

# INSTALLATION

## DSPLinux<sup>™</sup> C5471 BSP v1.1 for Texas Instruments<sup>™</sup> TMS320VC5471

### SYSTEM REQUIREMENTS

Below are the minimum requirements for installing and using the DSPLinux C5471 BSP.

- A host computer with an Intel<sup>®</sup> Pentium<sup>®</sup> III processor, 600 MHz or faster
- A display size of 1024 x 768 or larger, bit depth of 16 bpp
- 128 MB RAM
- 750 MB free hard disk space
- Red Hat<sup>®</sup> Linux 7.1 or later (complete install) configured on the host computer
- X Window System with GNOME or the KDE window manager
- A network card installed and configured on the host computer
- A DHCP server on the network or an available static IP address
- TI C5471 EVM with power supply
- Serial cable (male to female, 9-pin, straight through)

### INSTALLING THE DSPLINUX C5471 BSP SOFTWARE

1. Install and configure Red Hat Linux 7.1 or later on the host computer. When choosing the type of installation, select **CUSTOM**, then scroll to the bottom of the package list and check the box marked **EVERYTHING**.

**Note:** You can download or purchase Red Hat Linux 7.1 or later from [www.redhat.com](http://www.redhat.com).

2. From the RidgeRun CD-ROM, install the DSPLinux C5471 BSP as follows:

- a. Go to the installation directory.

```
$cd /tmp/bspmnt
```

**-or-**

```
$cd /mnt/cdrom
```

- b. Run the installation script specifying the development directory. At this point, be prepared to enter the "root" password; it is necessary when writing to certain directories.

```
$./INSTALL <development directory>
```

3. The DSPLinux C5471 BSP with a complete development tool chain for the ARM7, C5000 DSP, and Appliance Simulator with x86 cross-development tools is now installed and ready for use. For more information refer to Chapter 2 of the C5471 BSP User's Guide.

4. To configure and turn on the C5471 EVM hardware, refer to the section “Turning on the C5471 EVM” in the DSPLinux C5471 User Guide. Refer to Appendix A Jumpers for the C5471 EVM, to ensure that all jumper settings are correct.

## INSTALLING THE WINDOWS SDSERVER - ETHERNET EMULATION SERVER

Execute the SetupSDServer100.exe installer file provided on the Spectrum Digital CD to install the MS Windows based SDServer Ethernet server and parallel-to-JTAG driver.

The user may optionally consider combining the Windows and Linux development system capabilities onto one development PC using a separately purchased package known as VM Ware. RidgeRun does not provide support of the VM Ware software installation and configuration but it has been proven to work. Visit [www.vmware.com](http://www.vmware.com) for more information on how to download and purchase VM Ware.

## IF THE C5471 EVM DOES NOT BOOT

Typically, your C5471 EVM will come preinstalled with the DSPLinux system (bootloader, uCLinux kernel, and file system) loaded and ready to boot. If for some reason your EVM does not boot after it is properly configured per the above steps, please refer to Chapter 4 of the User's Guide, following steps in the section “GPP RRLOAD/KERNEL DEBUGGER (SDI-ARM-GDB)” and follow steps in Examples 3 and 4 to load your RRBootloader and DSPLinux kernel onto the EVM for the first time.

## CONNECTOR DIAGRAM

**TI C5471 EVM**



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