# AnyMedia ${ }^{\text {® }}$ AccessSytem Out-of-Service Replacement of SLC ${ }^{\circledR}$ Series 5 Carrier System Dual Channel Bank with AnyMedia FAST ${ }^{\text {TM }}$ Shelf in 80/82 Type Bulk Powered Cabinets (Using the 108818717 Adapter Kit) 

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## Warranty

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## Ordering Information

To order this document, refer to the How to Order This Document paragraph on page 3.

## Customer Assistance and Technical Support

The Lucent Technologies Regional Technical Assistance Center (RTAC) provides a technical assistance telephone number that is monitored 24 hours a day. For technical assistance on the implementation of this ECP, call 1-800-CAL-RTAC (225-7822).

## Acknowledgment

This document was created by the Customer Technical Services (CTS) organization at the Lucent Technologies Merrimack Valley Works in North Andover, Massachusetts USA. Refer to the How to Comment on This Document paragraph on page 3 if you wish to comment on this ECP.

# AnyMedia ${ }^{\circledR}$ Access System 

# Out-of-Service Replacement of SLC ${ }^{\circledR}$ Series 5 Carrier System Dual Channel Bank with AnyMedia ${ }^{\circledR}$ Access System FAST ${ }^{\text {TM }}$ Shelf in 80/82 Type Bulk Powered Cabinets 

## MIP 363-211-109

About This Document

Purpose

This Modification Implementation Procedure (MIP) document provides procedural instructions for replacing an out-of-service SLC ${ }^{\circledR}$ Series 5 Carrier System Dual Channel Bank (DCB) (or space previously vacated by a DCB) with an AnyMedia ${ }^{\circledR}$ Access System (AMAS) FAST ${ }^{\text {TM }}$ Shelf in $80 / 82$ Type Bulk Powered (BP) Cabinets in order to provide up to 120 lines of ADSL/POTS plus 72 lines of POTS only.

This document contains the following major sections:

- Preconditioning
- Implementation Procedure
- Trouble Clearing
- Post-Conditioning

Intended Audience

This MIP shall be implemented by Lucent Technologies installation personnel or the customer's craftpersons. The document should be available to support personnel, such as, Lucent Technologies Regional Technical Assistance Centers (RTAC).

## Reason for Reissue

Not applicable, first issue.

## Safety Instructions

## Basic Safety Precautions

When using telecommunications equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to personnel.
n Read and understand all instructions.
n Follow all warnings and instructions that are marked on the product.
n Installation and maintenance procedures must be followed and performed by trained personnel.

## Admonishments

There are three levels of admonishments: danger, warning, and caution.

A Danger Message indicates the presence of a hazard that WILL cause death or severe personal injury if the hazard is not avoided.

WARNING:
A Warning Message indicates the presence of a hazard that CAN cause death or severe personal injury if the hazard is not avoided.

1 CAUTION:
Indicate the presence of a hazard that WILL or CAN cause minor personal injury or property damage if the hazard is not avoided. Caution is also used for property-damage-only accidents. This includes equipment damage, loss of software, or service interruption.

## Electro-Static Discharge (ESD) Considerations

To reduce the possibility of ESD damage personnel should always ground themselves using approved and tested wriststraps while handling circuit packs referenced in this document. If grounding jacks are not available, an alligator clip adapter enables connection to bay or cabinet frame ground.


#### Abstract

1. CAUTION:

Industry experience has shown that all integrated circuit packs can be damaged by static electricity that builds up on work surfaces and personnel. The static charges are produced by various charging effects of movement and contact with other objects. Dry air allows greater static charges to accumulate. Higher potential are measured in areas with low relative humidity, but potentials high enough to cause damage can occur anywhere.


## Related Documentation

## Practices/Drawings

| Drawing/Document | Description |
| :--- | :--- |
| $631-600-246$ | 80A-BP Cabinet Description |
| $631-600-250$ | 80D-BP Cabinet Description |
| $631-600-243$ | 80E-BP Cabinet Description |
| $631-600-263$ | 80G-BP Cabinet Description |
| $631-600-290$ | 82A, D, G Cabinet Description |
| ED7C716-30 | 80D-BP Cabinet Assembly |
| ED7C703-30 | 80E-BP Cabinet Assembly |
| ED7C755-30 | 80G-BP Cabinet Assembly |
| ED1T298-01 | 82A Cabinet Assembly |
| ED1T299-01 | 82D Cabinet Assembly |
| ED1T300-01 | 82G Cabinet Assembly |
| SD-7C175-01/02 | 80D-BP Appl. Schematic |
| SD-7C158-01 | 80E-BP Appl. Schematic |
| SD-7C191-01 | 80G-BP Appl. Schematic |
| SD-1T298-01 | 82A Appl. Schematic |
| SD-1T299-01 | 82D Appl. Schematic |
| SD-1T300-01 | 82G Appl. Schematic |
| NPT-007 | ED7C704-30 Bulk Power Plant in 80D or 80E Cabinet |
| $363-211-103$ | AnyMedia Access System Documentation (CD-ROM) |
| $632-205-200$ | 710 Connector System |
| $167-102-100$ | CPS 4000 Manual |
| $631-600-254$ | RTS 60 Power System |

NOTE:
The above documents are not required for implementing this procedure and are simply listed for informational purposes should they be required.

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## How to Order This Document

To obtain additional copies of this Modification Implementation Procedure contact the Lucent Technologies Customer Information Center (CIC). Telephone the following number(s):

Lucent Technologies Documentation: (800)-852-3688 or (317)-322-6416

## How to Comment on This Document

Complete the feedback form at the front of this document or, if it is missing or not furnished, use the facsimile number below to make any comments on this document known to the MIP writer.

1-978-960-5786

## General Description

Scope

This procedure will be used to remove an unused SLC Series 5 DCB in 80/82 Type BP Cabinets, if not previously removed, and replace it with an AnyMedia Fast Shelf (using DCB wiring interfaces) and 6CQ Fan Unit to provide up to 120 lines of ADSL/POTS plus 72 lines of POTS only.

## Coordination

Not required

Type of Change

## Software, Hardware, Firmware

This change affects only Hardware

| SOFTWARE | HARDWARE | FIRMWARE |
| :---: | :---: | :---: |
|  | X |  |

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## Equipment Affected

Systems Affected

| System | SLC Series 5 Carrier System |
| :--- | :--- |
| System | AnyMedia Access System (AMAS) |

## Units Affected

| Unit | J1C182A( )-1 SLC Series 5 Carrier System DCB |
| :--- | :--- |
| Unit | J1C282AC-1, L2 AnyMedia FAST Shelf |

Software Release Information

This information is not required in this change procedure.

## Installation Requirements

## Training

The person performing this procedure must be properly trained and reasonably familiar with the SLC Series 5 and AnyMedia Systems.

## Installer Information

Two installers or craft person can accomplish this change in approximately two hours (estimated).

## Technical Support

If any of the steps specified in this procedure cannot be completed as indicated, call the next level of support or the Lucent Technologies Regional Technical Assistance Center (RTAC) at the following phone number for assistance.

RTAC: 1-800-CAL-RTAC (225-7822)

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## Risk Assessment

## Service Risk Assessment

## Rating:

LOW This procedure has a LOW service risk rating, since there is NO potential service loss if this procedure is not implemented immediately. This procedure can be implemented at any time as desired by the Customer.

## Implementation Risk Assessment

## Rating:

LOW This procedure has a LOW implementation risk rating, since there is NO potential for an unplanned service interruption to the end customer, if any procedural deviations or procedure specific equipment failures occur during the procedure. Since this procedure requires a DC circuit breaker change out, for certain configurations, there will be a service outage, for up to 192 customers, if the AnyMedia shelf is being added to a cabinet bay that contains a working SLC Series 5 DCB powered by a CPS4000 Power System. If no working DCB is present there will be no outage.This procedure can be performed at any traffic period as determined by the Customer.

## Time Estimates

## Procedure Time

The following chart provides time estimates for each phase in this procedure, and the actual time may vary slightly due to experience.

| Preconditioning | $1 / 2 \mathrm{hr}$. |
| :--- | :---: |
| Implementation Procedure | 1 hrs. |
| Post-Conditioning | $1 / 2 \mathrm{hr}$. |
| Backout Procedure | $\mathrm{n} / \mathrm{a}$ |

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## Out-Of-Service Time

Should it be the case, the maximum out-of-service time for a circuit breaker change out and DCB recovery is estimated to be 10 minutes.

## Items Required to Implement Change

The list of required equipment and tools for this procedure is shown below with appropriate notes defined at the bottom of the table.

| Code | Qty | Note | Description |
| :---: | :---: | :---: | :---: |
|  | 1 | L | ESD Wrist strap |
| 102450574 | 1 | L | 216C Tool for cabinet door (80 Type Cabinets) |
| 840841324 | 1 | L | Special tool for cabinet door (80/82 Type Cabinets) |
| 402321490 | 1 | L | C-Bridge Removal Tool (for opening 710 Connector) |
| 402490064 | 1 | L | L-Connector Presser Tool (for engaging 710 Connector) |
| 103062709 | N/A | D | 710-BC1-25 Bridging Module |
| 103062717 | N/A | D | 710-SC1-25 Splicing Module |
|  | 1 | L | Screw holding (split blade) medium screwdriver (optional) |
|  | 1 | L | 5/16" Hex Head Nut Driver |
|  | 1 | L | Digital Vot-Ohm Meter (DVOM) |
| J1C282AC-1,L2 | 1 | C | AnyMedia FAST Shelf |
| 108818717 | 1 | C,E | SLC/FAST RETRO (Combo) Kit |
| 407098490 | A | C | KS-23136 L38 Circuit Breaker (30 AMP) |
| Optional | A | C | AMAS Circuit Packs |
|  | 1 | L | Portable Lighting |
|  | 1 | L | Tent (to cover work area in the event of inclement weather) |
|  | A | L | Work Area Protection (cones, signs, etc.) |
| ITE-6675 | 1 | L,B | Continuity Test Set |
| ITE-7079 | 1 | L,B | Cable Adaptor (C407692540) Inst. Order \# 33707900 |

## NOTES:

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C = The item shall be supplied by the customer (or Lucent as p/o customer order).
$\mathrm{L}=$ The item shall be provided by Lucent Installation or customer installation team.
$\mathrm{A}=$ Use and/or quantity site dependent.
B = The ITE test equipment is only available to Lucent Technologies installers.
D = Replacement 710 Connectors listed for information only in case existing connectors are damaged.
$\mathrm{E}=$ For complete kit stocklist see table in Anymedia FAST Shelf Installation section.

## Preconditioning Procedure

## Description

The steps in this section shall be performed so that the equipment, the personnel, and the ancillary systems, such as, alarm centers, are ready for the change.

## Precautions

In order to maintain the integrity of this procedure do NOT alter or change any portion of the change procedure with out first contacting the Lucent Technologies Technical Support Organization (TSO) through the RTAC Support Hotline.

## $\equiv$ NOTE:

ESD precautions must be followed whenever performing any activity on the SLC Series 5 or AnyMedia Access System.

Procedure

## $\equiv$ NOTE:

Use the check boxes or the lines to check off the steps as you complete them. Use the $\mathbf{C}$ and I to identify whether the Customer or the Installer is to perform the step. Circle the appropriate letter.

C I $\qquad$
Step 1: Verify that a site survey was performed and that all criteria to perform this procedure was met. This document is not intended to be instructional regarding the site survey but, does, for completness, list the following items that must be addressed:

- The cabinet must be a 80 or 82 type arranged to accommodate a 13 " equipment depth.
- The cabinet must be equipped with a DDM-2000 (or equivalent fiber mux) with a OC-3 or OC-12 interface with DS3 capacity available.
- The power supply must be bulk power with adequate capacity.
- An unused, unequipped bank or an empty space that was pre-wired for a SLC Series 5 DCB.


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C I $\qquad$
Step 2: Review the entire change procedure.
C I
Step 3: Verify that all the correct equipment to perform the change, and that all the proper tools are available.

CI_
Step 4: Schedule the installation of this change with the customer representative.
c I__ $\square$
Step 5: The ESD Strap must be worn at the 80/82 Type BP Cabinet during any operations on the system involving the electronics.

CI_ $\square$
Step 6: Notify the appropriate Customer Representative before beginning this procedure on the 80/82 Type BP outside plant RT cabinet, in order to secure the necessary approval and to determine if customer wishes to be present when the change is performed.

C
Step 7: Proceed to the next paragraph "Implementation Procedure".

## Implementation Procedure

## Description

The following procedure assumes that both an unused, unequipped DCB (target bank) and its associated wiring is present in the 80/82 Type BP cabinet. If the wiring is present and the DCB has already been removed proceed to AnyMedia FAST Shelf Installation.

## Cabinet Entry

## $\Longrightarrow$ NOTE:

Use the check boxes or the lines to check off the steps as you complete them.

C I $\qquad$
Step 1: To open the cabinet doors for equipment access, perform the steps below. Do not open battery compartment door. See Figure 1.


Figure 1. Typical 80( )-BP Bulk Power Cabinets

CI $\quad \square$
Step 2: Obtain the Special Hex Key (Comcode 846244168) and 216C Tool (Comcode 102450574).

C
Step 3: To open a 80 Type Cabinet's electronic doors, insert the 216C tool and special hex key and turn both counterclockwise (see Figure 2). Open the door(s) until they lock in the open position. For a 82 Type Cabinet use only the hex key and the cabinet's door handles.


Figure 2. Accessing 80 Type BP Cabinet Doors (typical)

C I $\qquad$ Step 4: Opening the outer door(s) of the cabinet (either side) will activate an intrusion alarm. Immediately deactivate this alarm by first locating the microswitch on the bottom of the electronics compartment and then pulling the switch plunger out (toward the door) to its detent position.

## Target Bank Removal

## Description

The following procedures cover the physical removal of the SLC Series 5 DCB from the 80/82 Type cabinet.

## A caution:

The target bank must be out of service, and will normally be un-equipped with plug-in units. If it is equipped with plug-ins (fully or partially) there is some risk that it could be in service. Removal procedure should not proceed until it has been verified, with the customer, that the bank is not in service. This cannot be determined at site as all the indicator lights are normally extinguished on both an in-service as well as an out-of-service DCB.

C I $\qquad$
Step 1: Locate the target DCB, identified in the work order and verify that no plug ins are present. Remove the vertical duct covers on either side of it. Slotted head pan screws need only to be loosened in that the covers are equipped with slotted keyholes.

C I__ $\quad \square_{\text {Step 2: }}$ On left side of target bank, in the vertical duct, locate and expose (do not open) the following 710 connected VF cable assemblies:

| P/J 101BL | $P / J 101 W$ |
| :---: | :---: |
| $P / J 102 B L$ | $P / J 102 W$ |
| $P / J 103 B L$ | $P / J 103 W$ |
| $P / J 104 B L$ | $P / J 104 W$ |
| $P / J 105 B L$ | $P / J 105 W$ |
| $P / J 106 B L$ | $P / J 106 W$ |

It is recommended that the blue and white bank cables be secured, in separate bundles (4), using tie-wraps, both on the DCB side and cabinet side, to make identification, handling and future reconnection easier in later steps.

C I $\qquad$ Step 3: At the target bank locate the VF and DS1 710 connectors, previously segregated in Step 2, and while using the C-Bridge removal tool, separate P/J101BL, P/J102BL, P/J103BL, P/J104BL, P/J105BL, P/ J106BL, P/J101W, P/J102W, P/J103W, P/J104W, P/J105W and P/ J106W cable assemblies.
c I_ $\square$
Step 4: At this point the cables, in bold, in the following table will be disconnected in the following steps. Cables not in bold have been previously disconnected.

Table 1. RT Cables

RT Channel Bank Cable Connections

| P/J\# | Function | P/J\# | Function |
| :---: | :--- | :---: | :--- |
| J101BL | VF (1-25) Blue Bank | J105BL | DS1 Receive Blue Bank |
| J101W | VF (1-25) White Bank | J105W | DS1 Receive White Bank |
| J102BL | VF (26-50) Blue Bank | J106BL | DS1 Transmit Blue Bank |
| J102W | VF (26-50) White Bank | J106W | DS1 Transmit White Bank |
| J103BL | VF (51-75) Blue Bank | J108A(N) | -48V Power to Bank |
| J103W | VF (51-75) White Bank | J108B(N) | 20Hz Ringing to Bank |
| J104BL | VF (76-96) Blue Bank | J305 | Miscellaneous Pair Panel |
| J104W | VF (76-96) White Bank |  |  |

C I $\qquad$ Step 5: In right duct locate J305 (a dangler from the bank) and disconnect it from P305 (cabinet wiring). Note that if J305 is not connected to P305 ignore this step.

C I $\qquad$
Step 6: Also in right duct locate auxillary connector bracket (usually mounted alongside an upper DCB). This bracket mounts connectors terminating cables from both the upper and lower DCBs (power and ringing) and are mounted adjacent to the upper bank.

## A. CAUTION:

Connectors on this bracket carry power and ringing voltages. Use care in securing bracket so terminals do not short out.

## $\equiv$ nOTE:

This bracket may not be present in all arrangements in which case identical in-line connectors will be found.

Step 7: Disconnect, in this order, P108A-(N) (power) on bank dangler from J108A-(N) of cabinet wiring and P108B-(N) (ringing) on bank dangler from J108B- $(\mathrm{N})$ of cabinet wiring for the DCB being removed.

## 1. CAUTION:

Power and ringing voltages may be present on these connectors.Do not attempt to open cabinet DC breakers as some breakers power both an upper and lower bank and a subsequent power loss would result in a service outage.

## NOTE:

Since these danglers will be removed with the DCB make sure no other cables are dressed or tie wrapped to them.

C I
Step 8: Make sure the remaining connectors on the connector bracket are fully engaged.

C I $\qquad$
Step 9: The next three steps pertain to the physical removal of the connector bracket (if present) to allow the removal of an upper DCB. If removing a lower DCB skip these steps.

C I__ Step 10: Remove the cabinet end of the green ground wire from the auxiliary

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C I $\qquad$ Step 11: Loosen 2 hex head slotted 5/16" $12-24 X 1 / 2^{\prime \prime}$ screws holding the auxiliary connector bracket with conventional slotted screwdriver or nut driver. Remove screws with split blade (starter) screwdriver and set screws aside.

## CAUTION:

Cover any exposed terminals on the connector bracket with tape. A short of 48VDC to ground will trip the cabinet bay circuit breaker, which could, if an active DCB is in the bay, disrupt service to up to 192 customers.

CI $\quad \square$
Step 12: Position bracket aside to facilitate DCB removal. If necessary use tiewrap or tape. Make sure other connectors are fully engaged.

C $\qquad$ Step 13: At upper right corner of DCB note two black ground straps from bank terminated on cabinet upright. Remove screw, holding both wires to cabinet upright, and set aside.

## NOTE:

Other items may require removal for bank removal, such as cable brackets, left side auxiliary bracket, etc. depending on the specific DCB being removed. Inspect area and remove these items as required.


Step 14: The SLC Series 5 DCB has eight 12-24X1/2" mounting screws. Loosen all eight. Remove the upper screws on both sides and replace same with threaded support studs (guidepins). Remove remaining screws while supporting the bank in place.

## NOTE:

Guide pins are provided with the FAST shelf mounting hardware.

C I $\qquad$
Step 15: Carefully lift bank out and off support studs and set aside.

## AnyMedia Fast Shelf Installation

## Description

The following procedures will cover the physical mounting of the J1C282AC-1, L2 AnyMedia FAST Shelf as well as a 6CQ Fan Assembly and 111A Fan Control Unit.

C I $\qquad$
Step 1: The FAST shelf may be configured for single point or multipoint grounding by the engagement or disengagement of studs located on the shelf backplane. The FAST shelf default is mesh grounding with the hex head grounding studs installed. Since all installations will involve this method of grounding verify that the studs are engaged. See Figure 3.


Figure 3. J1C282AC-1 FAST Shelf Backplane (Rear View)

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C I $\qquad$ Step 2: Verify that the adjustable mounting brackets on the FAST shelf are arranged for front mounting (default position). See Figure 4.


Figure 4. FAST Shelf Left Side Mounting Bracket

CAUTION:
A SLC Series 5 DCB, when front mounted, in a cabinet or bay, protrudes 7" to the rear of the mounting surface. The FAST shelf protrudes 6 " to the rear but requires an additional 2 1/2" to accommodate backplane connectors and cables. Before mounting the FAST shelf measure the available space and, if insufficient, halt the procedure and notify Lucent support team.

C I $\qquad$ Step 3: The J1C282AC-1, L2 FAST shelf is equipped with dangler cables (connectorized extension cables from backplane connectors providing front access). See Figure 5 Sketch A for original complement of danglers. In order to minimize duct congestion unused danglars will be removed in the next step. See Figure 3 and 5 (Sketch B \& C).


SKETCH C (Dangler Identification)

Figure 5. Modification of Dangler Cables Provided with J1C282AC-1, L2 FAST Shelf

C I
Step 4: Remove the following cables:

- ED7C818-31 G4 on J104
- ED7C818-31 G3 on J102
- ED7C818-31 G18 on J110
- ED7C818-31 G5A on J106A
- ED7C818-31 G17 on J105
- ED7C818-31 G8A on J111A

C I__ Step 5: Locate FAST danglers for P11 and P2 on the top right side of the shelf.

C I _ $\quad \square$ Step 6: Locate, on the left side of the FAST shelf (as viewed from the front), the two green/yellow ground wires, one attached to the left hand mounting bracket and the other coming out of the left end of the FCM. Both of these leads should be attached to the left upright, using the FAST shelf mounting hardware in the step below.

## 三 NOTE:

In the following section "AnyMedia FAST Shelf Wiring" you will be instructed to run two 20' ED7C829-31 G1C coaxial cables from the faceplate of a AFMDS3 (to be installed later) in the AP16 position of the FAST shelf to a DSX3 or DS3 MUX. This can present wiring access problems depending on what side of the cabinet the DSX3 or DS3 MUX is located on and how much equipment is in the cabinet. In addition, if the MUX is a DDM-2000 the customer may equip it with BBG19 DS3 plug-ins with faceplate BNC connectors or use BBG4 plug-ins which require the coaxial cables to be connected to BNCs on the DDM-2000 backplane. If the cabling described above appears to be a future problem, the installer should consider any advantage he may have at this time, prior to installing the FAST shelf, to run the coax and/or gain access to the rear (backplane) of a DDM-2000. If proceeding with the DS3 cabling at this point see Step 7 below for the cables and Steps 17 thru 20 in the wiring section.

C I__ $\square_{\text {Step 7: Mount FAST shelf in cabinet using the studs (guide pins) to position }}$ the shelf. The studs are positioned on the first available holes (of the FAST shelf brackets), on either side. Use three 12-24X1/2" screws per side (seven mounting screws are provided with shelf). Temporarily

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dress or hold dangler cables in forward position to eliminate interference when mounting FAST shelf. See Figure 5 Sketch B for applicable danglers.
$\Longrightarrow$ NOTE:
The criteria for mounting the FAST shelf in any bay of the 80/82 Type BP Cabinet is to mount the FAST shelf as high, or as low as possible, depending if an upper or lower DCB has been removed. If a lower position is used the 6CQ Fan mounts above the FAST shelf. If an upper position is used the fan mounts below the FAST shelf. The FAST shelf and fan equals the space vacated by the DCB, which is $201 / 2$ ". All existing cabinet fans remain in their original positions.

C I


Step 8: Locate the above mentioned kit and verify that the following items are present:

| QTY | COMCODE | DESCRIPTION |
| :---: | :--- | :--- |
| 1 | 848572343 | CABLE,SLC/FAST PAR ADAPTER A |
| 1 | 848572350 | CABLE,SLC/FAST PAR ADAPTER B |
| 1 | 848572384 | CABLE,SLC/FAST DSO ADAPTER (AP1,2, 3) |
| 1 | 848572368 | CABLE,SLC/FAST DS1 ADAPTER (Note A) |
| 1 | 846584365 | 111A FAN CONTROL UNIT |
| 2 | 848572376 | CABLE,SLC/FAST DS0 ADAPTER (AP7,8,9 and <br> AP13, 14, 15)) |
| 2 | 848585600 | CABLE, SLC/FAST DS0 ADAPTER (AP4, 5, 6 and <br> AP10, 11, 12) |
| 2 |  | ED7C829-31 G1C COAX CABLE (20 FT) |
| 1 | 848446415 | 6CQ FAN UNIT |
| 10 |  | \#12-24 SCREW SIZE |
| 30 |  | CABLE TIE SIZE |
| 1 |  | INSTRUCTION SHEET |

[^0]C I $\qquad$
Step 9: Mount 6CQ Fan and 111A Fan Control Unit with screws provided in kit. As described above, the fan mounts above a bottom mounted FAST shelf or below a top mounted unit. The Fan Control Unit (FCU) must be miscellaneously mounted on the right-hand vertical duct in such a way that it does not interfere with the duct cover or cabinet door. Use fasteners provided in kit. Discard ground wire provided with kit. See Figures 6 and 7.


Figure 6. 6CQ Fan and 111A Fan Control Unit


Figure 7. General View of Fan Orientation and DS0/DS3 Wiring

C I $\qquad$
Step 10: If previously removed, remount the auxiliary connector bracket and associated ground wire to the cabinet vertical uprights.

## AnyMedia Fast Shelf Wiring

## Description

The following procedures will cover the wiring of a J1C282AC-1, L2 AnyMedia FAST Shelf, as well as a 6CQ Fan Assembly and 111A Fan Control Unit, to cabinet wiring previously provided for a SLC Series 5 DCB (now removed) using adapter cables provided as part of the C108818717 F00OH1225 SLC/RETRO (Combo) Kit. Also, at the cabinet level it will, in certain cases, change out the DC circuit breaker protecting power distribution to the cabinet bay the AnyMedia FAST Shelf will be deployed in.

Connecting Existing SLC Series 5 Wiring to the AnyMedia FAST Shelf

C I $\qquad$ Step 1: Remove the doors from the FAST shelf.

C I $\qquad$
Step 2: Remove the fuses from the FAST shelf. See Figure 8.


Figure 8. J1C282AC-1 FAST Shelf Fusing

C $\qquad$
Step 3: Determine if cabinet being modified is a 80A, 80D or 80G Cabinet. See equipment identification stamping on inside door panel. If yes proceed to next step otherwise go to Step 13.

C $\qquad$
Step 4: Verify if the 80A, 80D or 80G Cabinet is equipped with a CPS-4000 Power System. If yes proceed to next step otherwise go to Step 13.

C I $\qquad$
Step 5: In 80A, 80D and 80G Cabinets, equipped with the CPS-4000 Power Systems, the DC Circuit Breaker (CB) assigned to the cabinet bay that will house the new AnyMedia FAST Shelf must be replaced.

C I
Step 6: When instructed, the original CB, rated at 20 AMPs, will be replaced by a KS-23136 L38 (407098490) CB rated at 30 AMPs.

C I _ Step 7: Determine if there is a working DCB carrying live traffic in the same cabinet bay. If yes proceed to next step otherwise go to Step 9.

C

## Step 8:

Notify customer of need to turn down the working DCB for up to five minutes to allow for CB replacement and bank recovery. Proceed to following steps in accordance with customer instructions.

C I
Step 9: Determine, from cabinet decal, what DC CB controls the cabinet bay. Note that the breaker will be on if a working DCB is in the bay

C I


Step 10: If a working DCB is present verify that it has no active alarms.


Step 11: Remove the 20 AMP CB and replace it with the KS-23136 L38 30
AMP CB. If a working DCB is co-located in the cabinet bay turn on the $C B$. Otherwise the CB should be off (open).

C I__ $\square$ Step 12: Verify, if a working DCB present, that the DCB recovers, clears all

C I
Step 13: Locate 848572343 SLC/FAST Power/Alarm/Ringing (PAR) Cable Adapter (A). Refer to Figure 9 which identifies its electrical interfaces and Figure 10 which describes its physical application in the cabinet. Engage adapter cable connectors P1, P2 and P106 in FAST dangler connectors $\mathrm{J} 1, \mathrm{~J} 2$ and J 106 respectively. Also on this same adapter cable connect J108E and J114 to the 111A Fan Control Unit dangler P108E and the 6CQ Fan connector (undesignated) respectively. Connect the ground lead terminal to a fastener on the cabinet upright. Connect P108A and P108B (p/o PAR cable) to the auxiliary connector
bracket connectors J108A-(N) and J108B-(N) respectively located on the right upright (or directly to J108A and J108B if bracket not supplied).

CAUTION:
Power and/or ringing voltages are present on J108A, J108B and J114 if the bay circuit breaker is on. If on, the 6CQ Fan will be powered and running and the green LED on the FAST shelf FCM is on. If not on, assuming there is no active DCB in the bay, no action is necessary until voltage checks are performed later in these instructions.


C I
Step 14: Locate the 848572350 SLC/FAST PAR Adaptor B Cable Assembly. Refer to Figure 9 which identifies its electrical interfaces and Figure 10 which describes its physical application in the cabinet. Engage P111 connector to FAST connector J111 (on dangler). Connect J305 to cabinet connector P305. Insert J108F into the 111A Fan Control Unit dangler connector P108F.

C I
Step 15: Locate the 848572368 SLC/FASTDS1 Cable Adapter which consists of two identical cables except for connector marking. Refer to Figure 9 which identifies its electrical interfaces and Figure 10 which describes its physical application in the cabinet. Connect the first cable assembly with P101 to J101 dangler on FAST shelf. Dress the 710 connectors J105BL and J105W into the left duct (do not connect). Connect the second cable assembly with P103 to J103 dangler on FAST shelf. Dress the 710 connectors J106BL and J106WH into the left duct (do not connect).

C I__ $\square_{\text {Step 16: Verify that AP1 through AP16 slots on the FAST shelf all have factory }}$ provided faceplate adapters in place.

C


Step 17: Remove the trough cover from the bottom front of the FAST shelf.

C I
Step 18: In the following steps the AP connectors will be engaged from AP15 to AP1, with their associated cables dressed in the cable trough, at the bottom of the FAST shelf, and travel to the left. All 710 connectors will be engaged in the left duct. See Figure 10 for physical cable paths, Figure 11 for electrical interfaces and Figure 12 for AP faceplate connections and.

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## Note:

The simulated connectors on the blank faceplates do not have ejectors. The cable connectors snap in and pull out.

Figure 12. AP Faceplate Connectors Insertion and Removal

C I $\qquad$
Step 19: Locate the 848572376 SLC/FAST DSO Adapter Cable with three 68 pin connectors, labeled AP13, 14 and 15, at one end and a 710 connector, labeled J101WH, at the other. Engage the AP connectors to the corresponding (dummy) faceplate connectors (AP13, 14, 15) and dress the cable in the lower tray feeding the cable to the left. Temporarily position J101WH in the cabinet bay's left duct.

## 三 NOTE:

In this step, and the following four, when directed to dress the DSO cables in the trough, make sure the run from the AP connector to the trough is almost vertical, before the 90 degree left turn is made. This manner of dressing will facilitate the reinstallation of the trough cover in a later step.

C I $\qquad$ Step 20: Locate the 848585600 SLC/FAST DSO Adapter Cable with three 68 pin connectors, labeled AP10, 11 and 12, at one end and a 710 connector labeled J104BL at the other. Engage the AP connectors to the corresponding (dummy) faceplate connectors (AP10, 11, 12) and dress the cable in the lower tray feeding the cable to the left. Temporarily position J101WH in the cabinet bay's left duct.

C I $\qquad$
Step 21: Locate the 848572376 SLC/FAST DS0 Adapter Cable with three 68 pin connectors, labeled AP7, 8 and 9, at one end and a 710 connector labeled J103BL at the other. Engage the AP connectors to the corresponding (dummy) faceplate connectors (AP7, 8, 9) and dress the cable in the lower tray feeding the cable to the left. Temporarily position J103BL in the bay's left vertical duct.


Step 22: Locate the 848585600 SLC/FAST DSO Adapter Cable with three 68 pin connectors, labeled AP4, 5 and 6, at one end and a 710 connector labeled J102BL at the other. Engage the AP connectors to the corresponding (dummy) faceplate connectors (AP4,5,6) and dress the cable in the lower tray feeding the cable to the left. Temporarily position J102BL in the bay's left vertical duct.

C I


Step 23: Locate the 848572384 SLC/FAST DS0 Adapter Cable with three 68 pin connectors, labeled AP1, 2 and 3, at one end and four 710 connectors labeled J101BL, J102WH, J103WH and J104WH at the other. Engage the AP connectors to the corresponding (dummy) faceplate connectors (AP1, 2, 3) and dress the cable in the lower tray feeding the cable to the left. Temporarily position J103BL in the bay's left vertical duct.


Step 24: Visually verify that faceplate connectors read AP1 to AP15 reading left to right.


Step 25: In the left duct temporarily gather all the adapter cables 710s (J101 to J106, both BL and WH) in a bundle.

C I
Step 26: Connect adapter cable 710s to cabinet (cabling) 710s, using presser tool, per the following table:

| Cabinet to Adapter |  | Orientation |
| :---: | :---: | :---: |
| P101BL to J101BL | Circuit 1 | WH/BL,BL-WH to WH/BL,BL-WH |
| P101WH to J101WH | $"$ | WH/BL,BL-WH to WH/BL,BL-WH |
| P103BL to J103BL | $"$ | WH/BL,BL-WH to WH/BL,BL-WH |
| P102WH to J102WH | $"$ | WH/BL,BL-WH to no pair |
| P104WH to J104WH | $"$ | WH/BL,BL-WH to no pair |
| P103WH to J103WH | $"$ | WH/BL,BL-WH to RD-BR,BR-RD |
| P102BL to J102BL | $"$ | WH/BL,BL-WH to no pair |
| P104BL to J104BL | $"$ | WH/BL,BL-WH to no pair |
| P105BL to J105BL | $"$ | WH/BL,BL-WH to WH/BL,BL-WH |
| P105WH to J105WH | $"$ | WH/BL,BL-WH to WH/BL,BL-WH |
| P106BL to J106BL | $"$ | WH/BL,BL-WH to WH/BL,BL-WH |
| P106WH to J106WH | $"$ | WH/BL,BL-WH to WH/BL,BL-WH |

A CAUTION:
Although mating 710 s may only engage one way the mating circuit one color pairs are provided to expedite the connections. Care should be used in aligning connector pins prior to using presser tool.

C I $\qquad$
Step 27: If the DS3 cables have been previously run proceed to Step 32. If not, proceed to the next step.

C I $\qquad$
Step 28: From kit locate quantity two (2) ED7C829-31 G1C coaxial cables, connectorized at both ends (cables are symmetrical and identical). These cables are required to carry the transmit and receive DS-3 signals from the AFM-DS3 pack (that will be engaged later in shelf location AP 16) to a DSX-3 panel.

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C I $\qquad$
Step 29: Install the two (2) ED7C829-32, G1C DS3 Interface Cable Assemblies in the right duct, route them through the cable trough (exposed braid end), and locate their right-angle coaxial connectors (TX-1 and RX-1) approximately in the middle of the blank faceplate in position AP16 (the approximate position of the TX-1 and RX-1 connectors on the AFMDS3 AP to be located in position AP16 of the FAST shelf). See Figures 13. These coaxial cables should be secured out of the way but available for connection of the AFMDS3 when it is installed.


Figure 13. Temporary Location of DS3 Coaxial Cables

C


Step 30: Carefully push each cable to the back of the duct. Use waxed cord, waxed twine, or tie wraps as needed to secure the cables to the tie points on the shelf.

C $\qquad$
Step 31: Terminate the coaxial cables at the DS3 network equipment or the DSX-3 panel and label them as appropriate.

C I
Step 32: Reinstall the trough cover after carefully positioning each DSO cable (AP1 thru 15) so that each cable is captured in the fingers. The cables must be vertical coming up out of the trough in that the cover cannot be used to move the cables if the cover alignment is not right. The DS3 cables should be held in the AP16 position.

C I__ $\square$
Step 33: Install tie-wraps on the right side of the shelf securing the coaxial cables ED7C829-31, $G()$ as well as the left side for DS0 (VF) cables.

C I $\qquad$
Step 34: Reinstall the FAST shelf doors.

C I $\qquad$
Step 35: Verify that only the following connectors remain unconnected:

- P115 on 111A Fan Control Unit
- J109 bottom right FAST
- P16 top right FAST
- P2, P11 top left FAST

C I
Step 36: It is anticipated that some early 6CQ fans will have an interference problem between the left vertical duct (of the cabinet bay) cover and the undesignated connector on the left side of the fan unit. See Figures 8 and 32 . If you have this situation it will be necessary to remove a portion of the cover lip that blocks the access to the connector. Temporarily place the cover on the mounting screws but do not allow it to slip down on the keyhole (to it's normal position). Mark the lip with a line corresponding to the bottom of the connector. Next let the cover fall to its normal position and put a mark on the lip coinciding with the top of the connector. Cut the lip at these marks (hacksaw or Dremel tool) and then attach a lock pliers or equivalent to the metal lip between and bend back and forth until it breaks off. Smooth edge with a mill file.


Figure 14. 6CQ Fan Connector

C I
 Step 37: Re-attach both duct covers.

## Continuity Tests

## Description

The following procedure may optionally be used to test continuity of the VF cable pairs to the splice chamber or, if wired out, to the customers FDI (cabinet).

C I $\qquad$
Step 1: Use a continuity test set or the ITE-6675 Test Set and ITE-7079 Cable Adapter to test installed VF cables. The adapter cable engages the 68 pin AP connector on the 848572384 SLC/FAST DS0 Adapter (3 AP), $848572376 S L C / F A S T$ DS0 Adapter (ADSL) and 848585600 SLC/ FAST DSO Adapter (EVEN) cables.

Requirement: No open, powered, grounded or shorted wires or tip/ring reversals

Table 2. RETRO Wiring Plan

| AP \# | Cable <br> Pairs <br> AP | Series 5 <br> 710 <br> Connector <br> \# | 710 <br> Connector Pair \# | Pair ID on Block |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 1-8 | J101BL | 1-8 | B1 01-08 |
| 1 | 9-32 | J102WH | 2-25 | B2 27-50 |
| 2 | 1-8 | J101BL | 9-16 | B1 09-16 |
| 2 | 9-32 | J103WH | 1-24 | B2 51-74 |
| 3 | 1-8 | J101BL | 17-24 | B1 17-24 |
| 3 | 9-32 | J104W | 2-25 | B2 77-100 |
| 4 | 1-8 | J102BL | 2-9 | B1 27-34 |
| 5 | 1-8 | J102BL | 10-17 | B1 35-42 |
| 6 | 1-8 | J102BL | 18-25 | B1 43-50 |
| 7 | 1-8 | J103BL | 1-8 | B1 51-58 |
| 8 | 1-8 | J103BL | 9-16 | B1 59-66 |
| 9 | 1-8 | J103BL | 17-24 | B1 67-74 |
| 10 | 1-8 | J104BL | 2-9 | B1 77-84 |
| 11 | 1-8 | J104BL | 10-17 | B1 85-92 |
| 12 | 1-8 | J104BL | 18-25 | B1 93-100 |
| 13 | 1-8 | J101WH | 1-8 | B2 01-08 |
| 14 | 1-8 | J101WH | 9-16 | B2 09-16 |
| 15 | 1-8 | J101WH | 17-24 | B2 17-24 |

## $\Longrightarrow$ NOTE:

$B 1$ and $B 2$ refer to 100 pair protector block panels. B1 would be for the blue bank of the DCB removed and B2 for the white bank. Actual identification markings would be 1 upper (blue), 2 lower (white) etc. "Pair ID on Block" numbers are synonymous with the cable pair count of the 100 pair cables going to and from the protector blocks and by definition from the splice chamber to the FDI. For example, if checking continuity from AP3 connector (in a 1 to 32 sequence) to the FDI, the other end would be tested at pairs 17 to 24 of the cable assigned to the blue bank or block B1and pairs

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77 to 100 of the cable assigned to the white bank or block B2. Note that cable pairs $25,26,75$ and 76 are not used and are designated as spares.

## Verification of Power/Ringing Voltages

## Description

The following steps will verify the proper power and ringing voltages are present and at the correct level (on the FAST Shelf).

C I $\qquad$
Step 1: If not already on, turn on the DC CB powering the cabinet bay the AnyMedia FAST Shelf is located in.

C I $\qquad$
Step 2: Following steps will insert fuses and check voltages. Refer to Figure 12.


Figure 15. J1C282AC-1 FAST Shelf Fusing

C I $\qquad$
Step 3: Verify that the PWR LED on the FCM is lighted indicating input power is being provided to the FAST shelf (-48VDC).

C I__ $\quad \square_{\text {Step 4: Verify that 6CQ Fan is operational. Detect airflow upwards if possible. }}$ If operation uncertain temporarily insert tie-wrap into fan cage.

C


Step 5: Insert the two 15-Amp and one 1-Amp fuses in the -48V (F1)/15A, 48V (F2)/15A, and -20 HZ/1A holders, respectively, in the FAST shelf.

C I $\qquad$
Step 6: Verify the presence of -48 VDC at the FAST-48V (F1)/-48V RTN and -48 vV (F2)/-48V RTN jacks.

Requirement:
-42.5 to -56.5 volts DC

C I


Verify the presence of ringing voltage at the FAST shelf RINGING -20 HZ and RINGING RTN test jacks.

Requirement:
-42.5 to -56.5 volts DC
75 to 105 volts AC RMS

C I


If AMAS common and channel unit packs are to be temporarily stored in the shelf, prior to turn-up and test at a future time, remove all fuses and store in an appropriate manner (attached to FAST shelf).

## AMAS Common and Channel Unit Packs

Installation

## Description

In some cases the customer may request that AMAS packs be deployed at this time for future turn-up and test.

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C $\qquad$
Step 1: Verify all shelf fuses have been removed per Step 8 above.

C $\qquad$ Step 2: In the following step, when inserting AP packs, pull one AP connector and dummy faceplate out at a time, to insure that the connector is returned to its proper position. See Figure 16.


## Note:

The simulated connectors on the blank faceplates do not have ejectors. The cable connectors snap in and pull out.

Figure 16. AP Faceplate Connectors Insertion and Removal

C I $\qquad$
Step 3: While wearing the grounded ESD strap, place all packs in the shelf per the locations shown in Figure 17.
$\Longrightarrow$ note:
Do not connect DS3 coaxial cables to AFMDS3 pack.


Figure 17. AMAS FAST Shelf Fully Equipped (typical)

C I $\qquad$
Step 4: Implementation instructions complete. Proceed to Post Conditioning for final instructions.

## Back Out Procedures

## Description

Not required for this change.

## Labeling Requirements

## Description

Existing cabinet labels must be modified or replaced to identify the changes associated with the new AnyMedia Access System.

C I $\qquad$ Step 1: On the DSX-1 Panel label, change the SLC Series 5 designations to AnyMedia Access System designations for the systems being replaced. An example is shown below in Figure 18 for the case of a lower bank (\#1) substitution.

|  | M ${ }^{2}$ | $x^{3}$ |  |  |  | $x^{5}$ |  |  |  |  | R | A | B | c |  |  | P | A | B | C | D | P | A | B | $c$ | 0 |  | P |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BLUE- |  |  |  |  |  | WHITE |  |  |  |  |  | BLUE |  |  |  |  |  | WHITE |  |  |  |  | BLUE |  |  |  |  |  |
| $\begin{gathered} \text { AnyMedia } \\ \text { Access System \#1 } \\ \text { Bay \# } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  | DUAL CHANNEL BANK \#2 |  |  |  |  |  |  |  |  |  |  | DUAL CH |  |  |  |  |  |
| 1 | 2 | 3 |  | 4 | 5 | 6 | 7 | B | 9 |  | 10 | 11 | 12 |  |  |  | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |  |  |

Figure 18. Typical Modified DSX-1 Panel Label

C I $\qquad$ Step 2: On the "DSX REAR TERMINATIONS" decal located on the cabinet door near the DSX panel, under the "SYSTEM" column change the designations from BL \& WH to AMAS for the system being substituted. Under the "DSX POSITIONS" column change the number of positions. See Figure 19.

## $\equiv$ NOTE:

A SLC Series 5 DCB would, if fully operational, have 10 DS1s assigned. These would be 4 DS1s ( 4 X $24=96 \mathrm{ckts}$ ) for the blue bank plus a protect DS1. same for the white bank. The AnyMedia FAST shelf, for the same 192 circuits, requires 8 DS1s, but does not provide facilities protection. So, for example, the label shown, if the FAST was in the 2 L position, would use DSX positions 11-14 and 16-19.


Figure 19. Typical (marked) DSX Rear Terminations Label

C I $\qquad$ Step 3: On the decal located on the splice area cover, under the column "EQUIPMENT APPARATUS" change SLC Series 5 to AnyMedia System for the system being substituted. See Fig. 20.


Figure 20. Typical (marked) Splice Area Label

C I $\qquad$
Step 4: On the cabinet layout decal located on the door, change under "EQUIPMENT APPARATUS" SLC Series 5 Dual Channel Bank ( $\mathrm{x} / \mathrm{y}$ ) to AnyMedia Access System where $\mathrm{x}=$ cabinet bay number and $\mathrm{y}=$ an upper or lower position for the system being substituted. See Figure 21. Also note that the "Derived (VF)" pair numbers must also be changed. For each SLC Series 5 DCB 1 through 96 active circuits are wired out and, using cable pair counts in multiples of 25, pairs 97 through 100 are allocated as spares. For FAST pairs 97 through 100 are active so for the purpose of this label the VF pairs should show 100 pair groups.

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Figure 21. Typical Cabinet Layout Decal

C I $\qquad$
Step 5: On the two decals located next to the system being substituted change WHITE \& BLUE to AnyMedia or replace with new labels. See Figure 22 which shows a marked label (example) as well as a replacement label. The replacement label should be used if the customer is changing any of the system information on the existing labels. In this case the new label should be positioned adjacent to the FAST shelf with the arrow placed as appropriate. The label may be attached over
an existing label or the existing label may first be removed. Information as to System ID, PG Cable and pair numbers must be provided by the customer and entered in the spaces available on these labels.

i


Figure 22. Equipment Identification Replacement Label

C I $\qquad$
Step 6: On the protector block labels located near the protectors, under the "BANK" column change $\mathbf{x U}-\mathrm{BL}$ and $\mathbf{x U - W H}$ both to AMAS for the system being substituted (two labels). These could also be labeled $x L-B L$ and $x L-W H$ where the $x=$ the bank number. The "PROT POSN" column must be changed for both labels to indicate the change in active protectors. Change 1-25 to 1-24, 26-50 to 27-50, 51-75 to 51-74 and $76-96$ to $77-100$. The same numbering change is required in the "SHEATH \& PAIR" column for both labels. See Figure 19 for the typical case.


Figure 23. Example of Original (Unmarked) Protector Block Label


Figure 24. Typical (marked) Protector Block Labels

C I $\qquad$
Step 7: Figure 25, shown below shows the "AnyMedia Access System Protector Wiring" label, included in the kit, which provides information on the mapping of protector pairs to AnyMedia AP pairs and should be placed on the cabinet door near the protector blocks.

## AnyMedia ${ }^{\circledR}$ Access System Protector Wiring

| Pair \# on <br> Block | SLC Series 5 <br> 710 <br> Connector \# | 710 <br> Connector <br> Pair \# | AnyMedia <br> AP \# | AP <br> Cable <br> Pairs \# |
| :---: | :---: | :---: | :---: | :---: |
| B1 1-8 | J101 BL | $1-8$ | 1 | $1-8$ |
| B1 9-16 | J101 BL | $9-16$ | 2 | $1-8$ |
| B1 17-24 | J101 BL | $17-24$ | 3 | $1-8$ |
| B1 27-34 | J102 BL | $2-9$ | 4 | $1-8$ |
| B1 35-42 | J102 BL | $10-17$ | 5 | $1-8$ |
| B1 43-50 | J102 BL | $18-25$ | 6 | $1-8$ |
| B1 51-58 | J103 BL | $1-8$ | 7 | $1-8$ |
| B1 59-66 | J103 BL | $9-16$ | 8 | $1-8$ |
| B1 67-74 | J103 BL | $17-24$ | 9 | $1-8$ |
| B1 77-84 | J104 BL | $2-9$ | 10 | $1-8$ |
| B1 85-92 | J104 BL | $10-17$ | 11 | $1-8$ |
| B1 93-100 | J104 BL | $18-25$ | 12 | $1-8$ |
| B2 1-8 | J101 WH | $1-8$ | 13 | $1-8$ |
| B2 9-16 | J101 WH | $9-16$ | 14 | $1-8$ |
| B2 17-24 | J101 WH | $17-24$ | 15 | $1-8$ |
| B2 27-50 | J102 WH | $2-25$ | 1 | $9-32$ |
| B2 51-74 | J103 WH | $1-24$ | 2 | $9-32$ |
| B2 77-100 | J104 WH | $2-25$ | 3 | $9-32$ |

Note: B1 and B2 refer to the 100 pair protector block panels. B1 is associated with the blue system of the original (removed) SLC Series 5 Carrier System dual channel bank and B2 is associated with the white system. "Pair \# on Block" numbers are synonymous with the protector numbers and the cable pair count of the 100 pair cables going to and from the protector blocks. Note that protectors and cable pairs $24,25,75$, and 76 are not used on either block and are designated as spares.

Figure 25. AnyMedia AP Pairs Label

C I $\qquad$
Step 8: Attach Protector Block labels 1 and 2 above and below the existing protector Block labels identified in Step 6. These labels identify the protector block previously associated with the "Blue" bank as Block 1 and the "White" bank as block 2 for the AnyMedia shelf. See Figure 26.


Figure 26. Protector Block Replacement Labels

C


Step 9: If an AnyMedia shelf has been substituted for SLC Series 5 DCB \#1 or \#2 the labeling on the CIP should be changed to reflect alarm reassignments.

C I $\qquad$
Step 10: It is also recommended the Series designation for the DC Test Pair on the CIP be changed to AMAS.

# Trouble Clearing 

## Description

The following figures and tables provide connector pin-outs for information/trouble clearing purposes:


Figure 27. J1C282AC-1 P1 Power Connector p/o PAR Adapter A 848572343


Figure 28. J1C282AC-1 P2 Ringing Voltage Connector p/o PAR Adapter A 848572343


Figure 29. TAP Interface Cable Connector p/o PAR Adapter A 848572343


Figure 30. VF AP1-AP3 Faceplate Connections p/o DSO Adapter Cable (3 AP)
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Figure 31. VF AP4 to AP15 Faceplate Connections p/o DS0 Adapter Cables 848572376 and 848585600

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Figure 32. DS1 Receive (IN) Cable (1-8) Connections p/o DS1 Adapter 848572368


Figure 33. DS1 Transmit (OUT) Cable (1-8) Connections p/o DS1 Adapter 848572368
J108F
TLM-1 WH-BL 1
TLM-2 BL-WH 2
J305
TLM-3 WH-OR $1 T$ 48V RTN OR-WH 1R

| J108E   <br> PSMN BL 1 <br> PMN RD 2 <br> $-48 V$ BK 3 |
| :--- | :--- | :--- |


| P114 |  |  |
| :--- | :--- | :--- |
| -48V | BK | 1 |
| FANFAIL | BL | 2 |
| -48V RTN | WH | 3 |
| NC | 4 |  |


| P111 |  |
| :--- | :--- |
| TLM-1 | WH-BL 1 |
| TLM-2 | BL-WH 2 |
| TLM-3 | WH-OR 3 |
| $-48 V$ TTN OR-WH 25 |  |

Figure 34. Miscellaneous Connector Pinouts

Table 3. Pair Terminations on 710 Connectors (Adapter cables)

| Pair Terminations on 710 Connectors |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 710 | J101BL,J101W,J103BL | J102W, J104W | J103W | J102BL. J104BL | J105BL,J105W, J106BL, J106W |
| POS. | PAIR(T/R)/BINDER | PAIR(T/R)/BINDER | PAIR(T/R)/BINDER | PAIR(T/R)/BINDER | PAIR (T/R) |
| 1T/1R | WH/BL, BL/WH (BL) | NC | RD/BR, $\mathrm{BR} / \mathrm{RD}$ (BL) | NC | WH/BL, BL/W (BL) |
| 2T/2R | WH/OR,OR/WH(BL) | RD/BR,BR/RD (BL) | RD/SL,SL/RD (BL) | WH/BL, BL/W (BL) | WH/OR,OR/WH (BL) |
| 3T/3R | WH/GR,GR/WH (BL) | RD/SL,SL/RD (BL) | BK/BL,BL/BK (BL) | WH/OR,OR/WH (BL) | WH/GR,GR/WH (BL) |
| 4T/4R | WH/BR,BR/WH (BL) | BK/BL,BL/BK (BL) | BK/OR,OR/BK (BL) | WH/GR,GR/WH (BL) | WH/BR,BR/WH (BL) |
| 5T/5R | WH/SL,SL/WH (BL) | BK/OR,OR/BK (BL) | BK/GR,GR/BK (BL) | WH/BR,BR/WH (BL) | WH/SL,SL/WH (BL) |
| 6T/6R | RD/BL,BL/RD (BL) | BK/GR,GR/BK (BL) | BK/BR,BR/BK (BL) | WH/SL,SL/WH (BL) | DRAIN ON 6 T |
| 7T/7R | RD/OR,OR/RD (BL) | BK/BR,BR/BK (BL) | BK/SL,SL/BK (BL) | RD/BL,BL/RD (BL) |  |
| 8T/8R | RD/GR,GR/RD (BL) | BK/SL,SL/BK (BL) | YE/BL, BL/ ${ }^{\text {(BL) }}$ | RD/OR,OR/RD (BL) |  |
| 9T/9R | WH/BL, BL/W (BL) | YE/BL,BL/YE (BL) | WH/BL, BL/WH (OR) | RD/GR,GR/RD (BL) |  |
| 10T/10R | WH/OR,OR/WH (BL) | WH/BL, BL/WH (OR) | WH/OR,OR/WH (OR) | WH/BL, BL/W (BL) |  |
| 11T/11R | WH/GR,GR/WH (BL) | WH/OR,OR/WH (OR) | WH/GR,GR/WH (OR) | WH/OR,OR/WH (BL) |  |
| 12T/12R | WH/BR,BR/WH (BL) | WH/GR,GR/WH (OR) | WH/BR,BR/WH (OR) | WH/GR,GR/WH (BL) |  |
| 13T/13R | WH/SL,SL/WH (BL) | WH/BR,BR/WH (OR) | WH/SL,SL/WH (OR) | WH/BR,BR/WH (BL) |  |
| 14T/14R | RD/BL,BL/RD (BL) | WH/SL,SL/WH (OR) | RD/BL,BL/RD (OR) | WH/SL,SL/WH (BL) |  |
| 15T/15R | RD/OR,OR/RD (BL) | RD/BL,BL/RD (OR) | RD/OR,OR/RD (OR) | RD/BL,BL/RD (BL) |  |
| 16T/16R | RD/GR,GR/RD (BL) | RD/OR,OR/RD (OR) | RD/GR,GR/RD (OR) | RD/OR,OR/RD (BL) |  |
| 17T/17R | WH/BL, BL/W (BL) | RD/GR,GR/RD (OR) | RD/BR,BR/RD (OR) | RD/GR,GR/RD (BL) |  |
| 18T/18R | WH/OR,OR/WH (BL) | RD/BR,BR/RD (OR) | RD/SL,SL/RD (OR) | WH/BL, BL/W (BL) |  |
| 19T/19R | WH/GR,GR/WH (BL) | RD/SL,SL/RD (OR) | BK/BL,BL/BK (OR) | WH/OR,OR/WH (BL) |  |
| 20T/20R | WH/BR,BR/WH (BL) | BK/BL,BL/BK (OR) | BK/OR,OR/BK (OR) | WH/GR,GR/WH (BL) |  |
| 21T/21R | WH/SL,SL/WH (BL) | BK/OR,OR/BK (OR) | BK/GR,GR/BK (OR) | WH/BR,BR/WH (BL) |  |
| 22T/22R | RD/BL,BL/RD (BL) | BK/GR,GR/BK (OR) | BK/BR,BR/BK (OR) | WH/SL,SL/WH (BL) |  |
| 23T/23R | RD/OR,OR/RD (BL) | BK/BR,BR/BK (OR) | BK/SL,SL/BK (OR) | RD/BL,BL/RD (BL) |  |
| 24T/24R | RD/GR,GR/RD (BL) | BK/SL,SL/BK (OR) | YE/BL,BL/YE (OR) | RD/OR,OR/RD (BL) |  |
| 25T/25R | NC | YE/BL,BL/YE (OR) | NC | RD/GR,GR/RD (BL) |  |

Lucent Technologies - Proprietary
Use pursuant to Company instructions

## Post Conditioning

## Description

This section describes final operations.

## Precautions

This procedure is not required for this change procedure.

## Procedure

三 NOTE:
Use the check boxes or the lines to check off the steps as you complete them.

C I $\qquad$ Step 1: Final dress all cabling.

C I


Step 2: Dispose of the target DCB, if present, per the customer's instructions.

C I


Step 3: Close and/or replace all cabinet doors and lock with hex head tool.

C I $\qquad$
Step 4: Notify customer that change out is complete.

This completes the MIP 363-211-109 Change Procedure.


[^0]:    Note A - 848572368 consists of two cables, one for receive (P101) and one for transmit (P103).

