



Freescale Semiconductor, Inc.

mobileGT Standard Development Platform Quick Start Guide

Introduction

Motorola is pleased to announce the first Standard Development Platform (SDP) for mobileGT. This document guides you through getting a quick start with mobileGT SDP. It does not replace all the documentation provided, but gives you a good starting point.

Quick Start with mobileGT SDP

Software Installation

Install the five mobileGT SDP CDs in the following order:

- (a) QNX 6.1
- (b) Metrowerks Codewarrior
- (c) Motorola mobileGT Quick Start CD 1.0
- (d) VisualAge Micro Edition 1.4
- (e) Java Applications

All of the installations should be installed to directories without spaces in their names. Some utilities will not function correctly in directory structures such as "c:/Program Files/..."

The QNX 6.1 IPL and Startup files are installed by the Motorola mobileGT Quick Start CD 1.0 under the %QNX_TARGET%/ppcbe/boot/sys directory. Hence it is important that the order of installing the CDs as mentioned above be noted.

After installation, it will be necessary to reboot the system. On some versions of windows, certain settings are automatically updated, while others are not taken into effect until after a reboot.

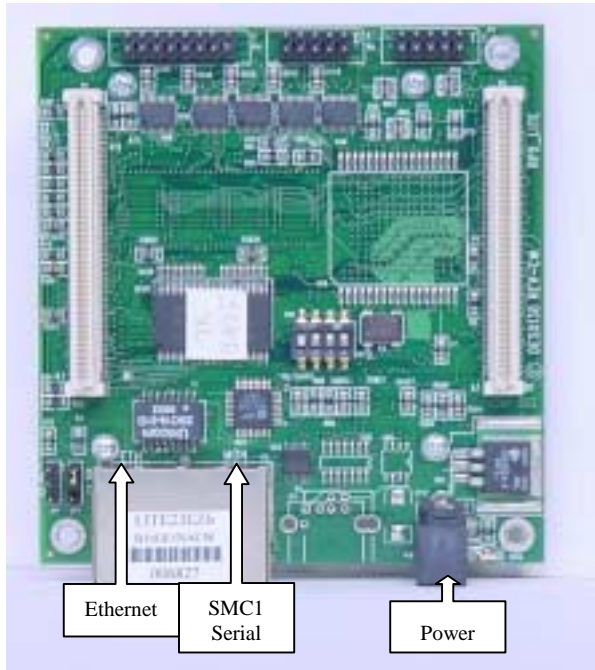
Serial and Ethernet Connections

Hook up a serial cable between the SMC1 port on the RPX Lite and the mobileGT target system. SMC1 must be accessed on the RPX Lite board via an adapter that physically connects the RJ-45 port on the RPX Lite to a standard serial DB9 port.

The Ethernet cable connects to the RPX Lite board on the front of the board (accessible at a through-hole in the mobileGT target system) on the left. See Figure 1 below.

Terminal Emulator Configuration

Use a terminal emulator to connect from the host to the mobileGT target sytem (Hyperterminal is distributed with Windows if no other is available.) The terminal emulator must be set up with the following parameters: 9600 baud, 8 data bits, no parity, 1 stop bit, and no flow control.

Figure 1 RPX Lite Board


Power Connection

Power up the mobileGT target system by connecting the power supply to the RPX Lite board on the front of the target system at physical connector P16. See Figure 1 above.

The images from dev.build (the main boot image), fsdev.build (a blank file system image), photon.build (a set of Photon utilities) and ppcbe.build (a set of Neutrino utilities) are already burnt into the target flash. From your terminal emulator window, you should be able to see the target boot up. On the target's LCD screen, the mobileGT splash screen will be displayed.

Network Configuration

When the target system is powered up for the first time, the netconfig utility will be executed. To use CodeWarrior, choose '1' at the netconfig menu to set up the network environment. The netconfig utility will request information about the network environment. At a minimum, it will need an IP address for the target system. This must be a static IP address, not a dynamic address supplied by the DHCP protocol. Other information, such as a gateway address, netmask, and NFS Server address are also requested.

CodeWarrior Configuration

CodeWarrior will also need to be configured to talk to the target system. In CodeWarrior, select 'Edit->Preferences.' In the IDE Preferences Panel of the IDE Preferences dialog, select 'Debugger->Global Connection Settings.' Choose View TCP/IP Settings in the View Connection Type drop-down menu. Type '<target ip address>:10000' in the Host Name text box. Select OK.

Now applications can be debugged using CodeWarrior on the target system.