DSA90604A-02

S E R V I C E   N O T E

Supersedes:
NONE

DSO/DSA90000A Series Oscilloscopes

Serial Numbers: ALL

Acquisition boards which are loaded into a different back board slot than they were factory calibrated in will fail the filter user calibration because the calibration software cannot locate the filter factory calibration data.

Parts Required:

P/N	Description	Qty.

Infiniium application SW upgrade to version 1.30 or greater.

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
MODIFICATION RECOMMENDED			
ACTION CATEGORY: X ON SPECIFIED FAILURE X AGREEABLE TIME	STANDARDS LABOR: 0.5 Hours		
LOCATION CATEGORY: X CUSTOMER INSTALLABLE X ON-SITE X SERVICE CENTER X CHANNEL PARTNER	SERVICE INVENTORY: [[]] RETURN [[]] SCRAP [[]] SEE TEXT		USED PARTS: [[]] RETURN [[]] SCRAP [[]] SEE TEXT
AVAILABILITY: PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL: 09/01/09		
AUTHOR: MR	PRODUCT LINE: PL1A		
ADDITIONAL INFORMATION:			

September 4, 2008

Agilent Technologies

Situation:

Acquisition boards which are loaded into a different back board slot than they were factory calibrated in will fail the filter user calibration because the calibration software cannot locate the filter factory calibration data.

Solution/Action:

Upgrade Infiniium Baseline Application software to 1.30 or greater. Do this before performing user calibration.

Solution details:

The filter calibration data structure stored in the flash RAM contains a "Valid" entry field for each channel to indicate if the factory calibration was performed. The software which reads the filter factory calibration data can utilize this "Valid" field to determine which channel in the data structure contains the calibration factors. The following logic will be used:

For channels 1,3:
        if (channel 1 valid and channel 3 invalid) use channel 1
        else if (channel 1 invalid and channel 3 valid) use channel 3
        else return failed

For channels 2,4:
        if (channel 2 valid and channel 4 invalid) use channel 2
        else if (channel 2 invalid and channel 4 valid) use channel 4
        else return failed

Note that if an acquisition board has been factory calibrated in both slot locations using 1.20 software or earlier, the 1.30 user calibration will still fail because both channels (1,3 or 2,4) in the filter calibration data structure will have "Valid" field entries. To solve this problem in the 1.30 software, the filter factory calibration has been modified to only store the calibration data in the lower two channels of the filter calibration data structure. Now, channels 1,3 always get stored in channel 1 and channels 2,4 always get stored in channel 2. Also, the factory calibration invalidates any filter calibration data from a previous factory calibration which is stored in channels 3,4. In the rare case where an acquisition board has been factory calibrated in both slot locations using 1.20 software or earlier, the 1.30 factory calibration will need to be performed to fix the filter calibration data structure and eliminate the user calibration failure.