56800/E SCI Hands-On Exercise

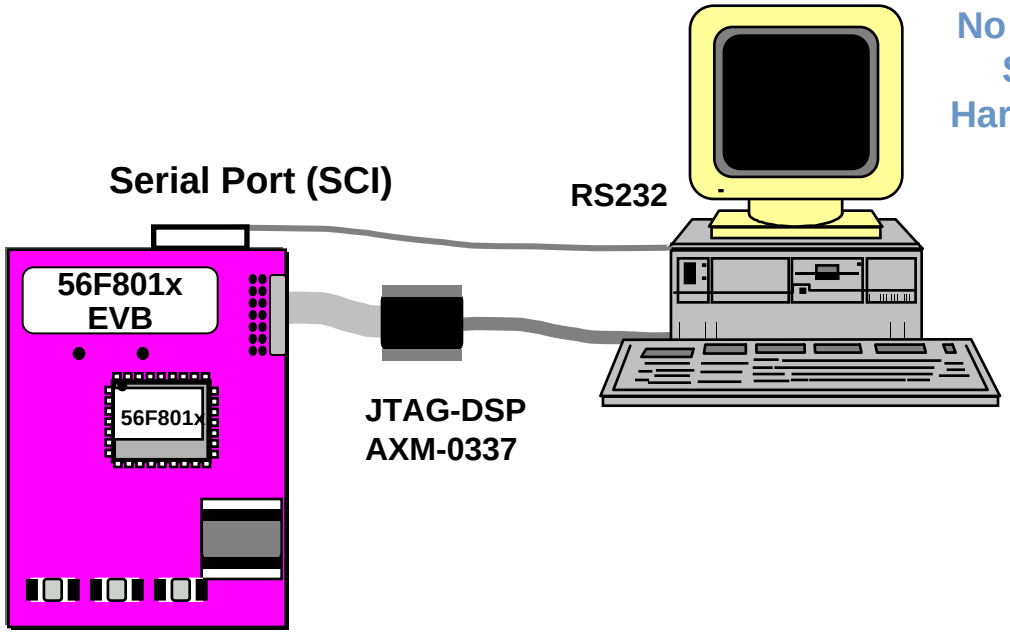
56800/E Training

freescale semiconductor

Task Description

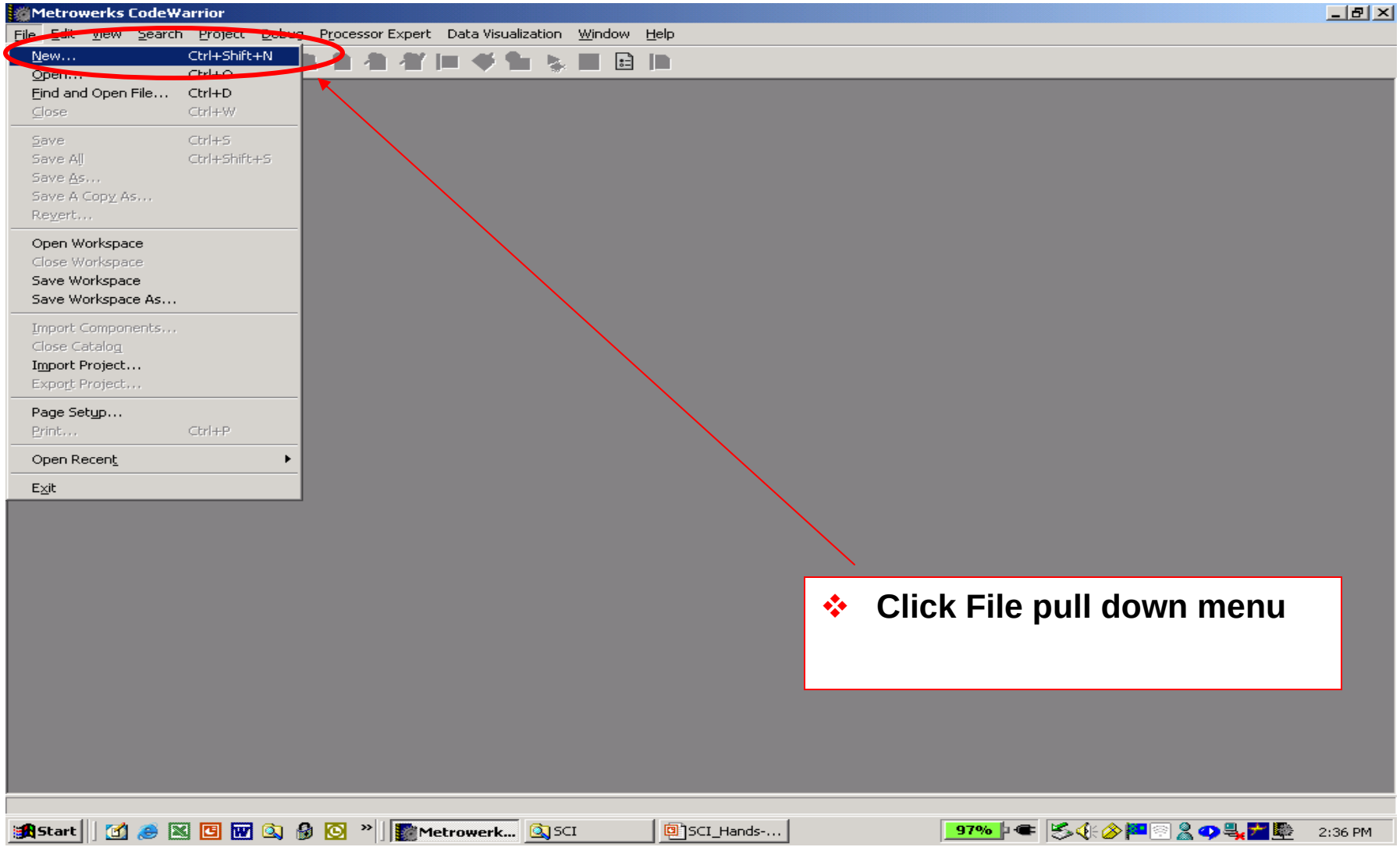
Develop a monitor application that uses SCI in messages between PC and DSC56F801x EVB.

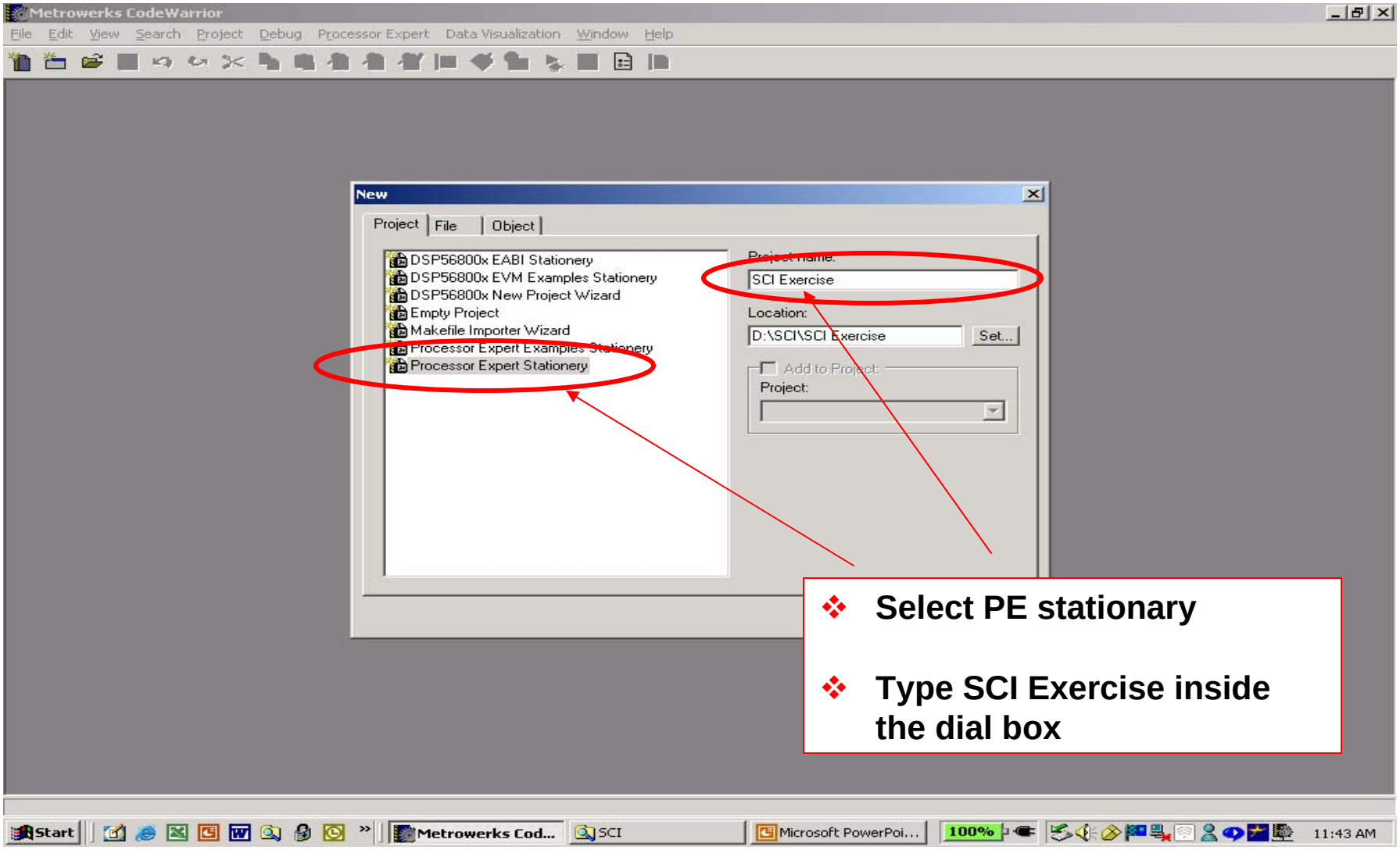
HyperTerminal (Console) for
CAN Data Display
via RS232,
Bits/sec : 9600
No parity : none
Stop bit : 1
Hardware : None



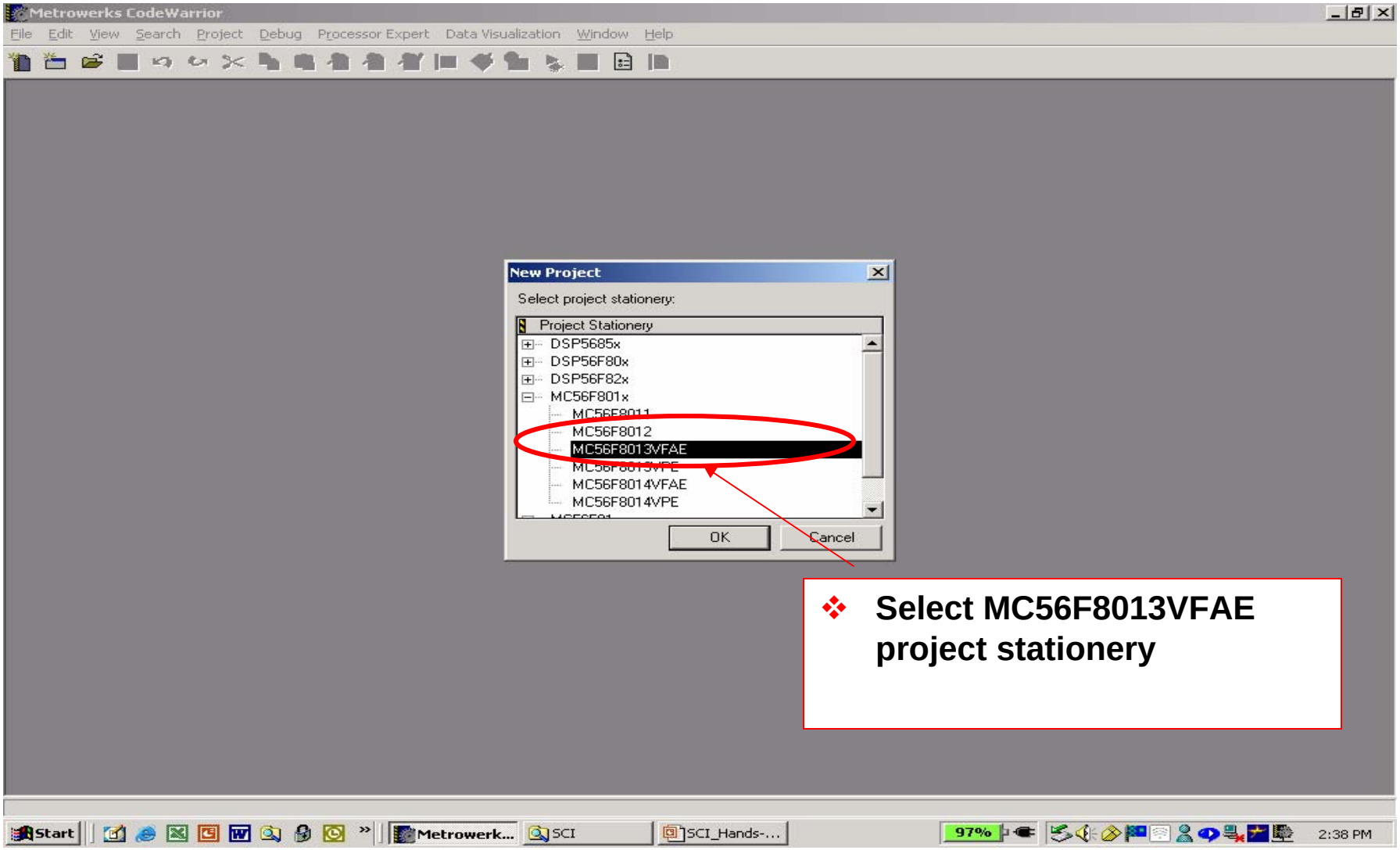
Approach

- Use Processor Expert Beans to implement Target System application
  - ✓ AsynchroSerial
  - ✓ Download and Execute on 56F801x Demo Board

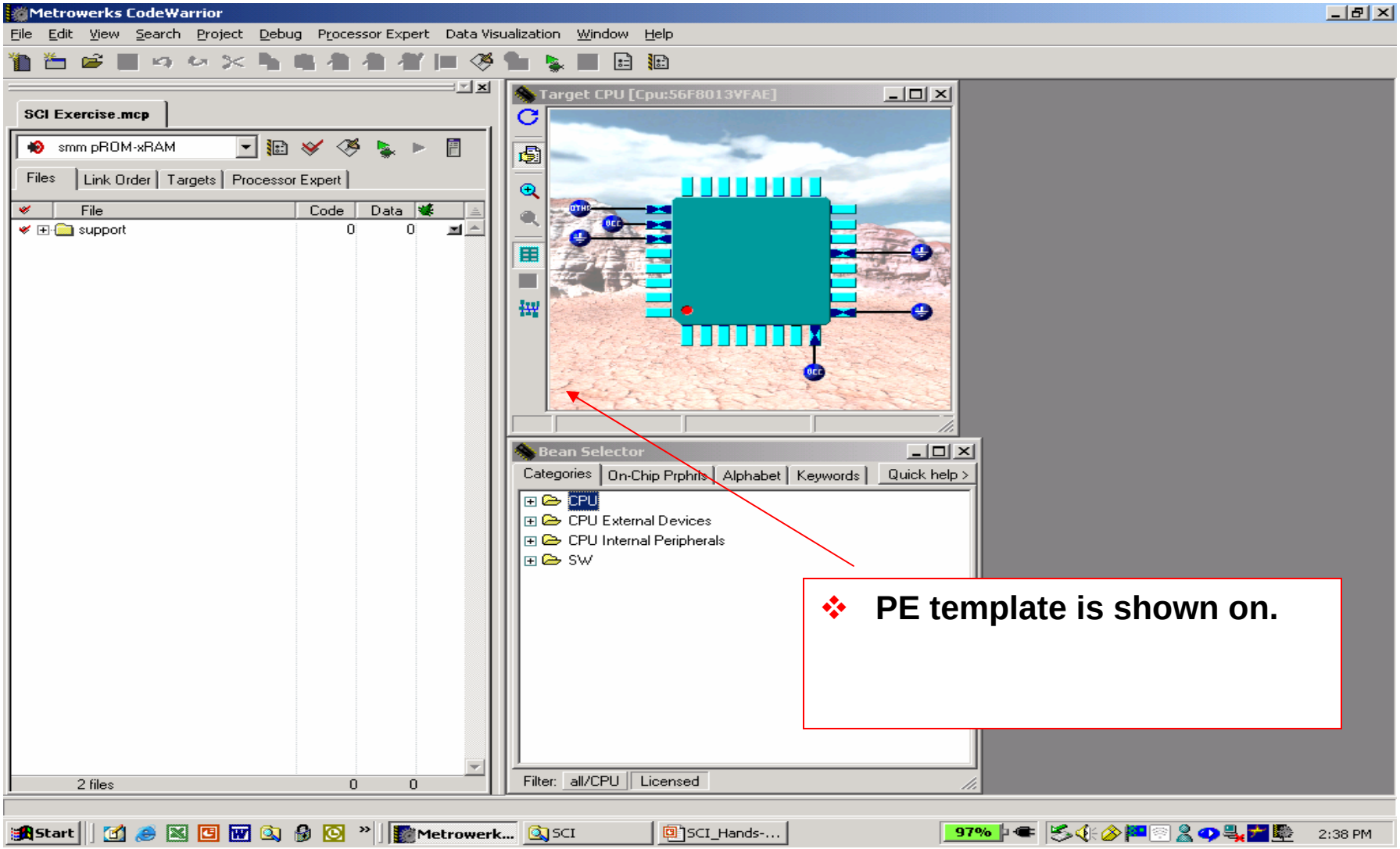


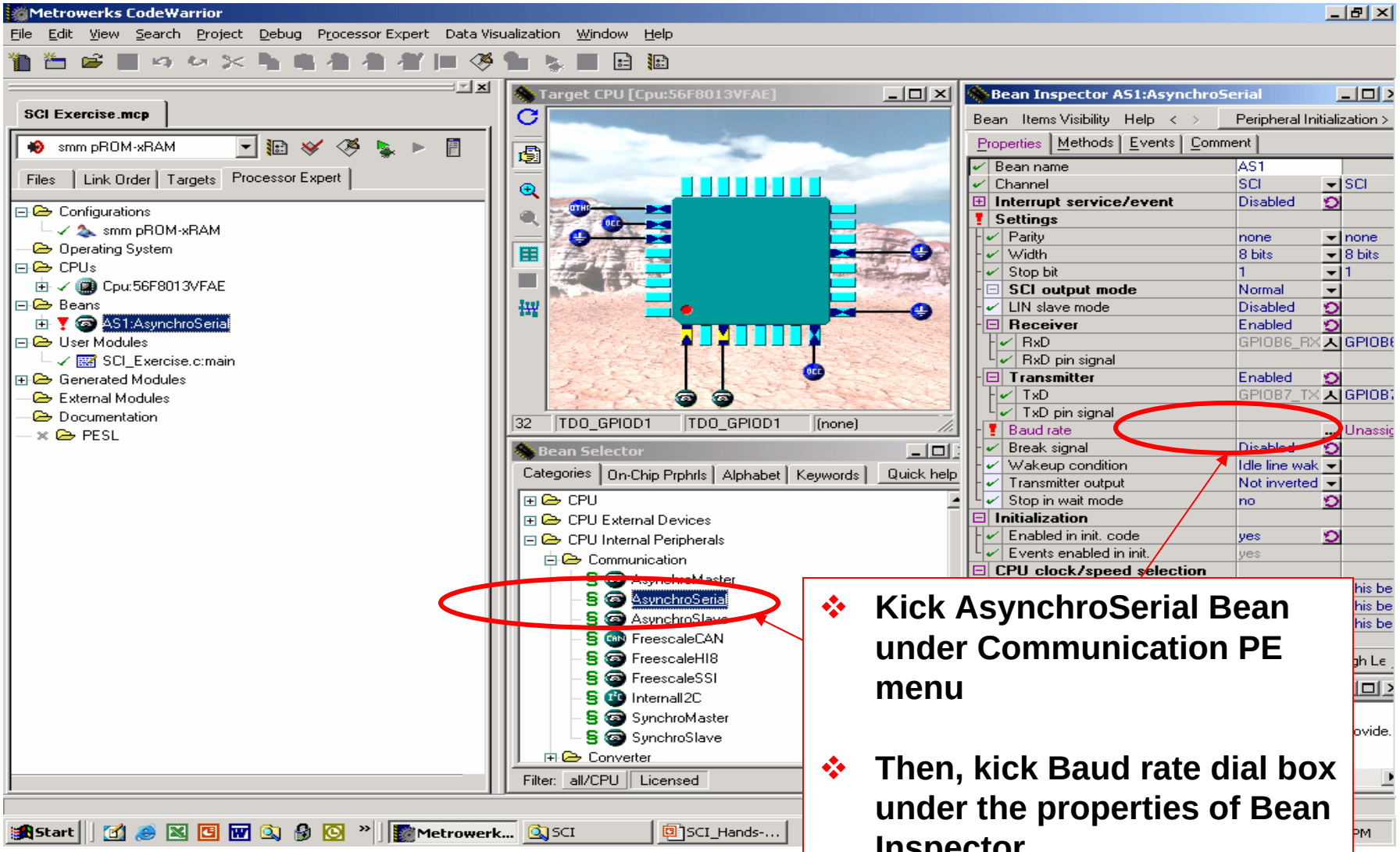


- **Select PE stationary**
- **Type SCI Exercise inside the dial box**

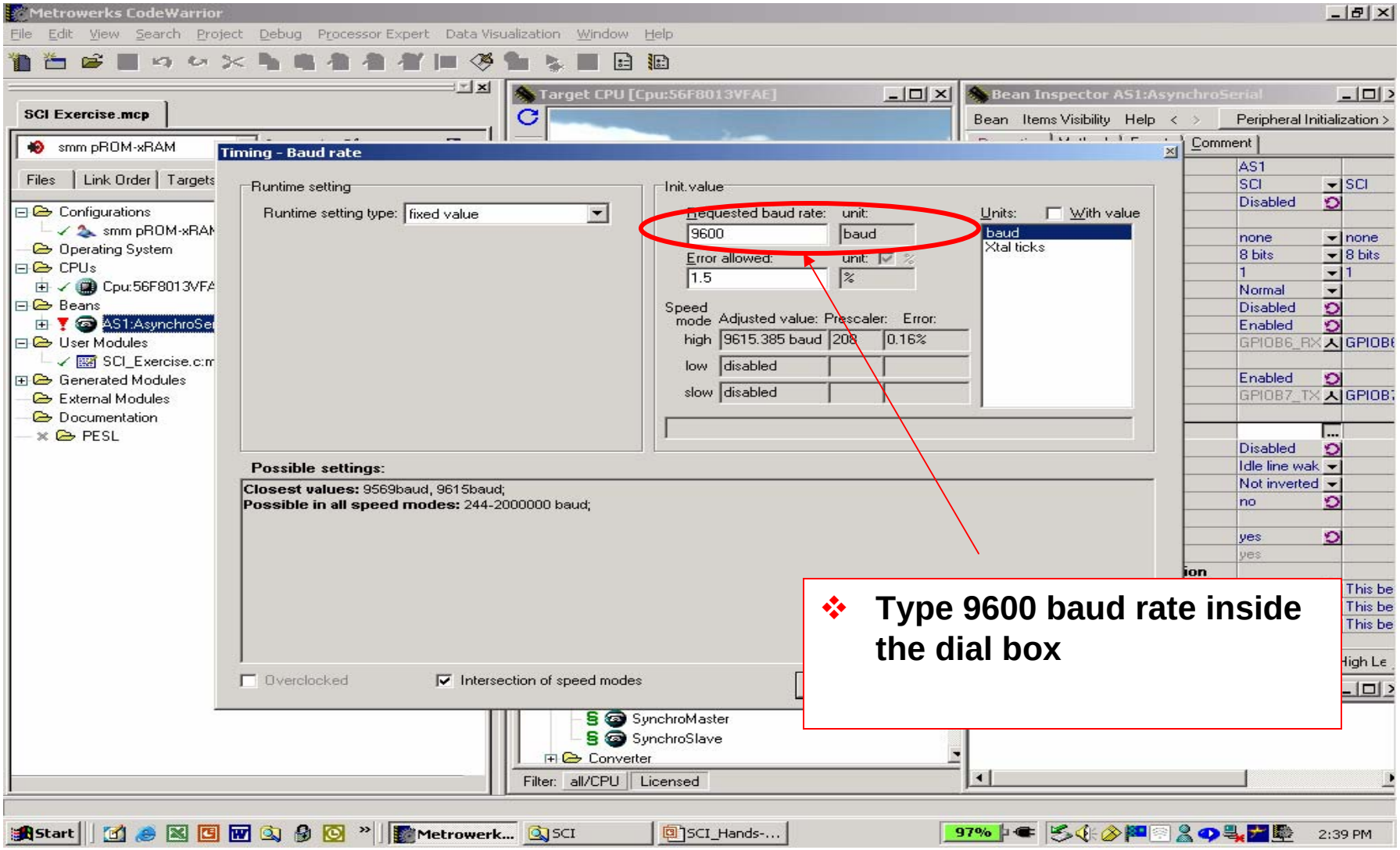


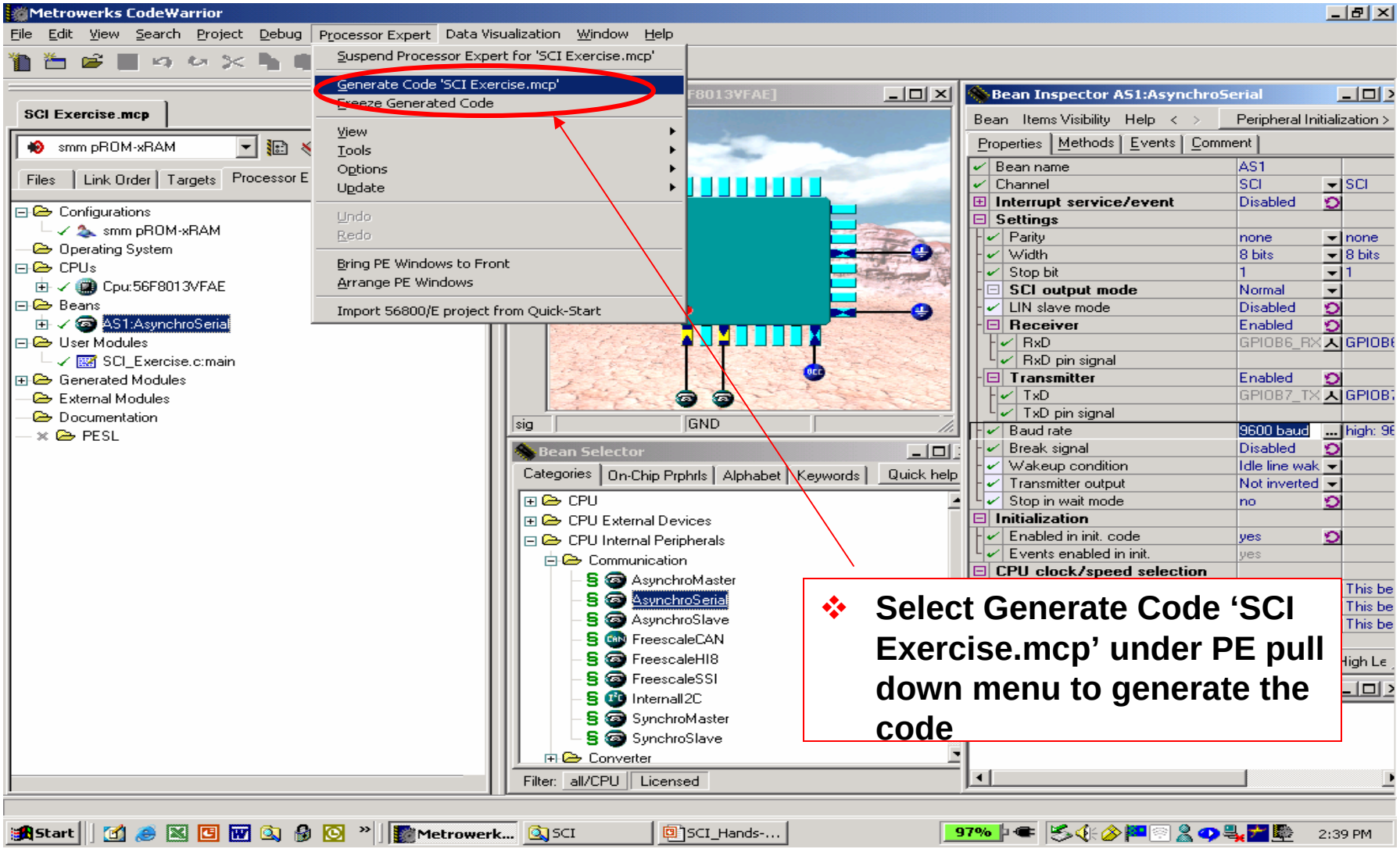
- **Select MC56F8013VFAE project stationery**



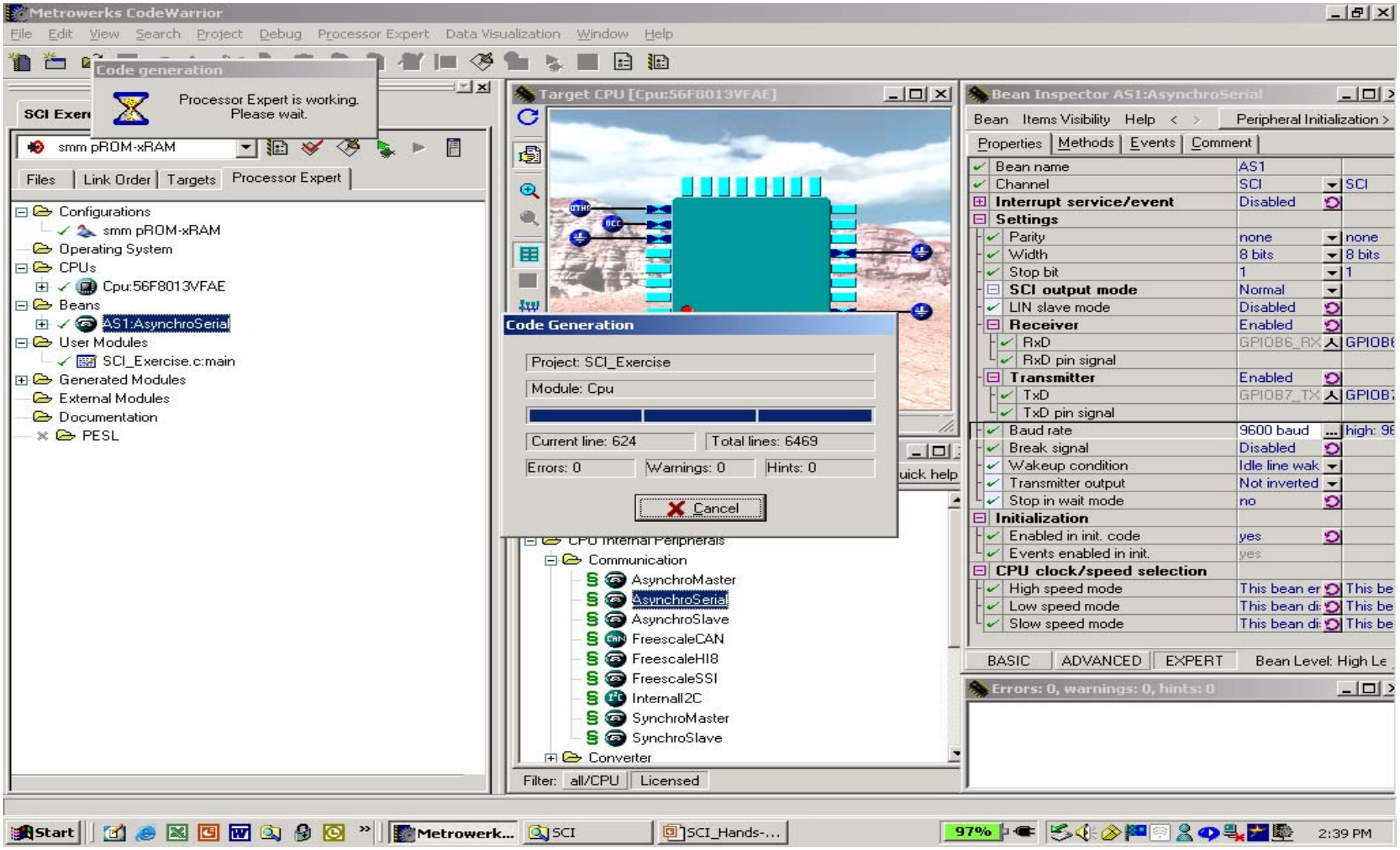


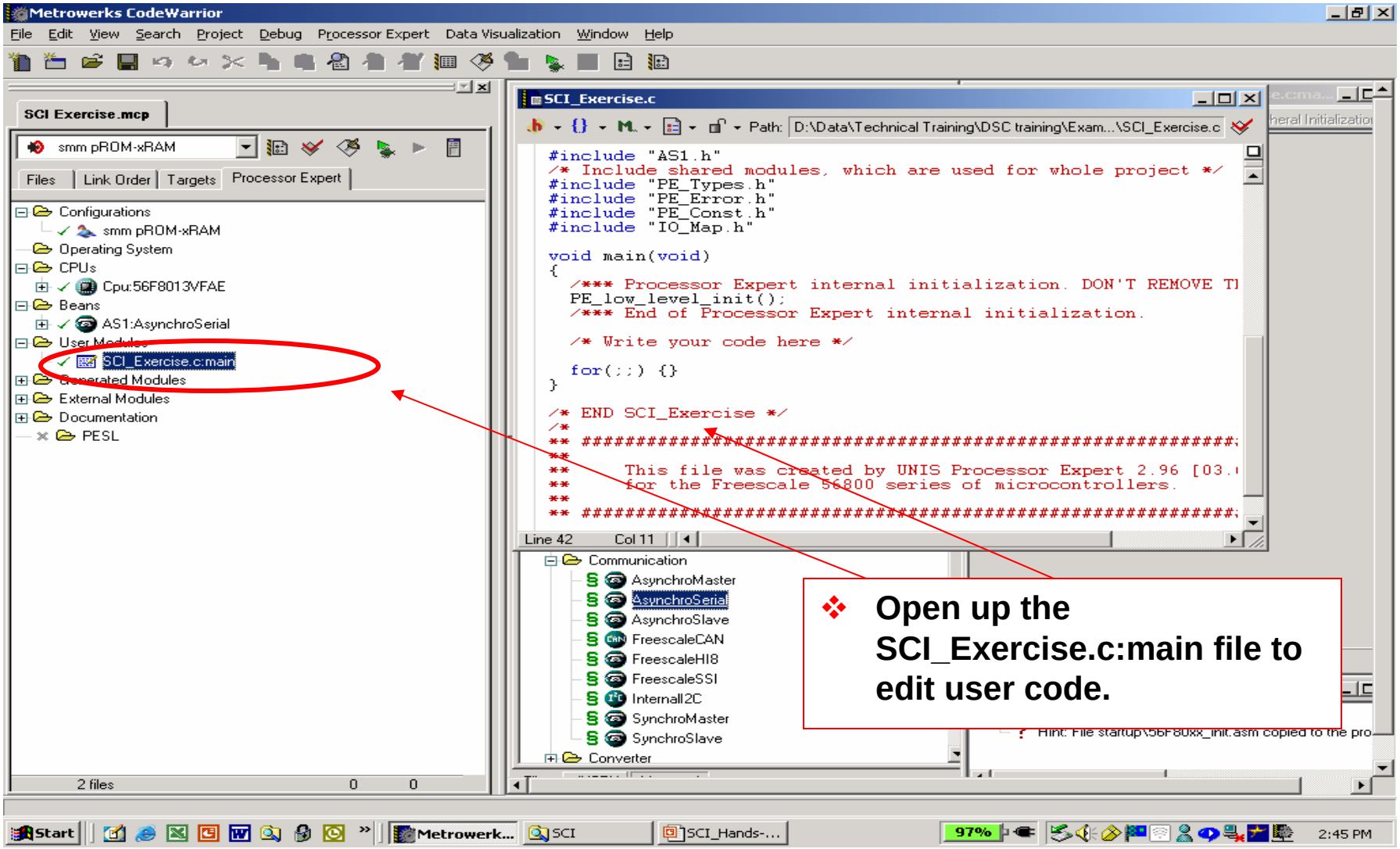
- Kick AsynchroSerial Bean under Communication PE menu
- Then, kick Baud rate dial box under the properties of Bean Inspector AS1:AsynchroSerial



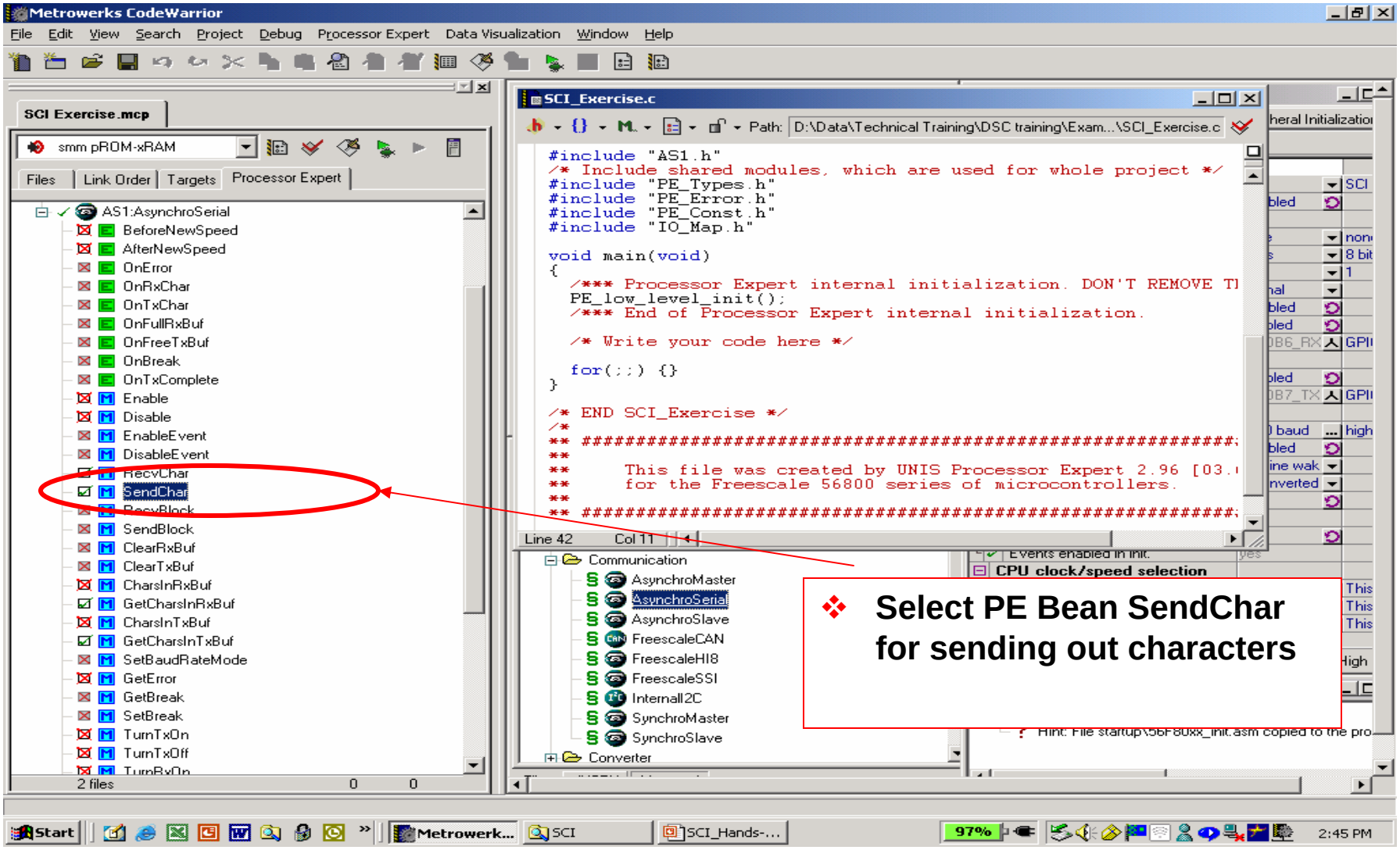


- **Select Generate Code ‘SCI Exercise.mcp’ under PE pull down menu to generate the code**

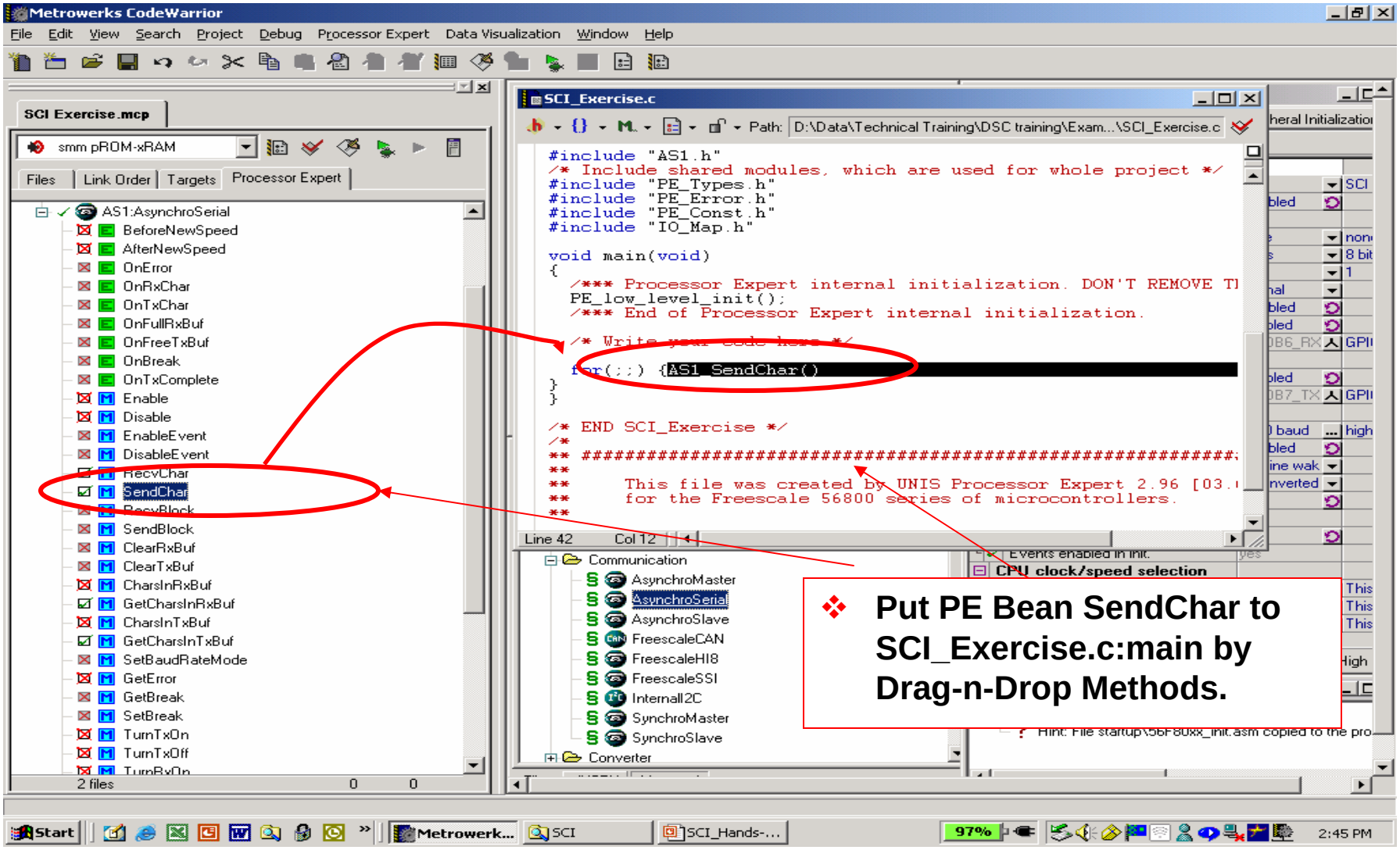




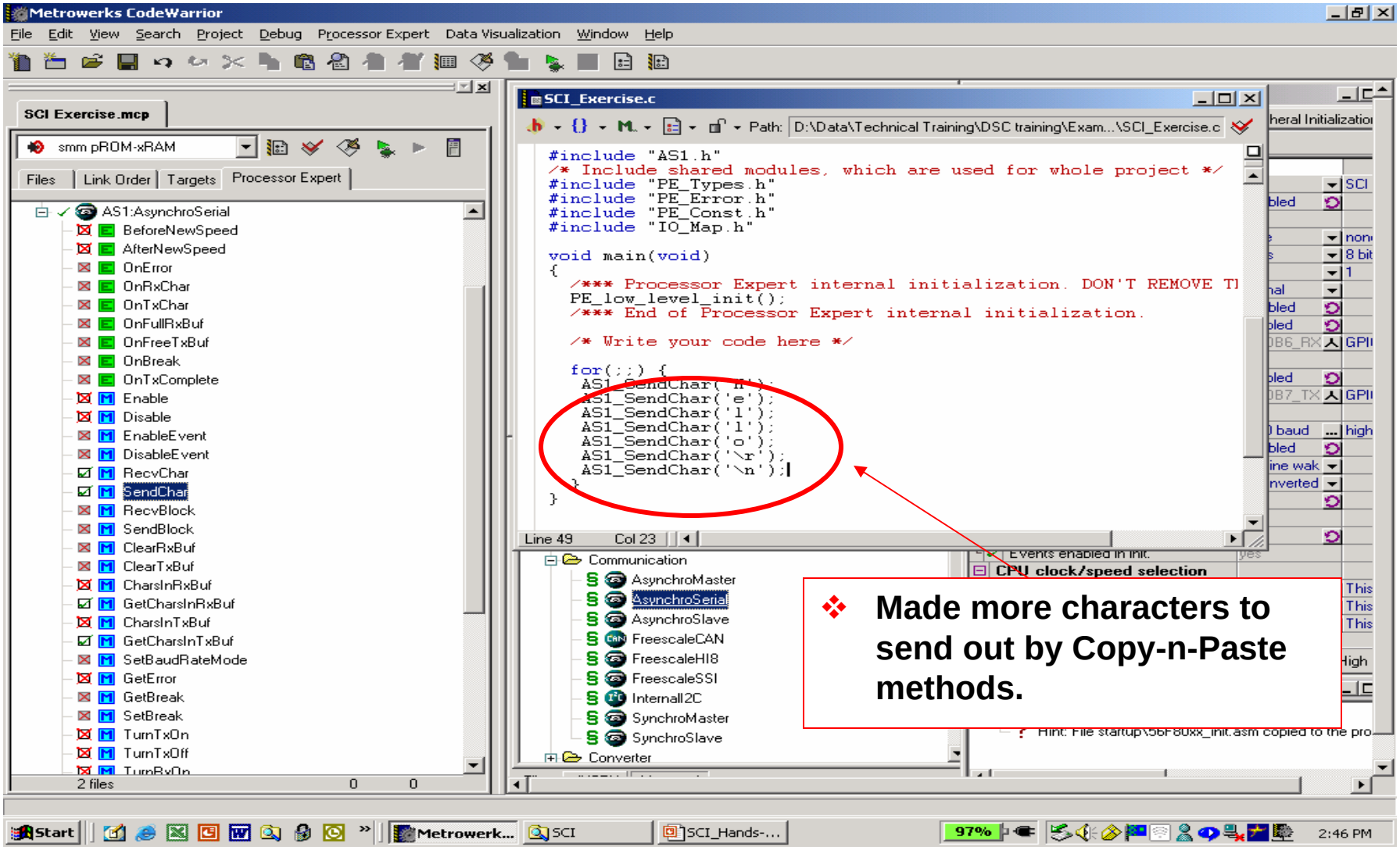
- **Open up the SCI_Exercise.c:main file to edit user code.**



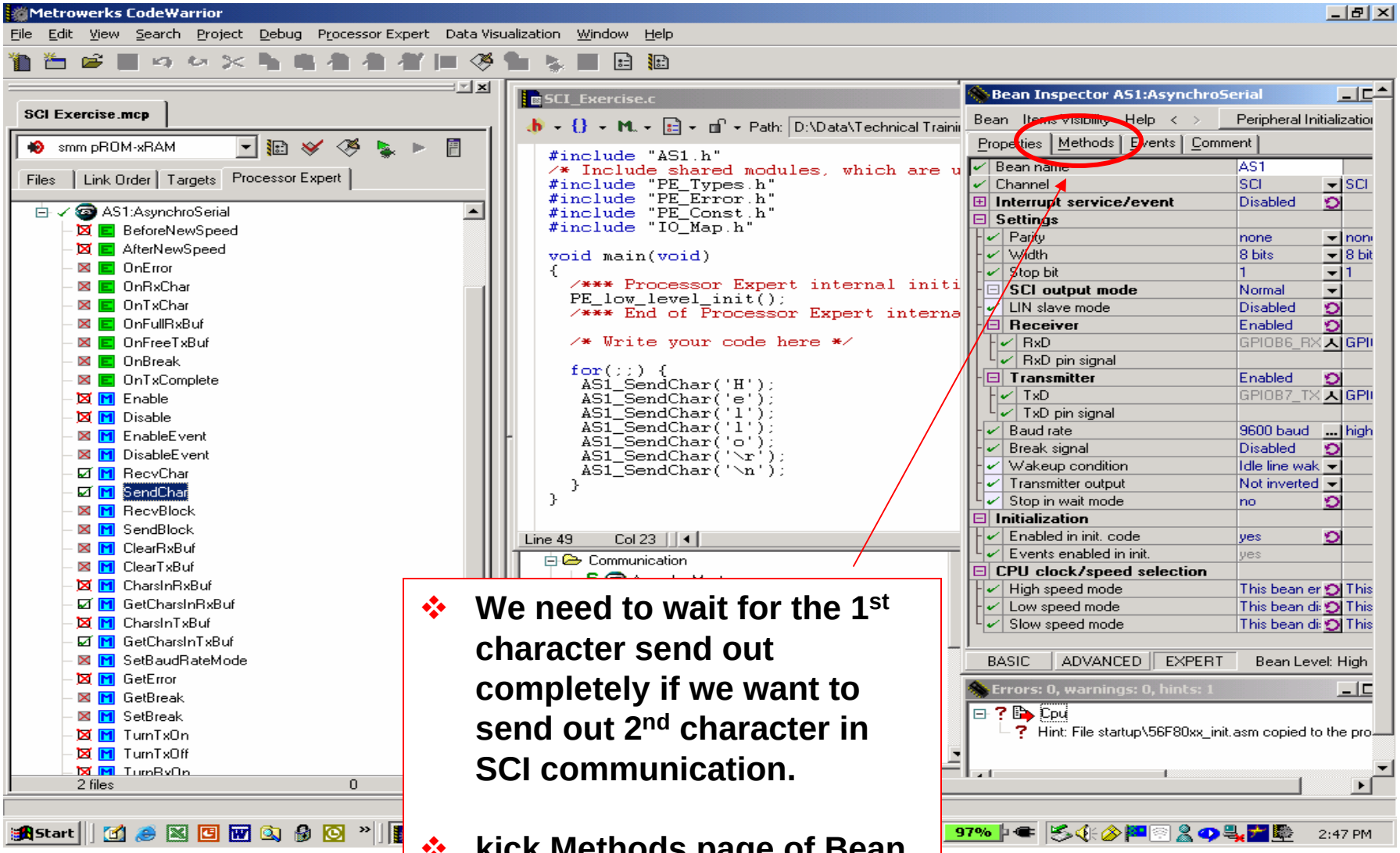
- **Select PE Bean SendChar for sending out characters**



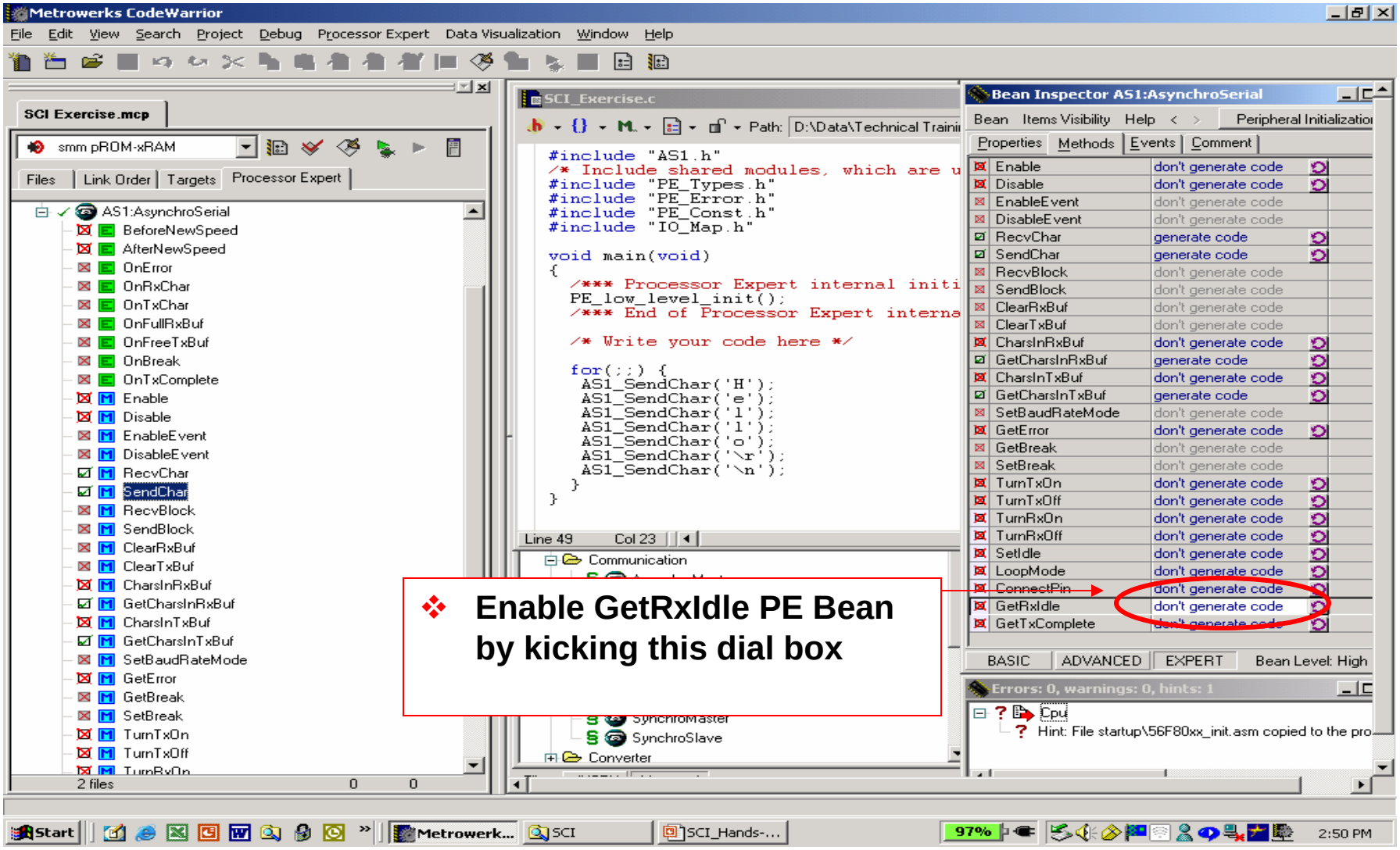
- **Put PE Bean SendChar to SCI_Exercise.c:main by Drag-n-Drop Methods.**



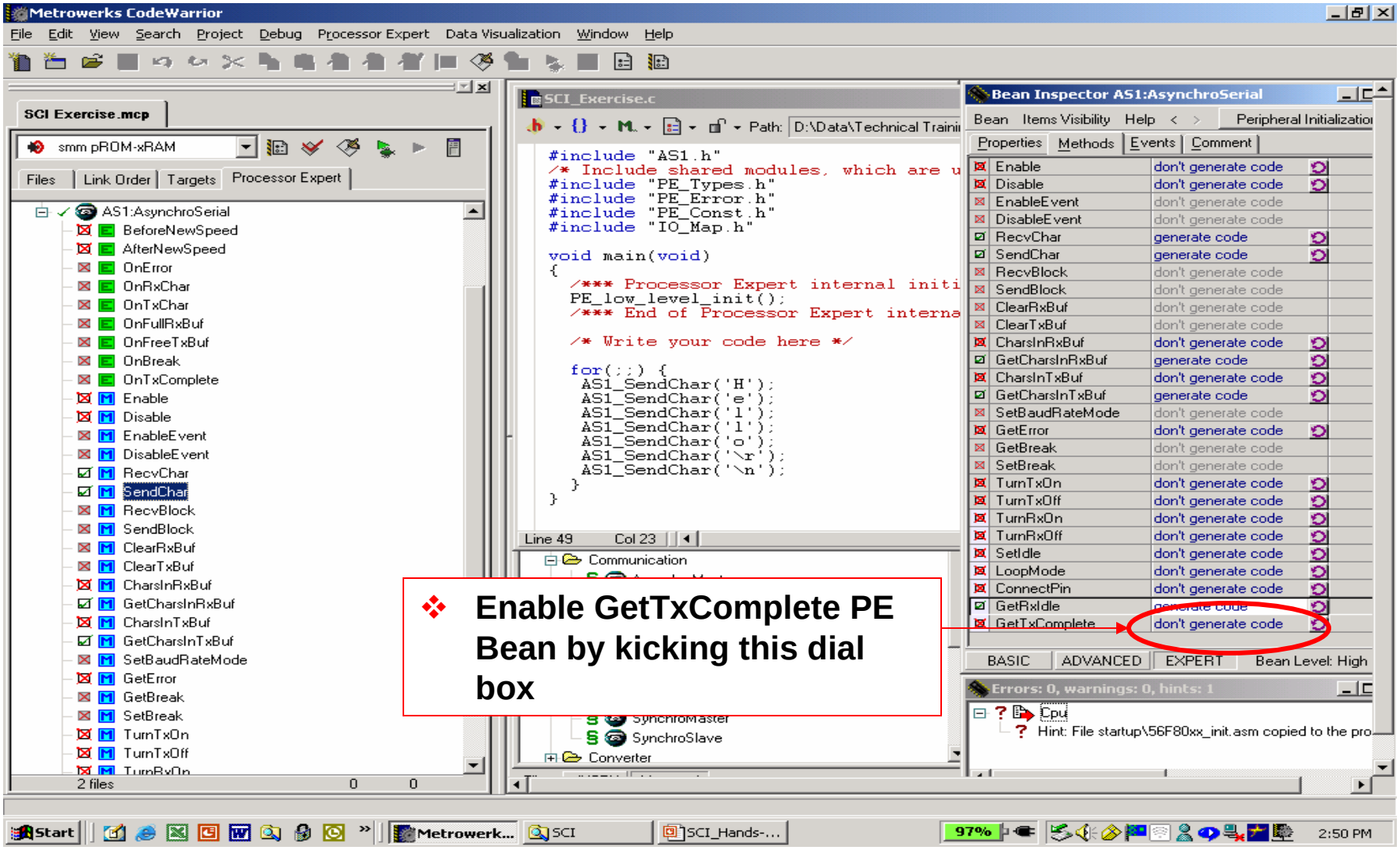
- **Made more characters to send out by Copy-n-Paste methods.**



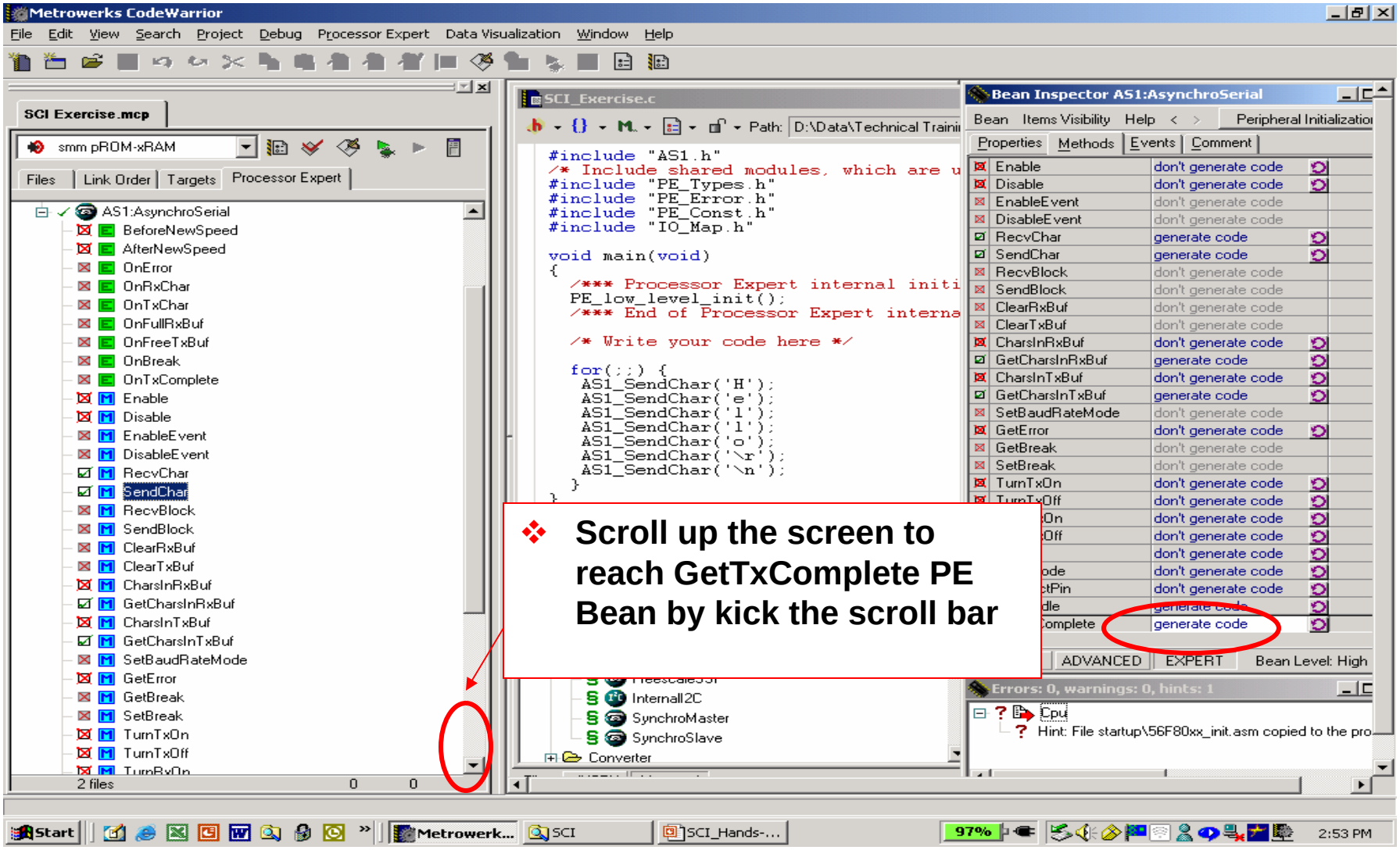
- We need to wait for the 1st character send out completely if we want to send out 2nd character in SCI communication.
- kick Methods page of Bean Inspector AS1:AsynchroSerial

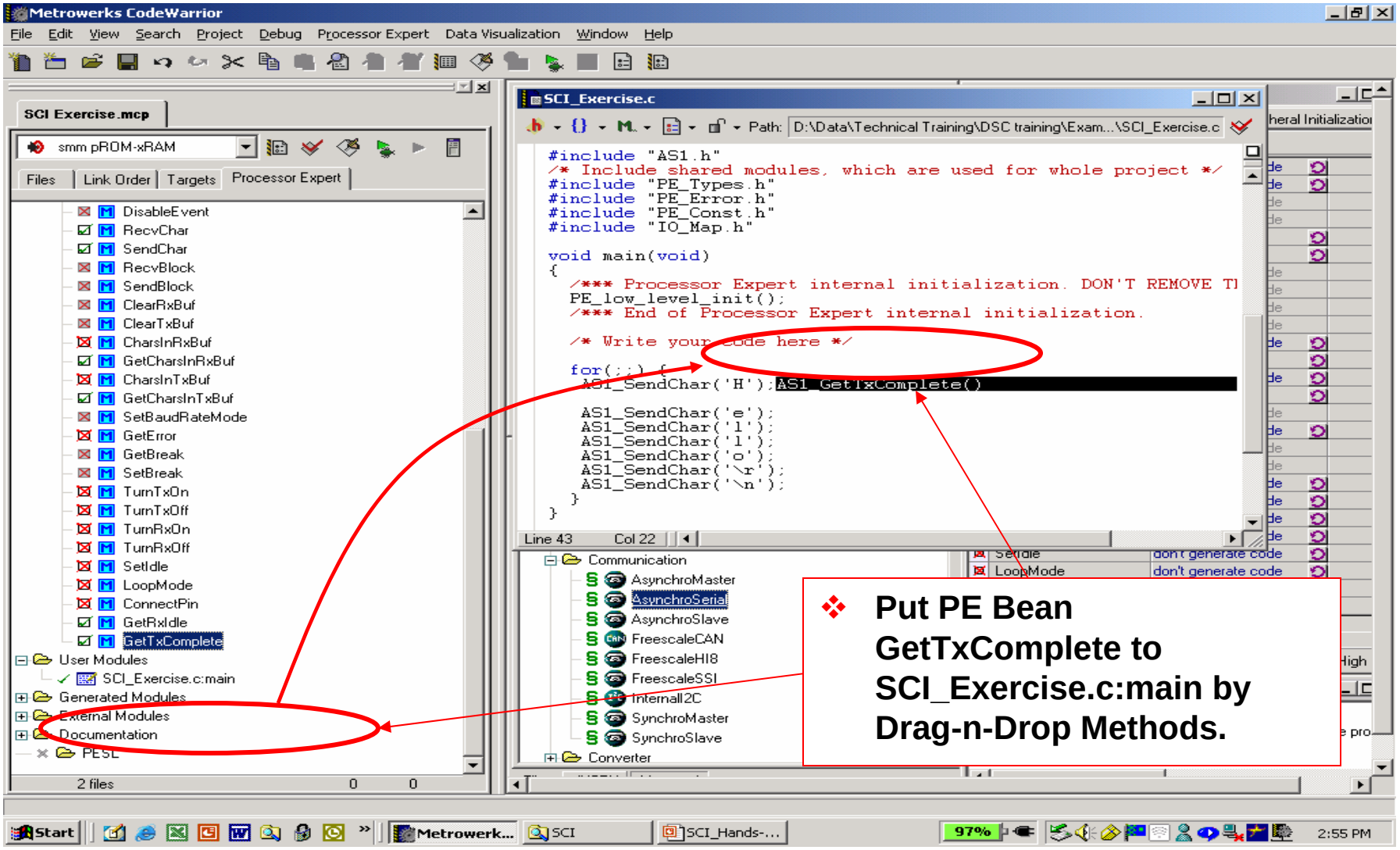


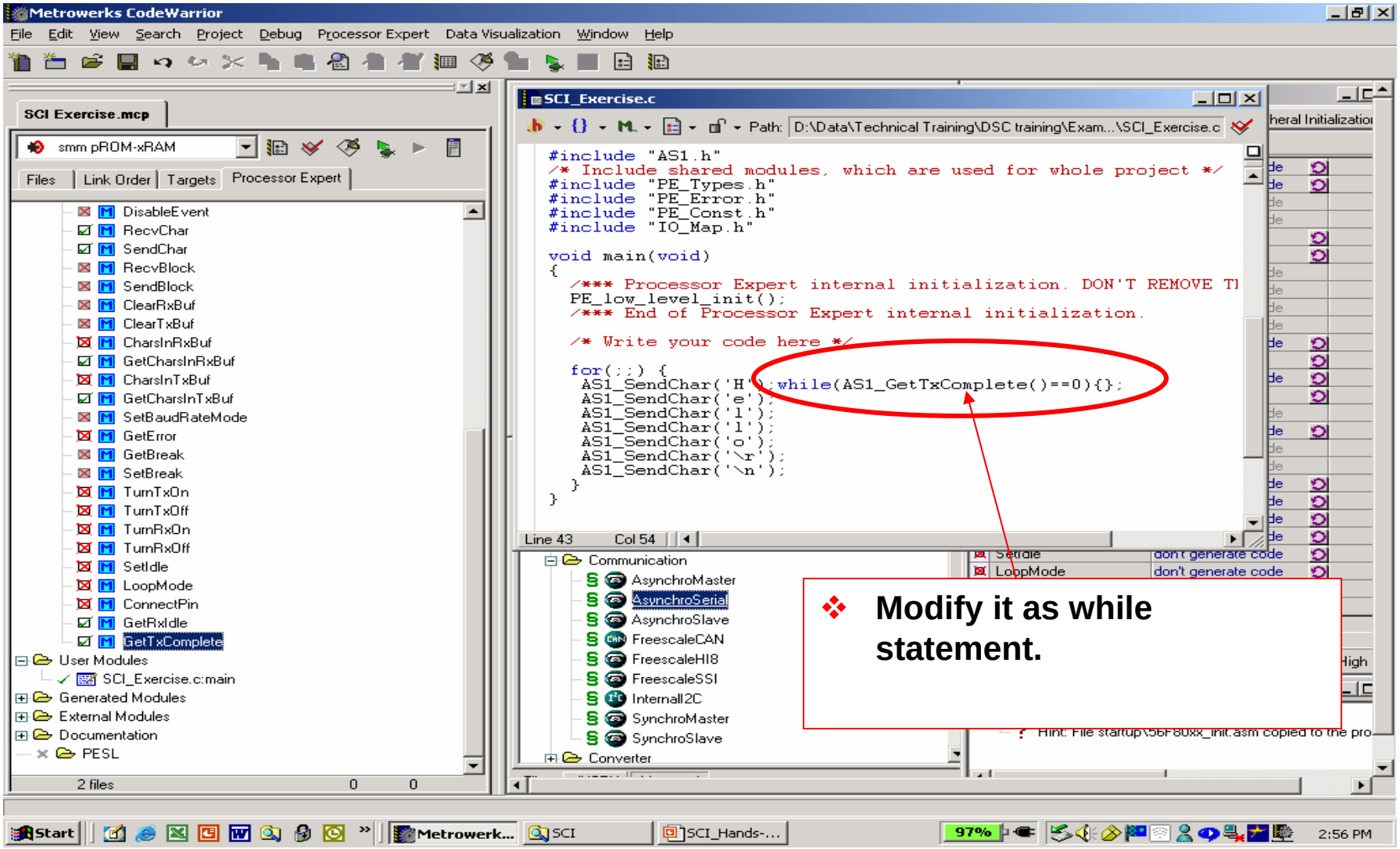
- **Enable GetRxIdle PE Bean by kicking this dial box**

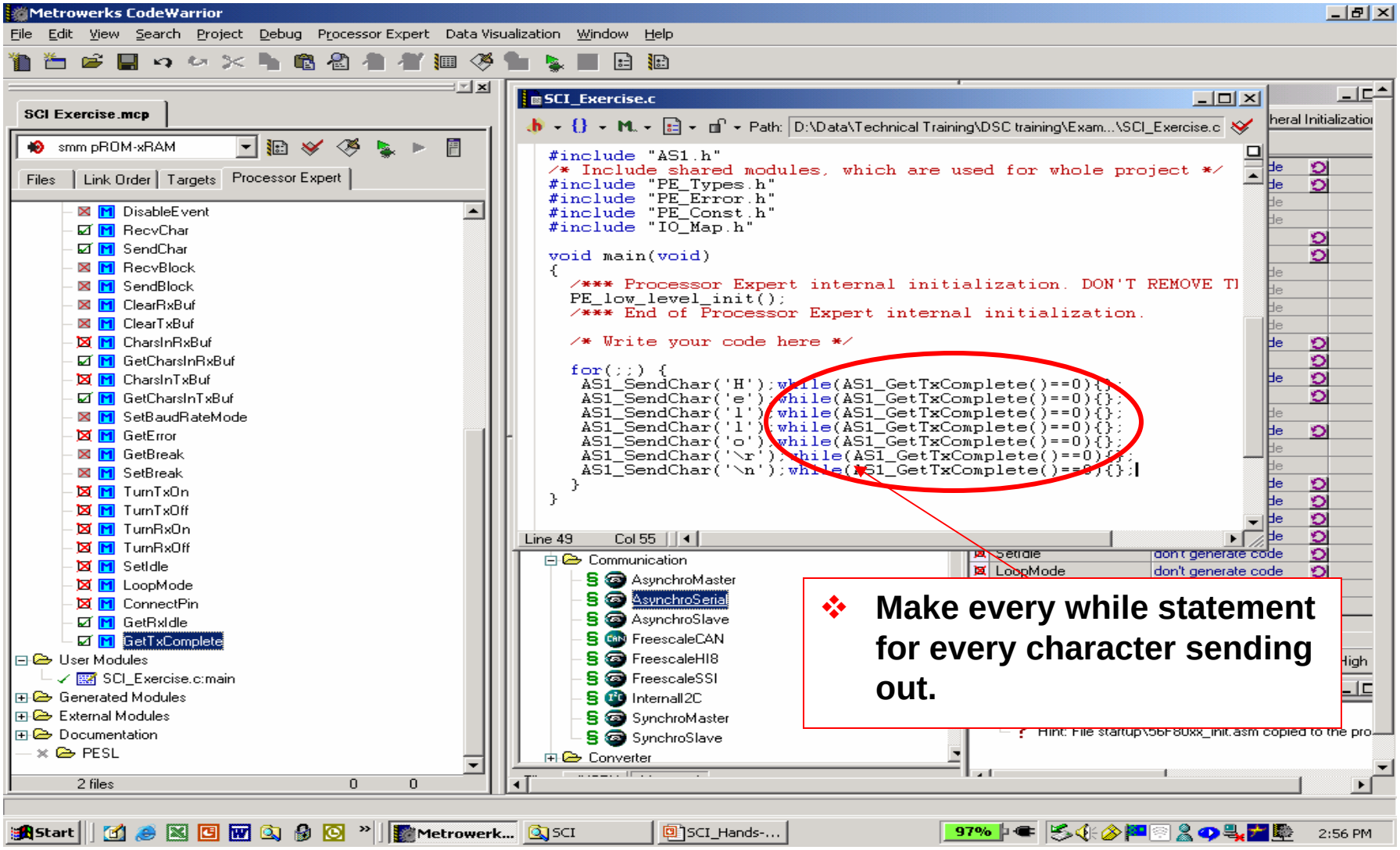


- **Enable GetTxComplete PE Bean by kicking this dial box**

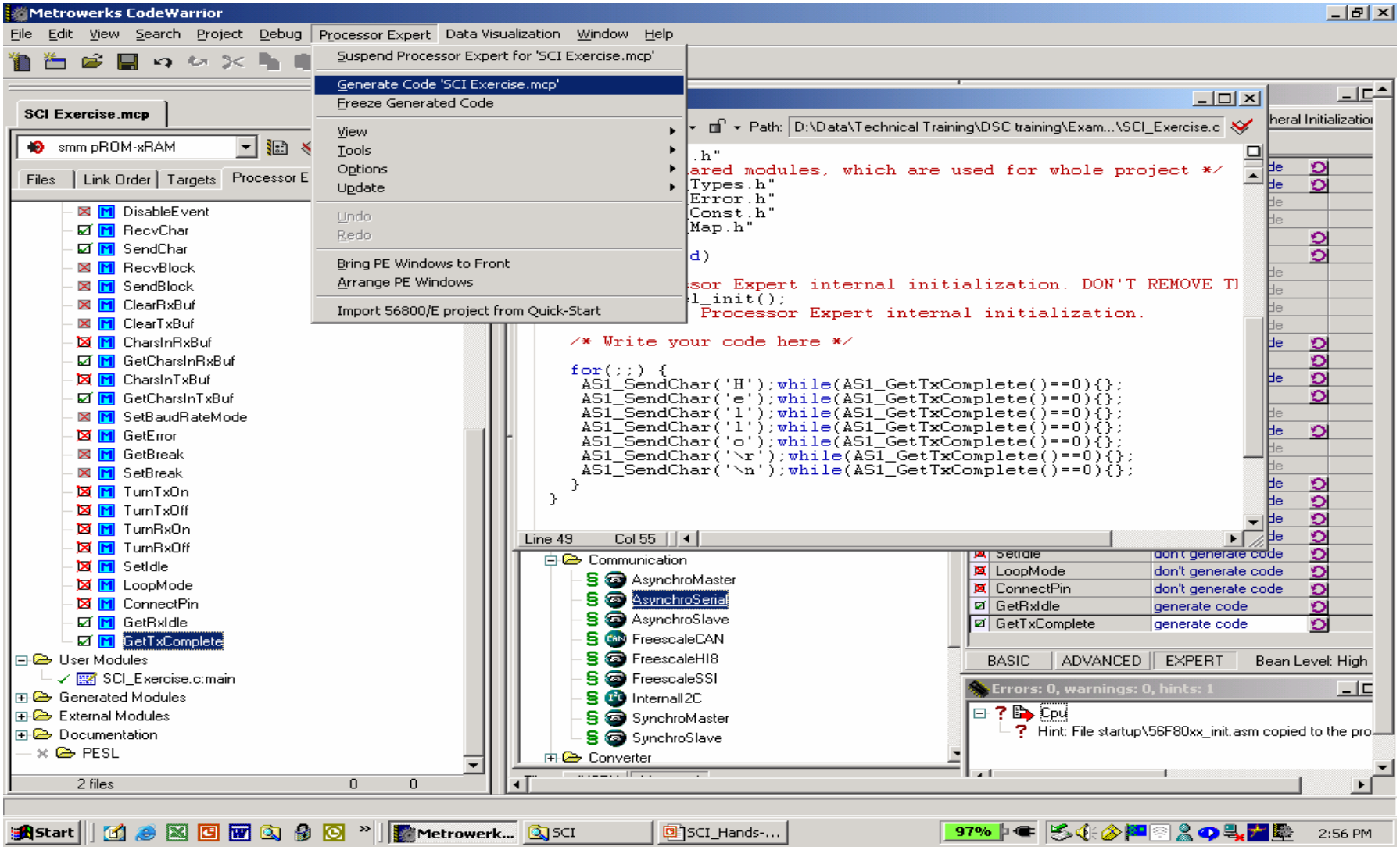


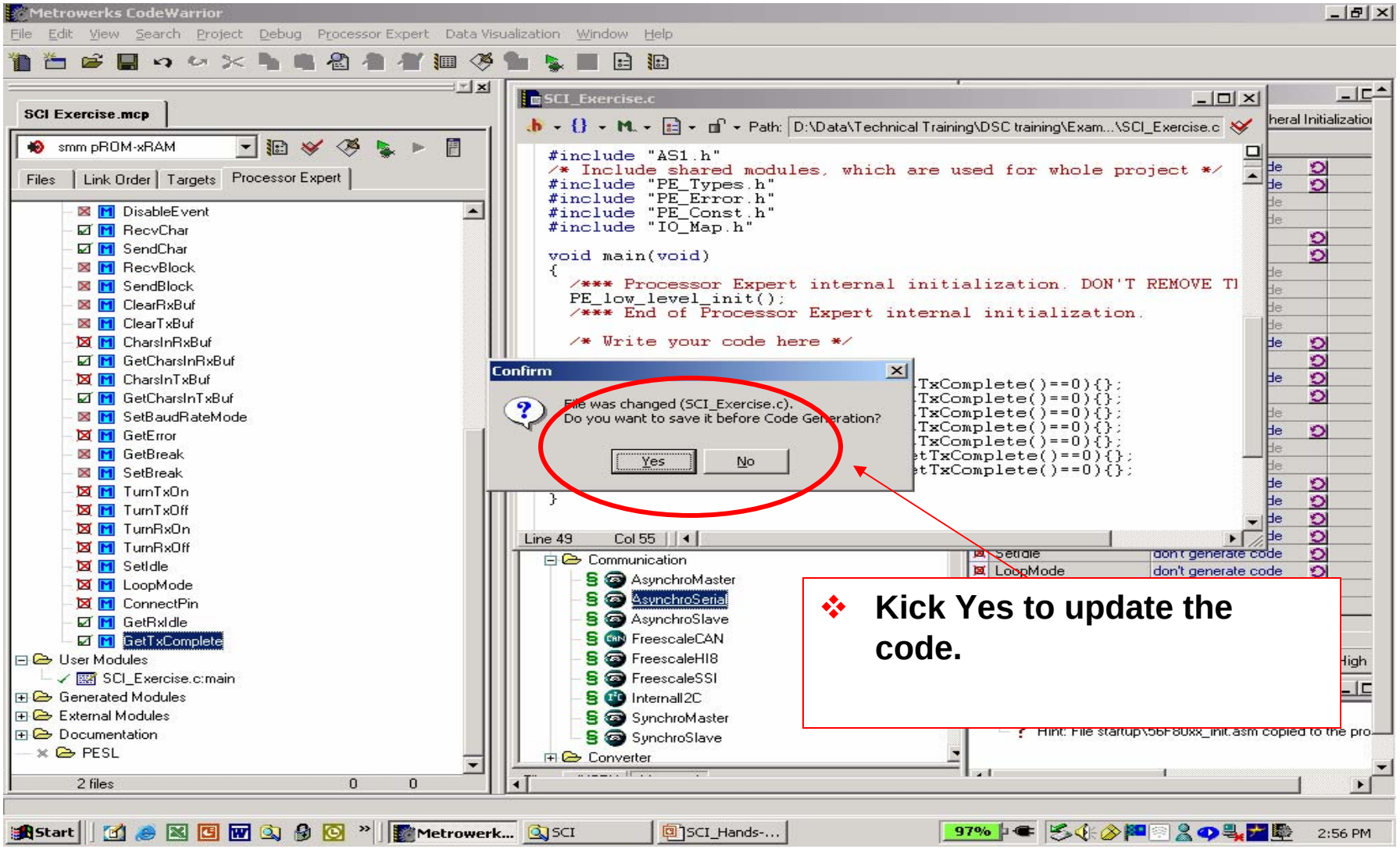


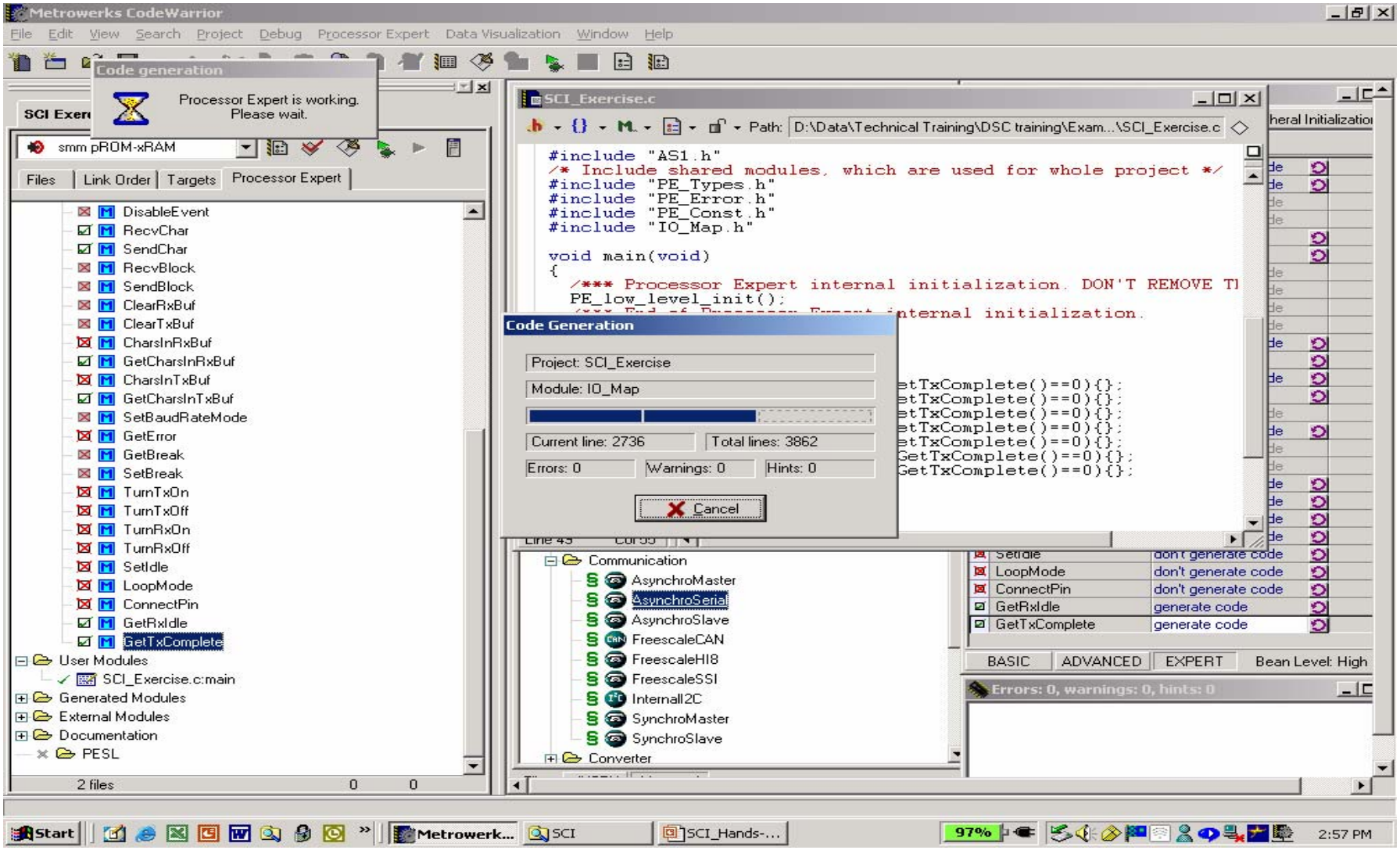


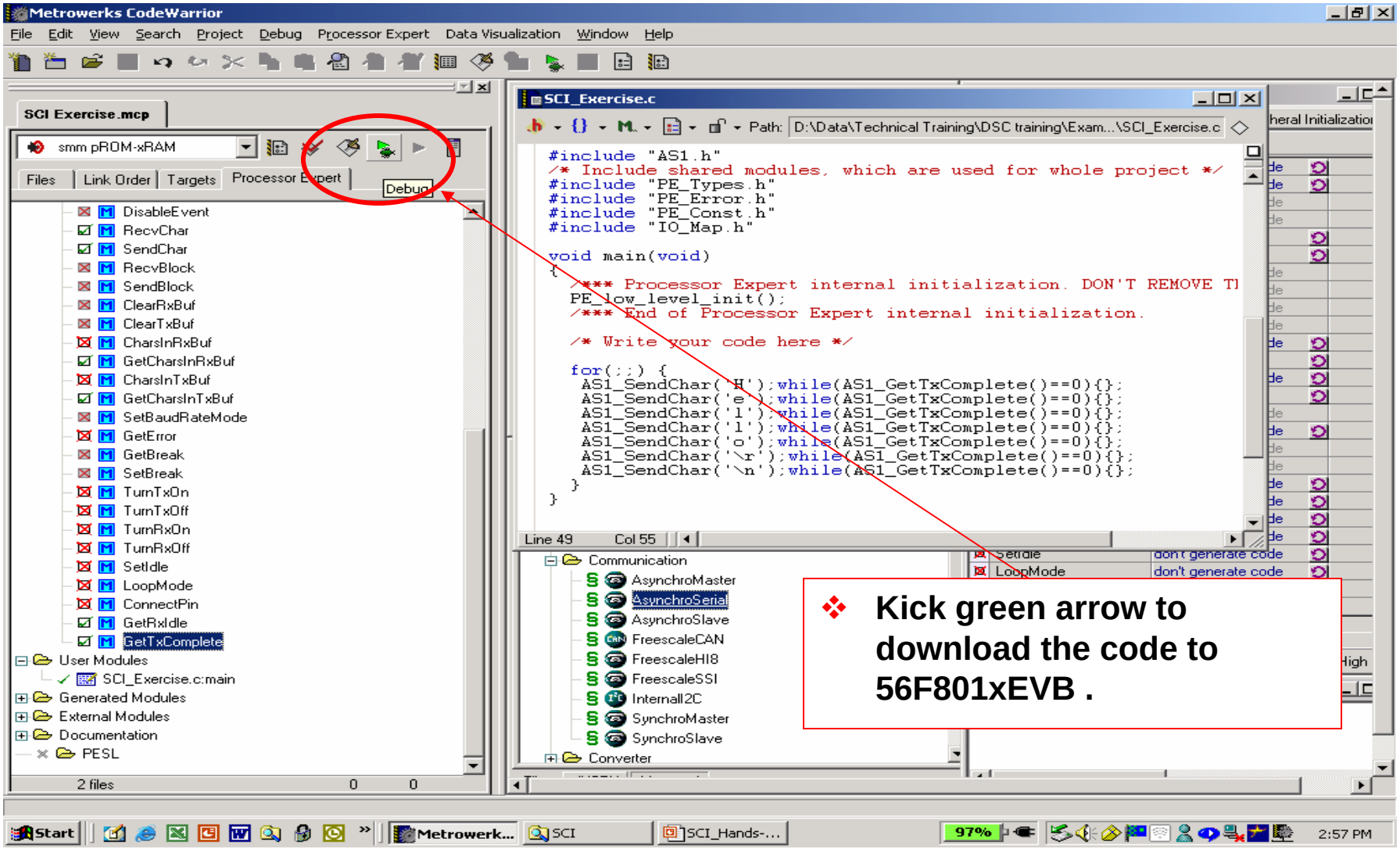


- **Make every while statement for every character sending out.**

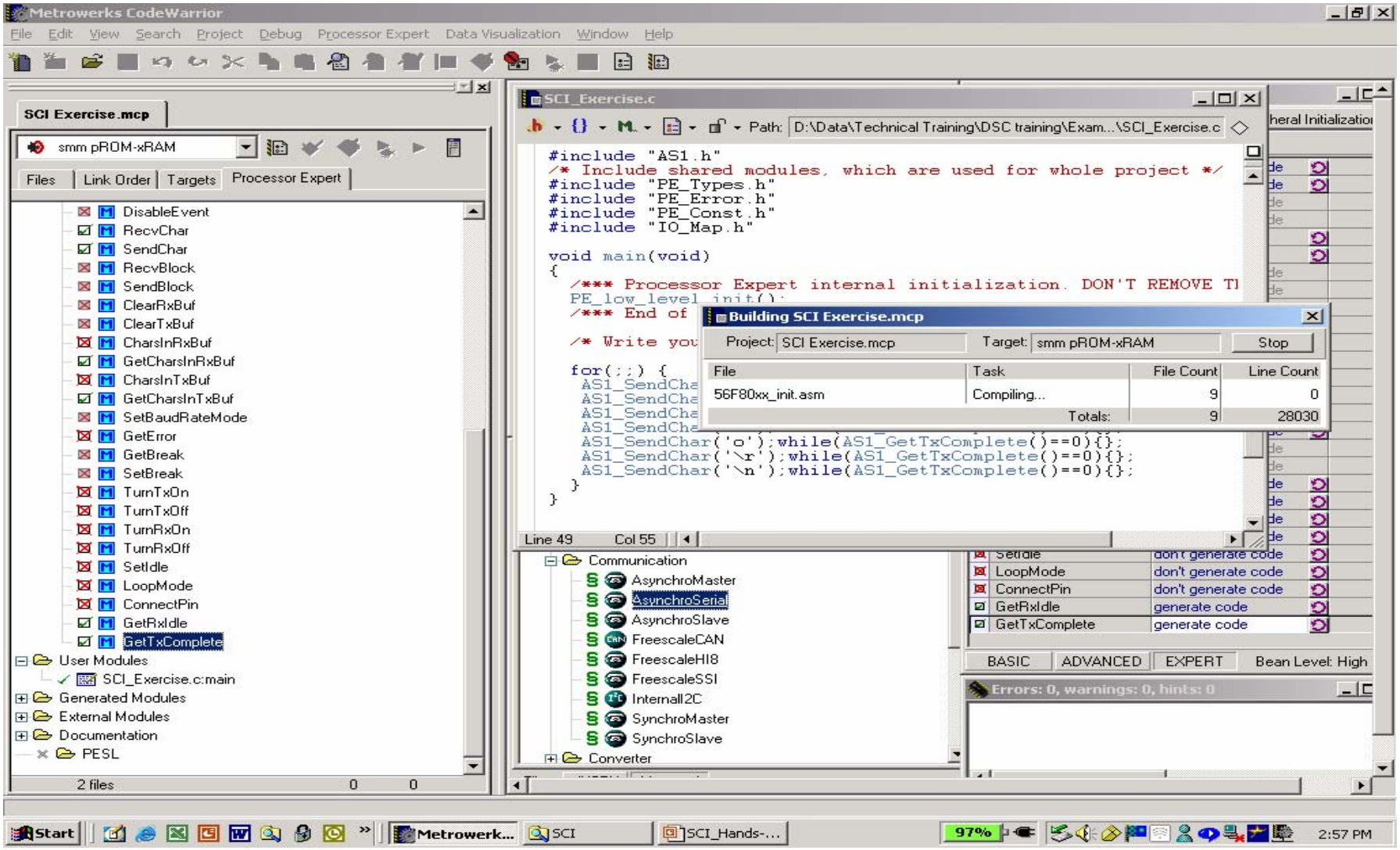


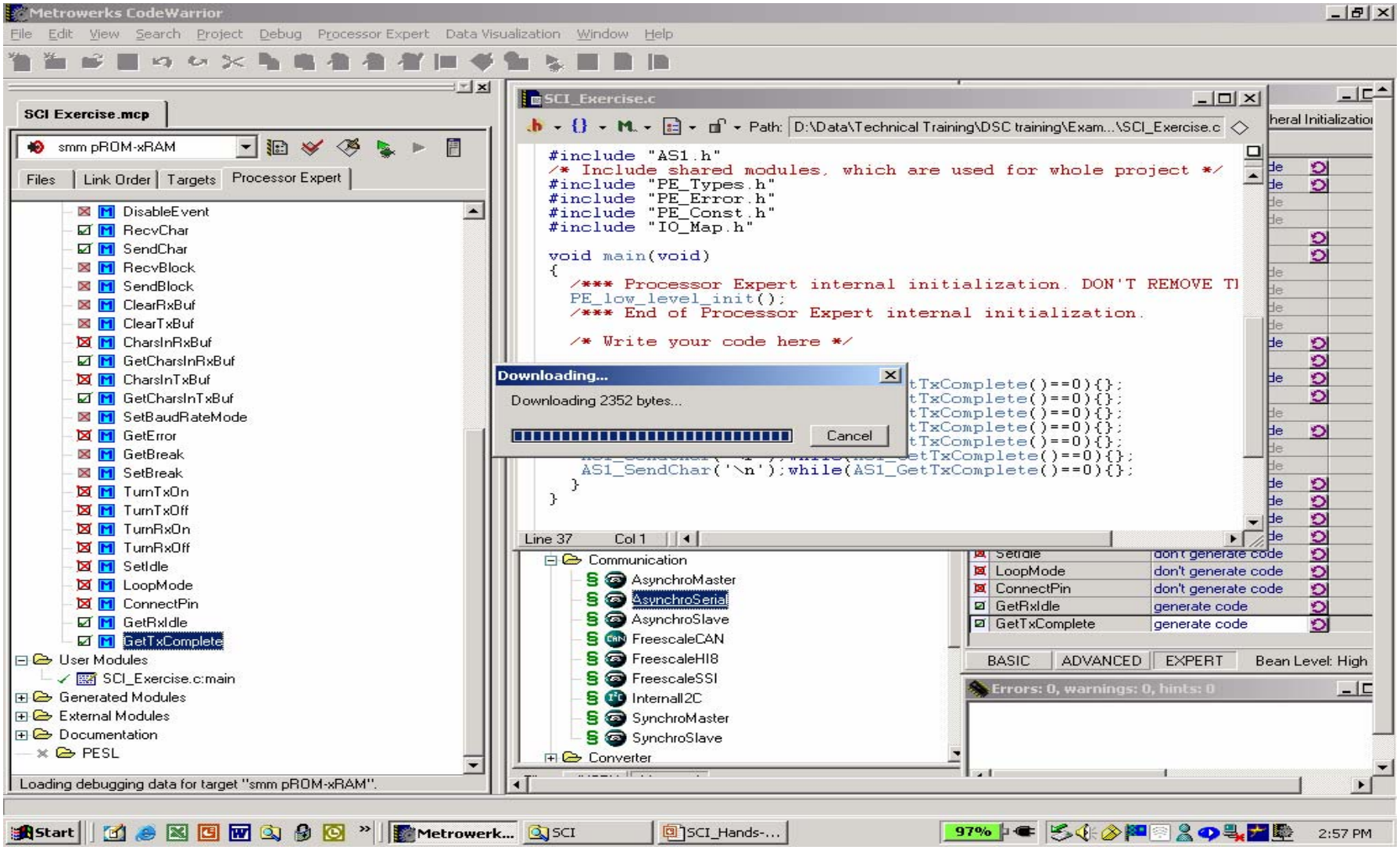


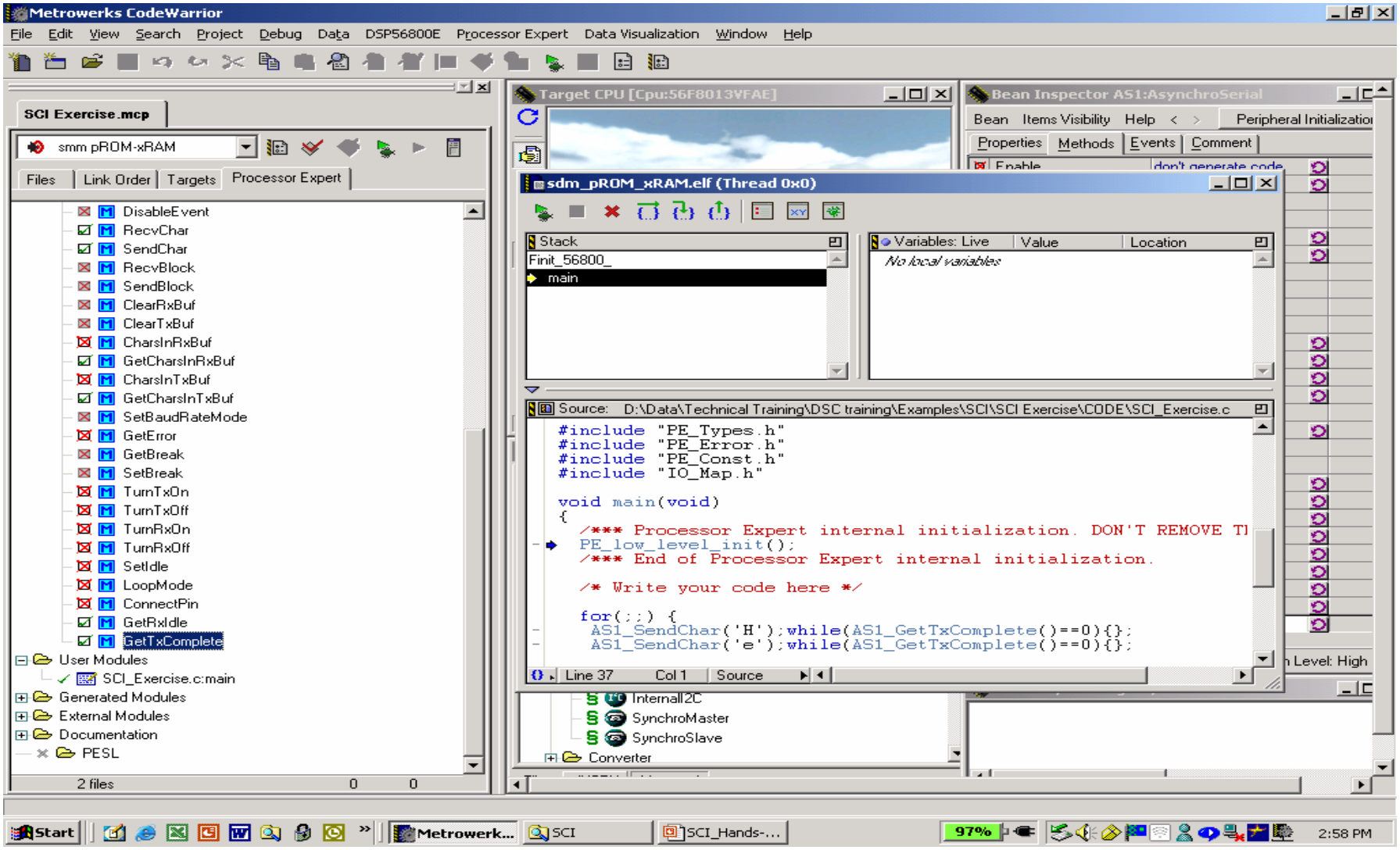


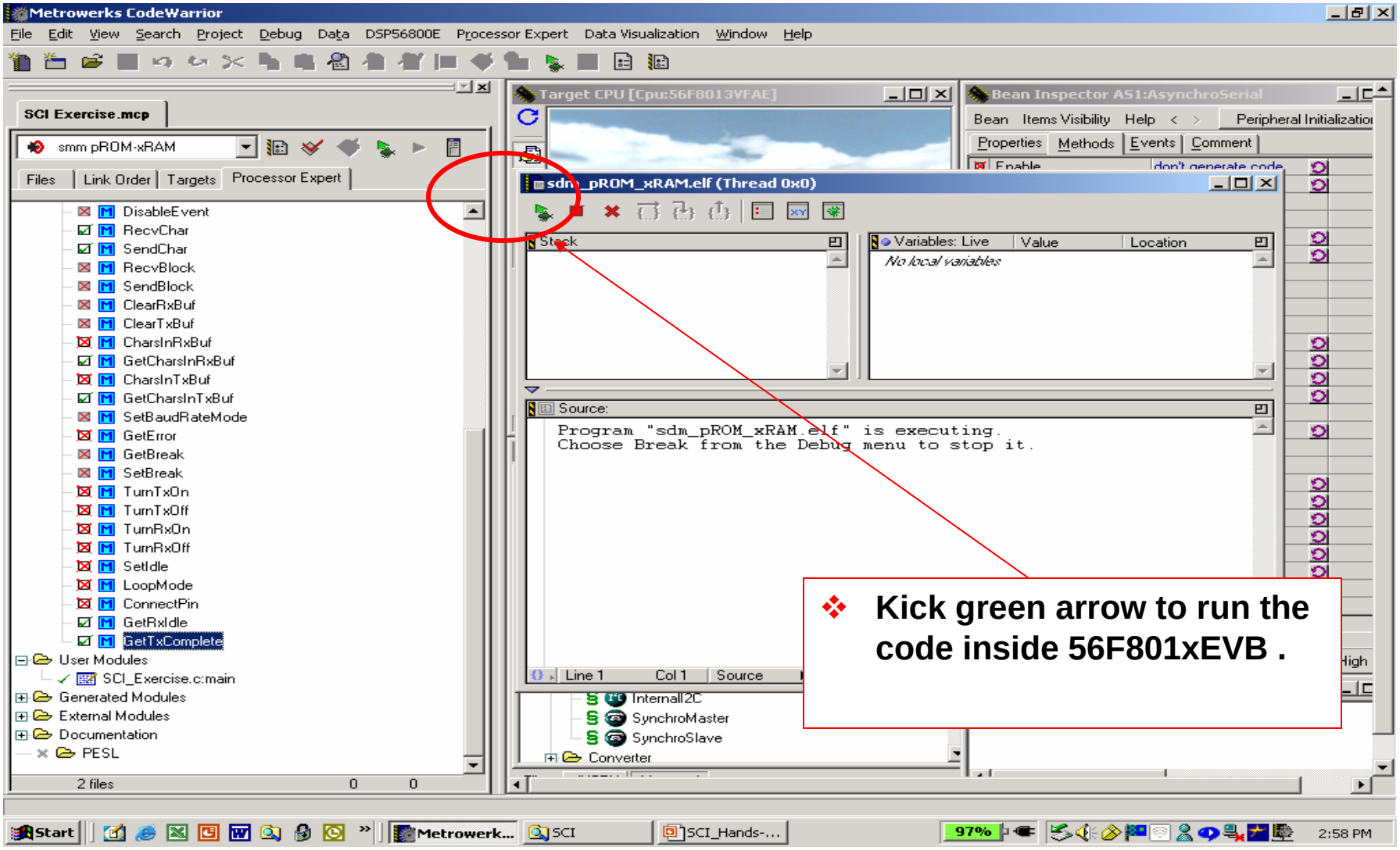


- **Kick green arrow to download the code to 56F801xEVB .**

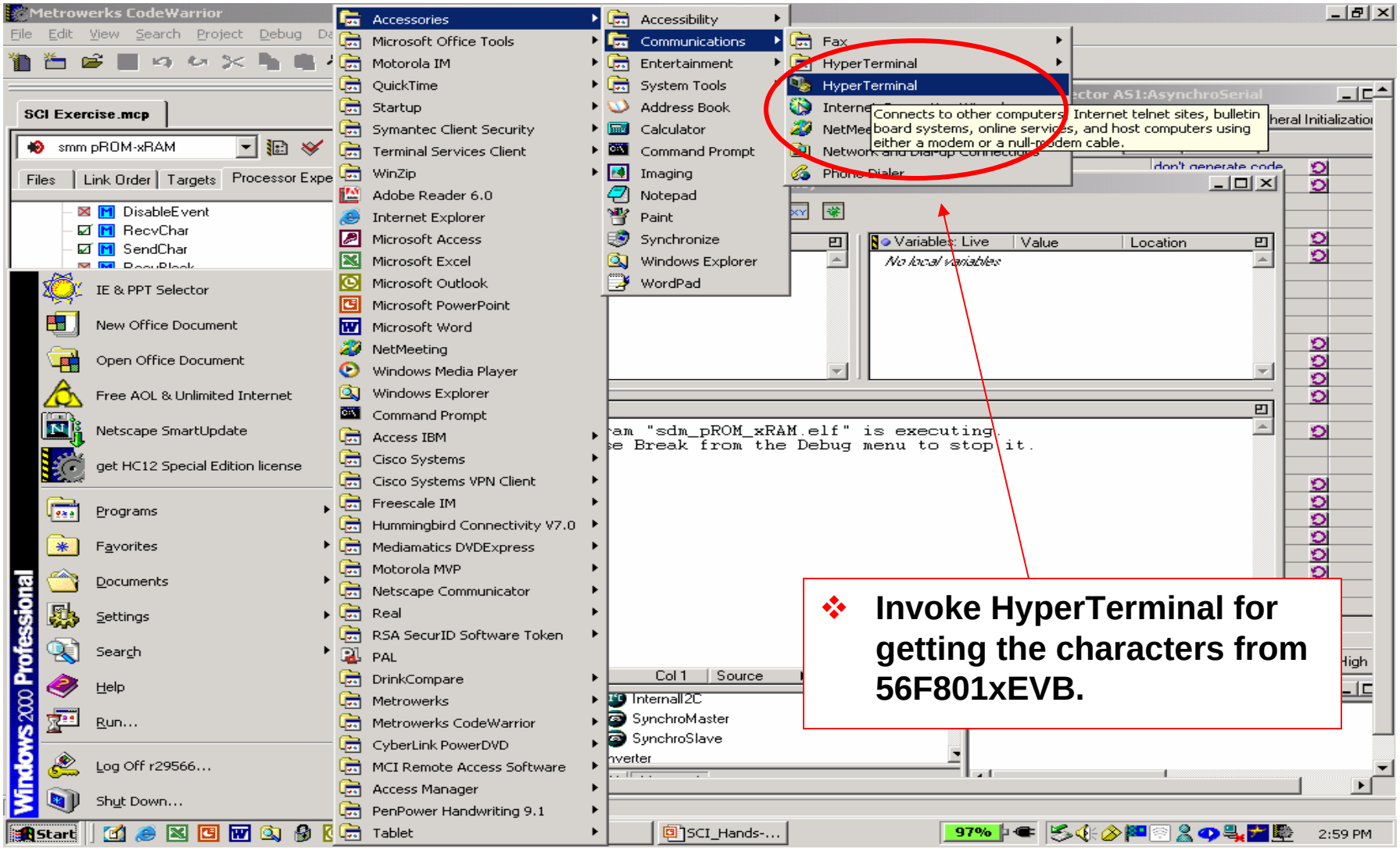




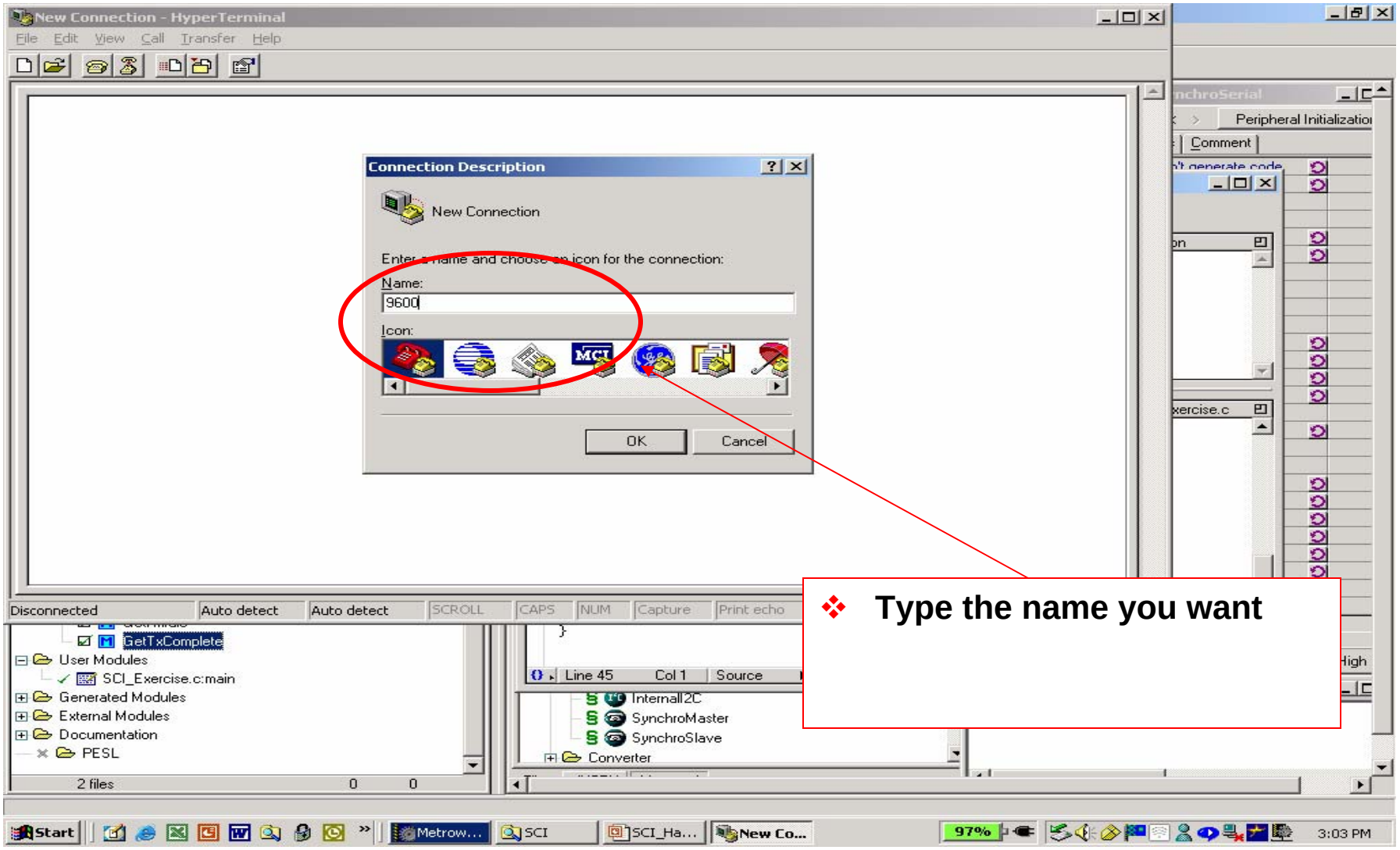




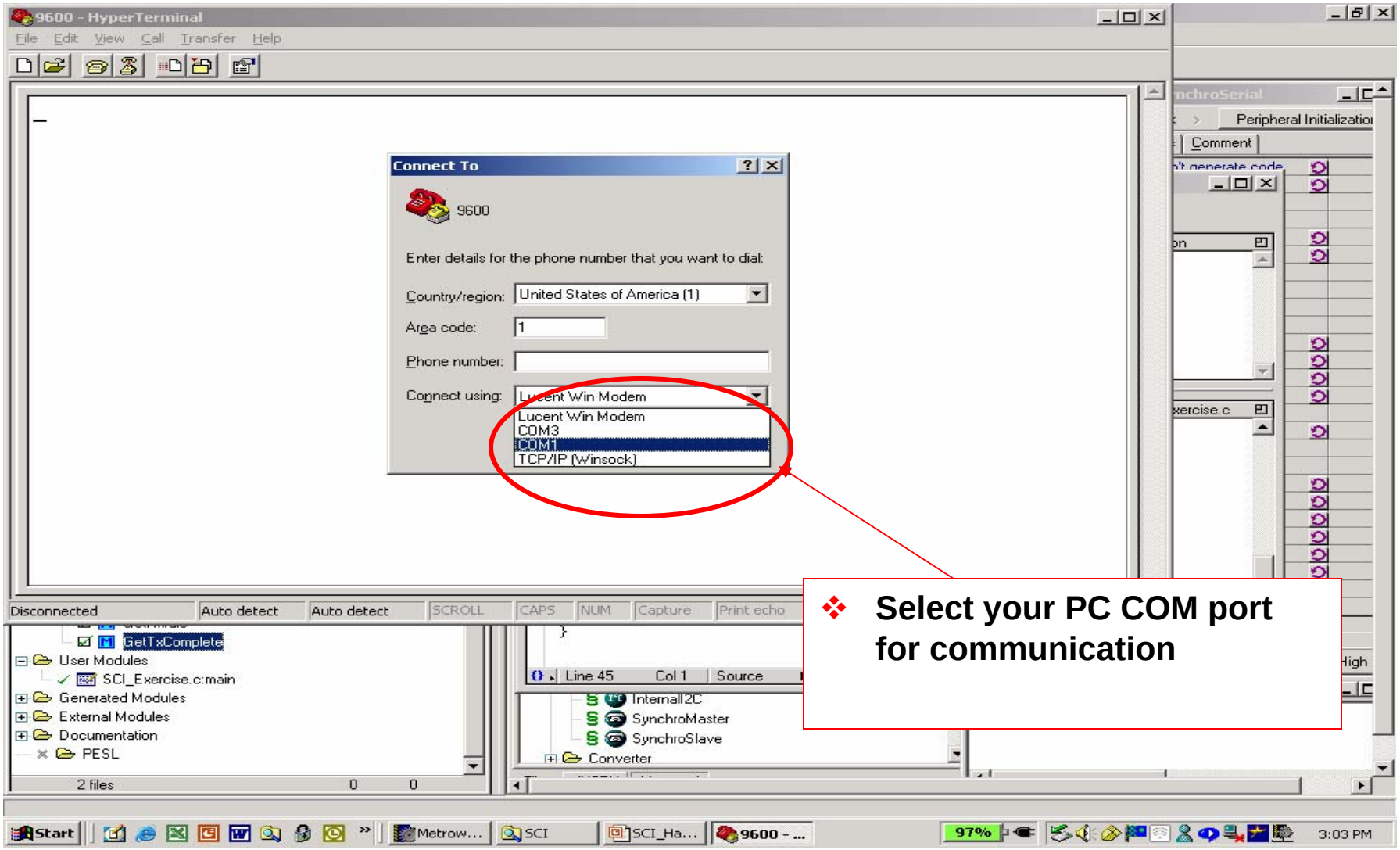
- **Kick green arrow to run the code inside 56F801xEVB .**



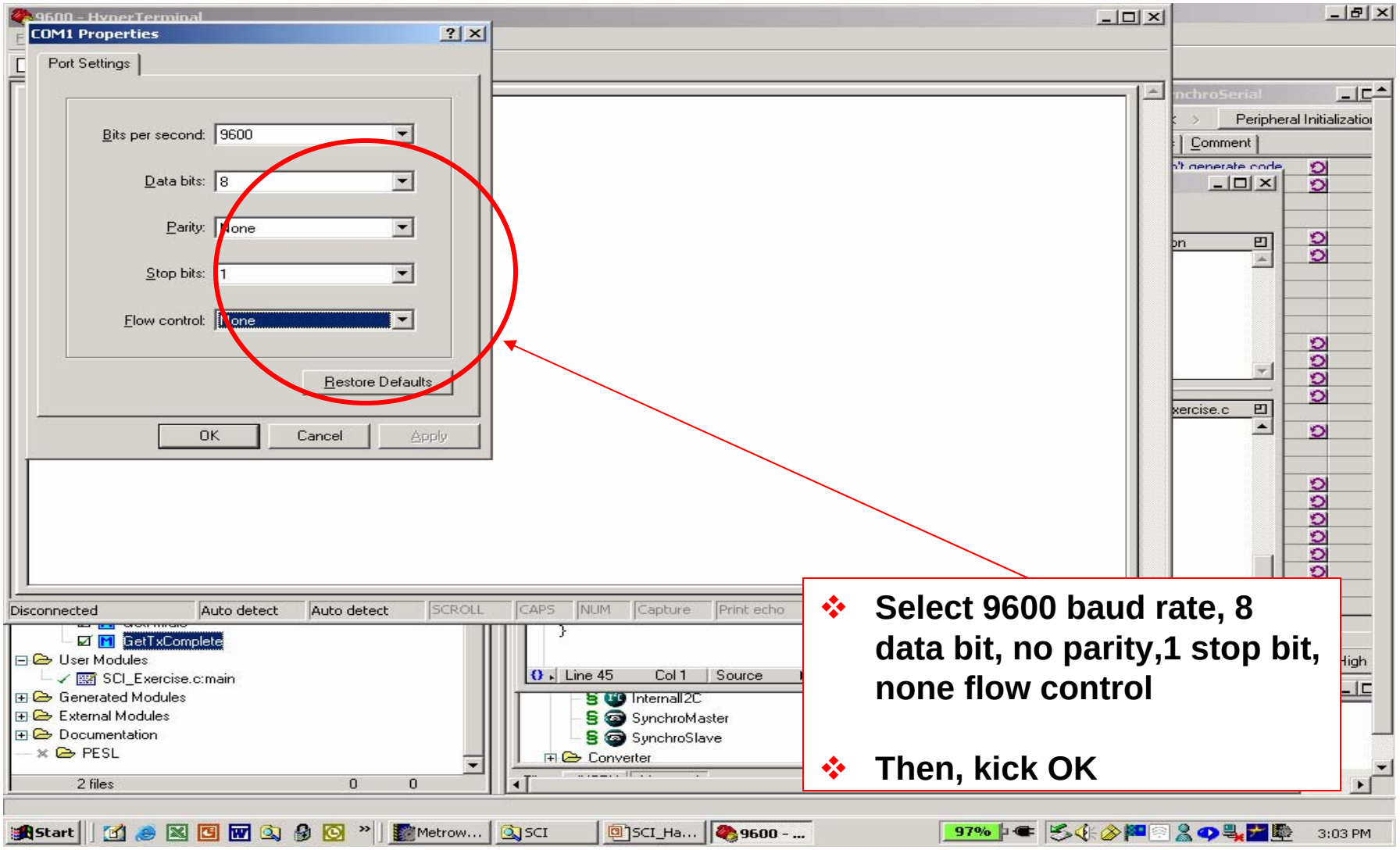
- **Invoke HyperTerminal for getting the characters from 56F801xEVB.**



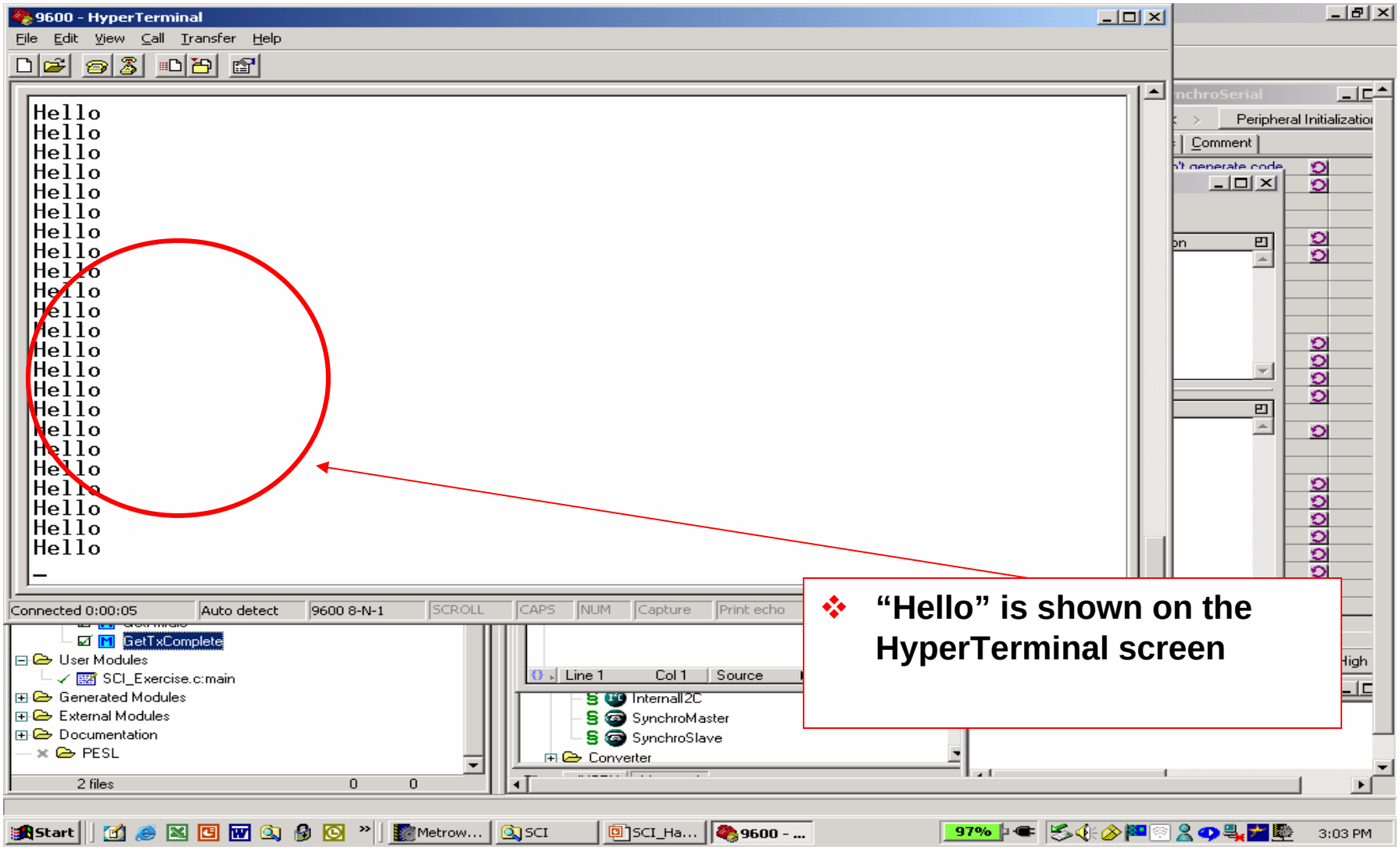
- **Type the name you want**



- **Select your PC COM port for communication**



- Select 9600 baud rate, 8 data bit, no parity,1 stop bit, none flow control
- Then, kick OK



- **“Hello” is shown on the HyperTerminal screen**

Summary

Summary

- Understand the hardware and software support available for the 56800E Hybrid Controller product line.

- Demonstrated the ease of developing applications using CodeWarrior development tools with Processor Expert™ technology.

Thank You!!!