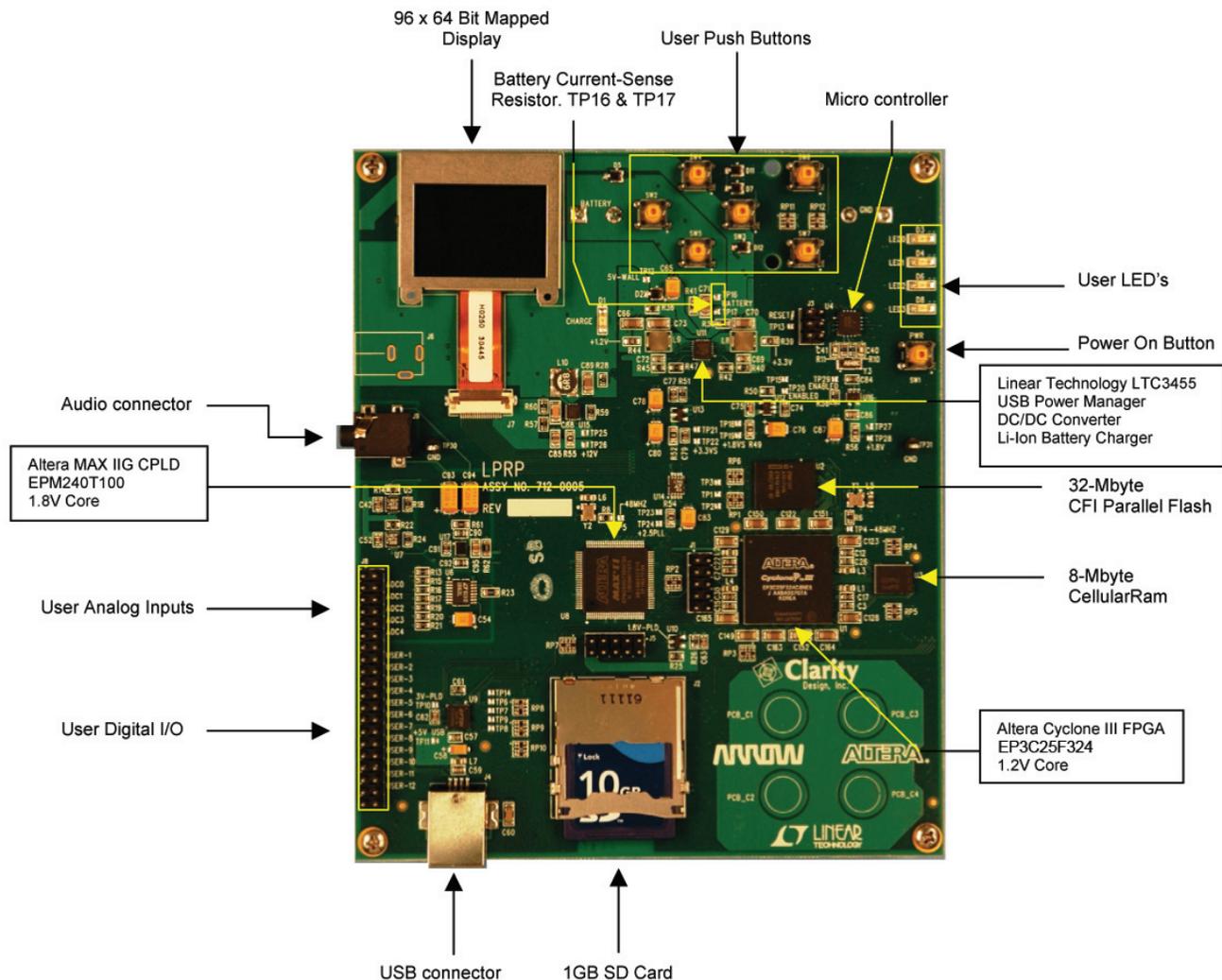


LOW POWER REFERENCE PLATFORM (LPRP)



QUICK START GUIDE



WHAT THIS KIT INCLUDES:

- LPRP development board (functions as MP3 player and picture viewer)
- Detailed LPRP User Guide and reference materials on SD card with reader
- Quick Start guide
- Pair of headphones
- USB cable

Run the MP3 player:

The LPRP can run off batteries. It is shipped with one that is fully charged. Plug in the headphones. Ensure that the USB cable is NOT plugged in. To turn it on: Press the Power On button:

- a. The display is on. Use the six pushbuttons next to the display to navigate the available LPRP demo functions.*
- b. Select the Playlist menu option. Choose a track.*
- c. Measure the power. Use a multimeter to measure across TP 16 & 17. Set the measurement range to mV. Battery power used = R41 reading x 10 mW.*
- d. Select Pause*
- e. Measure the Power (TP 16 & 17)*

Hibernate to CellularRAM:

- a. Start the MP3 player.*
- b. Choose the "Hibernate" option.*
- c. Measure R41.*
- d. Press any button.*



INSTALL THE SOFTWARE:

Quartus II and the Nios II EDS are the primary development tools required to use and/or modify the designs used with this kit.

1. Download and install Quartus II Web Edition v7.1 and Nios II Embedded Design Suite by performing the following steps.
 - a. Go to the following Altera web page:
www.altera.com/download
 - b. Follow the instructions to complete the installation process.
2. License the software
 - a. Go to the following Altera Web page:
<http://www.altera.com/support/licensing/setup/lic-setup-q2webedition.html>

If you have difficulty installing Quartus II software, refer to "Installing Quartus II Software" in Quartus II Installation & Licensing for Windows found at www.altera.com/literature/manual/quartus_install.pdf

3. Using the provided SD card reader install the contents of the LPRP SD card to your computer.
4. Install the USB-Blaster™ driver software as explained in the LPRP User Guide.

FEATURED DEVICES:

Altera Cyclone III EP3C25.

For more Cyclone III information, please go to:
<http://www.altera.com/products/devices/cyclone3/cy3-index.jsp>

For detailed device specifications, please see the Cyclone III datasheet:
www.altera.com/literature/lit-cyc3.jsp

Linear Technology LT3455

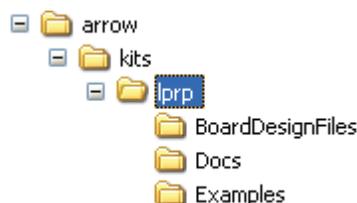
For more information, please go to
<http://www.linear.com/> and select LT3455 in the search function.

To download SwitcherCAD software please go to:
<http://www.linear.com/designtools/software/switchercad.jsp>

WHAT IS INSTALLED:

The LPRP installation program creates a directory structure for the installed files (figure below), where <path> is the selected installation directory. By default these files will be installed to:

Arrow\kits\lprp



The table below lists the file directory names and a description of their contents.

INSTALLED DIRECTORY CONTENTS

Directory Name	Description of Contents
BoardDesignFiles	Contains schematic, layout, assembly, and bill of material board design files. Use these as a starting point for a new prototype board design.
Docs	Contains the development kit documentation.
Examples	Contains the sample design files for the LPRP board.

HOW TO KEEP GOING:

The next step is to read the LPRP User Guide. This document contains a more detailed description of the following operations:

- How to download FPGA configuration files to the board
- How to measure power on the LPRP board
- How to use the example designs

Additional information on training and tutorials can be found at the Altera website:

Altera University Program: www.altera.com/universityprogram
Altera Training: www.altera.com/training