5DX-81B

S E R V I C E N O T E

Supersedes:
5DX-81A

5DX Series 2L, 3 and 5000 Systems

Serial Numbers: USXXXX834 – USXXXX912

5DX Digital I/O Inspection Instructions for potentially PCA shorts

To Be Performed By: Agilent-Qualified Personnel or Customer

Parts Required:

P/N	Description	Qty.
N7200-60079	Digital I/O assembly	1
or		
N7200-69079	Digital I/O assembly (Refurb)	1
N7200-84366	Service Note Label	1

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

MODIFICATION RECOMMENDED

ACTION CATEGORY:	[X] ON SPECIFIED FAILURE [X] AGREEABLE TIME	STANDARDS: LABOR: 1.0 Hours	
LOCATION CATEGORY:	ON-SITE	SERVICE INVENTORY: SEE TEXT	USED PARTS: SEE TEXT
AVAILABILITY:	End of Support	AGILENT RESPONSIBLE UNTIL: July 2006	

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ADDITIONAL INFORMATION: The N7200-60079, N7200-69079 and N7200-84366 are orderable through SPD (Service Parts Delivery) at 1-800-816-8650.
Time and material should be billed to the Customers Support Contract.
Reference the service note number in the activity description field of the SR.

Agilent Technologies

May 11, 2006

Situation:
Recent problems in the field have been discovered related to the 5DX Digital I/O. We have traced this back to a different vendor manufacturing the E7200-66529 Digital I/O PCA. The vendor used a different type of stacked DB connector than the PCA was originally designed for. This newer connector, when mounted, has the potential to short out several of the trace vias underneath the connector. There are two problems that can occur:

1. This short can affect the Right outer Panel Clear Sensor. The sensor will not change state when shorted. This leads to panel handling errors and unexpected panel handling behavior (Panel will sometimes unload internally).
2. This short can affect the Rear SMEMA TR1 LED causing it to be stuck in the on state.

Note: If the 5DX Series 2L Digital I/Os were replaced with the current version they might have the incorrect DB9 connectors, so they should also be inspected.

Solution/Action:

Note: Customers can perform the inspection of the Digital I/O and if needed Agilent Qualified Personnel should perform the replacement.

If the DGIO have either one of the following labels as shown in Photos 1 and 2 the Digital I/O has already been inspected.

Photo 1

Photo 2

If these labels are not on the Digital I/O continue with the following procedure.

These new Digital I/Os can be identified by a different style of DB connector on the PCA. To inspect a suspect Digital I/O, the front sheet metal cover must be removed to visually access the PCA. To do this, remove the (4) 8-32 Torx screws from the front panel Refer to the photo below.

To do this, remove the (4) 8-32 Torx screws, using a #15 Torx driver from the front panel Refer to Photo 3.

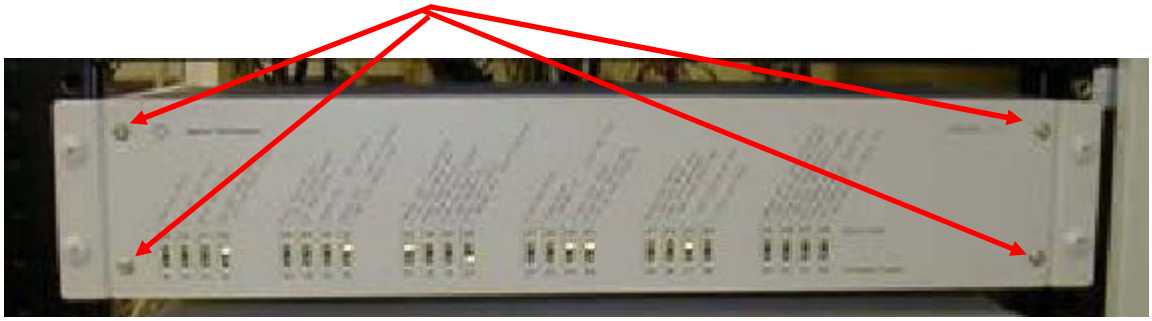
Photo 3

Once the panel cover has been removed, visually inspect the DB9 connectors in the back of the Digital I/O box (Connectors J10025 –J10028). See Photo 4 and Photo 5

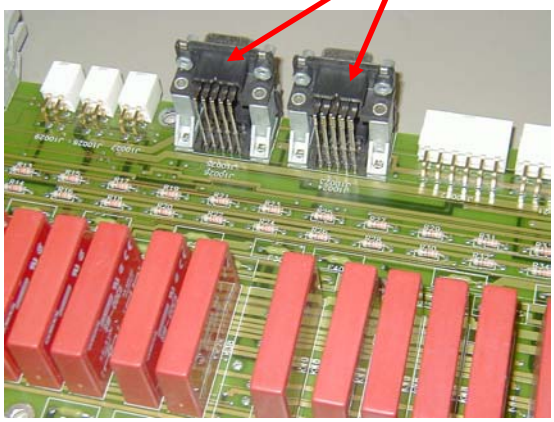

Photo 4 (Good DB9 Connectors)

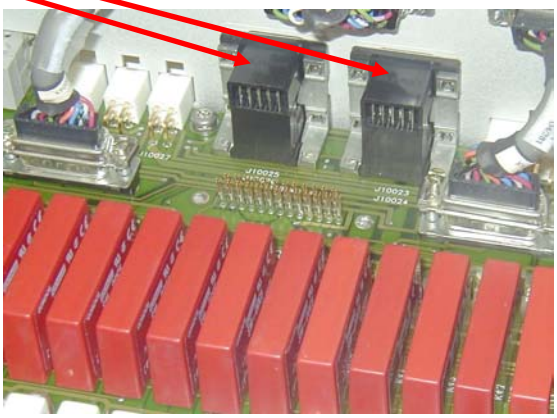

Photo 5
(Defective DB9 Connectors if no Kapton tape underneath)

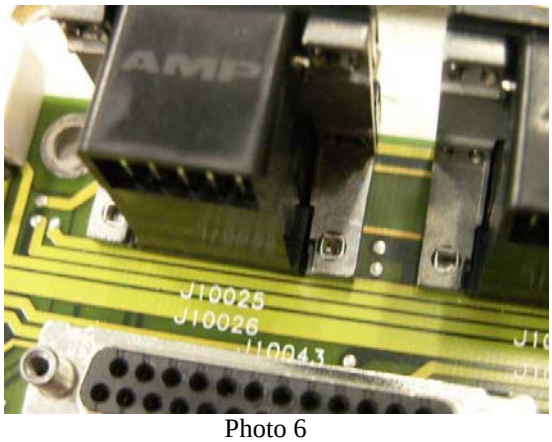

Photo 6

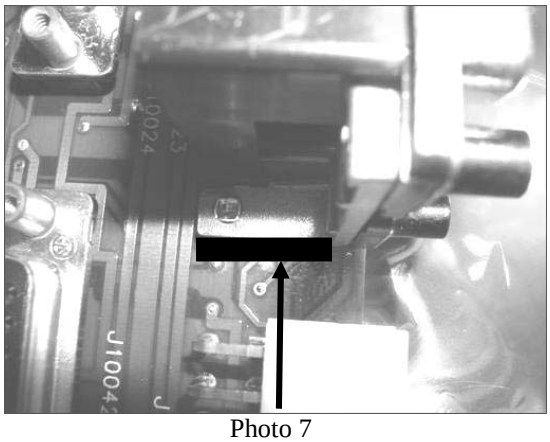

Photo 7

Any N7200-60079 and N7200-69079 (Digital I/Os) with the black AMP DB9 connectors Photo 6 and without Kapton tape underneath are defective and should be replaced by Agilent Qualified Personnel.
The defective material should be returned to SPD.

Note: Photo 7 shows the factory fix. The factory has added Kapton tape underneath the black connectors.

If the N7200-60079 or N7200-69079 (Digital I/O) has the correct DB9 connectors place a Service Note label on the Digital I/O as shown in Photo 8.

Photo 8