

N1078A-01

Modification Recommended Service Note

Supersedes:
NONE

N1078A Optical/Electrical Clock Recovery

Serial Numbers: US00000000 - US58490100

Modification available to improve Clock Recovery performance on N1078A.

Parts Required:

PN:	Description	Qty
N1076-63010	CDR Board - JSA Locking modification	1

ADMINISTRATIVE INFORMATION

ACTION	<input type="checkbox"/> ON SPECIFIED FAILURE	STANDARDS			
CATEGORY:	<input checked="" type="checkbox"/> AGREEABLE TIME	LABOR:	0.5 Hours		
LOCATION	<input type="checkbox"/> CUSTOMER INSTALLABLE	SERVICE:	<input checked="" type="checkbox"/> RETURN	USED	<input checked="" type="checkbox"/> RETURN
CATEGORY:	<input type="checkbox"/> ON-SITE (active On-site contract required)	INVENTORY:	<input type="checkbox"/> SCRAP	PARTS:	<input type="checkbox"/> SCRAP
	<input checked="" type="checkbox"/> SERVICE CENTER		<input checked="" type="checkbox"/> SEE TEXT		<input type="checkbox"/> SEE TEXT
	<input type="checkbox"/> CHANNEL PARTNERS				
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL:	PRODUCT'S SUPPORT LIFE		
	<input checked="" type="checkbox"/> Calibration Required	PRODUCT LINE:	PL8F		
	<input type="checkbox"/> Calibration NOT Required	AUTHOR:	NC		

ADDITIONAL INFORMATION:

Service for the N1078A is available in the Factory only. All service must be performed at the Factory, not the Service Center.

Situation:

For N1078A with Option JSA, when using JSA in Jitter Mode and turning on the Jitter Optimization feature for Clock Recovery Emulation, Clock Recovery Lock may be lost. This is most likely to occur with PAM4 signals at higher data rates. When Jitter Optimization is enabled, a calibration step signal is used to characterize the loop response. Before this modification, it was possible for the calibration step to cause the clock recovery to lose lock for PAM4 signals at higher data rates. Loss of clock recovery lock is accompanied by an error message indicating “Clock recovery has lost lock.” Although this improvement is seen when using Option JSA, this modification will be performed on all N1078As, even if the unit doesn’t currently have Option JSA.

A resistor modification was made to the CDR board and is available to reduce the likelihood of loss of clock recovery lock and to improve overall performance.

This upgrade is to be performed at no additional charge to the customer. The customer may be charged for other services provided, such as repair or calibration, per the usual process.

Solution/Action:

Units received for service, repair or calibration, shall undergo As Received testing according to the regular service procedure.

Perform CDR board (N1076-63010) “**JSA Locking**” modification and the customer shall not be charged for parts or labor associated with this upgrade.

Revision History:

Date	Service Note Revision	Author	Reason for Change
11 Jan 2019	01	NC	As Published