



NEX-NAND152CA2(SK)
NEX-NAND132CA2(SK)

NVDDR2/3 – 152/132 ball
Memory Component Interposer
For use with a Logic Analyzer or Memory
Analyzer

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TABLE OF CONTENTS

1.0 OVERVIEW	5
1.1 General Information.....	5
1.1.1 Product Concept.....	5
2.0 CONNECTING the Memory Component Interposer	5
2.1 General.....	5
2.2 Connecting to the Target under test.....	5
2.2.1 Probe attachment/D-Max Pinout.....	5
2.3 Mounting the Interposer	8
2.4 Memory Solder ball Life.....	8
2.5 Nexus Optional Solder Attach.....	8
2.6 Component Pinout	9
APPENDIX A – Memory Interposer Silkscreen.....	10
APPENDIX B – Board Dimensions	11
APPENDIX C – Socket Dimensions	12
APPENDIX D – Riser Dimensions	14
APPENDIX E – Support.....	15

TABLE OF FIGURES

Figure 1 - D-Max Pinout Table for J1	6
Figure 2 - D-Max Pinout Table for J2	7
Figure 3 - Side view of Interposer insertion into socket	8
Figure 4 - Top Side of Silkscreen	10
Figure 5 - Bottom Side Silkscreen	10
Figure 6 - Socket Dimensions with Solderballs.....	12
Figure 7 - Socket Dimensions without Solderballs.....	13
Figure 8 - Riser Dimensions	14

1.0 OVERVIEW

1.1 General Information

This Memory Component Interposer adapter has been designed to provide a high fidelity, easy to probe adapter that connects between your target Board and your memory component.

This manual covers the Nexus 152 ball NVDDR MCI which is used with 152-ball BGA memory components. Please contact Nexus for additional information.

1.1.1 Product Concept

An optional socket is available and can be used for interconnect between the target/SOC and the interposer. Without a socket, the MCI can be soldered directly to the target under test as long as there is mechanical clearance.

There is also an optional memory socket available for the MCI. This socket is installed on top of the MCI for easy insertion and removal of memory parts from the MCI.

Nexus provides an optional service for the removal of a memory component from the target under test and the re-balling of the removed memory component as well as the attachment of the riser or socket and interposer onto the user supplied target under test. This attachment is similar to soldering a BGA component onto a Board.

2.0 CONNECTING the Memory Component Interposer

2.1 General

Care should be taken to support the weight of the scope probes so that the Memory Component Interposer board is not damaged.

2.2 Connecting to the Target under test

2.2.1 Probe attachment/D-Max Pinout

A “D-Max” probe is used to connect between the target and the instrument. The following is the pinout for the D-Max connector.

Signal Name	Probe J1		Signal Name
	A1	B1	GND
DQ7_1	A2	B2	CEO_1_n
GND	A3	B3	DQ6_1
	A4	B4	GND
	A5	B5	DQ5_1
GND	A6	B6	RE WR 1
WE_CLK_1	A7	B7	GND
GND	A8	B8	
GND	A9	B9	DQ4_1
DQS_1_t	A10	B10	GND
DQS_1_c	A11	B11	RE_1_c
GND	A12	B12	CLE_1
	A13	B13	GND
	A14	B14	
GND	A15	B15	
DQ1_1	A16	B16	GND
DQ0_1	A17	B17	DQ3_1
GND	A18	B18	DQ2_1
	A19	B19	GND
	A20	B20	GND
GND	A21	B21	ALE_1
	A22	B22	GND
	A23	B23	
GND	A24	B24	
	A25	B25	GND
	A26	B26	
GND	A27	B27	

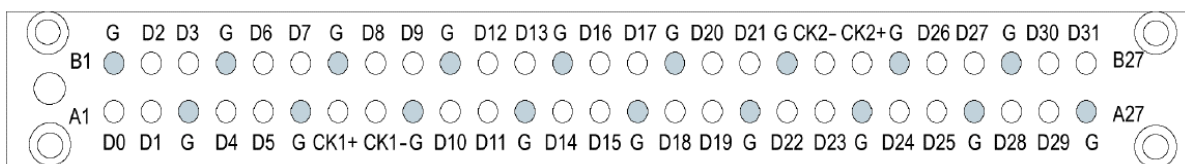


Figure 1 - D-Max Pinout Table for J1

Signal Name	Probe J2		Signal Name
	A1	B1	GND
DQ7_0	A2	B2	CE0_0_n
GND	A3	B3	DQ6_0
	A4	B4	GND
GND	A5	B5	DQ5_0
WE_CLK_0	A6	B6	RE WR 0
GND	A7	B7	GND
GND	A8	B8	
DQS_0_t	A9	B9	DQ4_0
DQS_0_c	A10	B10	GND
GND	A11	B11	RE_0_c
	A12	B12	CLE_0
	A13	B13	GND
	A14	B14	
GND	A15	B15	
DQ1_0	A16	B16	GND
DQ0_0	A17	B17	DQ3_0
GND	A18	B18	DQ2_0
	A19	B19	GND
	A20	B20	GND
GND	A21	B21	ALE_0
	A22	B22	GND
	A23	B23	
GND	A24	B24	
	A25	B25	GND
	A26	B26	
GND	A27	B27	

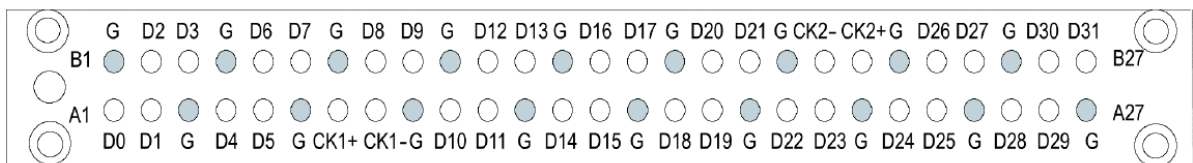


Figure 2 - D-Max Pinout Table for J2

2.3 Mounting the Interposer

The interposer ships with solderballs attached to the bottom side of interposer. Check the orientation of the Memory Component Interposer for pin 1. Orient the bottom side of interposer so that pin 1 of the device, matches pin 1 of the interposer and in turn matches pin 1 of the target. There are 4 holes in the interposer to help align the interposer. Pressfit the interposer into the target socket using the guide posts as guides and again, ensuring pin 1 lines up with pin 1 on the target. Insert the Memory Component Interposer onto the socket on the Target by pushing the interposer onto the socket as shown in Figure 3. Care should be taken to ensure that the balls on the adapter align correctly with the socket on the target.

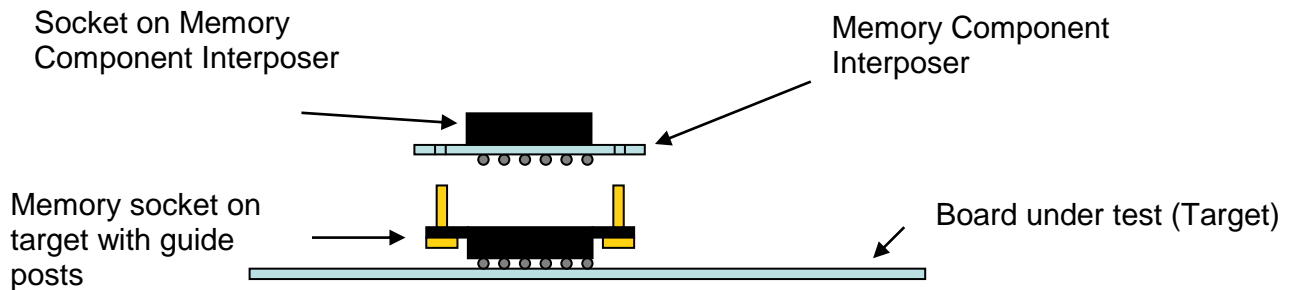


Figure 3 - Side view of Interposer insertion into socket

2.4 Memory Solder ball Life

When pressed into the sockets, the solder balls are retained by the capture cups of the socket. Solder balls should give good signal continuity for a minimum of three insertions into sockets. In Typical applications the solder balls usually last for 7 insertions.

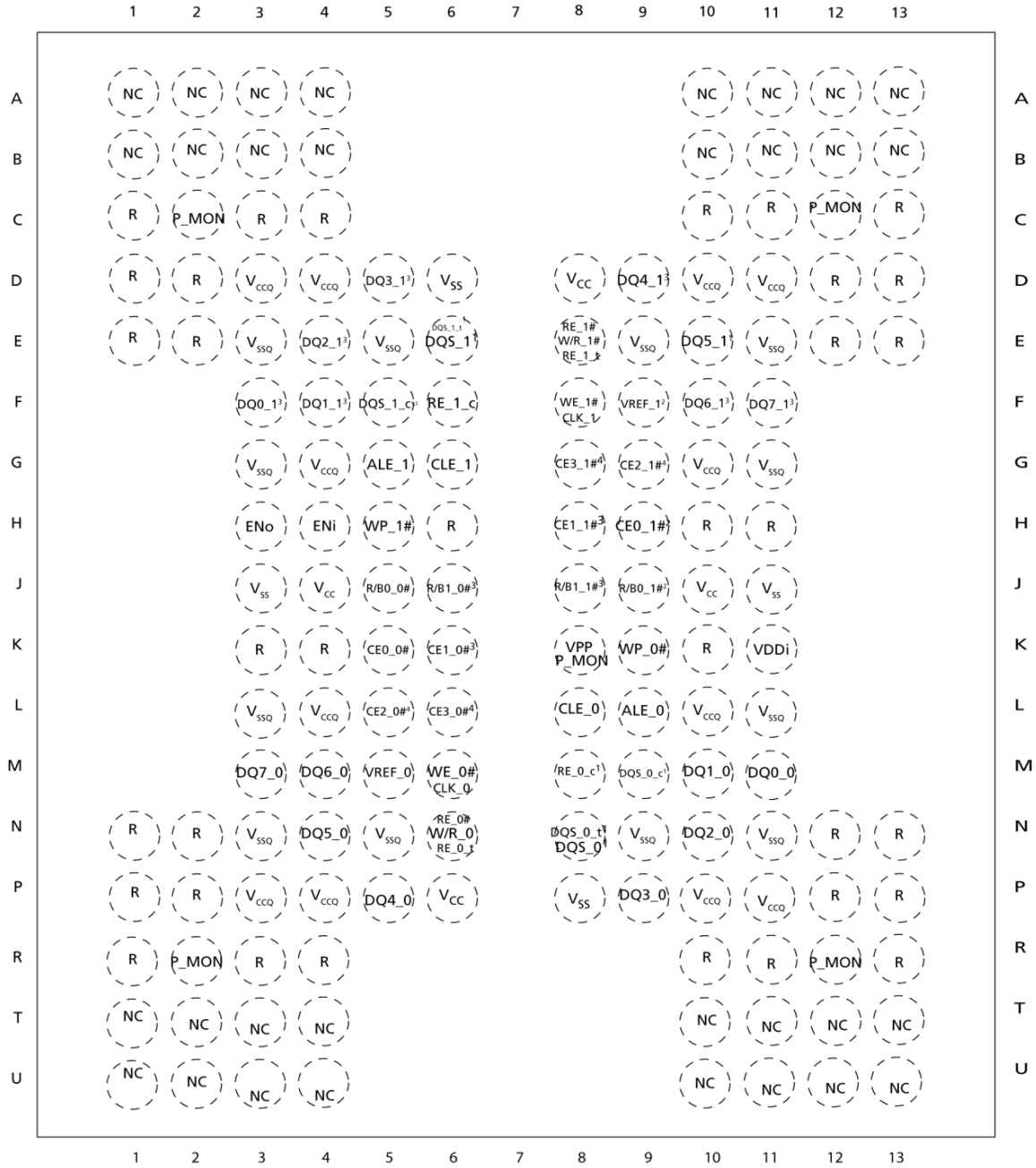
2.5 Nexus Optional Solder Attach

If you ordered the “socket attach” option (Nexus does the attachment) please fill out the sheet that came with your Component Interposer and return it with your target to the address on the sheet.

Only working, pre-tested targets can be sent for rework.

- Nexus will remove and re-ball your memory device with the correct size solder balls.
- Install the riser onto your target.
- Attach the interposer to the riser.
- Insert the memory, retest and return the adapter.

2.6 Component Pinout



APPENDIX A – Memory Interposer Silkscreen

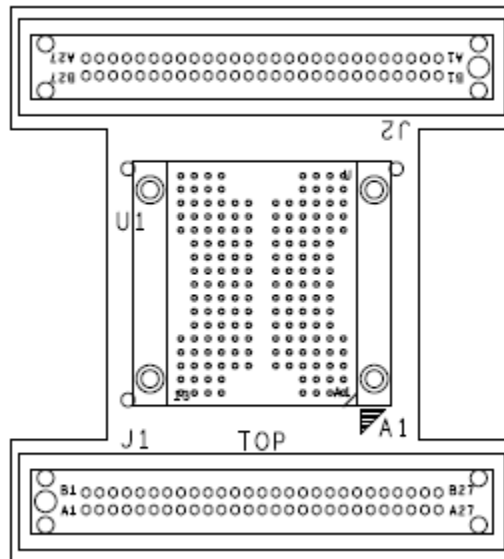


Figure 4 - Top Side of Silkscreen

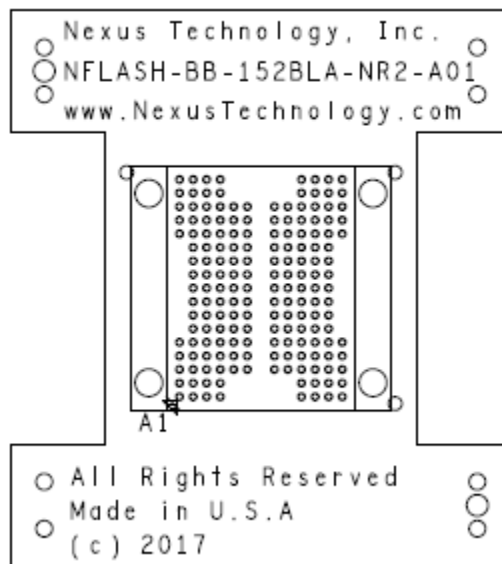


Figure 5 - Bottom Side Silkscreen

APPENDIX C – Socket Dimensions

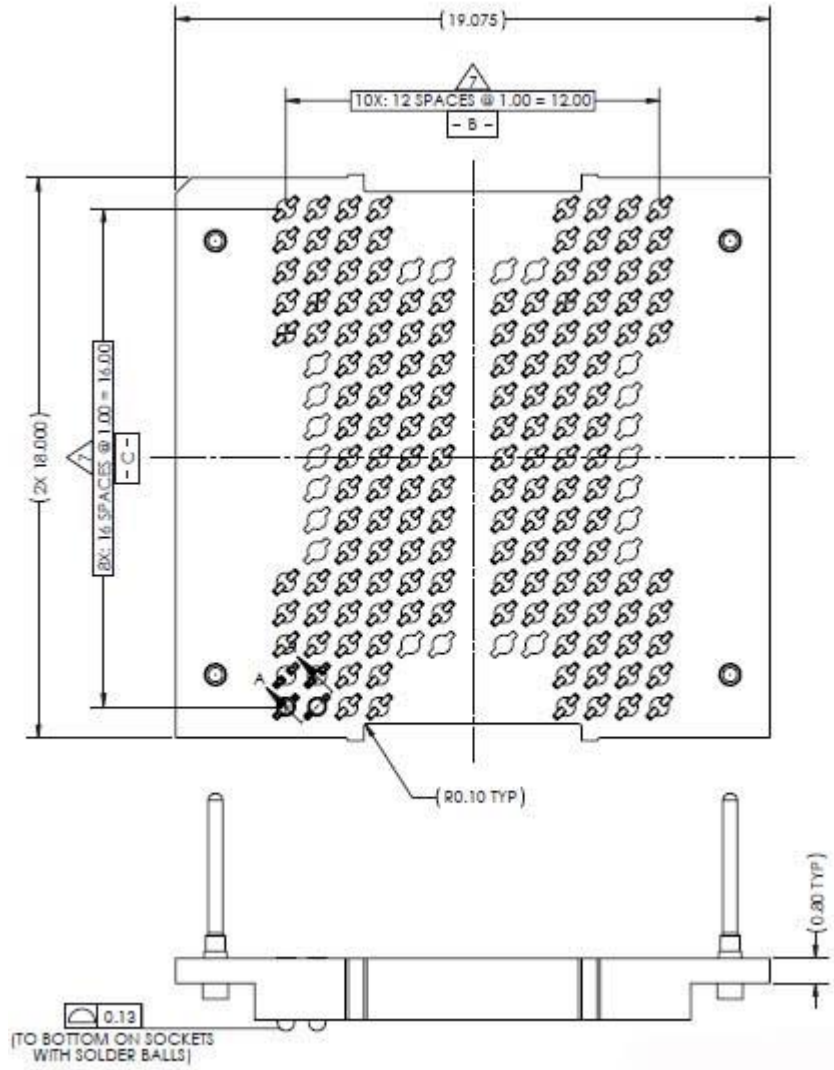


Figure 6 - Socket Dimensions with Solderballs

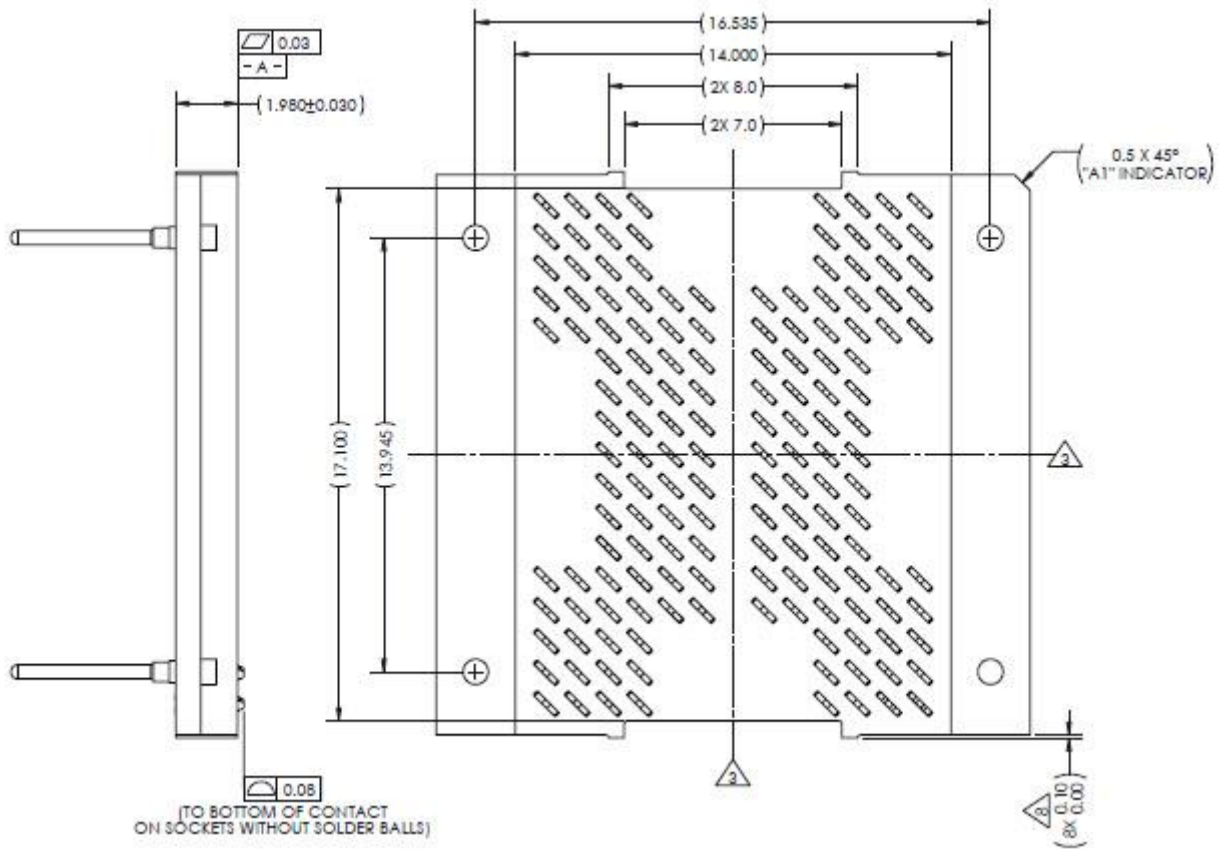


Figure 7 - Socket Dimensions without Solderballs

APPENDIX D – Riser Dimensions

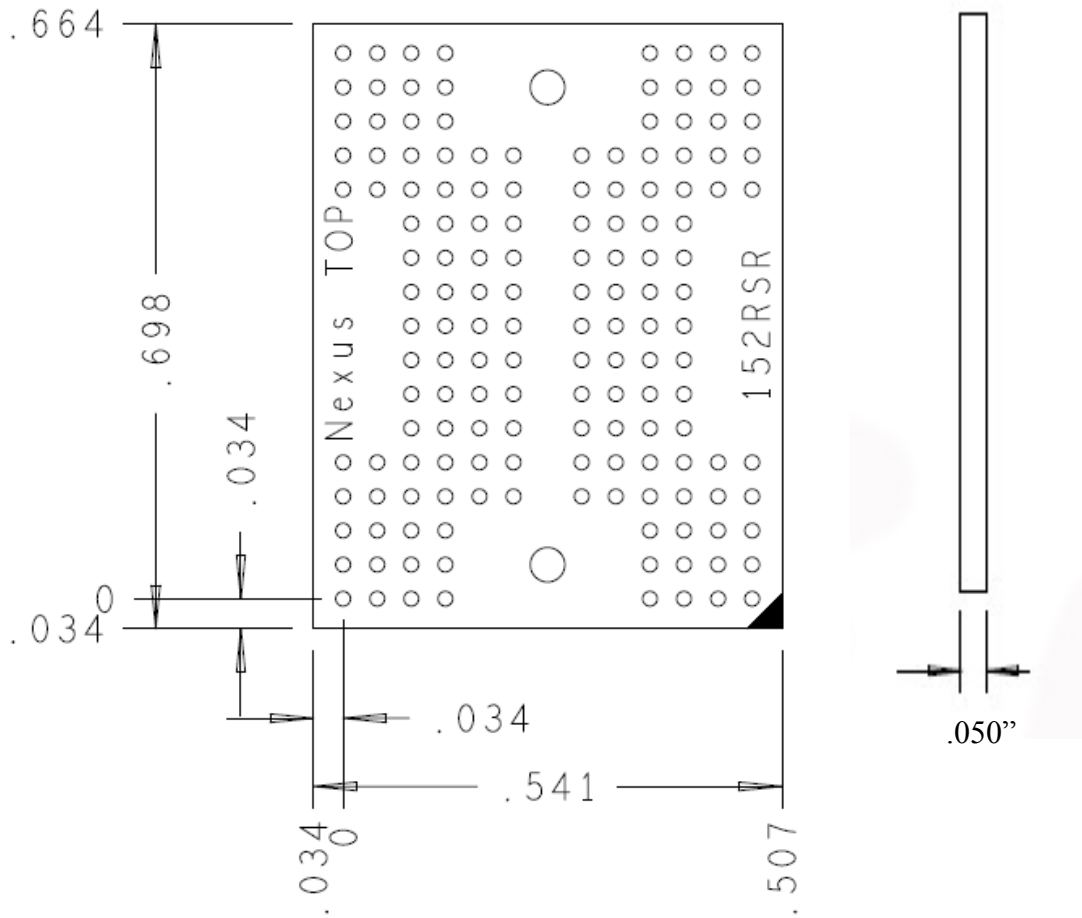


Figure 8 - Riser Dimensions

APPENDIX E – Support

About Nexus Technology, Inc.



Established in 1991, Nexus Technology, Inc. is dedicated to developing, marketing, and supporting Bus Analysis applications.

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We will try to respond within one business day.

If Problems Are Found

Document the problem and e-mail the information to us. If at all possible please forward a Saved System Setup (with acquired data) that shows the problem (if appropriate). Do not send a text listing alone as that does not contain enough data for analysis. To prevent corruption during the mailing process it is strongly suggested that the Setup be zipped before transmission.