W2639A Rework Instruction Guide – For use when W2639A scope probe board adapter is used with DDR2 BGA probe (W2631A and W2633A).

Introduction

This document provides rework information for the following Agilent products:

- W2639A scope probe adapter board

The W2639A is designed to provide high bandwidth performance to the oscilloscope with proper termination. However, for use with the DDR2 BGA probe, the VREF point should not be terminated. The rework instruction provides a workaround to correct the termination point of VREF at the W2639A scope probe board adapter.

The figure below show the overall features and connection points for the probe:

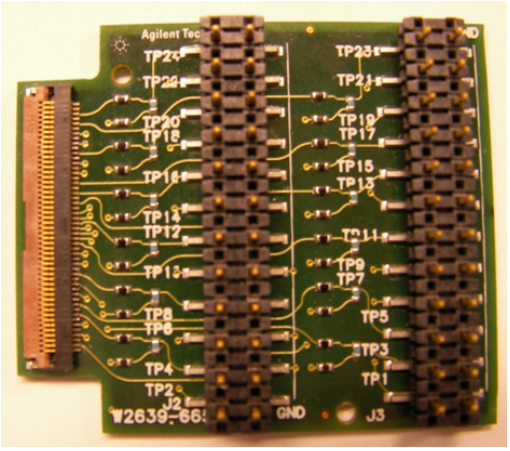

Figure 1 W2639A scope probe adapter board

Equipment required for rework

- W2639A scope probe board adapter (1 of 2)
- Soldering iron

Rework Instruction to remove VREF termination on W2639A DDR2 scope probe board adapter when use with W2631A DDR2 x16 BGA probe.

1. VREF signal is connected to the W2639A scope probe board adapter via the left flex wing of the W2631A DDR2 BGA probe on TP11 as shown in Table 1.
2. Remove the 37 .4 ohm resistor located near TP11 with a soldering iron as shown in Figure 2 to disconnect the signal from GND. This will open the path to VREF.

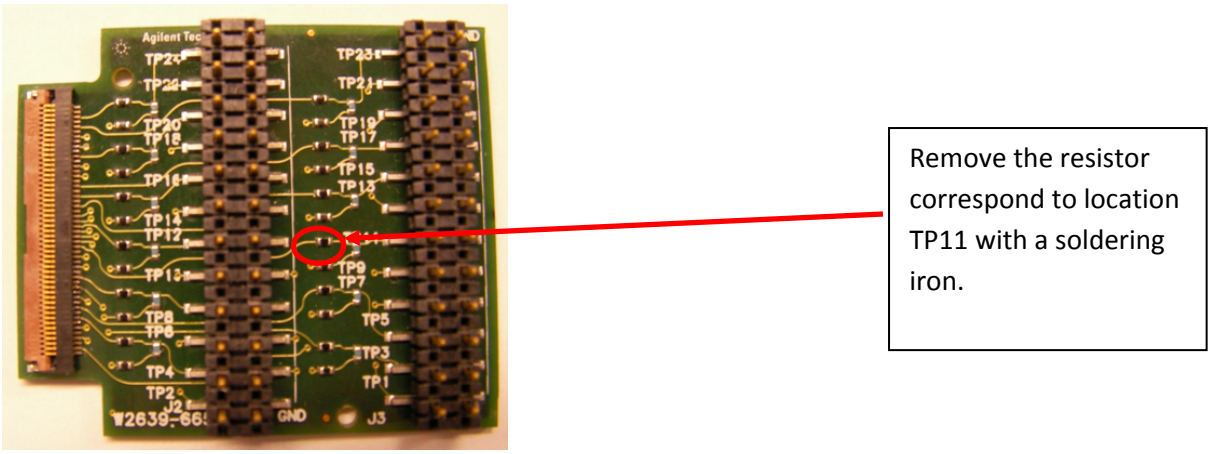

Figure 2 Location of the 37 .4ohm resistor for TP11 on the W2639A scope probe board adapter.

3. Label the reworked W2639A scope probe adapter board “LEFT”. The reworked W2639A must only connect to the left flex wing of the W2631A DDR2 BGA probe.
4. The rework instruction may be repeated for the following BGA probes with reference to the pin-out tables shown in the user manual: http://cp.literature.agilent.com/litweb/pdf/W2638-97000.pdf
    - W2631A x16 DDR2 BGA probe
    - W2633A x8 DDR2 BGA probe

    Note: Please contact Agilent to confirm the exact location of the resistor.

Table 1 W2639A BGA scope probe adapter pin-out for W2631A

Left Flex Wing						
Signal Name	Signal Name	Test Point		Signal Name	Signal Name	Test Point
GND	UDM	TP1		GND	DQ14	TP2
GND	DQ9	TP3		GND	DQ11	TP4
GND	DQ12	TP5		GND	DQ6	TP6
GND	LDM	TP7		GND	DQ1	TP8
GND	DQ3	TP9		GND	DQ4	TP10
GND	**VREF**	**TP11**		GND	CKE	TP12
GND	WE#	TP13		GND	BA1	TP14
GND	BA0	TP15		GND	BA2	TP16
GND	A1	TP17		GND	A5	TP18
GND	A10	TP19		GND	A3	TP20
GND	A7	TP21		GND	NC	TP22
GND	A12	TP23		GND	A9	TP24

Right Flex Wing						
Test Point	Signal Name	Signal Name		Test Point	Signal Name	Signal Name
TP24	DQ15	GND		TP23	DQ8	GND
TP22	DQ10	GND		TP21	DQ13	GND
TP20	LDQS#	GND		TP19	DQ7	GND
TP18	LDQS	GND		TP17	DQ0	GND
TP16	DQ2	GND		TP15	DQ5	GND
TP14	CK	GND		TP13	ODT	GND
TP12	CK#	GND		TP11	RAS#	GND
TP10	CAS#	GND		TP9	CS#	GND
TP8	A0	GND		TP7	A4	GND
TP6	A2	GND		TP5	A6	GND
TP4	A8	GND		TP3	RFU#2	GND
TP2	A11	GND		TP1	NC	GND