High Speed Signal Path Applications

July 13, 2011

## ADC12Dxx00RFRB - Dual 12 bit, Giga-Sample RF-sampling Signal Acquisition Reference Board

## 1.0 Introduction

The term in this document "ADC12Dxx00RFRB" specifically applies to the following reference boards: ADC12D800RFRB, ADC12D1600RFRB, ADC12D1800RFRB.

The ADC12Dxx00RFRB is an ultra high-speed signal acquisition system designed around National's ADC12Dxx00RF analog-to-digital converter. This 12-bit ADC operates at sample rates in excess of 500 Ms/s. National provides this Design Package to select customers who own one of these reference boards and wish to use its design as a starting point for a portion of their own product design.

The design package is provided under the licensing agreement in this document (which the customer agrees to by accepting this package) with certain stipulations:

- \* that the design package is provided as-is without any warranties concerning its operation as it is designed to be a design tool and not a product;
- \* that the customer will not directly productize this design and will only use it as an assistance towards the design of a different product of his own;
- \* that while National provides full application support to our customers for the purposes of designing-in our IC products, this design package is provided free of charge as a courtesy and system level design aspects of this package are not supported.

## 2.0 Contents of the package

- 1. Bill-of-Materials (BOM)
- 2. Board schematics
- 3. Board layout design
- 4. FPGA design source files (necessary source files).

The WaveVision-5 Signal Path Evaluation software, which is required to interact with the board, is provided separately.

Customer will need to provide the tools required to work with each of these items. These are:

- 1. PC with Windows XP 32-bit environment.
- 2. Allegro or OrCAD design package for schematic entry.
- 3. Allegro board design package.
- 4. Xilinx ISE

## 3.0 EVALUATION PRODUCT LICENSE AGREEMENT

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**TERMINATION**. National may terminate this license at any time for breach of any of its terms and conditions. Upon termination, the evaluation board and all copies of any software and/or documentation shall be returned to National.

**GOVERNING LAW.** This Agreement is governed by the laws of the State of California and the United States. Any claim arising out of this Agreement will be brought in Santa Clara County, CA.