



---

## **LNA input matching measured on I-sample v1.1**

**Technical Note**

---

## 0 Document Control

© 2005 Texas Instruments Incorporated. All rights reserved.

Texas Instruments Incorporated and / or its subsidiaries (TI) reserve the right to make corrections, modifications, enhancements, improvements, and other changes to its products, software and services at any time and to discontinue any product, software or service without notice. Customers should obtain the latest relevant information during product design and before placing orders and should verify that such information is current and complete.

All products are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment. TI warrants performance of its products to the specifications applicable at the time of sale in accordance with TI's standard warranty. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed. TI assumes no liability for applications assistance or customer product design. Customers are responsible for their products and applications using TI products, software and / or services. To minimize the risks associated with customer products and applications, customers should provide adequate design, testing and operating safeguards.

Any access to and / or use of TI software described in this document is subject to Customers entering into formal license agreements and payment of associated license fees. TI software may solely be used and / or copied subject to and strictly in accordance with all the terms of such license agreements.

Customer acknowledges and agrees that TI products and / or software may be based on or implement industry recognized standards and that certain third parties may claim intellectual property rights therein. The supply of products and / or the licensing of software do not convey a license from TI to any third party intellectual property rights and TI expressly disclaims liability for infringement of third party intellectual property rights.

TI does not warrant or represent that any license, either express or implied, is granted under any TI patent right, copyright, mask work right, or other TI intellectual property right relating to any combination, machine, or process in which TI products, software or services are used.

Information published by TI regarding third-party products, software or services does not constitute a license from TI to use such products, software or services or a warranty, endorsement thereof or statement regarding their availability. Use of such information, products, software or services may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose without the express written permission of TI.

### 0.1 Export Control Statement

Recipient agrees that it will not knowingly export or re-export, directly or indirectly, any product or technical data (as defined by the U.S. EU and other Export Administration Regulations) including software, or any controlled product restricted by other applicable national regulations, received from Disclosing party under this Agreement, or any direct product of such technology, to any destination to which such export or re-export is restricted or prohibited by U.S. or other applicable laws, without obtaining prior authorization from U.S. Department of Commerce and other competent Government authorities to the extent required by those laws. This provision shall survive termination or expiration of this Agreement.

According to our best knowledge of the state and end-use of this product or technology, and in compliance with the export control regulations of dual-use goods in force in the origin and exporting countries, this technology is classified as given on the front page.

This product or technology may require export or re-export license for shipping it in compliance with certain countries regulations.

## **0.2 Document History**

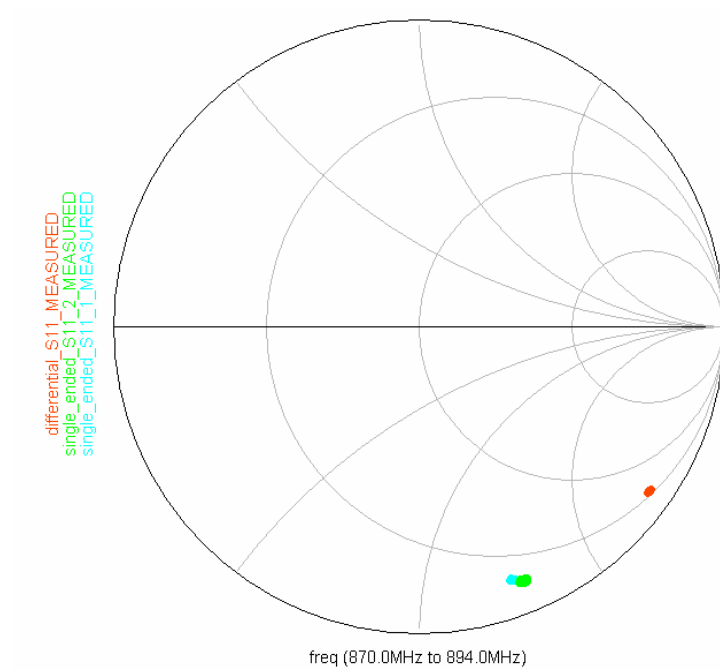
Date	Version	Status	Author
2005-08-29	001	Draft	a0918765
Initial version.			

## **0.3 References, Abbreviations, Terms**

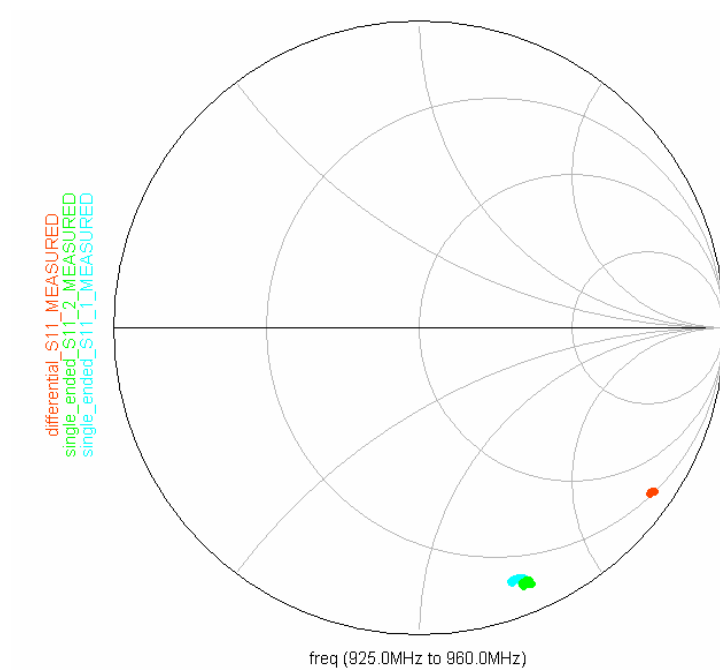
## Introduction:

The purpose of this document is to describes the de-embedded LNA input impedance of LOCOSTO receiver from S2P files measured on a I-sample v1.1.

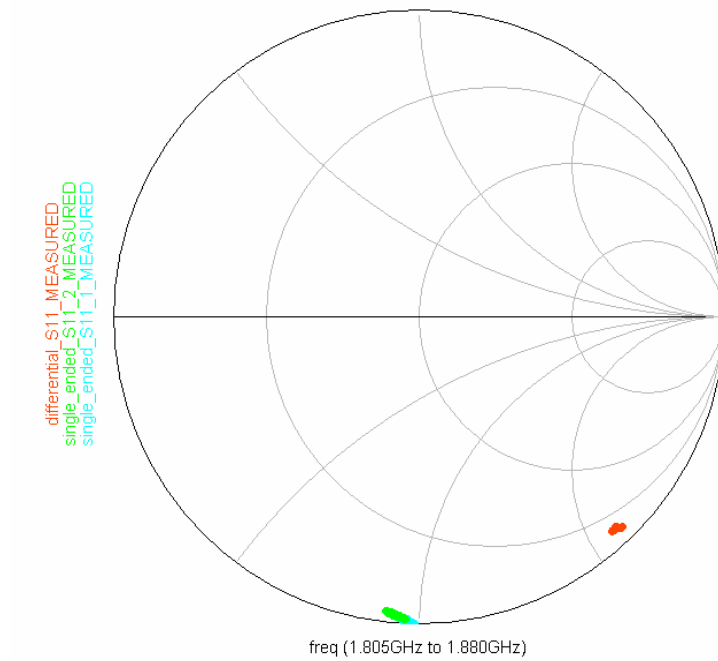
S11\_1 in blue is the single ended S11 parameters at positive input  
S11\_2 in green is the single ended S11 parameters at negative input  
S11 in red is the differential S11



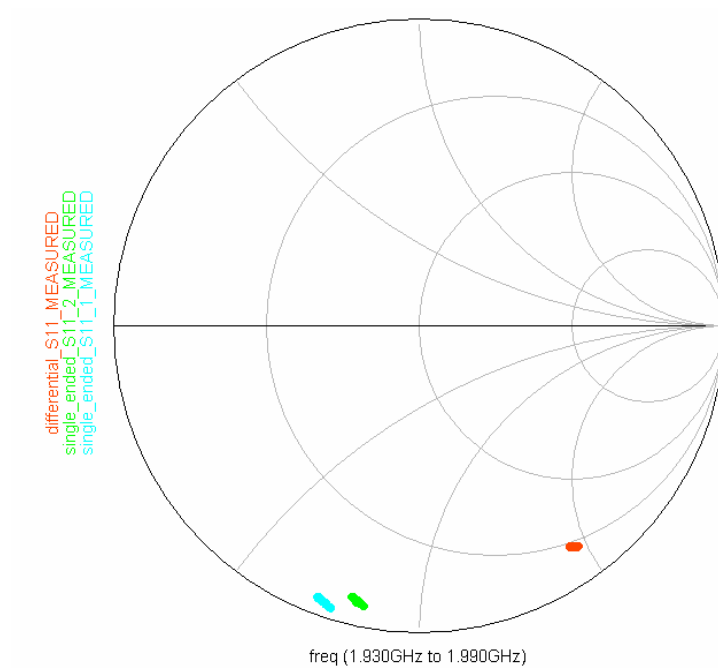
**S11 measured in GSM850**



**S11 measured in GSM900**



**S11 measured in DCS1800**



**S11 measured in PCS1900**