

Downloading run-time-image from Platform Builder



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Application note

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Target Setup:

- Connect RS-232 Female-Female cable to debug port (came with EVB)
- Connect other end to PC COM-port
- Connect BaseBoard power plug
- Connect Ethernet cable to Ethernet port

PC Setup:

- Follow Windows Embedded CE6.0 R2 BSP Installation guide to build a run-time-image.
- Install hyper terminal, choose appropriate COM-Port.
 - Com-Port settings
 - Baud rate : 38400
 - Data: 8 bit
 - Parity : none
 - Stop bits: 1
 - Flow control: none

Download procedure:

- Power up system
- In PC HyperTerminal, Press 'Space" many times to stop system from loading run-time-image. See fig' below:

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```
Tera Term Web 3.1 - COM1 VT
File Edit Setup Web Control Window Help
MOBM Alive
DDR in 32-bit mode
*****
Variscite LTD VAR320 SBC v2.0 Boot Module
Processor : Marvell Monahans-P PXA320 624MHz
Nand Flash: Samsung K9F1G08U0B 128MB
RAM       : 128MB 266MHz DDR SDRAM
Windows Embedded CE 6.0 R2
Bootloader Ver 2.32
*****
128kb blocks
Copy Block 0x00020000 to DDR at 0x80000000 - OK!
Copy Block 0x00040000 to DDR at 0x80020000
Eboot Alive
Microsoft Windows CE Ethernet Bootloader Common Library Version 1.1 Built Jul 25 2008 10:58:04
Reset Cause (0x1): Hardware reset
MAC address: 02-00-5E-A3-EF-BD
pic init!
Press [ENTER] to launch image stored in flash or [SPACE] to cancel.
Initiating image launch in 3 seconds.
[0] IP address is <192.168.1.123>
[1] Subnet mask is <255.0.0.0>
[2] Boot Delay is <3 seconds>
[3] DHCP <Enabled>
[5] <Launch existing flash resident> OS image at startup is set
[I] IP address of TFTP server is <by USNP server>
[N] Name of file to download is <Default>
[B] BSP configuration menu
[T] Test menu
----
[L] Launch existing flash resident OS image now
[F] Format NAND flash
[W] NAND flash update of OS image is <Disabled>
[D] Download OS image with Platform Builder
[U] Update OS image with TFTP server
[E] Download Eboot image with TFTP server and update it in NAND flash
[S] Download Splash Screen image with TFTP server and update it in NAND flash
[C] Download Custom Config file with TFTP server and update Args in NAND flash
Enter your selection: █
```

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- Choose option 'D' to download from Platform builder.
- If "[w] NAND flash update of OS image is <Enabled>" image will be saved in NAND flash

```
Tera Term Web 3.1 - COM1 V1
File Edit Setup Web Control Window Help

Microsoft Windows CE Ethernet Bootloader Common Library Version 1.1 Built Jul 25 2008 10:58:04
Reset Cause (0x1): Hardware reset
MAC address: 02-00-5E-A3-EF-BD
pic init!

Press [ENTER] to launch image stored in flash or [SPACE] to cancel.

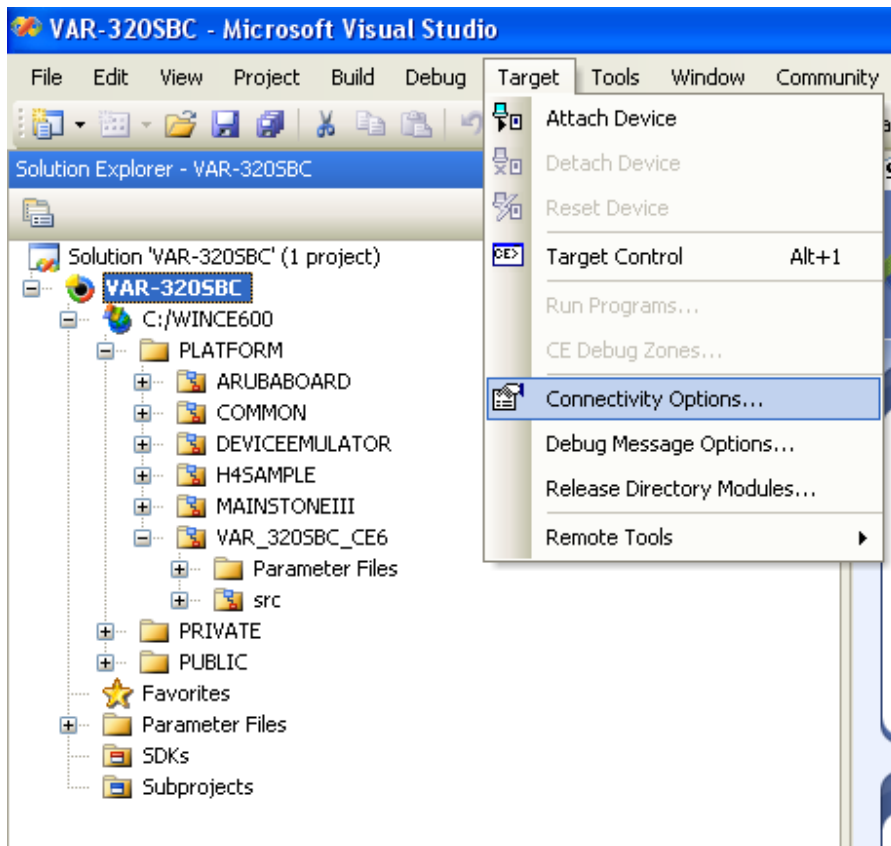
Initiating image launch in 3 seconds.
[0] IP address is <192.168.1.123>
[1] Subnet mask is <255.0.0.0>
[2] Boot Delay is <3 seconds>
[3] DHCP <Enabled>
[5] <Launch existing flash resident> OS image at startup is set
[I] IP address of TFTP server is <by USNP server>
[N] Name of file to download is <Default>
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-----
[L] Launch existing flash resident OS image now
[F] Format NAND flash
[W] NAND flash update of OS image is <Disabled>
[D] Download OS image with Platform Builder
[U] Update OS image with TFTP server
[E] Download Eboot image with TFTP server and update it in NAND flash
[S] Download Splash Screen image with TFTP server and update it in NAND flash
[C] Download Custom Config file with TFTP server and update Args in NAND flash

Enter your selection:
Enter your selection:
Enter your selection:
Enter your selection:
Enter your selection: d
pKITLArgs->MAC: 0002:A35E:BDEF
cdadrcfg2:12C80B
(+)Dm9isaInit()
=====
EBOOT - Ethernet Debug Driver
-----
Driver Version : 1.11.071218.01
Release Date : 2007-12-18
-----
IO Address : 0xB9C00000
Data Port : 0xB9C00004
INFO::46
INFO::A46
INFO::0
INFO::9000
INFO::Probe: DM9000 is detected.
MAC Address : 02-00-5E-A3-EF-BD
IO Mode : WORD
Link is OK
(-)Dm9isaInit()
INFO: Davicom dm9000a Ethernet controller initialized.
InitEthernet: MAC address = 02-00-5E-A3-EF-BD
System ready!
Preparing for download...
JEMPreDownload: Using device name <VAR320SBC_61373>
InitDHCP():: Calling ProcessDHCP()
DHCPACK:: IP=192.168.1.123, NetMask=255.255.255.0, LeaseTime=86400 sec.
EbootCheckIP: No ARP response in 2 seconds, assuming ownership of IP address 192.168.1.123
+EbootSendBootmeAndWaitForTftp
Sent BOOTME to 255.255.255.255
```

- Wait for DHCP to receive an IP address.
- Bootloader will broadcast itself as "VAR320SBC_xxxx" according to its MAC address

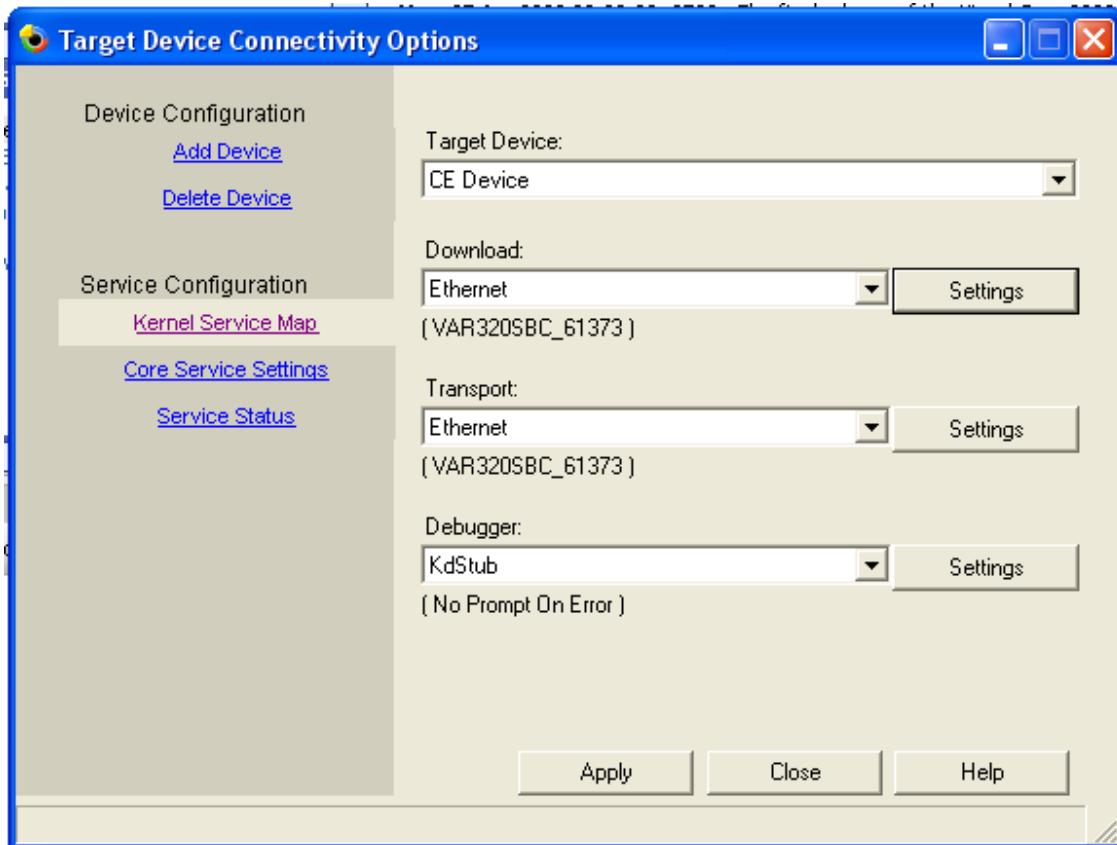
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- In platform builder go to Target-> Connectivity Options



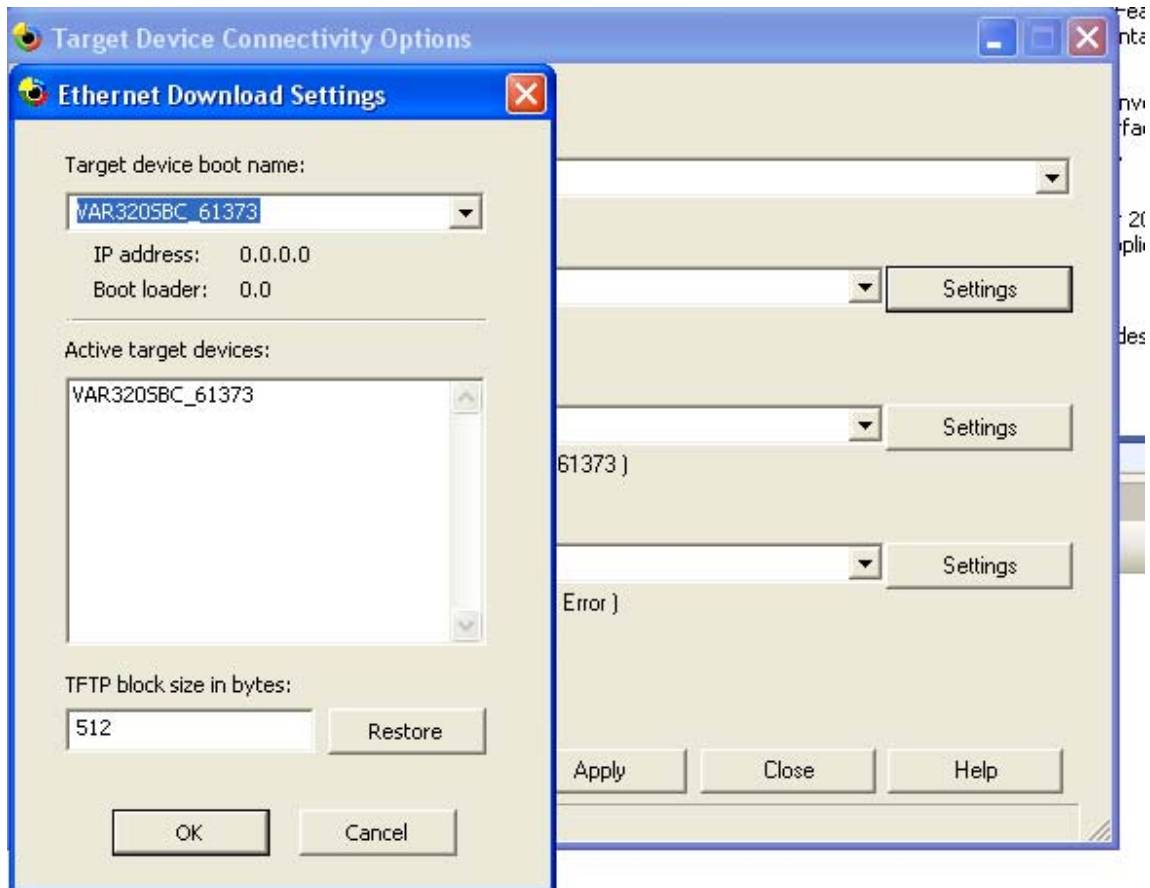
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- Choose settings



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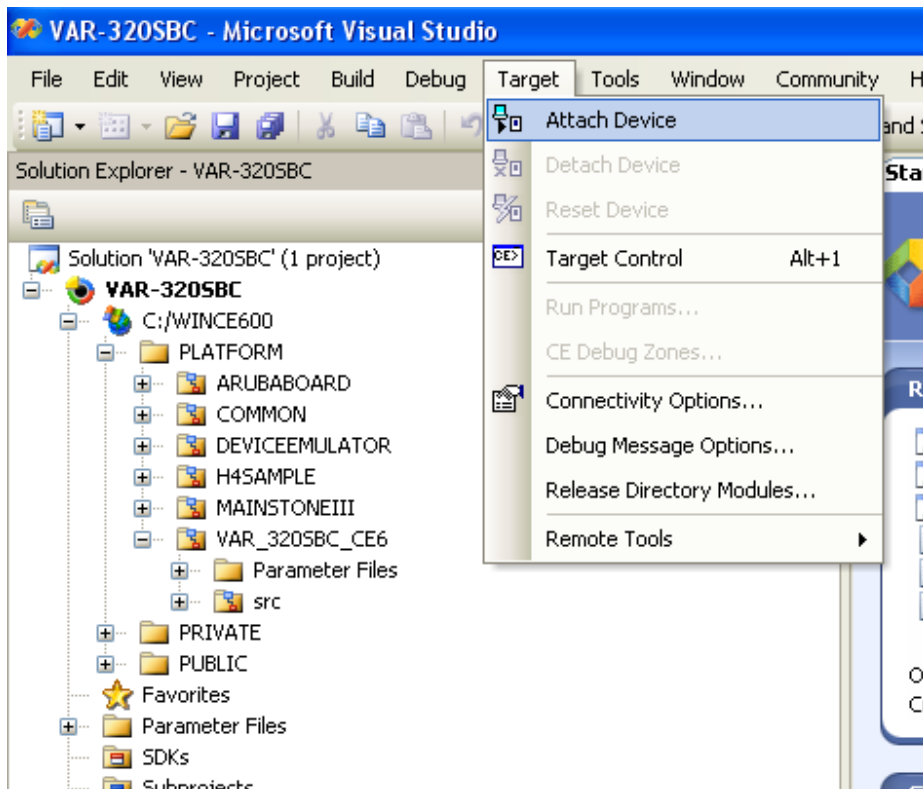
- Wait until “VAR320SBC_xxx” appears. Click it. And press OK.



- Apply changes in settings windows

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- Click:Target-> Attach Device. See figure:



- Wait for download to complete!