

OR

Steps

- 1) Define the processor /processing device (family and version) for the target system.
- 2) Defining the source code window with labels and symbolic arguments as execution goes on for each single step.
- 3) Define the processor registers for each step /module.
- 4) Define details of ports and target system.
- 5) Editor to edit source code files, initial data files , data and tables.
- 6) Define assembler/compiler for program test with link library.
- 7) Execute the source code to check the target system , else debug the source code.
- 8) For system working properly as per the specifications, then final implementation is carried out
- 9) Finally application software is embedded in the system by using device programmer.

Device programmer:

- Also called as laboratory programmer, a programming system for a application device such as EPROM/ROM or Flash memory or microcontroller memory, PLA.
- The device to be programmed is inserted into the socket at the device programmer and burns the code using software at the host. i.e. personal computer through serial port.
- The device programmer software running on the host uses an input file from the locator software output records reflects the final design which has the bootstrap loader and compressed records which the processor decompresses before the embedded system processor starts the execution.

Target board

Target board or machine or system consists of-

- 1) A microprocessor or microcontroller,
 - 2) ROM-memory of image of embedded system,
 - 3) RAM- memory for implementation of stack, temporary variables and memory buffers
- Peripheral devices and interfaces such as RS 232,10/100 base ethernet,parallel ports, USB etc
- Example –A simple sample target system is as shown