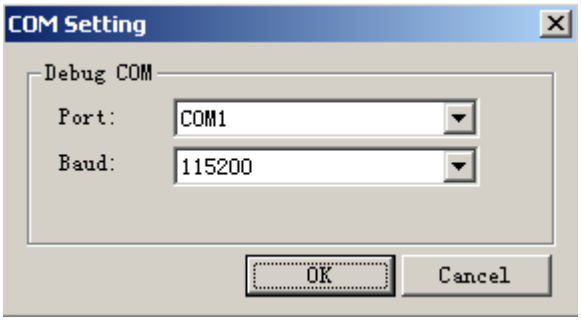

Figure 12

3. Select the “Debug” tab of output window. Then select “Build->Debug Start” to start. From the debug window, it shows that the debug port is opened successfully.

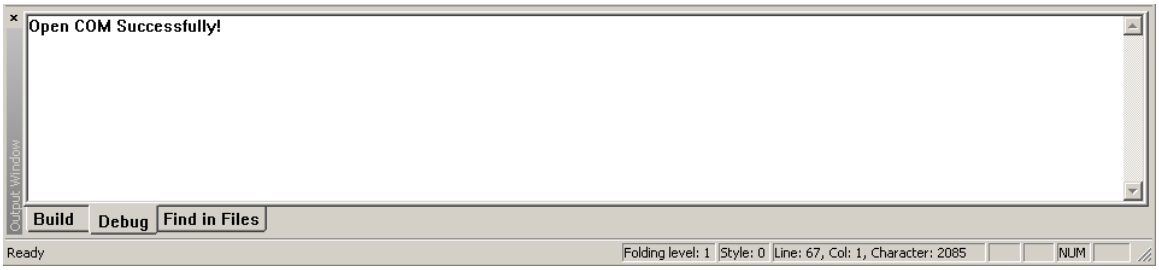

Figure 13

4. Power on the module, the customer’s program will be running on the module, then debug information will be printed in debug window via debug port which is set as instructed above.

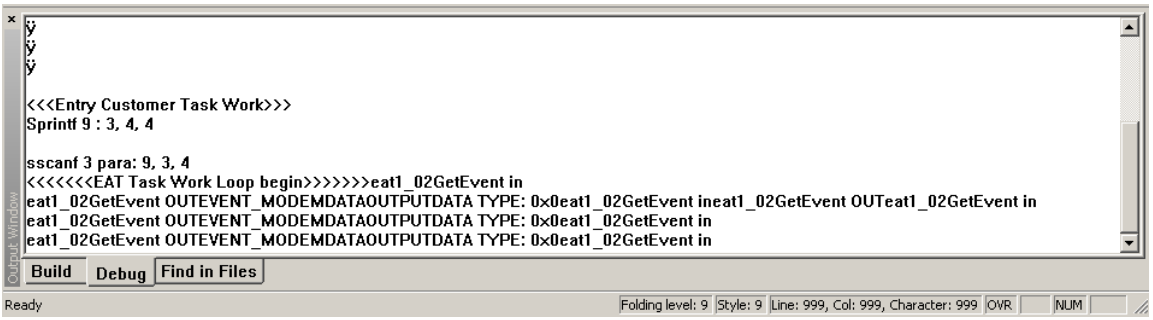

Figure 14

5. Stop debugging by selecting “Build->Debug Stop”.

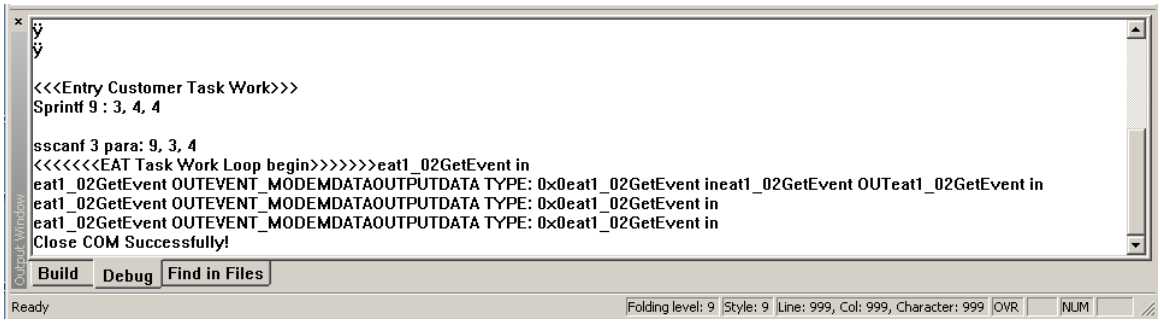
ÿ
ÿ
ÿ
<<<Entry Customer Task Work>>>
Sprintf 9 : 3, 4, 4
sscanf 3 para: 9, 3, 4
<<<<<<<EAT Task Work Loop begin>>>>>>>eat1_02GetEvent in
eat1_02GetEvent OUTEVENT_MODEMDATAOUTPUTDATA TYPE: 0x0eat1_02GetEvent ineat1_02GetEvent OUTeat1_02GetEvent in
eat1_02GetEvent OUTEVENT_MODEMDATAOUTPUTDATA TYPE: 0x0eat1_02GetEvent in
eat1_02GetEvent OUTEVENT_MODEMDATAOUTPUTDATA TYPE: 0x0eat1_02GetEvent in
Close COM Successfully!
Output Window
Build
Debug
Find in Files
Ready
Folding level: 9
Style: 9
Line: 999, Col: 999, Character: 999
OVR
NUM

Figure 15

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