OPTION INDEX

APP OR WRG	RATED ON ISSUE	REF NOTES	LOCATION
Z	STD 1	205	B1
Y	STD 1	205	B1
X	STD 1	205	B6
W	STD 1	205	B7, 8
V	STD 1	205	B7, 8
T	STD 1	205	B7, 8
S	STD 1	205	B7, 8
R	STD 1	205	B13
Q	STD 1	205	B13
P	STD 1	205	D1
N	STD 1	205	H7, 8
M	STD 1	205	H9, 10

DWG ISS	CD ISS	DWG ISS	CD ISS	DWG ISS	CD ISS
1	1 APPX –	2AC	1 APPX 1AC	3B	1 APPX 2B

DWG ISS	CD ISS	DATE ISSD	DRN	APP
4B	1 APPX 3B	6-1-92		
5B	1 APPX 4B	4-12-93		
6M	1 APPX 5M	9-3-96		

SUPPORTING INFORMATION

SYSTEM USED ON	DESIGN CONTROL	CATEGORY	NO.
		5ESS ASSIGNMENT RULES SWITCHING MODULE APPLICATION SD	SD-5D007-01 SD-5D012-02

SHEET INDEX NOTES

1. ONLY THE LATEST ISSUE, OR ISSUES IF CONCURRENT, ARE SHOWN IN THE INDEX.
2. FOR REISSUES, A CHANGED OR NEW SHEET IS ASSIGNED THE SAME ISSUE NUMBER AS SHEET 1.
3. THE ISSUE NUMBER OF SHEET 1 IS RECOGNIZED AS THE ISSUE NUMBER OF THE WHOLE DRAWING.

BT13

5ESS® SWITCHING EQUIPMENT

REMOTE APPLICATIONS
SCHEMATIC
CIRCUIT

DWG SIZE	ISSUE
C2	6M

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DESIGNATION MNEMONICS INDEX

MNEMONICS	AS NO.	DEFINITION
13A	AS 2	BUBBLE MEMORY RECORDED ANNOUNCEMENT SYSTEM
C/D	AS 1	CONTROL/DISPLAY
CLK	AS 1	CLOCK-CONTROL
DCLU	BD 1	DIGITAL CARRIER LINE UNIT
DCTU	AS 1	DIRECTLY CONNECTED TEST UNIT
DF	AS 1	DISTRIBUTING FRAME
ASU	AS 1	ALARM AND STATUS UNIT
DLTU	AS 1	DIGITAL LINE TRUNK UNIT
DSU	BD 1	DIGITAL SERVICE UNIT
DSX	AS 1	DIGITAL CROSS-CONNECT
FIDB	AS 1	FACILITIES INTERFACE DATA BUS
FIU	AS 1	FACILITIES INTERFACE UNIT
SMC	AS 1	SWITCHING MODULE CONTROL CABINET
LTP	AS 1	LINE TRUNK PERIPHERAL CABINET
LU	AS 1	LINE UNIT
MCTU	AS 1	MODULAR CONTROLLER TIME SLOT INTERCHANGE UNIT
M	AS 2	MISCELLANEOUS CABINET
MMSU	AS 1	MODULE METALLIC SERVICE UNIT
MTB	AS 1	METALLIC TEST BUS
NCT	AS 1	NETWORK CONTROL AND TIMING
PICB	AS 1	PERIPHERAL INTERFACE CONTROL BUS
PIDB	AS 1	PERIPHERAL INTERFACE DATA BUS
RSM	AS 1	REMOTE SWITCHING MODULE
SLC	BD 1	SUBSCRIBER LOOP CARRIER
TAU	AS 1	TEST ACCESS UNIT
TBCU	BD 1	TRUNK BUS CONTROL UNIT
TLWS	BD 1	TRUNK AND LINE WORK STATION
TTY	BD 1	TELETYPEWRITER
TU	AS 1	TRUNK UNIT
AIU	AS 11	ACCESS INTERFACE UNIT

REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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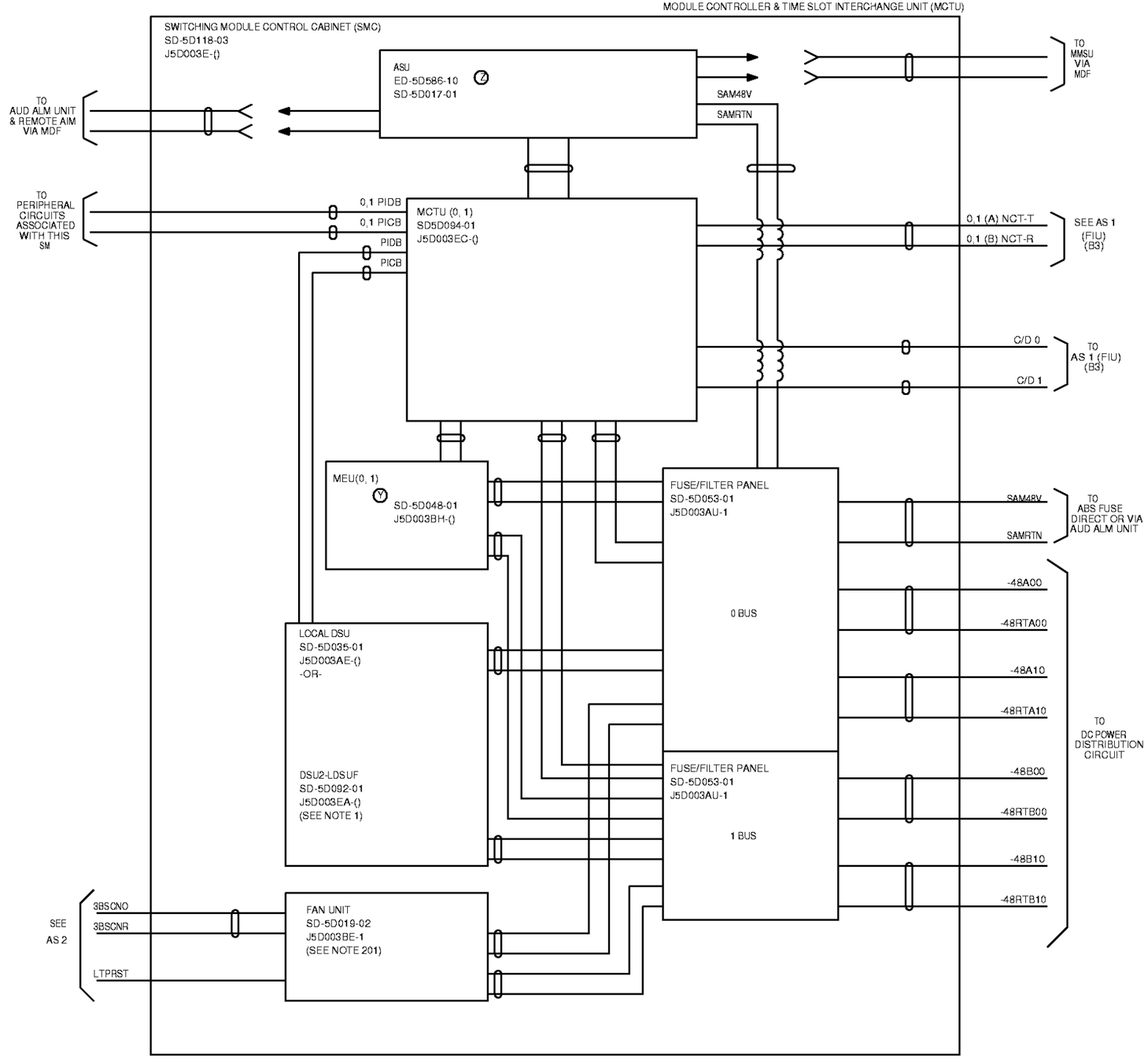
PART OF AS 1

SWITCHING MODULE CONTROL CABINET (SMC)
WITH THE
MODULE CONTROLLER & TIME SLOT INTERCHANGE UNIT (MCTU)



NOTE:

1. THE DSU2-LDSUF (J5D003EA-( )) IS A REPLACEMENT FOR THE LOCAL DSU (J5D03AE-( )). DSU2-LDSUF PHASED INTO FULL PRODUCTION DURING 5E2(2).

REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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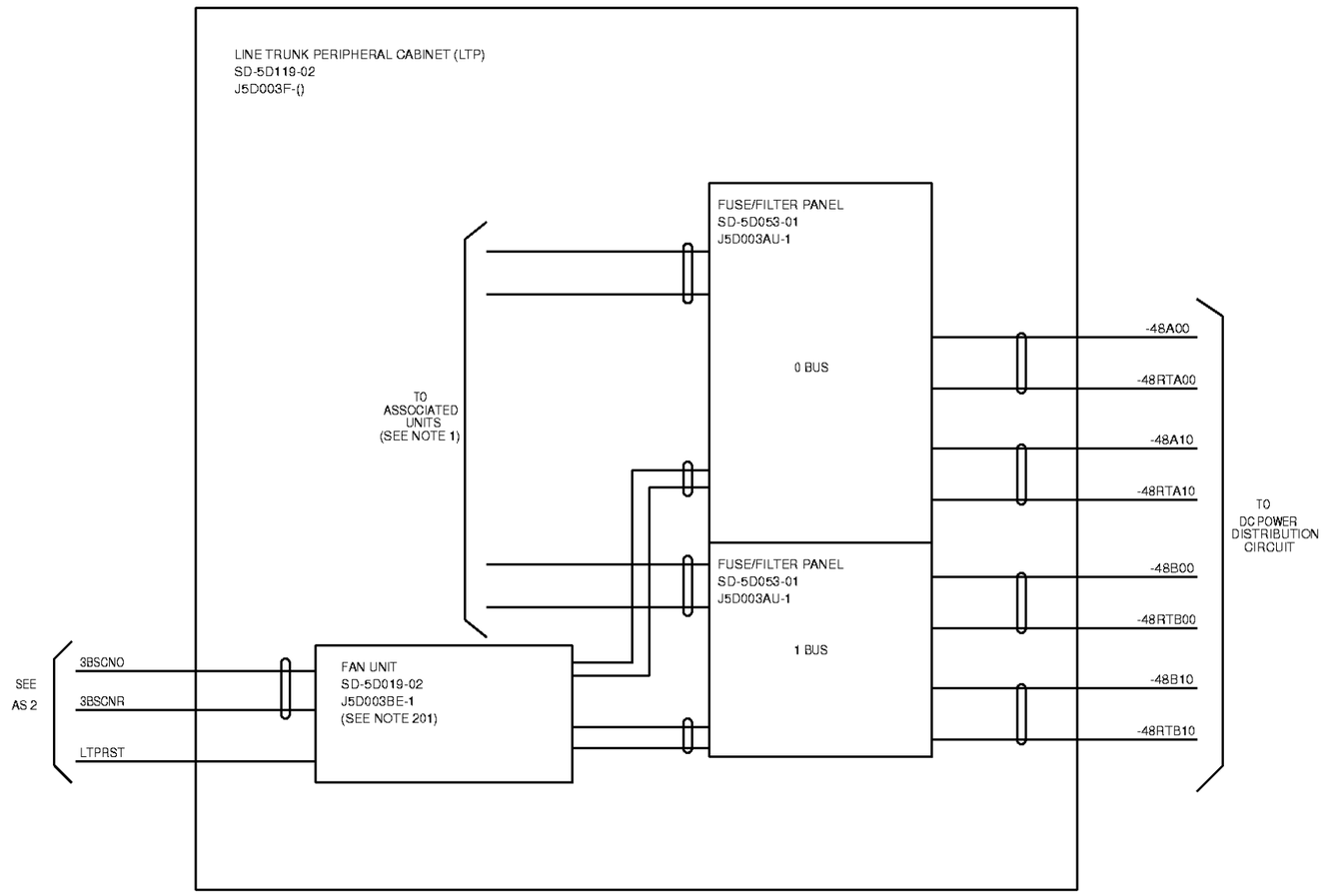
LINK TRUNK PERIPHERAL CABINET

NOTE:

1. FUSE/FILTER UNITS ARE USED TO PROVIDE THE FUSING AND FILTER REQUIREMENTS FOR THE PERIPHERAL UNITS WITHIN THE SAME LINE TRUNK PERIPHERAL (LTP) CABINET. SEE CURRENT DRAIN LISTING ON SD-5D002-01 TO DETERMINE FUSING REQUIREMENTS.



REMOTE APPLICATIONS SCHEMATIC		DWG SIZE C2	ISSUE 6M
Lucent Technologies, Inc.	SD-5D133-01		SHEET B2

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PART OF AS 1

STANDARD 2000 CABINET
SD5D546-01
J5D003FT-( )

LINE TRUNK PERIPHERAL CABINET (LTP)
SD5D119-02
J5D003F-( )

FUSE/FILTER UNIT
SD-5D190-01
J5D003FJ-( )

( ) BUS

-48V
-48VRTN
-48V
-48VRTN

TO
PERIPHERAL
UNITS

TO
DC POWER
DISTRIBUTION
CIRCUIT

SEE
AS 22

3BSCNO
3BSCNR
LTPRST

BI-DIRECTIONAL
FAN UNIT
SD5D003FH-( )
SD-5D168-02

( ) BUS

-48V
-48VRTN
-48V
-48VRTN

REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

Lucent Technologies, Inc.	SD-5D133-01	SHEET
		B2A

PART OF AS 1

FACILITIES INTERFACE UNIT
(FIU)

DESCRIPTION

EACH FACILITIES INTERFACE UNIT IS AN 8 1/2" HIGH SHELF WHICH PROVIDES INTERCONNECTION FOR 4 TO 20 DFI'S IN THE DLTU.

A DUPLICATED PERIPHERAL INTERFACE CONTROL BUS (PICB) ONE DUPLICATED FACILITY INTERFACE DATA BUS (FIDB), AND ONE DUPLICATED (T1CLK) ARE REQUIRED FOR EACH DFI IN THE DLTU.

FUSING EQUIPMENT

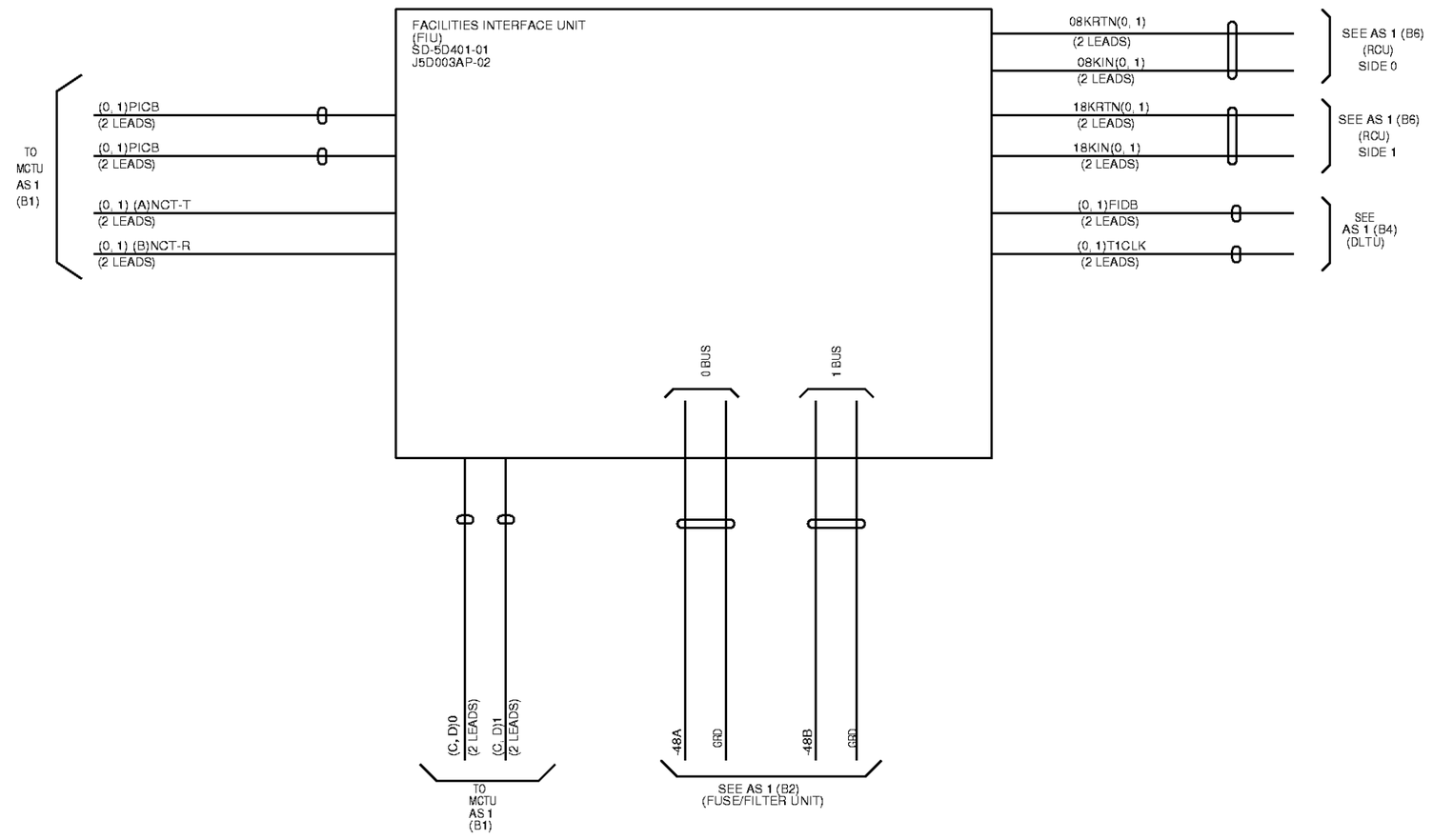
SEE SD-5D400-01 FOR FUSING REQUIREMENTS.

SPECIFIC MOUNTING REQUIREMENTS

THE FIU SHALL BE LOCATED IN LTP BAY 0 OF AN RSM VERTICAL EQL 36 ABOVE TWO DLTU POSITIONS.

SEE NOTE 207.

PROVISION FOR THE FIU-DLTU CONFIGURATION IN BAY 0 OF AN SM IS RECOMMENDED WHEN ENGINEERING AN SM THAT IS TO BE CONVERTED INTO AN RSM AT A LATER DATE.



REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

Lucent Technologies, Inc.	SD-5D133-01	SHEET B3

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PART OF AS 1

DIGITAL LINE TRUNK UNIT
(DLTU)

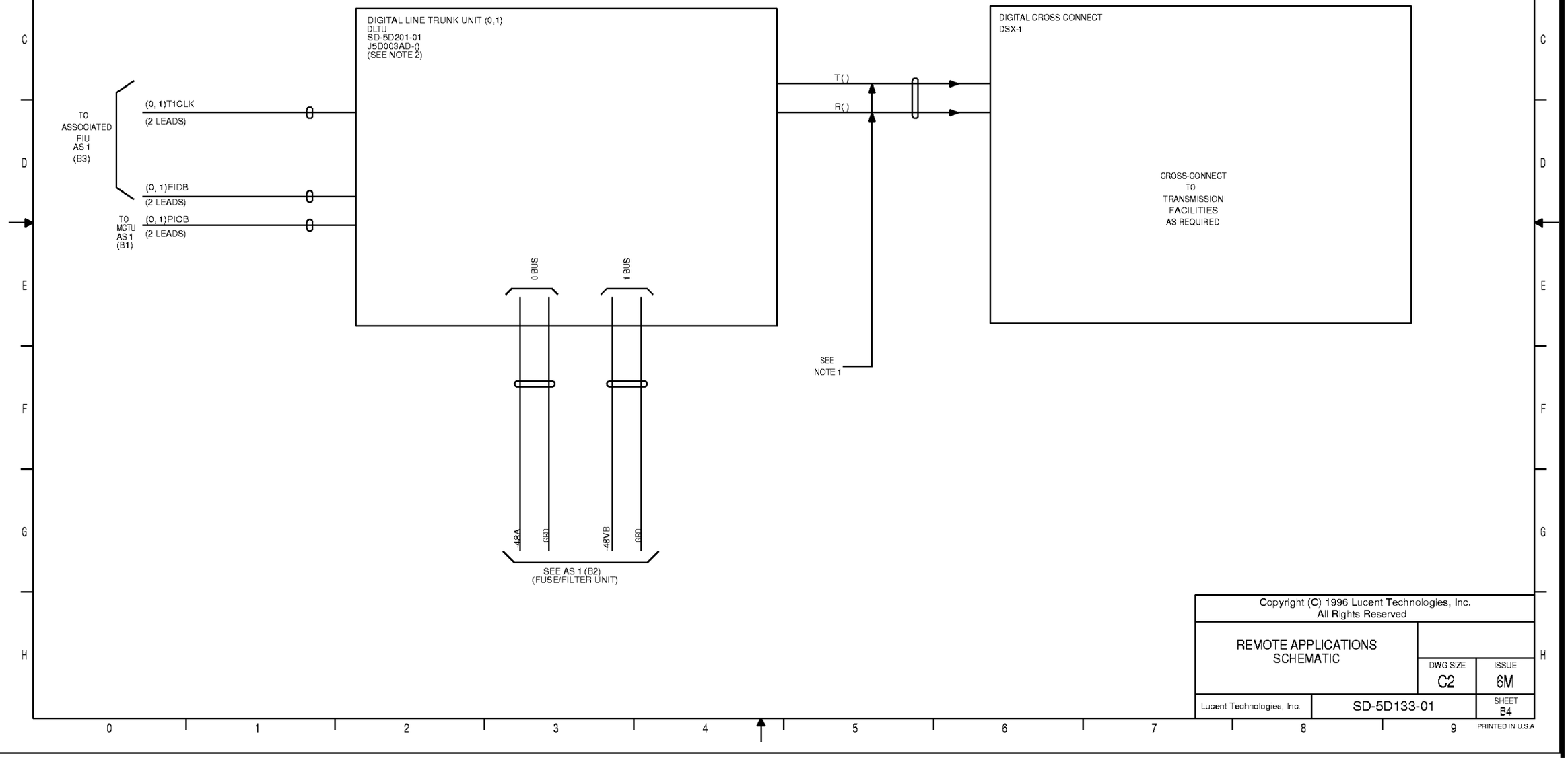
NOTE:
1. AN RSM OFFICE REQUIRES A MINIMUM CONFIGURATION OF TWO T1 LINES (2 DFI'S).
2. DFI'S ARE TO BE ANN5B AT THE RSM AND ALSO AT THE HOST.

DESCRIPTION
EACH DLTU IS AN 8 1/2" HIGH SHELF THAT PROVIDES FOR TERMINATION OF UP TO 10 TI FACILITIES.

CAPACITY
EACH DLTU WILL ACCOMODATE UP TO 10 TI FACILITIES (10 UMBILICALS) (SEE SD-5D007).

FUSING REQUIREMENTS
(SEE SD-5D201-())

SPECIFIC MOUNTING REQUIREMENTS
THE RECOMMENDED PLACEMENT FOR THE DLTU IS IN ONE OF THE BOTTOM 2 EQUIPMENT POSITIONS EQL'S 19 & 2B BAY 0 LTP CABINET. THIS PLACEMENT MINIMIZES CABLE CONGESTION.



REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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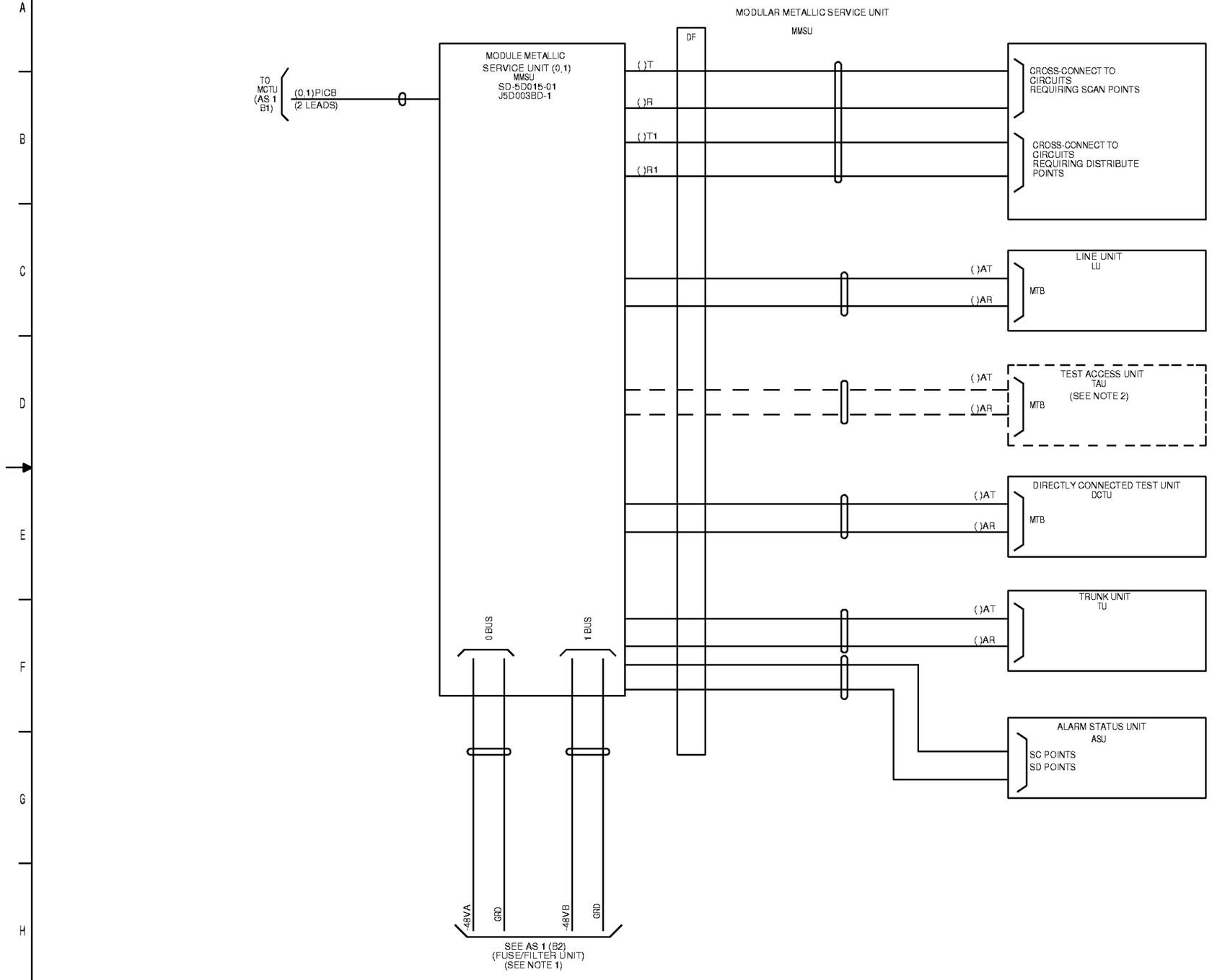

NOTES:

1. THE MODULAR METALLIC SERVICE UNIT (MMSU) IS ALWAYS REQUIRED AT THE REMOTE SWITCHING MODULE. THE MMSU SHALL BE LOCATED IN THE RESOURCE MODULE OF AN MMRSM (SEE NOTE 203).

   DESCRIPTION

   A BASIC MODULAR METALLIC SERVICE UNIT (MMSU) CONSISTS OF ONE 8 1/2" HIGH SHELF. EACH SHELF CONTAINS SERVICE GROUPS (0 & 1) AND HAS SEPERATE POWER & PICB'S. THIS UNIT CAB BE EQUIPPED TO PROVIDE METALLIC ACCESS FUNCTIONS. SCAN & DISTRIBUTE FUNCTIONS, ALIT FUNCTIONS, AND GDX COMPENSATION IN ANY COMBINATION.

   A GROWTH MODULAR METALLIC SERVICE UNIT (GMSU) CONSISTS OF THE BASIC MMSU HARDWARE-ENGINEERED TO MEET THE OFFICE REQUIREMENT FOR METALLIC ACCESS FUNCTION. SCAN & DISTRIBUTE FUNCTIONS, ALIT FUNCTION, AND GDX COMPENSATION IN ANY COMBINATION IN ADDITION TO THE BASIC MMSU.

   FUSING REQUIREMENTS

   SD-5D015-01

   SPECIFIC MOUNTING REQUIREMENTS

   RECOMMENDED PLACEMENT FOR AN MMSU IS VERTICAL EQL 19,28 OR 36 IN AN LTP BAYS 2, 3, OR 4 .

2. THE TEST ACCESS UNIT IS REQUIRED AT THE HOST BUT CAN ALSO BE USED AT THE RSM SITE. THE TEST ACCESS UNIT IS MOUNTED IN THE INLINE MCO SD-5D114-01 OR ON THE STLWS SD-5D192-01.

3. IN CO-LOCATED ORMS/TRMS SHARING OF A MMSU METALLIC NETWORK FOR TEST FACILITIES IS ALLOWED ON ONLY ONE MMSU (MAXIMUM FOUR SHELVES). ADDITIONAL MMSUS MAY BE USED FOR SCAN AND DISTRIBUTE CIRCUITS.

REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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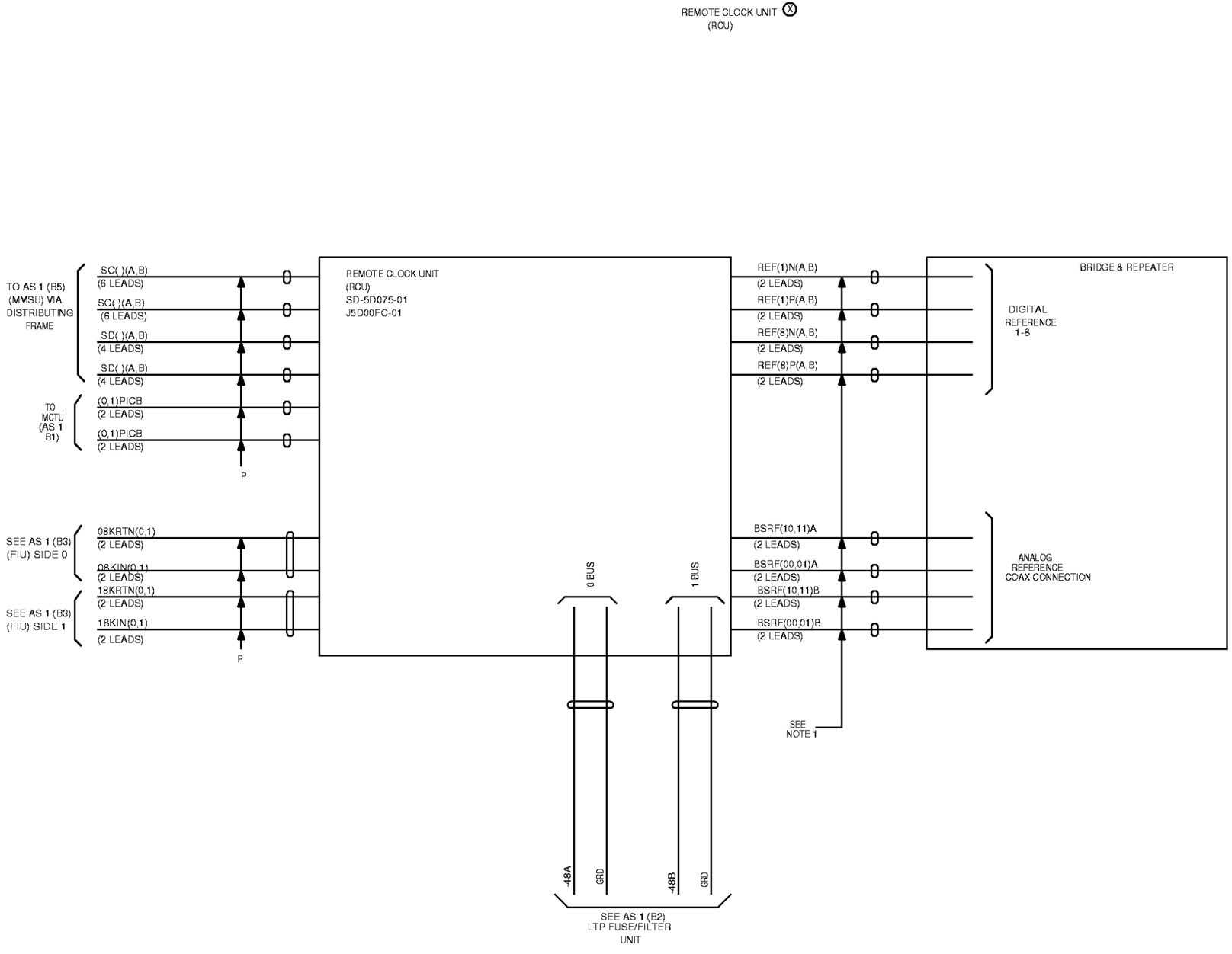

NOTES:

1. THE REFERENCE REF1N(A,B), REF1P(A,B), REF2N(A,B) AND REF2P(A,B) ARE USED IN DOMESTIC APPLICATION. FOR INTERNATIONAL APPLICATION REFERENCES REF(1-8) (A,B) ARE TO BE ENGINEERED PER OFFICE REQUIREMENTS.

DESCRIPTION

EACH REMOTE CLOCK UNIT IS AN 8-1/2" HIGH SHELF THAT PROVIDES INTERCONNECTION FOR A CLOCK IN THE STAND ALONE MODE. THIS UNIT IS OPTIONAL EQUIPPED IN A MULTI-MODULE REMOTE SWITCHING ENVIRONMENT

FUSING REQUIREMENTS

SEE SD-5D400-01 FOR FUSING REQUIREMENTS.

SPECIFIC MOUNTING REQUIREMENTS

THE RCU SHALL BE LOCATED IN THE POSITION DIRECTLY ABOVE THE FACILITIES INTERFACE UNIT (FIU) VERTICAL EQL 45 IN BAY 0 LTP OF THE RESOURCE MODULE (RSM 1) IN AN MMRM. A MAXIMUM OF ONE RCU TO BE USED PER MMRSM ARRANGEMENT (SEE NOTE 205).

2. THE NETWORK CLOCK REFERENCE MAYBE PROVIDED BY AN ANALOG SOURCE (AT TRF) OR A DIGITAL SOURCE OVER T1 LINES VIA THE DSX BAY. THE DIGITAL SOURCE SHOULD BE OBTAINED OVER THE UMBILICAL CONNECTING RSM TO HOST OFFICE.

REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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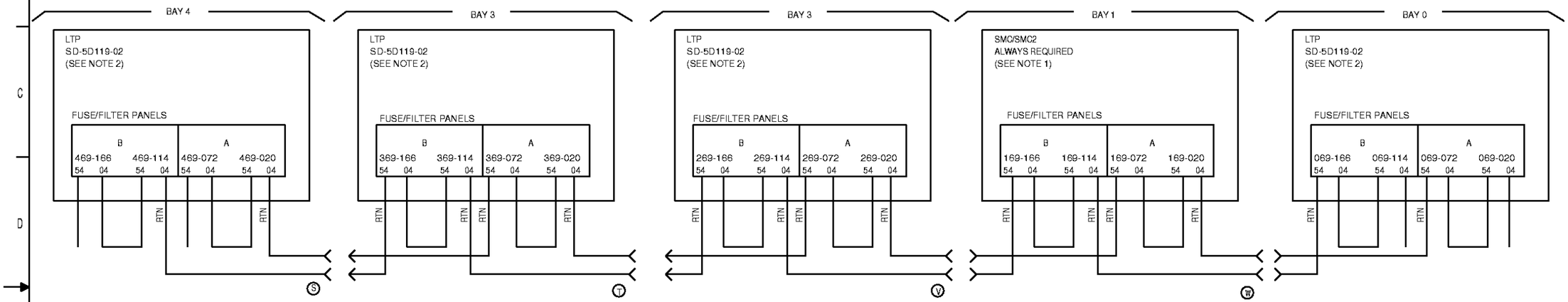
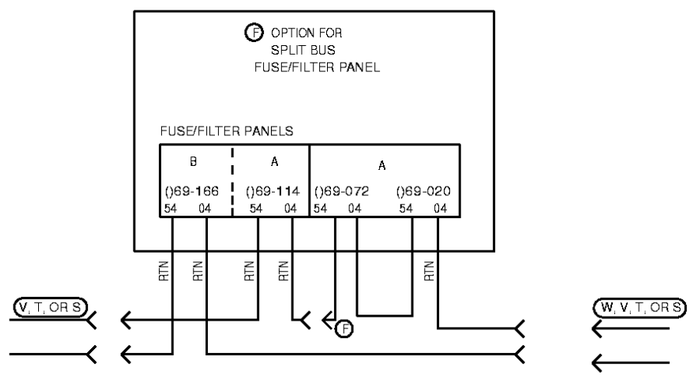
PART OF AS 2

SWITCHING MODULE -48VRTN
INTERCONNECTION MULT

NOTES:
1. SMC CAN BE: SD-5D118-01, SD-5D118-02, OR SD-5D118-03. SMC2 IS SD-5D160-01.
2. WIRING OPTIONS ARE CUMULATIVE:
   FOR (1) LTP USE OPTION (W)
   FOR (2) LTP'S USE OPTIONS (W) AND (V)
   FOR (3) LTP'S USE OPTIONS (W), (V) AND (T)
   FOR (4) LTP'S USE OPTIONS (W), (V), (T) AND (S)





REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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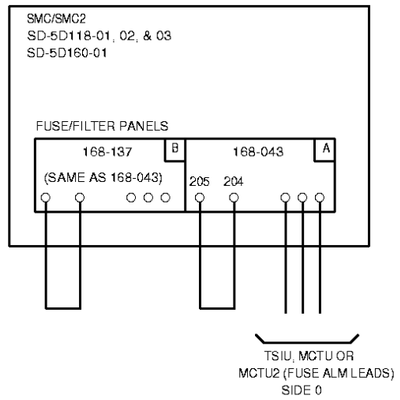
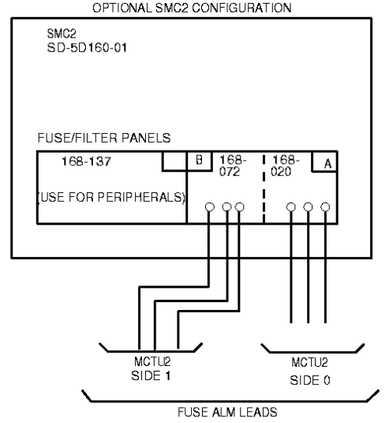
PART OF AS 2

SWITCHING MODULE FUSE ALARM
INTERCONNECTION

SINGLE BAY



OPTIONAL SMC2 CONFIGURATION



REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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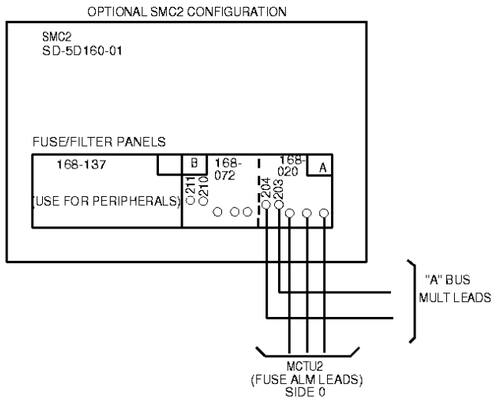
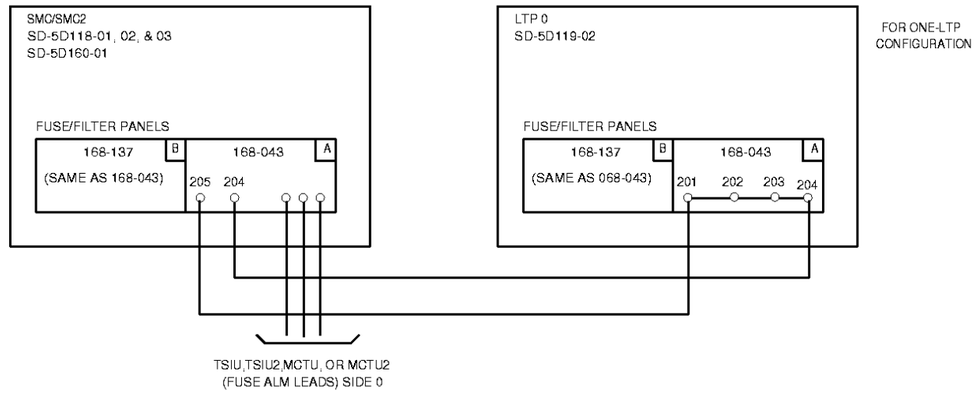
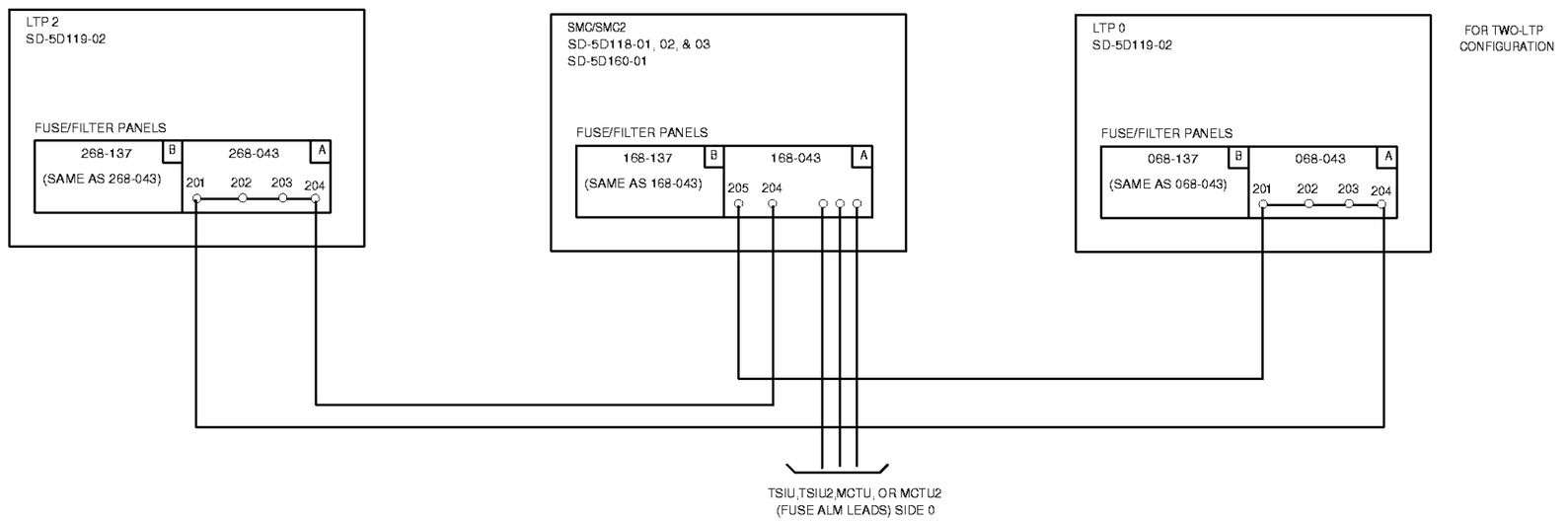
PART OF AS 2

INTER BAY FUSE ALARM LEADS







REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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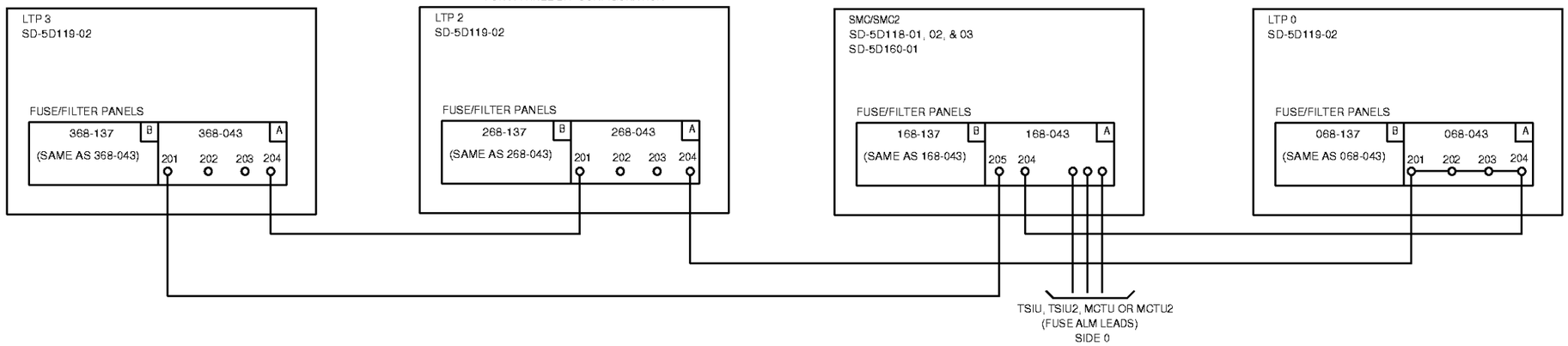
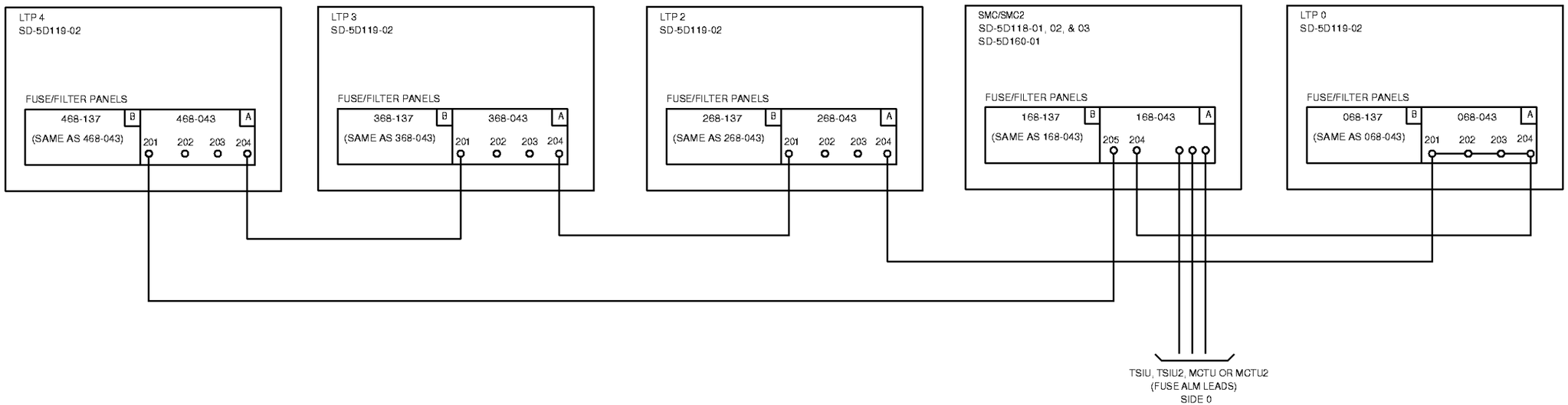
PART OF AS 2

INTER BAY FUSE ALARM LEADS

FOR A THREE LTP CONFIGURATION



FOR A FOUR LTP CONFIGURATION



REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

Lucent Technologies, Inc. | SD-5D133-01 | SHEET B10

AS 3

MISCELLANEOUS CABINET

TYPICAL

NOTES:

1. THE MISCELLANEOUS CABINET MAY BE EQUIPPED WITH THE 13A RECORDED ANNOUNCEMENT AND/OR 14A RECORDED ANNOUNCEMENT, THE INDUCTOR PANEL, AND TWO FUSE/FILTER UNITS.
2. THE POWER DISTRIBUTION PANEL (J86334D,LA,B) MAY BE ENGINEERED TO MOUNT IN THE MISCELLANEOUS CABINET.
3. THE POWER DISTRIBUTION FUNCTION MAY BE SUPPLIED BY THE POWER DISTRIBUTION PANEL IN THE MISCELLANEOUS CABINET OR BY A POWER DISTRIBUTION CABINET.
4. THE 14A RECORDED ANNOUNCEMENT SYSTEM REQUIRES CONNECTING TO EITHER A 4 WIRE E & M TRUNKS OR DEDICATED (TERMINATE ONLY) LINES.

-48A00
RTNA00
-48A10
RTNA10
-48B00
RTNB00
-48B10
RTNB10

INDUCTOR PANEL
ED-5D130-01
J5D005AC-1

(0 BUS)
FUSE/FILTER UNIT
SD-5D053-01
J5D003AU-1
0 BUS

(1 BUS)
FUSE/FILTER UNIT
SD-5D053-01
J5D003AU-1
1 BUS

FUSED -48V AS REQUIRED

14A RECORDED ANNOUNCEMENT SYSTEM (SEE NOTE 1)

BUBBLE MEMORY RECORDED ANNOUNCEMENT SYSTEM 13A (SEE NOTE 1)

TO TRUNK OR LINE UNIT (SEE NOTE 4) VIA DISTRIBUTING FRAME

TO MMSU VIA DISTRIBUTING FRAME

TO TRUNK UNIT VIA DISTRIBUTING FRAME

TO MMSU VIA DISTRIBUTING FRAME

J863340,LA,B (SEE NOTE 2 & 3)

POWER DISTRIBUTION PANEL

-48V POWER A BUS

-48V POWER B BUS

P
-48A
RTNA
P
-48B
RTNB

TO AS 7

-48A( )
RTNA( )
-48B( )
RTNB( )

TO SM CABINETS

REMOTE APPLICATIONS SCHEMATIC

SEPTEMBER 3, 1996

DWG SIZE C2

ISSUE 6M

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SD-5D133-01

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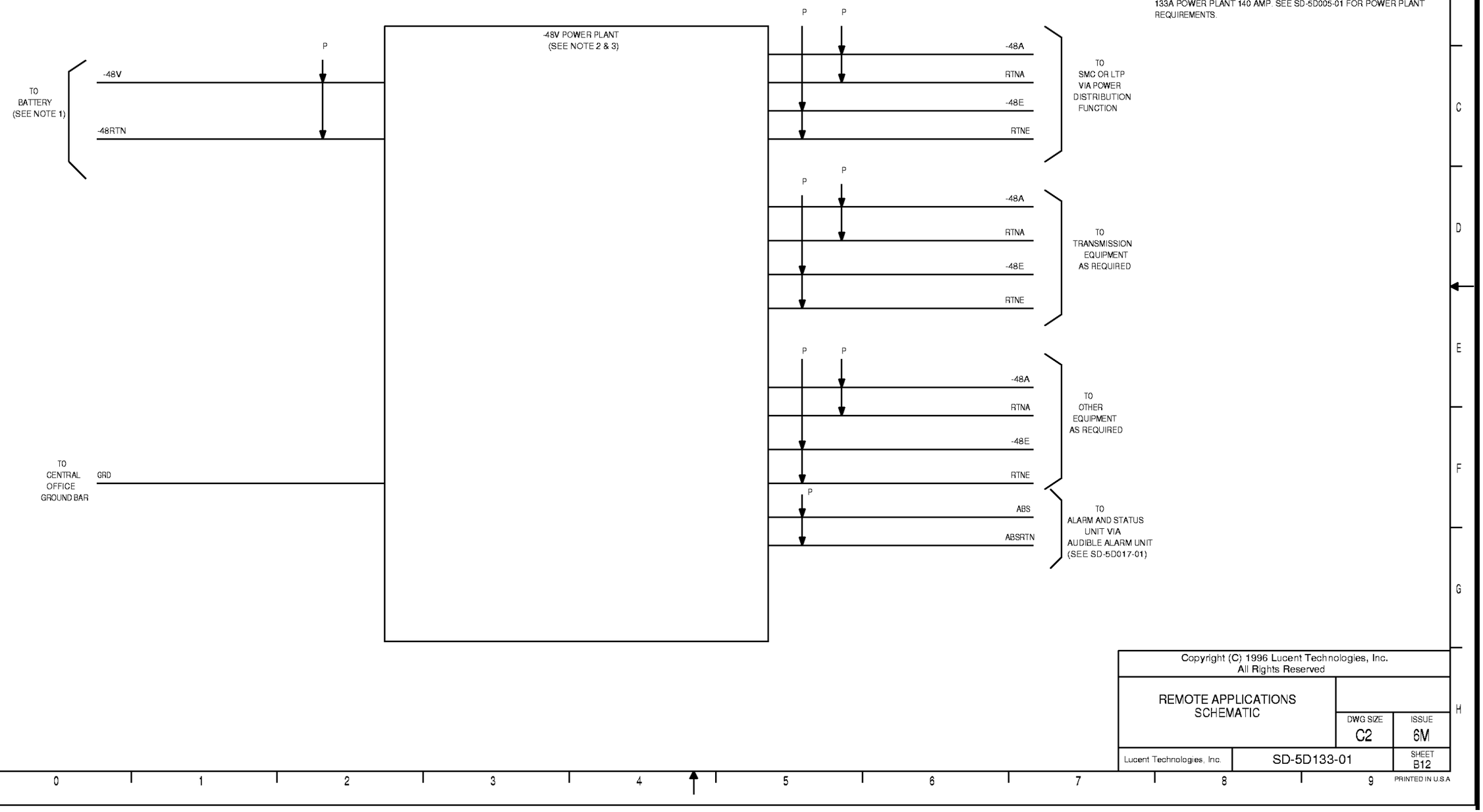
AS 4

-48V BATTERY PLANT
FOR RSM

NOTES:

1. IN AN MMRSM ARRANGEMENT A SMALL BATTERY PLANT IS REQUIRED TO PROVIDE -48V POWER. HOWEVER, AN EXISTING BATTERY PLANT MAY BE USED IF IT HAS ELECTRONIC SWITCH SYSTEM VOLTAGES AS SPECIFIED IN BSP-800-610-165 WHICH MEETS THE RSM POWER AND GROUNDING REQUIREMENTS AS SPECIFIED IN ED-5D024-01.
2. THE RSM POWER PLANT MUST BE EQUIPPED WITH AN AUTOMATIC RESTART TYPE OF RECTIFIER.
3. THE RSM MAYBE EQUIPPED WITH A 131A POWER PLANT 70 AMO, OR 133A POWER PLANT 140 AMP. SEE SD-5D005-01 FOR POWER PLANT REQUIREMENTS.



REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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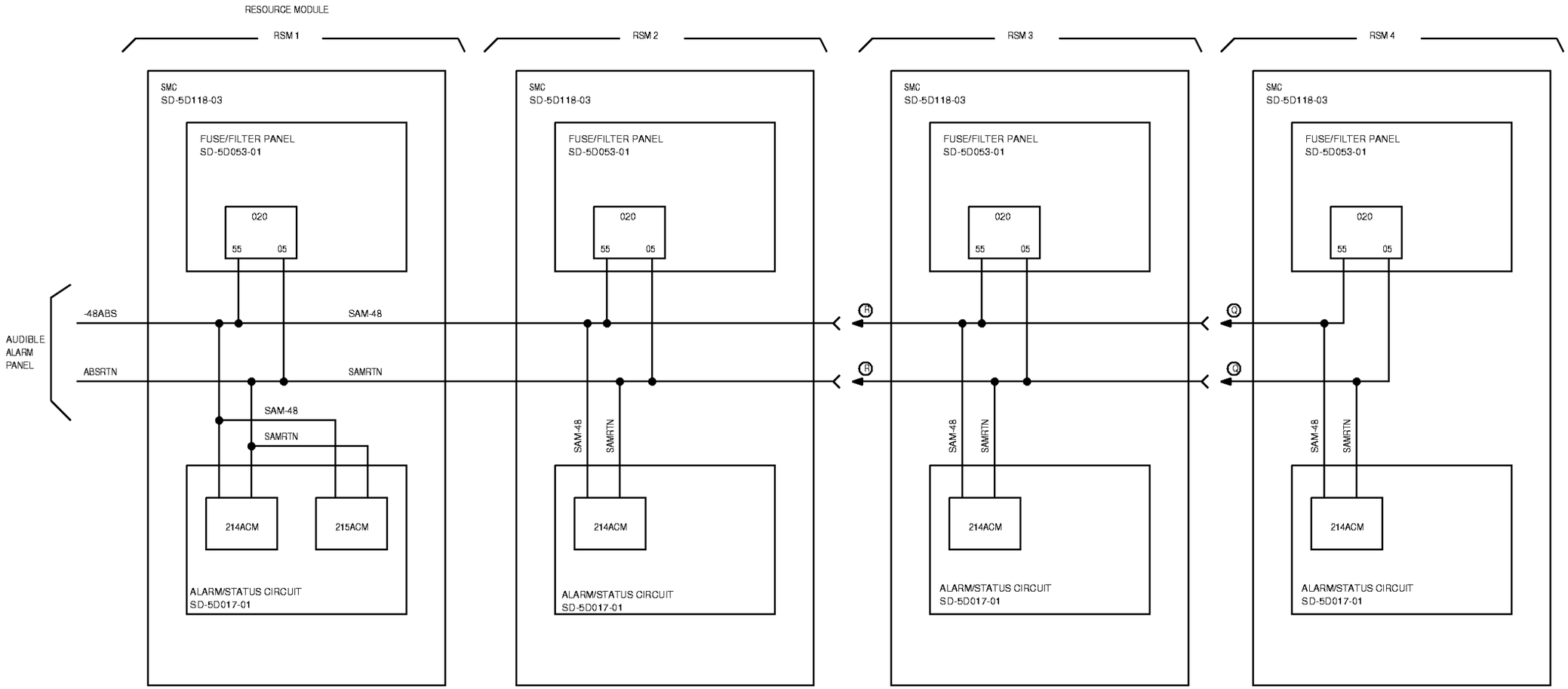
AS 5

MULTI-MODULE RSM

ALARM/STATUS CIRCUIT INTERCONNECTIONS



REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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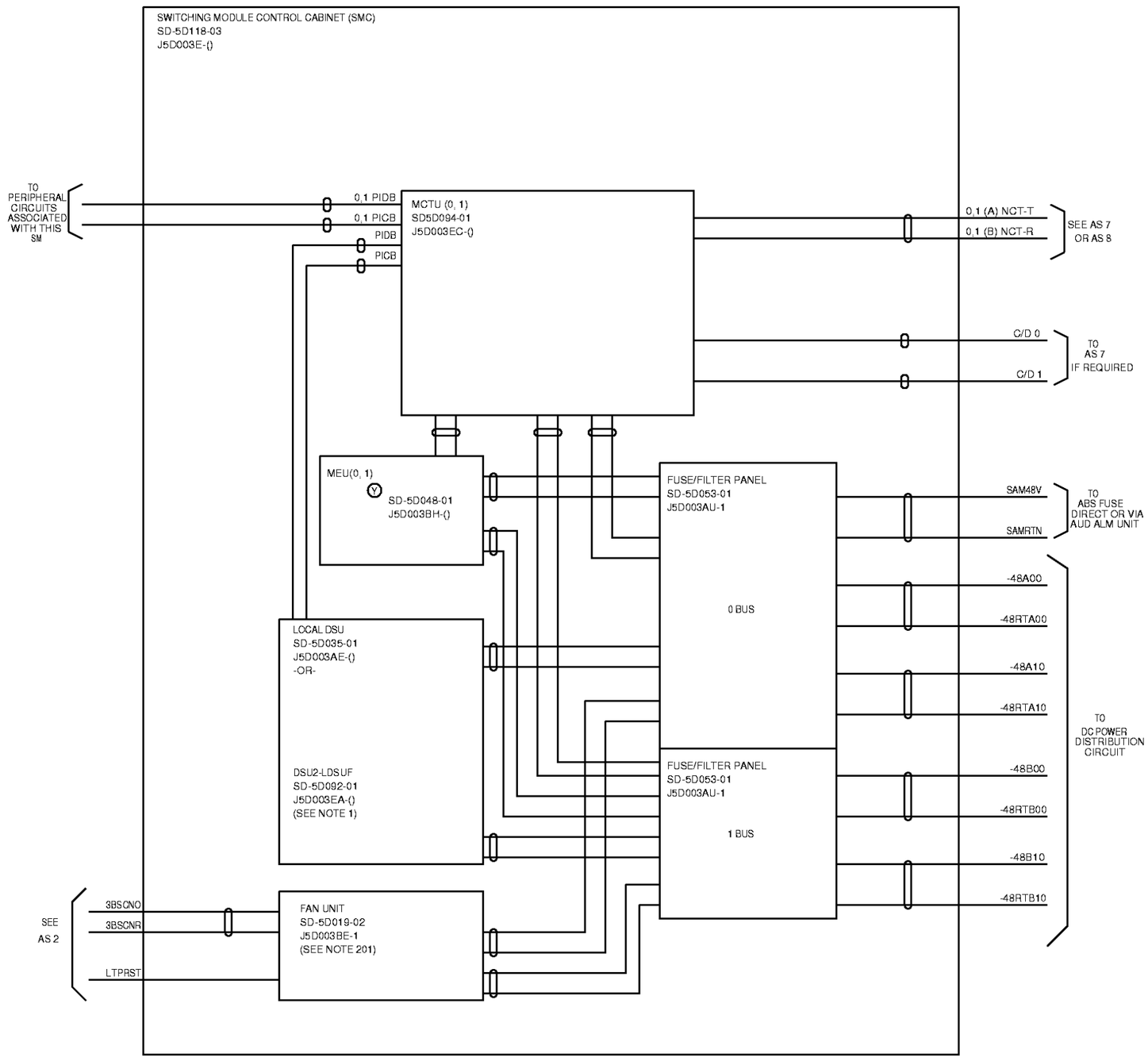
PART OF AS 6

SWITCHING MODULE CONTROL CABINET (SMC)
WITH THE
MODULE CONTROLLER & TIME SLOT INTERCHANGE UNIT (MCTU)

NOTE:

1. THE DSU2-LDSUF (J5D003EA) IS A REPLACEMENT FOR THE LOCAL DSU (J5D03AE). DSU2-LDSUF PHASED INTO FULL PRODUCTION DURING 5E2(2).



REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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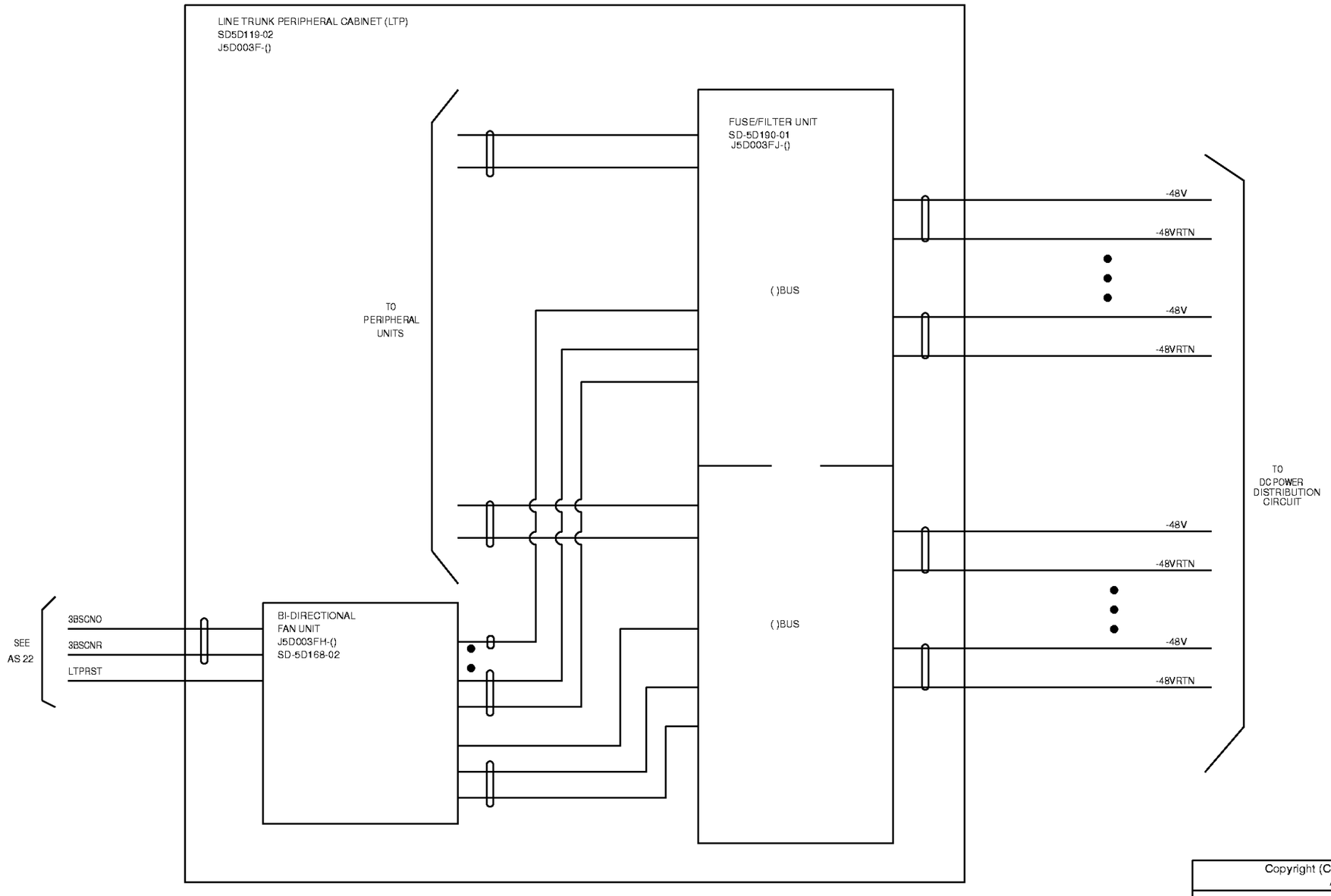
21 INCH DEPTH STANDARD CABINET



REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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		B14A

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PART OF AS 6

AIU CABINET
SD8G000-01
J8G000AA-{}

LINE TRUNK PERIPHERAL CABINET (LTP)
SD5D119-02
J5D003F-{}

FUSE/FILTER UNIT
SD-5D190-01
J5D003FJ-{}

TO
PERIPHL
UNITS

( )BUS

-48V
-48VRTN
-48V
-48VRTN

TO
DC POWER
DISTRIBUTION
CIRCUIT

SEE
AS 22

3BSCNO
3BSCNR
LTPRST

BI-DIRECTIONAL
FAN UNIT
J5D003FH-{}
SD-5D168-02

( )BUS

-48V
-48VRTN
-48V
-48VRTN

REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

Lucent Technologies, Inc.	SD-5D133-01	SHEET
		B14B

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AS 7

TRANSMISSION RATE CONVERTER UNIT (TRCU)

TO ASSOCIATED CM1 (TMS) OR CM2

TO ASSOCIATED MCTU AT REMOTE

TO ASSOC MCTU

TO DSX

0,1(A)NCT-T

N,T(0A)COAX

0,1(B)NCT-R

N,T(0B)COAX

(0)CD

(1)CD

N,T(1A)COAX

N,T(1B)COAX

0A

0B

1A

1B

-48V

-48VRTN

TO AS 1 (FUSE/FILTER PANEL)

DESCRIPTION:
EACH TRCU CONSISTS OF ONE 8 1/2" HIGH SHELF PROVIDING AT THE REMOTE LOCATION - 1 CIRCUIT PER SIDE UTILIZING TWISTED-PAIR CABLE AS NCT LINKS.

HOST LOCATION - 2 CIRCUITS PER SIDE SUPPORTING 2 REMOTES AND UTILIZING OPTICAL CABLE NCT LINKS.

FUSING REQUIREMENTS:
- SEE SD-5D400-01 FOR FUSING REQUIREMENTS.

SPECIFIC MOUNTING REQUIREMENTS:
-REMOTE LOCATION - THE TRCU SHALL BE MOUNTED DIRECTLY ABOVE THE MCTU IN THE SMC CABINET.
-HOST LOCATION - THE TRCU SHALL BE MOUNTED IN THE MISC. CABINET.

REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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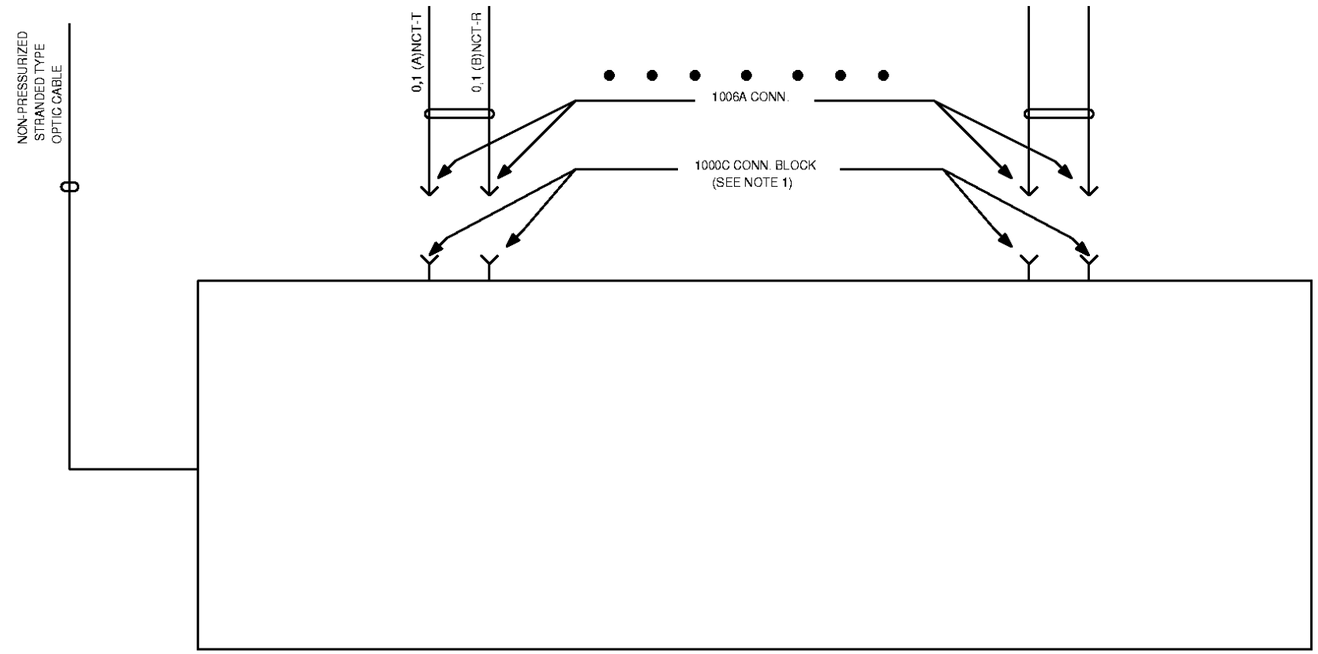
AS 8

LIGHTGUIDE INTERCONNECTION SYSTEM
(OPTIONAL CONFIGURATION)



LIGHTGUIDE STRANDED CABLE INTERCONNECTION MODULE (LSCIM)
(OPTIONAL UNIT)

DESCRIPTION:

A LIGHTGUIDE INTERCONNECTION SYSTEM MAYBE ANY OF A NUMBER OF CONFIGURATION WHICH TERMINATE FIBRE OPTIC CABLES ON 100C (SIX PACK) CONNECTOR BLOCKS. VARIOUS CONFIGURATIONS ARE:

LSCIM TERMINATES (24) FIBRE OPTIC CABLES
LSCIT TERMINATES (72) FIBRE OPTIC CABLES
LSCIE TERMINATES (144) FIBRE OPTIC CABLES
LCIT TERMINATES (72) FIBRE OPTIC CABLES
LCIE TERMINATES (144) FIBRE OPTIC CABLES

THE EXAMPLE SHOWN HERE IS A LSCIM.

EACH LSCIM CONSISTS OF ONE 5" HIGH X 17" LONG UNIT WHICH CAN BE EITHER WALL OR FRAME MOUNTED. THE LSCIM PROVIDES INTERCONNECTION FOR UP TO (4) NON-PRESSURIZED STRANDED TYPE CABLES AND (24) FIBRE OPTIC CABLES. MODEL F83AK8509 LSCIM OR EQUIVALENT.

SPECIFIC MOUNTING REQUIREMENTS:

THE RECOMMENDED MOUNTING LOCATIONS FOR THE LSCIM ARE:
- -REMOTE LOCATION - USE A WALL MOUNTED CONFIGURATION.
- -HOST LOCATION - USE A FRAME MOUNTED CONFIGURATION AND MOUNT IN THE MISC. CABINET OR A WALL MOUNTED CONFIGURATION IF THE NON-PRESSURIZED STRANDED OPTIC CABLES HAVE A METALLIC SHEATH.

NOTES:

1. WHEN ATTENUATION IS REQUIRED 401 BARREL TYPE LIGHTGUIDE BUILD-OUTS (LBO) ATTENUATORS CAN BE PUT ON 1000C CONNECTORS.

   401A1 (5-8DB LOSS)
   401B1 (10-13DB LOSS)
   401C1 (15-18DB LOSS)

REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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AS 9

SWITCHING MODULE CONTROL CABINET 2 (SMC2)
EQUIPPED WITH
MODULE CONTROLLER & TIME SLOT INTERCHANGE UNIT 2 (MCTU2)

SWITCHING MODULE CONTROL CABINET 2 (SMC2)
SD-5D160-01
J5D003L-{}

ASU
ED-5D586-10
SD-5D017-01
(Z,J)

TO
MMSU
VIA MDF

TO
AUD ALM UNIT
& REMOTE AIM
VIA MDF

TO
PERIPHERAL
CIRCUITS
ASSOCIATED
WITH THIS
SMC2

PIDB(0,1)
PICB(0,1)

MCTU2(0, 1)
SD-5D151-01
J5D003LA-{}

1
0

{0,1}{A} NCT-T
{0,1}{B} NCT-R

TO FIU,
TRCU

F/F PANEL
SD-5D053-02
J5D003AU-2
E/W LIST 6
(H)

B BUS

-48RTB01
-48B01

-48RTB00
-48B00

TO
DC POWER
DISTRIBUTION
CIRCUIT

F/F PANEL
SD-5D053-02
J5D003AU-2
E/W LIST 6
(G)

A BUS

-48RTA10
-48A10

-48RTA00
-48A00

TO
MCTU2 &
6 FAN UNIT

SEE
AS 2

3BSCNO
3BSCNR
LTPRST

6 FAN UNIT
SD-5D081-01
J5D003BN-{}

SAM48V
SAMRTN

TO ABS FUSE
DIRECT OR VIA
AUD ALM UNIT

NOTES:

1. THE LOCAL DSU FUNCTION IS PROVIDED BY DSC CIRCUIT PACKS WITHIN THE MCTU2.
2. EQUIPMENT NOTE 205 DISCRIBES VARIOUS OPTIONS SHOWN ON THIS PAGE.
3. THIS SMC2 CONFIGURATION WILL SUPPORT RSMS, TRMS, & ORMS.

FUSE/FILTER OPTION

F/F PANEL
J5D003AU-2 OR
J5D003BT-{}
(H)

A OR B BUS

F/F PANEL
SD-5D053-02
J5D003AU-2
E/W LIST 6 & SPLIT BUS

B BUS

(G)

A BUS

-48RTB
-48B

-48RTA
-48A

REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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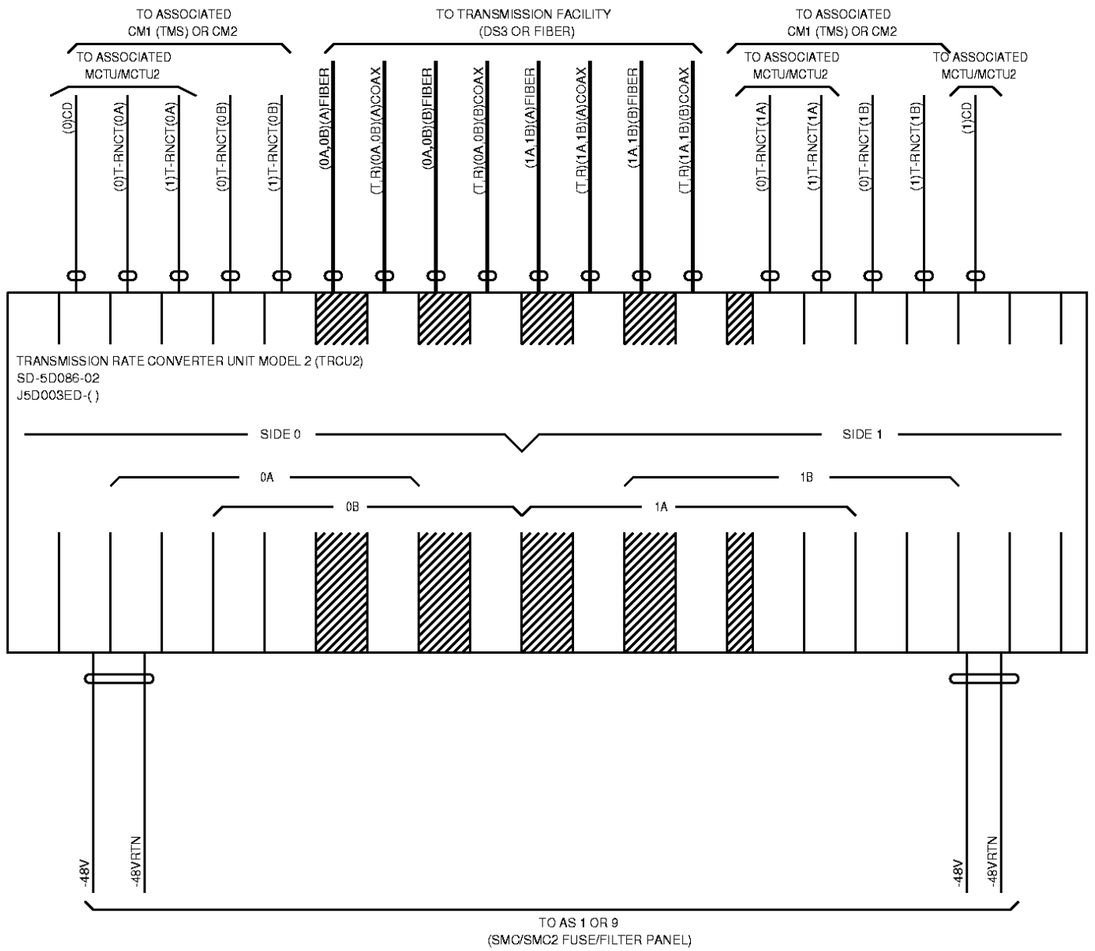
AS 10

TRANSMISSION RATE CONVERTER UNIT MODEL 2 (TRCU2)



DESCRIPTION

EACH TRCU2 CONSISTS OF ONE 8 1/2" HIGH SHELF PROVIDING AT THE REMOTE LOCATION - 1 CIRCUIT PER SIDE UTILIZING TWISTED-PAIR CABLE AS NCT LINES.

THE HOST LOCATION - 2 CIRCUITS PER SIDE SUPPORTING 2 REMOTES AND UTILIZING OPTICAL CABLE NCT LINKS.

FUSING REQUIREMENTS

SEE SD-5D400-01 FOR FUSING REQUIREMENTS.

SPECIFIC MOUNTING REQUIREMENTS

REMOTE LOCATION - THE TRCU2 SHALL BE MOUNTED DIRECTLY ABOVE THE MCTU/MCTU2 IN THE SMC/SMC2 CABINET.

HOST LOCATION - THE TRCU2 SHALL BE MOUNTED IN MISC. CABINET.

NOTES:

1. FOR DISTANCE LIMITATION SEE INFORMATION NOTE 312.
2. FOR TYPICAL INTERCONNECTION SEE BLOCK DIAGRAM 14.

REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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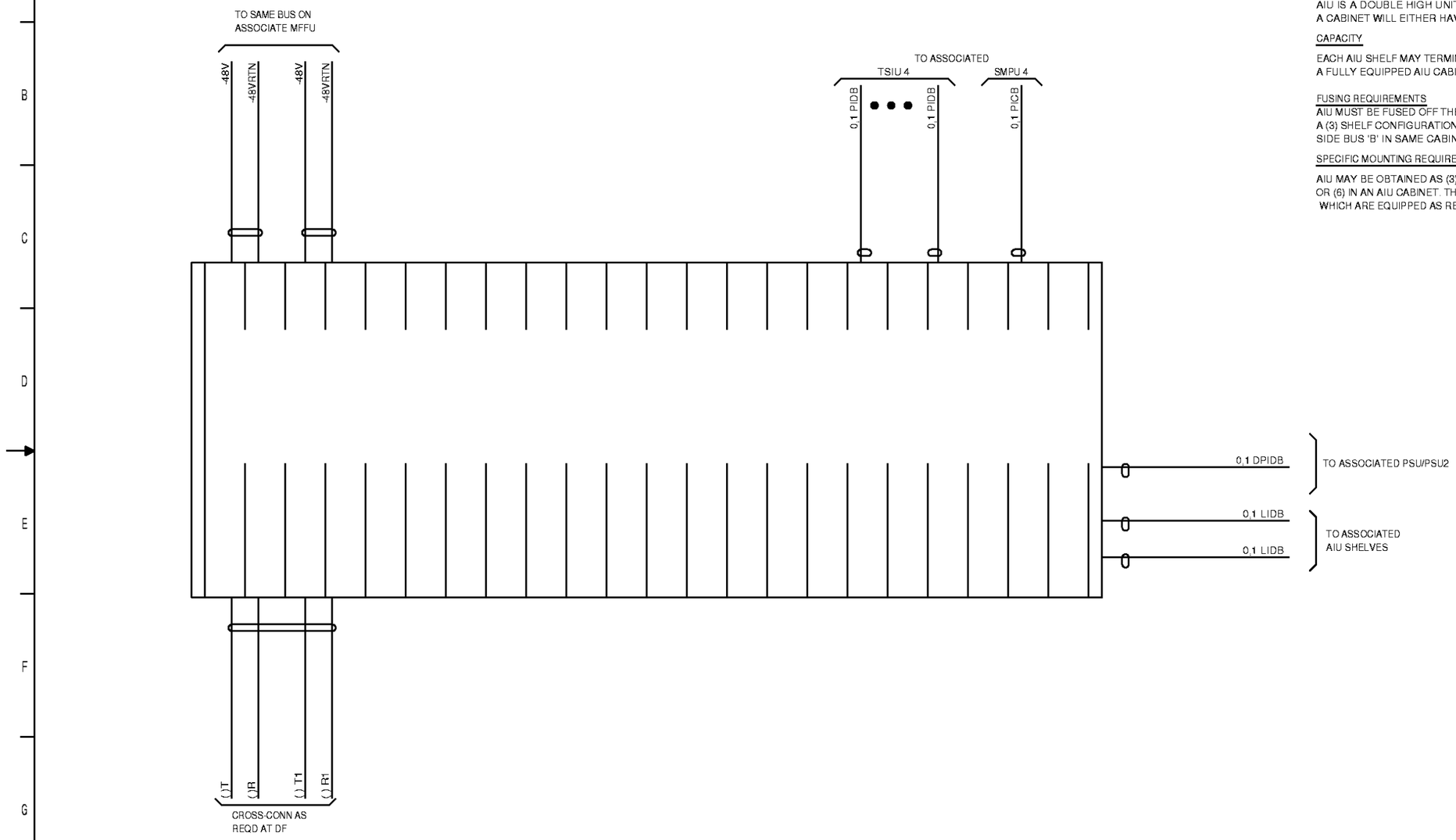
AS 11

ACCESS INTERFACE UNIT (AIU)
SD-8G000-01
J8G000AA-( )



DESCRIPTION

AIU IS A DOUBLE HIGH UNIT (17.00") X 8.62" DEEP.
A CABINET WILL EITHER HAVE (3) OR (6) AIU SHELVES.

CAPACITY

EACH AIU SHELF MAY TERMINATE UP TO 640 LINES.
A FULLY EQUIPPED AIU CABINET TERMINATES 3584 LINES.

FUSING REQUIREMENTS

AIU MUST BE FUSED OFF THE SAME BUS 'A' OR 'B' AS A (3) SHELF CONFIGURATION (EX: EQPT SIDE BUS 'A' WRG SIDE BUS 'B' IN SAME CABINET) SEE SD-8G000-01

SPECIFIC MOUNTING REQUIREMENTS

AIU MAY BE OBTAINED AS (3) IN A STANDARD 2000 CABINET OR (6) IN AN AIU CABINET. THESE ARE UNEQUIPPED SHELVES WHICH ARE EQUIPPED AS REQUIRED. (SEE EQPT NOTE: 212)

REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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CIRCUIT NOTES:

101.

DESIG	FUSE AMP	POTENTIAL	ONE PER

BATTERY SYMBOL

VOLTAGE RANGE

102.

NETWORK VALUES			
NETWORK		RESISTANCE IN OHMS	CAPACITANCE IN UF
NO.	CODE		

REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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EQUIPMENT NOTES:

200. THIS DOCUMENT SHOWS THE STRAP WIRING REQUIRED FOR THE FAN UNIT ALARM, SCAN AND DISTRIBUTE CONNECTIONS BETWEEN THE BAYS, IN AN SRM.

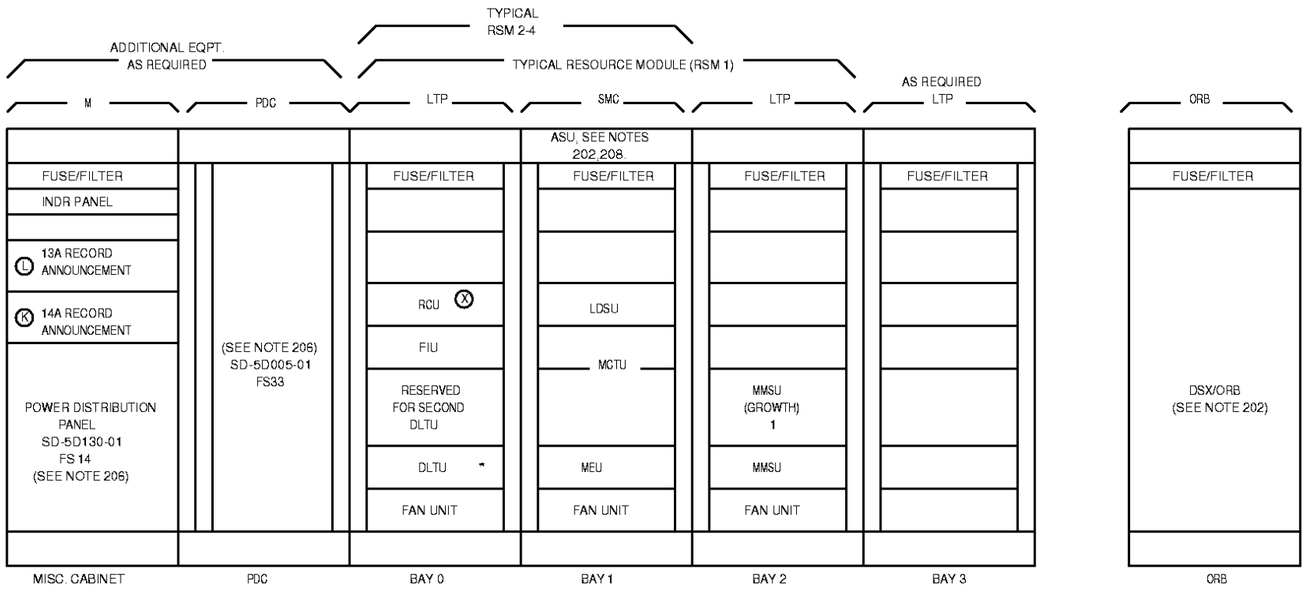
201. FAN FUSING ARRANGEMENTS FOR THE SMC AND LTP CABINETS SHALL BE AS FOLLOWS:

FAN UNIT	FUSE/FILTER PNL.	F/F PNL EQL	FUSING UNIT TERMINAL LEADS
J5D003BE-{} E/W WW ALM BRD	J5D003AU-{}	( )69-020 ( )69-114	53,52;43,42;41,40 53,52;43,42;41,40
J5D003BE-{} E/W COMM ALM BRD	J5D003AU-{}	( )69-020 ( )69-114	43,42;53,52 43,42;53,52
J5D003BE-{} E/W COMM ALM BRD	J5D003BT-{}	( )69-020 ( )69-072 ( )69-114 ( )69-166	 33,32 45,44 33,32
J5D003BN-{}	J5D003BT-{}	( )69-020 ( )69-072 ( )69-114 ( )69-166	45,44 33,32;45,44 45,44 33,32;45,44
J5D003BN-{}	J5D003AU-{}	( )69-020 ( )69-114	
J5D003BN-{}	J5D003AU-{} E/W SPLIT BUS	169-020 169-027	21,20;11,10;01,00 41,40;31,30;21,20

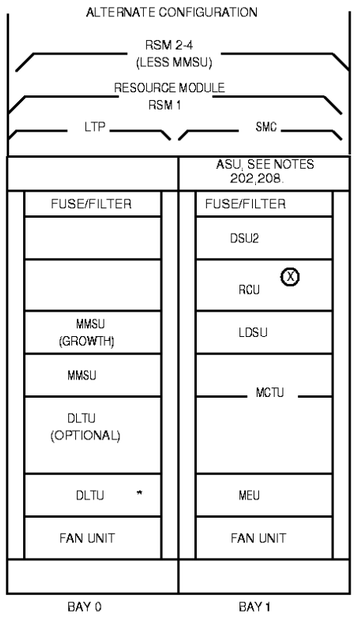
202. THE DIGITAL CROSS-CONNECT (DSX) AND THE OFFICE REPEATER BAY (ORB) ARE TO BE SPECIFIED AND ENGINEERED BY THE LINE ENGINEERS.

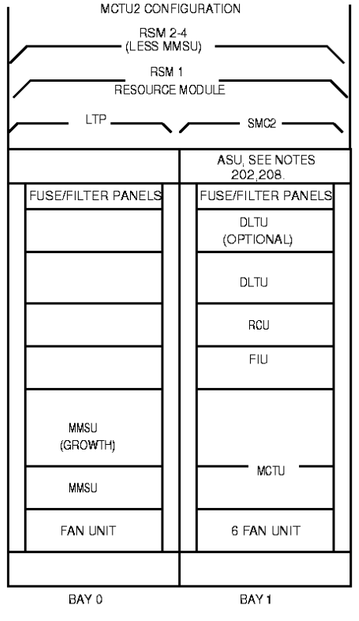
EQUIPMENT NOTES:

203. TYPICAL CONFIGURATION:



* EQUIP FIRST DLTU IN THIS POSITION





REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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EQUIPMENT NOTES (CONT):

204. ASSIGNMENT OF PICB CABLES INTERCONNECTING THE MCTU AND THE PERIPHERAL UNITS AND ASSIGNMENT TO PIDB CABLES INTERCONNECTING THE MCTU AND THE PERIPHERALS ARE DESCRIBED IN SD-5D007-01.

205. OPTION NOTES:
- (Z) -ASU ED-5D586-10 G2 USED IN RSM 2-4 IN MMRSM ARRANGMENTS (SEE NOTE 207).
- (Y) -MEMORY EXPANSION UNIT, EQUIPPED WHEN
  1. SM MEMORY EXCEEDS 5 MEGABYTES WITH TN28 MEMORY PACKS.
  2. SM MEMORY EXCEEDS 10 MEGABYTES WITH TN56 MEMORY PACKS.
- (X) -RCU IS OPTIONAL IN MMRSM, REQUIRED WHEN DIGITAL TRUNKS ARE USED TO TRANSIT DATA.
- (W) -D3 WIRING ASSOCIATED WITH LTP BAY 0.
- (V) -D3 WIRING ASSOCIATED WITH LTP BAY 2.
- (T) -D3 WIRING ASSOCIATED WITH LTP BAY 3.
- (S) -D3 WIRING ASSOCIATED WITH LTP BAY 4.
- (R) – ASU POWER WIRING ASSOCIATED WITH RSM 3 OF AN MMRSM ARRANGEMENT.
- (Q) – ASU POWER WIRING ASSOCIATED WITH RSM 4 ON AN MMRSM ARRANGEMENT.
- (P) -THE AUDIO AND VISUAL ALARMS ARE OPTIONAL AT THE RSM SITE.
- (N) -RSM BELTLINE IS OPTIONAL IN MMRSM.
- (M) -RSM MAINTENANCE USING REMOTE STLWS IS OPTIONAL IN MMRSM.
- (L) – 13A RECORDED ANNOUNCEMENT SYSTEM IS OPTIONAL IN THE MISCELLANOUS CABINET OF A MMRSM.
- (K) – 14A RECORDED ANNOUNCEMENT SYSTEM IS OPTIONAL IN THE MISCELLANOUS CABINET OF A MMRSM.
- (J) -ASU ED-5D586-10 G1 & G2 IS OPTIONAL IN TRMS AND ORMS.
- (H) -WITH SMC2 THIS FUSE/FILTER PANEL CAN BE USED TO SUPPORT PERIPHERALS LIKE LUS, ISLUS. THIS REQUIRES OPTION (G)
- (G) -WITH SMC2 THIS FUSE/FILTER PANEL CAN HAVE A SPLIT-BUS OPTION WHICH ALLOWS THE MCTU2 AND 6 FAN UNIT SIDES 0 & 1 TO BE POWERED FROM THIS F/F PANEL ONLY.
- (F) -D3 WIRING ASSOCIATED WITH TYING -48VRTN BUSES TOGETHER WITHIN A CABINET.

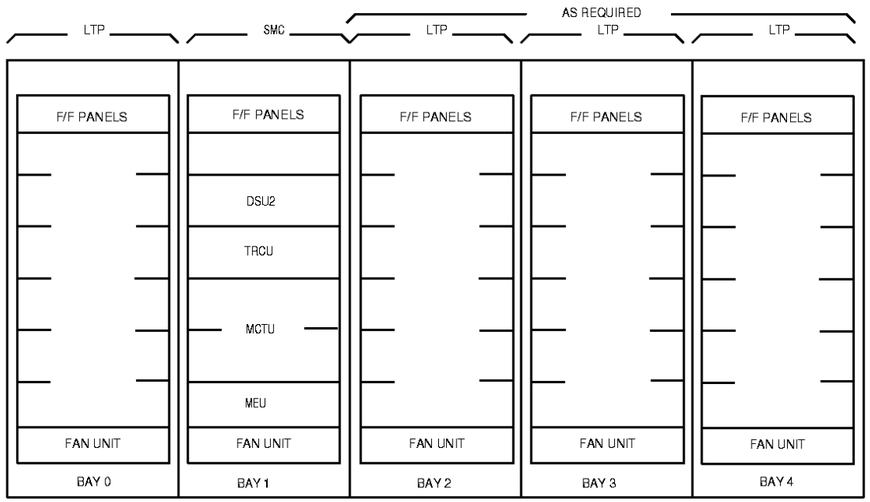
206. THE POWER DISTRIBUTION FUNCTION CAN BE PROVIDED ON THE MISCELLANEOUS CABINET OR IT CAN BE PROVIDED BY THE POWER DISTRIBUTION CABINET.

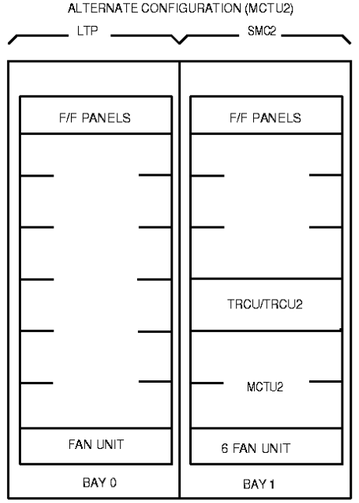
207. THE ALARM AND STATUS UNIT ED-5D586-10 G1 & G2 SHALL BE MOUNTED ABOVE THE SMC IN FRONT OF THE FUSE/FILTER UNIT. THE RESOURCE MODULE (RSM 1) WILL BE EQUIPPED WITH ASU ED-5D586-10 G1 AND RSM 2-4 WILL BE EQUIPPED WITH ED-5D586-10 G2.

208. THE AUDIBLE ALARM PANEL IS AN OPTIONAL UNIT AND SHOULD BE MOUNTED ON THE WALL IN THE RSM ENVIRONMENT.

EQUIPMENT NOTES (CONT):

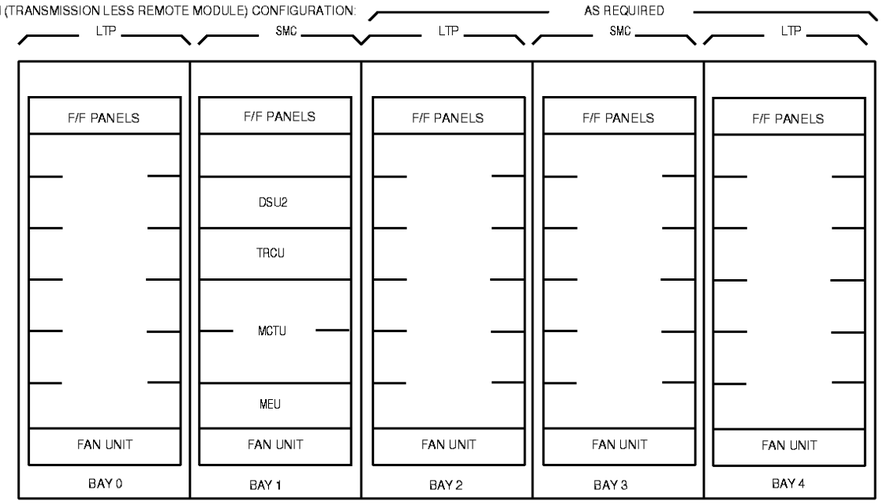
209. TYPICAL ORM (OPTICALLY REMOTE MODULE) CONFIGURATION:

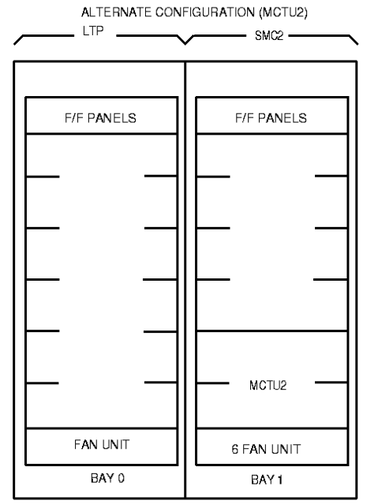




ORM NOTES:
1. OPTIONAL EQUIPMENT -
   ASU (ALARM STATUS UNIT) ED-5D586-10,G1 (ASC & SAM) OR G2 (SAM).
   MMSU (MODULE METALLIC SERVICE UNIT) J5D003BD-() TO PROVIDE ALIT TESTING OR WITH A DCTU INTEGRATED MLT TESTING.
2. EQUIPMENT NOT USABLE IN AN ORM.
3. ADDITIONAL EQUIPMENT AS REQUIRED:
   MISC. CABINET
   POWER DISTRIBUTION CABINET
   DIGITAL CROSS-CONNECT (DSX)/OFFICE REPEATER BAY
   LIGHTGUIDE CROSS-CONNECT (LGX) EQUIPMENT
4. MULTIPLE ORMS CO-LOCATED CREATE AN ORM CLUSTER. AN ORM CLUSTER IS LIMITED IN NUMBERS BY THE CONSTRAINTS IN "INFORMATION NOTE 311". IN AN ORM CLUSTER, SOME EQUIPMENT MAY BE SHARED, LIKE THE MMSU, DCTU, AND ASC.

210. TYPICAL TRM (TRANSMISSION LESS REMOTE MODULE) CONFIGURATION:





TRM NOTES:
1. OPTIONAL EQUIPMENT -
   ASU (ALARM STATUS UNIT) ED-5D586-10,G1 (ASC & SAM - USED IN RESOURCE MODULE) OR G2 (SAM)
   MMSU (MODULE METALLIC SERVICE UNIT) J5D003BD-() USED TO PROVIDE ALIT TESTING AND/OR WITH A DCTU PROVIDES MLT TESTING.
2. EQUIPMENT NOT USABLE IN A TRM.
3. ADDITIONAL EQUIPMENT REQUIRED:
   MISC. CABINET
   POWER DISTRIBUTION CABINET
   DIGITAL CROSS-CONNECT (DSX)/OFFICE REPEATER BAY
   LIGHTGUIDE INTERCONNECTION SYSTEM.
4. MULTIPLE TRMS CO-LOCATED CREATE A TRM CLUSTER. A TRM CLUSTER IS LIMITED IN NUMBERS BY THE CONSTRAINTS IN "IN INFORMATION NOTE 311". IN A TRM CLUSTER, SOME EQUIPMENT MAY BE SHARED, LIKE THE MMSU, DCTU, AND ASC.

REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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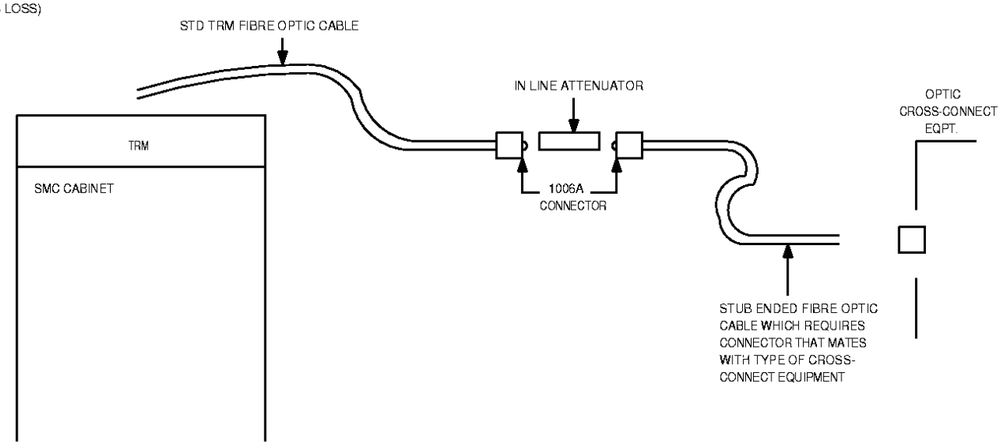
EQUIPMENT NOTES (CONT):

211. IN TRM APPLICATIONS WHERE ATTENUATION AS SHOWN IN "AS 8" CAN NOT BE USED, AN IN-LINE ATTENUATOR IS SUGGESTED. THE IN-LINE SERIES OF ATTENUATORS ALLOW FIBRE OPTIC CABLE EQUIPPED WITH 1006A CONNECTORS TO BE CONNECTED AT EACH END. THE DOCUMENTATION PROVIDES ATTENUATORS AND SHORT STUB ENDED FIBRE OPTIC CABLES WHICH WILL GO BETWEEN THE CROSS-CONNECT EQUIPMENT AND THE TRM FIBRE OPTIC CABLING (SEE SKETCH BELOW).

THE IN-LINE ATTENUATORS CODE AND VALUES ARE AS FOLLOWS:

CODE NO.	VALUE
1002A	(0DB LOSS)
402A	(6DB LOSS)
402B	(12DB LOSS)
402C	(16DB LOSS)



REMOTE APPLICATIONS SCHEMATIC

DWG SIZE C2 | ISSUE 6M

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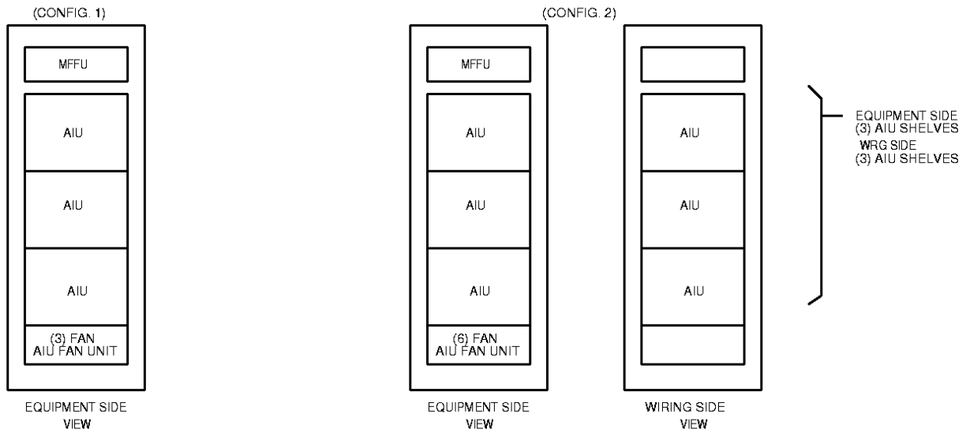
EQUIPMENT NOTES(CONT.)

212. AIU CAN BE OBTAINED IN TWO CONFIGURATIONS ONLY
1. (3) AIU SHELVES IN A 21.00" DEPTH STANDARD CABINET OR A STANDARD 2000 CABINET.

2. (6) AIU SHELVES IN THE AIU CABINET.



REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE C2 | ISSUE 6M

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INFORMATION NOTES:

301. UNLESS OTHERWISE SPECIFIED:
RESISTANCE VALUES ARE IN OHMS,
CAPACITANCE VALUES ARE IN MICROFARADS,
VALUES PRECEDED BY THE SYMBOL + (PLUS)
OR - (MINUS) ARE IN VOLTS.

FEATURE OR OPTION	PROVIDE		
	APP FIG	APP OR WRG	QUANTITY

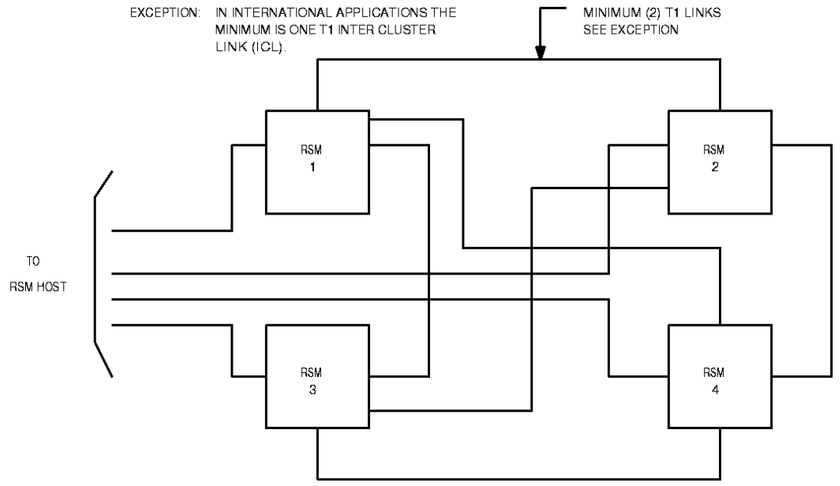
303.

RECORD OF FIGURES, WIRING AND APPARATUS CHANGES					
CHANGED ON ISS	IF JOB RECORDS DO NOT SPECIFY	THIS OPTION WAS FURN	SEE NOTE	USE IN CIRCUIT	
				AVAIL	DA

304. A SUBSCRIBER LOOP CARRIER (SLC 96) SYSTEM IS A PAIR GAIN SYSTEM THAT REDUCES THE NEED FOR NEW CABLING BY INCREASING THE NUMBER OF CUSTOMERS SERVED BY THE EXISTING FACILITIES.

INFORMATION NOTES (CONT):

305. THE DIAGRAM BELOW CONTAINS THE INTRA MODULE LINK CONNECTIONS FOR FOUR RSM'S. A MINIMUM OF (2) T1 LINKS ARE REQUIRED BETWEEN MODULES AND A MINIMUM SET OF (2) T1 LINKS BETWEEN THE HOST AND EACH RSM WITH A MAXIMUM COMBINED TOTAL OF (20) T1 LINKS AVAILABLE. ALL T1 LINKS ABOVE THE MINIMUM ARE OFFICE ENGINEERED.
EXCEPTION: IN INTERNATIONAL APPLICATIONS THE MINIMUM IS ONE T1 INTER CLUSTER LINK (ICL).



306. IN ORM APPLICATIONS, AT BOTH THE HOST AND REMOTE LOCATIONS THE CABLING BETWEEN THE TRCU AND THE DSX-3 BAY MUST NOT EXCEED 450 FEET IN LENGTH. IN ADDITION, THIS CABLING MUST BE ROUTED WITHIN 3 FEET OF THE 5ESS GROUND WINDOW AT SOME POINT IN ITS LENGTH. THE COAX SHEILD MUST BE GROUNDED AT THE GROUND WINDOW WITH A GROUND LEAD NO GREATER THAN 3 FEET IN LENGTH. (COAX JACK -JACK BULKHEAD CONNECTORS THROUGH A BUSS BAR GROUNDED TO THE GROUND WINDOW IS ACCEPTABLE).

307. IN ORM APPLICATIONS, THE FIBRE NCT LINKS BETWEEN THE CM1 (TMS) OR CM2 AND THE TRCU HAVE THE PRESENT 1000 FEET CABLE LENGTH LIMITATION.

308. IN TRM APPLICATIONS, AT THE HOST LOCATION IF THE OUTSIDE PLANT OPTIC CABLE HAS A METALLIC SHEATH THE LSCIM CANNOT BE MOUNTED IN THE MISC CABINET.

309. IN TRM APPLICATIONS, IF THE OUTSIDE PLANT OPTIC CABLE CAN BE TERMINATED IN 1006A OPTIC CONNECTORS, THE LSCIM IS NOT REQUIRED. OPTIC CABLES WOULD BE JOINED UTILIZING 1002A OPTIC COUPLERS OR 402 TYPE ATTENUATORS AS REQUIRED.

310. IN TRM APPLICATIONS, THE OPTIC REQUIREMENTS ARE:

HOST		REMOTE	OPTICAL WAVE LENGTH	ALLOWABLE END TO END LOSS (4)	MAX. OUTSIDE PLANT LOSS
CONFIG	OPTIC CONN.	OPTIC CONN.			
CM1 (TMS)	982TA(1)	982TA	875 MICROMETERS	9DB TO 17DB LOSS (3)	11DB
	982WY(2)	982WY			
CM2	982TH RCV SIDE	982TA	875 MICROMETERS	9DB TO 17DB LOSS	11DB
		982WY			
	982TH XMIT SIDE	982TA	875 MICROMETERS	14DB TO 22DB LOSS	11DB
		982WY			

SPECIAL NOTES:
1. 982TA TRANSCEIVERS ARE USED IN UPPER BACKPLANE LOCATIONS.
2. 982WY TRANSCEIVERS ARE USED IN LOWER BACKPLANE LOCATIONS.
3. USE ATTENUATORS TO MEET LOSS REQUIREMENTS.
4. END TO END MEANS FROM CONNECTOR AT SM TO CONNECTOR AT CM.

INFORMATION NOTES (CONT):

311. IN TRM APPLICATIONS WHEN ATTENUATION IS REQUIRED IT WILL BE PROVIDED ON OR NEAR THE CROSS-CONNECT EQUIPMENT (LIKE THE LSCIM "AS 8") OF THE REMOTE SITE. IF THE CROSS-CONNECT EQUIPMENT USED HAS 1000C TYPE CONNECTOR BLOCKS. THEN ATTENUATION CAN BE PROVIDED AS SHOWN IN "AS 8". IF THE CROSS-CONNECT EQUIPMENT DOES NOT USE 1000C TYPE CONNECTOR BLOCKS. THEN ATTENUATION CAN BE PROVIDED BY IN-LINE ATTENUATORS WITHIN THE FIBRE OPTIC CABLE RUN (SEE EQUIPMENT NOTE: 211).

ORM/TRM CLUSTERS TO UTILIZE THE SHARED RESOURCES FEATURE MUST BE CO-LOCATED. IT IS RECOMMENDED THAT CO-LOCATED ORMS/TRMS RESIDE IN THE SAME ROOM. IF THEY CAN NOT RESIDE IN THE SAME ROOM THEY MUST MEET THESE CO-LOCATION CONSTRAINTS:

A. HOST SWITCH - CO-LOCATED ORM/TRMS MUST HAVE THE SAME HOST.
B. POWER DISTRIBUTION - CO-LOCATED ORMS/TRMS MUST USE THE SAME POWER PLANT AND GROUND WINDOW. (NOTE: ORMS/TRMS CAN NOT BE MORE THAN ONE FLOOR AWAY FROM GROUND WINDOW.)
REF: SD-5D005-01
ED-5D024-01
C. MMSU - CO-LOCATED ORMS/TRMS SHARING A MMSU'S METALLIC NETWORK ARE LIMITED TO A SINGLE MMSU (MAXIMUM OF FOUR SHELVES) AND MEET IT'S CONNECTIVITY REQUIREMENTS. ADDITIONAL MMSUS MAY BE USED FOR SCAN AND DISTRIBUTE CIRCUITS.
REF: SD-5D007-01
SD-5D014-02
D. DCTU & ATU - CO-LOCATED ORMS/TRMS SHARING THESE TEST FACILITIES ON THE METALLIC NETWORK ARE LIMITED TO A SINGLE DCTU (MAXIMUM 3 PMUS) AND MUST MEET THEIR CONNECTIVITY REQUIREMENTS.
E. ALARMS (OPTIONAL) - CO-LOCATED ORMS/TRMS UTILIZING THE OPTIONAL ASU (ALARM STATUS UNIT) MUST USE THE SAME ALARM BATTERY SUPPLY.
REF: SD-5D017-01

312. IN ORMS THE ALTERNATE ROUTE OF THE ODD (EVEN) LINK FROM SIDE "0" AND THE ODD (EVEN) LINK FROM SIDE "1" DIFFER IN DELAY BY MORE THAN 20 MICROSECONDS (APPROXIMATELY 2.5 MILES IN LENGTH) A SLIP CAN OCCUR. THE SLIP WILL OCCUR WHEN THE "TSI" SWITCHES SIDES (LIKE DURING THE DIAGNOSTIC ROUTINE "FORCE" ONTO SWITCH"). A SLIP IS A FRAME OF DATA WHICH IS NON-ISDN WITHOUT PROTOCOLS. IF THESE SLIPS CANNOT BE TOLERATED THE FOLLOWING RESTRICTIONS MUST BE ADHERED TO.

THE ODD (EVEN) LINKS FROM SIDE "0" AND THE ODD (EVEN) LINK FROM SIDE "1" MUST NOT DIFFER IN DELAY BY MORE THAN 20 MICROSECONDS (APPROXIMATELY 2.5 MILES IN LENGTH). IF THE INTERFERENCE IS ELECTRICAL THE ODD (EVEN) LINKS FROM SIDE "0" AND SIDE"1" CAN HAVE THE SAME ROUTE AND THE EVEN (ODD) LINKS AN ALTERNATE ROUTE WHICH WOULD ALLOW THESE ROUTES TO DIFFER BY A DELAY OF MORE THAN 20 MICROSECONDS (2.5 MILES). IF THE INTERFACE IS OPTICAL THE ODD AND EVEN LINKS ARE ON THE SAME FIBRE SO THE DIFFERENCE IN DELAY CANNOT BE MORE THAN 20 MICROSECONDS (2.5 MILES) AND THE RESTRICTION IS REQUIRED.

313. IN TRM APPLICATIONS-ALTERNATE ROUTING OF LINKS CAN BE DONE, PROVIDED THE TIME DIFFERENTIAL IS NO MORE THAN 70NS WITH A MAXIMUM LENGTH DIFFERENTIAL OF 45 FEET.
IT IS RECOMMENDED THAT THE ODD (EVEN) LINKS FROM SIDE "0" AND SIDE "1" BE IN THE SAME ROUTE.
IF ADDITIONAL CABLE LENGTH IS REQUIRED TO BALANCED ROUTING. IT IS RECOMMENDED THAT THE EXTRA FIBRE BE COILED IN THE CABLE RACK OF THE TRM.

REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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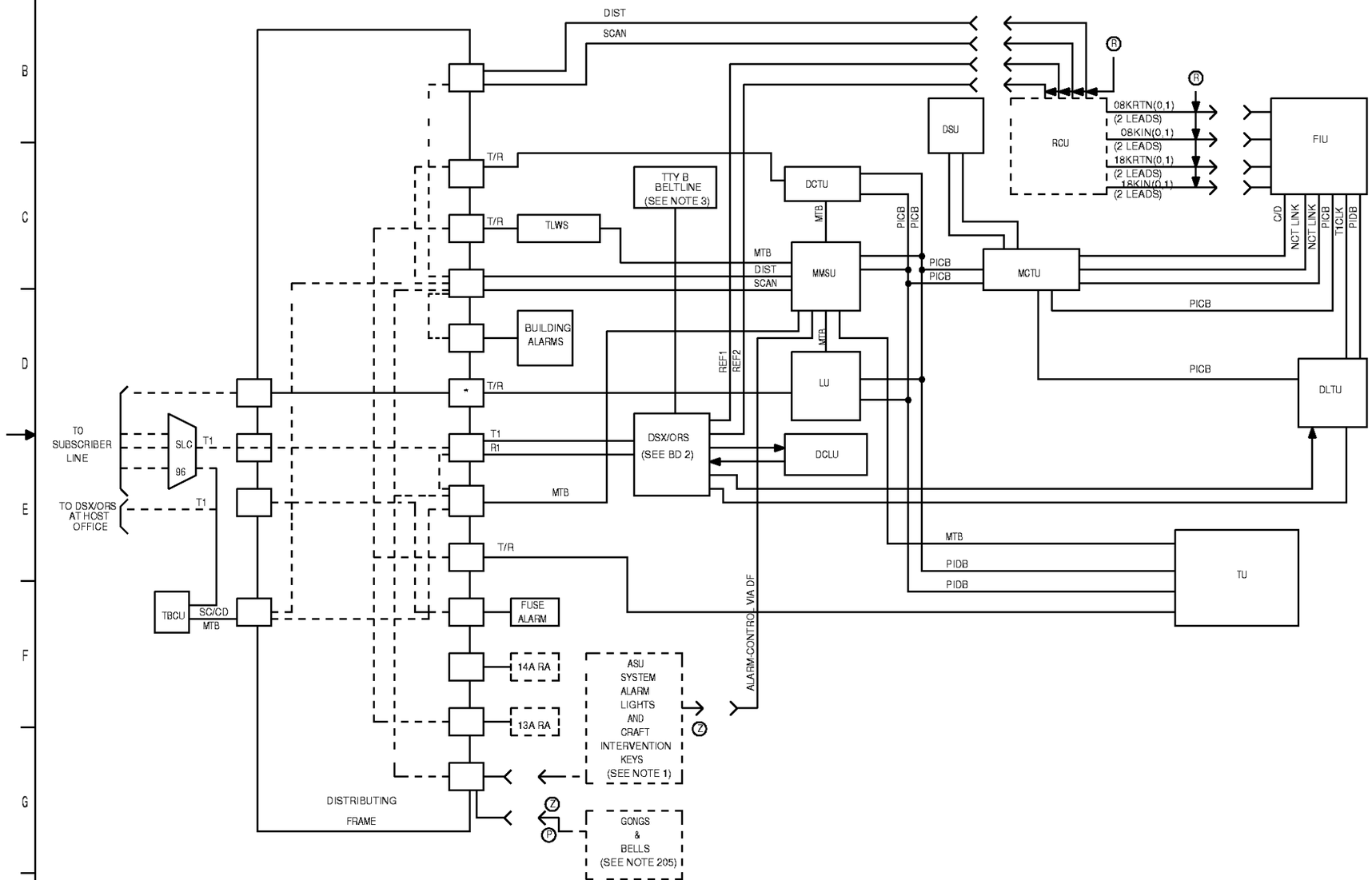
BD 1

BLOCK DIAGRAM FOR A TYPICAL
MULTI-MODULE REMOTE SWITCHING MODULE



NOTES:
1. SEE NOTES 207 AND 208.
2. ADDITIONAL RSM CABLING INFORMATION IS CONTAINED IN ED-5D500-10.
3. THE TTY-B BELTLINE IS INDEPENDENT FROM THE HOST MAIN BELTLINE (TTY-A). THE TTY-B IS INTENDED TO BE CONNECTED TO OTHER RSM WITHIN THE SAME MULTI-MODULE RSM ONLY.

* LIGHTNING PROTECTION IS REQUIRED FOR THE 5ESS LINE UNITS. TYPICAL EQUIPMENT IS SHOWN IN ED-5D025-11 AND THE MAIN FRAME ASSIGNMENT IS CONTAINED IN ED-5D027-01.

REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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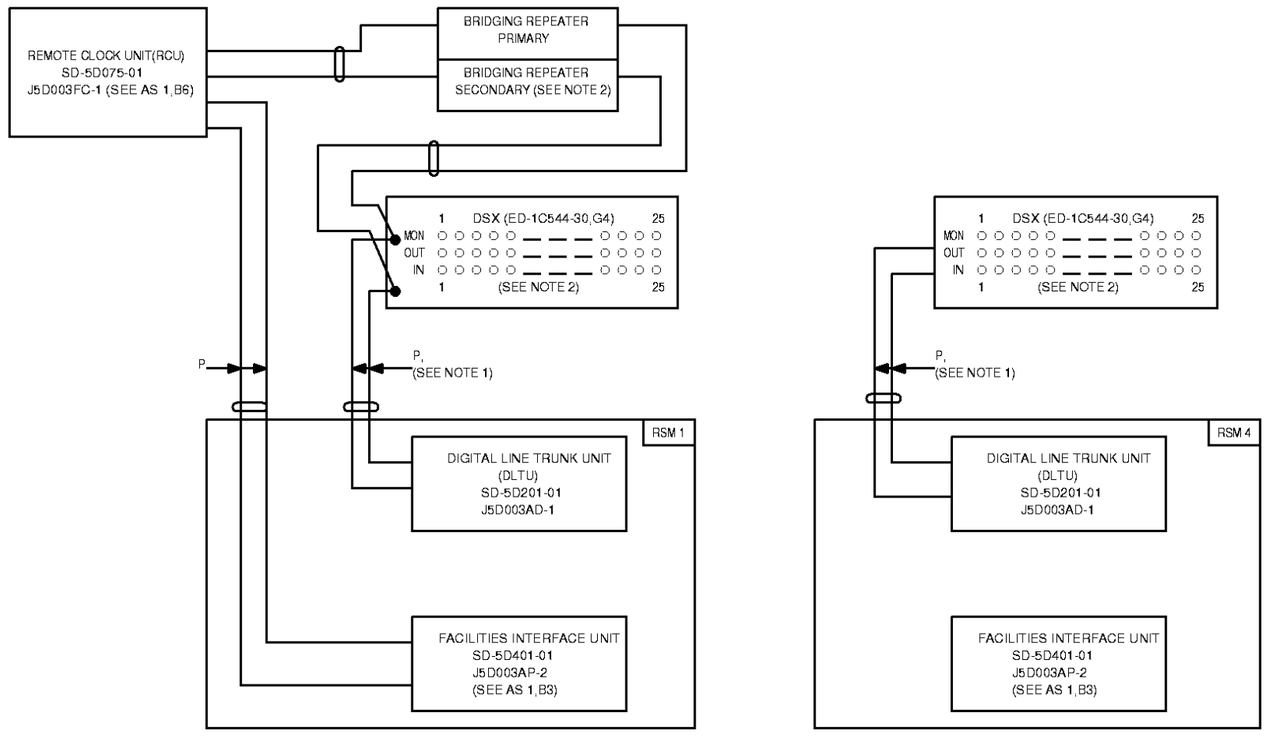
BD 2

BLOCK DIAGRAM OF THE MULTI-MODULE
REMOTE SWITCHING SYSTEM
NETWORK

NOTES:
1. THE INTRA MODULES LINKS ARE CROSS CONNECTED AT THE DIGITAL CROSS-CONNECT BAY (DSX). A MINIMUM OF TWO T1 LINKS (UMBILICALS) ARE REQUIRED TO ESTABLISH THE INTRA MODULE LINKS (SEE NOTE 305).
2. THE BRIDGE AND REPEATER WIRING IS CONTAINED IN ED-5D500-11.



REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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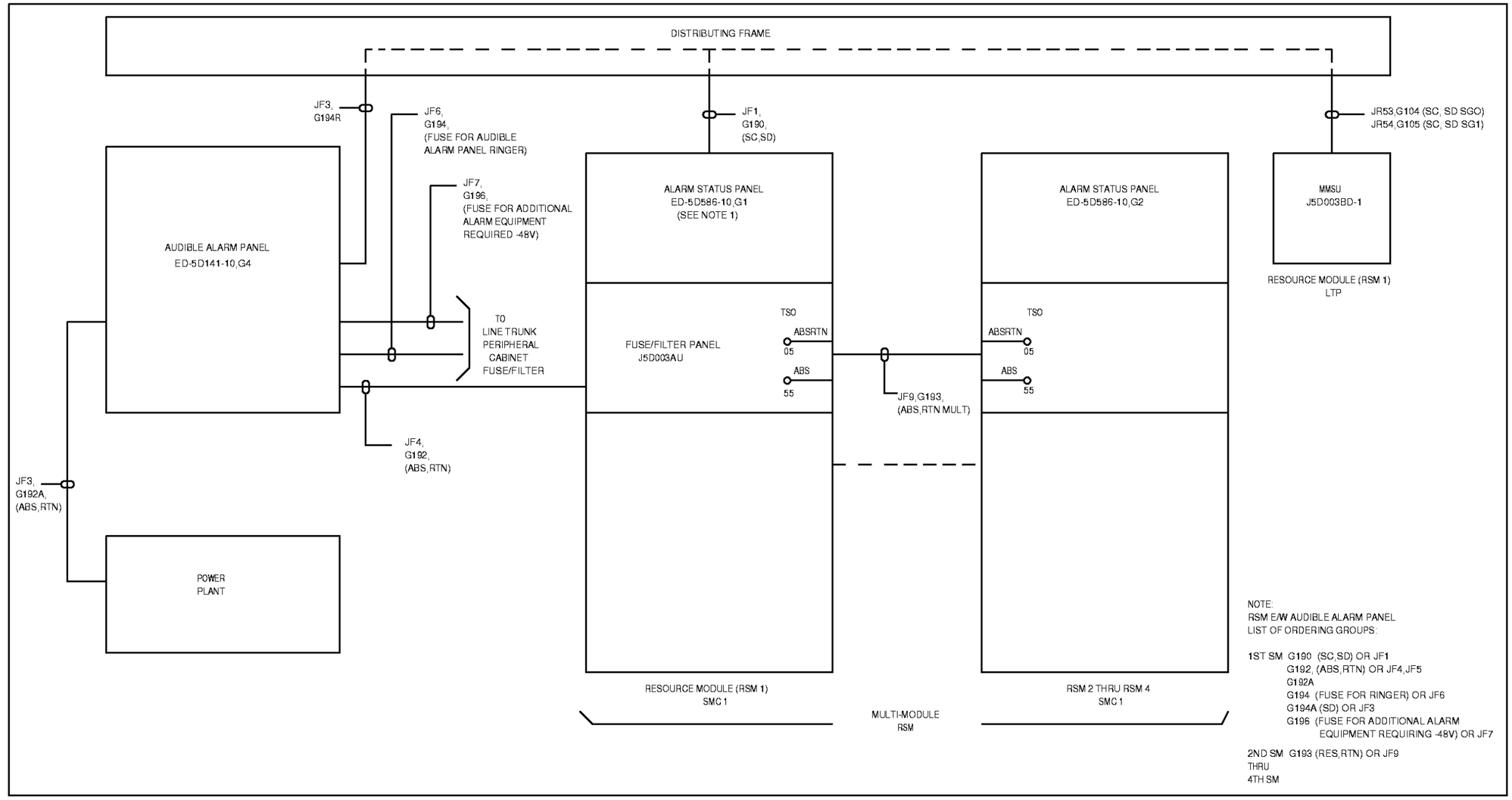
BD 3

BLOCK DIAGRAM OF THE
ALARM AND STATUS UNIT (ED-5D586-10)
WITH AUDIBLE PANEL (ED-5D141-10,G4)

NOTES:
1. THE AUDIBLE AND VISUAL ALARM CIRCUIT (SD-5D017-01) CONTAINS THE ALARM AND STATUS UNIT (ED-5D586-10,G1,G2) CIRCUIT INFORMATION.
2. CROSS-CONNECTION INFORMATION PROVIDED IN ED-5D500-15 (CONVENTIONAL) AND ED-5D500-16 (COSMIC II).



NOTE:
RSM E/W AUDIBLE ALARM PANEL
LIST OF ORDERING GROUPS:

1ST SM G190 (SC,SD) OR JF1
G192, (ABS,RTN) OR JF4,JF5
G192A
G194 (FUSE FOR RINGER) OR JF6
G194A (SD) OR JF3
G196 (FUSE FOR ADDITIONAL ALARM EQUIPMENT REQUIRING -48V) OR JF7

2ND SM G193 (RES,RTN) OR JF9
THRU
4TH SM

REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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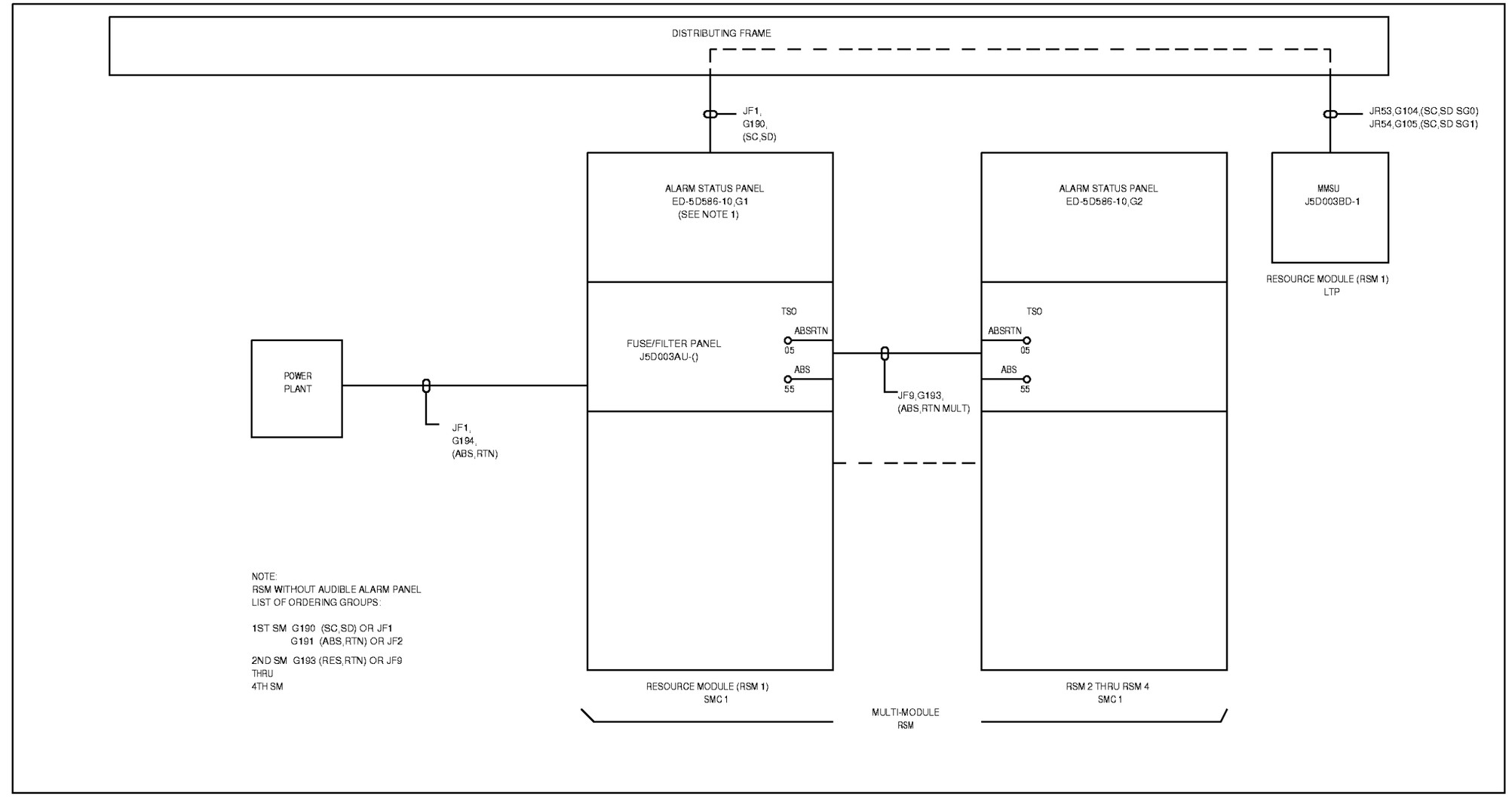
BD 4

BLOCK DIAGRAM OF THE
ALARM AND STATUS UNIT (ED-5D586-10)
WITHOUT THE AUDIO PANEL (ED-5D141-10,G4)

NOTES:
1. THE AUDIBLE AND VISUAL ALARM CIRCUIT (SD-5D017-01) CONTAINS THE ALARM AND STATUS UNIT (ED-5D586-10,G1,G2) CIRCUIT INFORMATION.



REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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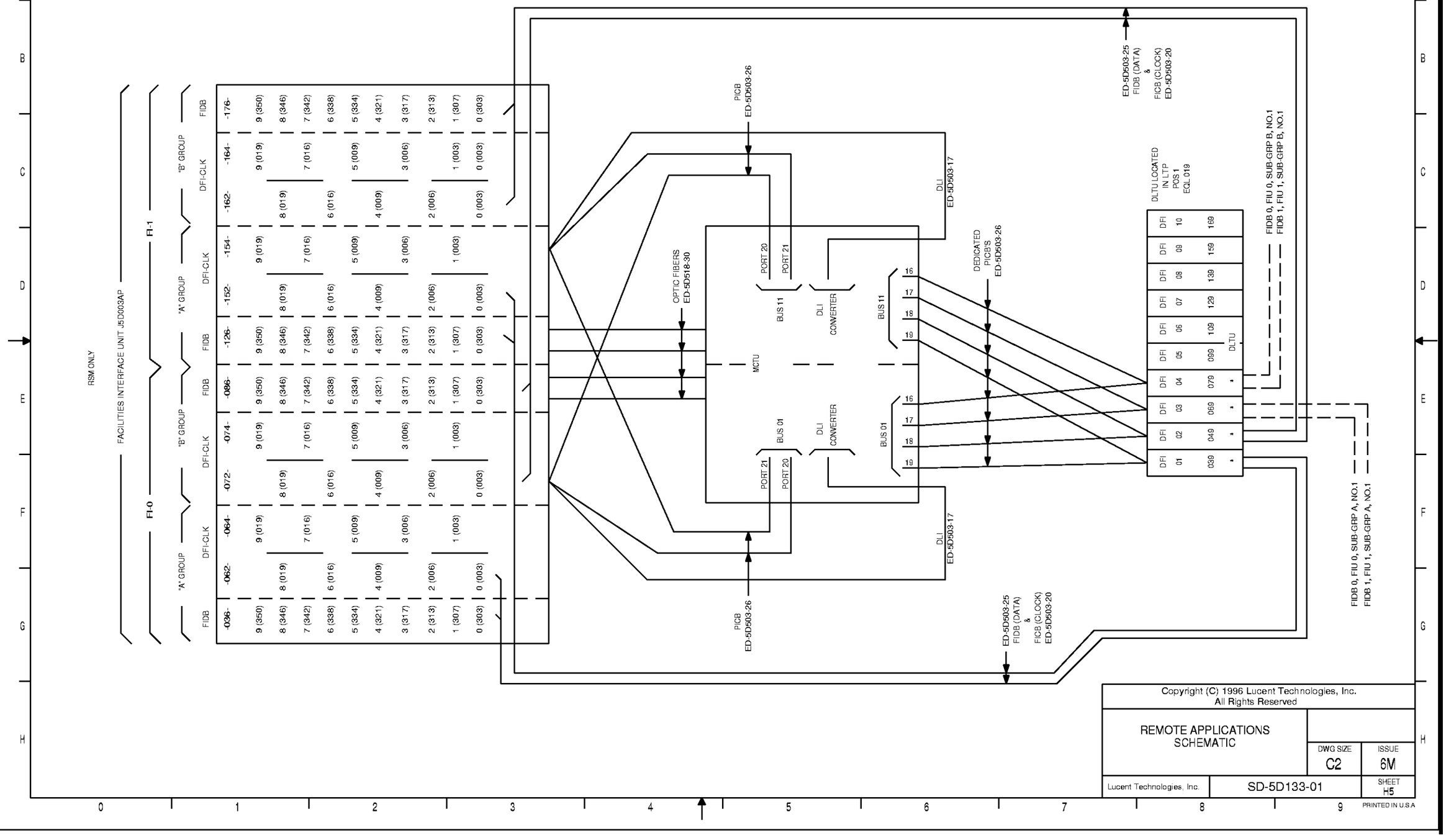
BD 5

BLOCK DIAGRAM
TYPICAL MCTU, FIU & DLTU
CABLING INFORMATION

NOTE:
1. A MINIMUM OF (2) DFI'S ARE REQUIRED. THE FIRST (4) POSITIONS * ARE DEDICATED AND MUST BE EQUIPPED IN PAIRS. THE REMAINDER CAN BE EQUIPPED INDIVIDUALLY.
EXAMPLE: IF (3) DFI'S WERE TO BE EQUIPPED - (2) DFI'S WOULD BE LOCATED IN POSITIONS 01 & 02 AND THE THIRD WOULD BE LOCATED IN POSITION 05.



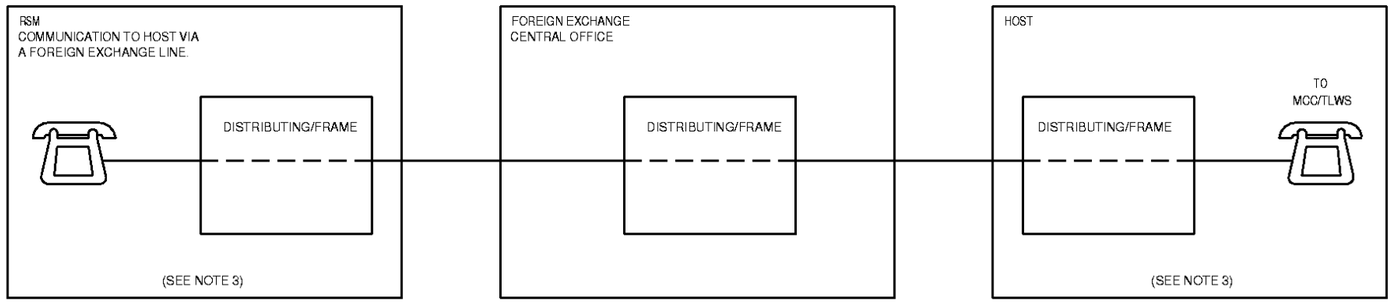
REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

Lucent Technologies, Inc. | SD-5D133-01 | SHEET H5

BD 6

BLOCK DIAGRAM OF RSM COMMUNICATION LINE



NOTES:

1. THE RSM COMMUNICATION LINE IS CONNECTED TO THE NON-LOAD SIDE OF THE T1-CABLE (UNUSED PAIRS) OR VIA SEPARATE DEDICATED FOUR WIRE CABLE.
2. THE CONNECTION SHOWN MUST BE ASSIGNED BY THE LINE ENGINEER.
3. THE COMMUNICATION BUS BETWEEN THE RSM AND THE HOST MUST BE ENGINEERED AS A FOREIGN EXCHANGE LINE.
4. THE ENGINEERED FOR MORE THAN ONE COMMUNICATION LINE CONNECTION BACK TO THE HOST OFFICE MUST BE TO AN UNUSED STLWS PORTS OR TO PROVIDE PARTY LINE CONNECTION BETWEEN THE RSM AND THE HOST.

REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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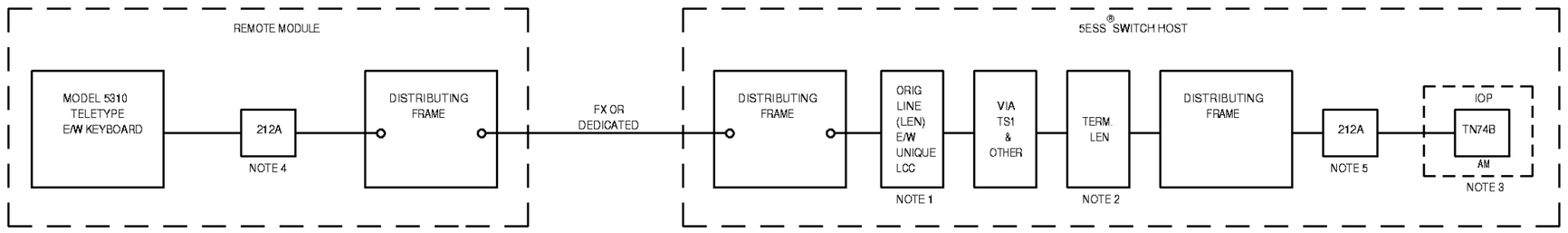
BD 7

BLOCK DIAGRAM OF THE RSM BELTLINE MAINTENANCE
VIA DEDICATED FACILITIES, FOREIGN EXCHANGES, OR ORDER WIRE
RSM BELTLINE (N)

NOTES:

1. A UNIQUE LINE CLASS CODE IS NEEDED.
2. SPECIAL ROUTING IS REQUIRED TO PERMIT ONLY THE DIRECT CONNECT LINE TO ACCESS THIS LEN.
3. THIS ARRANGEMENT USED THE TTY-B CHANNEL. THE TTY-A IS USED AT THE HOST FOR BELTLINE MAINTENANCE.
4. REQUIRES DATA PHONE TO ORIGINATE & MONITOR FOR A BUSY. 212A DATA NEEDS LOW SPEED (300 BAUD), ORIGINATE MODE, AND DISCONNECT ON LOSS OF CARRIER OPTIONS.
5. 212A DATA SET AT TERMINATING END NEEDS DISCONNECT ON LOSS OF CARRIER, 300 BAUD, AND ANSWER MODE OPTIONS.



REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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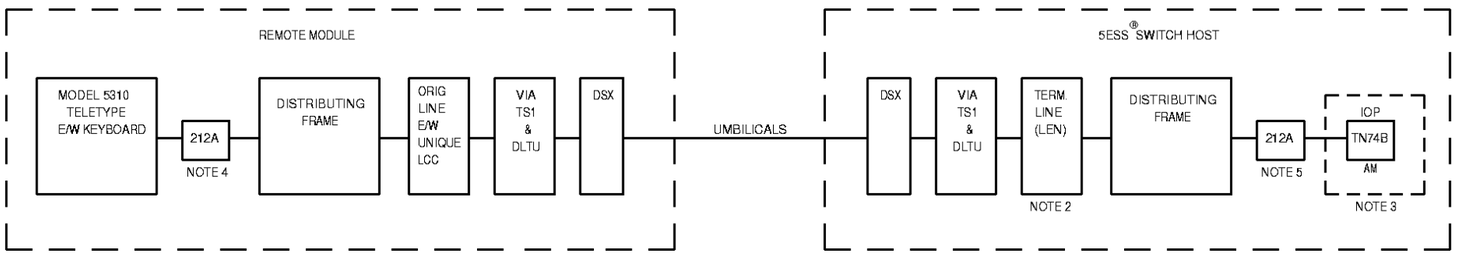
BD 8

BLOCK DIAGRAM OF THE RSM
BELTLINE MAINTENANCE FOR RSM
WITH RSM PROVIDING SWITCHED ACCESS

RSM BELTLINE (N)



NOTES:

1. A UNIQUE LINE CLASS CODE IS NEEDED.
2. SPECIAL ROUTING IS REQUIRED TO PERMIT ONLY THE BELTLINE ORIGINATING LEN TO ACCESS THIS TERMINATING LEN.
3. THIS ARRANGEMENT USES THE TTY-B CHANNEL AND THE TTY-A CHANNEL WILL BE USED FOR THE HOST.
4. REQUIRES DATA PHONE TO ORIGINATE AND MONITOR FOR A BUSY. THE 212A DATA SET NEEDS LOW SPEED (300 BAUD), ORIGINATE MODE, AND DISCONNECT ON LOSS OF CARRIER OPTIONS.
5. THE 212A DATA SET AT TERMINATING END NEEDS DISCONNECT ON LOSS OF CARRIER, 300 BAUD, AND ANSWER MODE OPTIONS.
6. IN THE RSM PROVIDING SWITCHED ACCESS, THE RSM MUST BE CAPABLE OF SWITCHING THE CALL TO THE HOST TO PERMIT ACCESS TO THE BELTLINE MAINTENANCE CHANNEL. THE RSM LINE UNIT THAT HAS THE ORIGINATING LEN MUST BE OPERATIONAL AND THE RSM CANNOT BE IN STAND-ALONE MODE.
7. THE MAINTENANCE ACTIVITIES WILL BE INTERRUPTED AT THE RSM DURING STAND-ALONE MODE ANYWAY, BECAUSE THE HOST CANNOT SEND ANY ORDERS OR DIAGNOSTICS TO AN ISOLATED SWITCHING MODULE.

REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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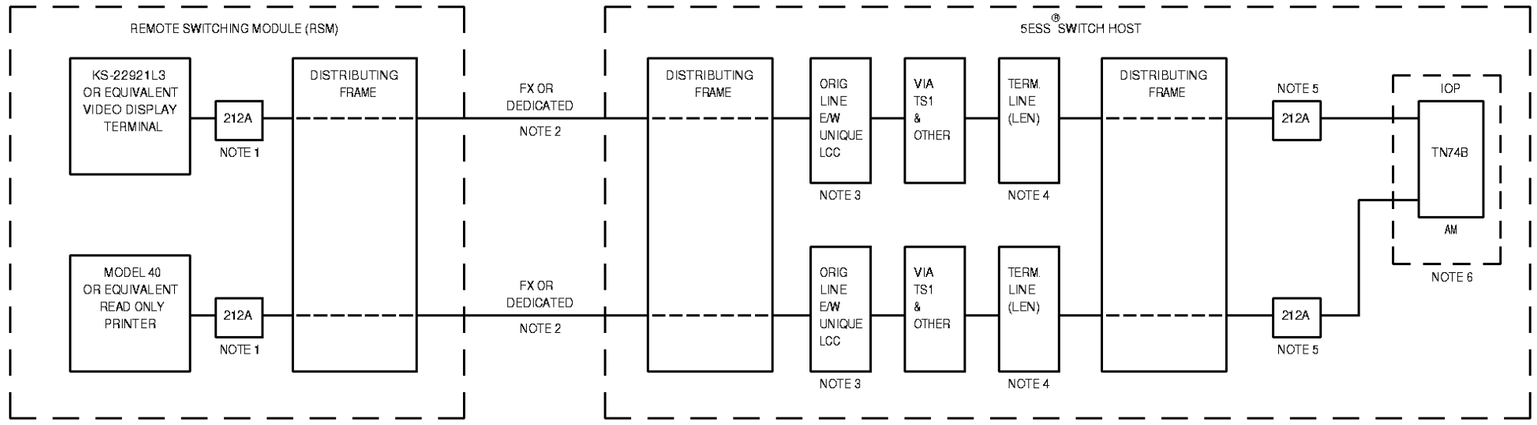
BD 9

BLOCK DIAGRAM OF THE
RSM MAINTENANCE USING REMOTE STLWS
VIA DEDICATED FACILITIES (M)

NOTES:

1. DATA PHONE IS REQUIRED TO ORIGINATE CALL. THE 212A DATA SET WILL OPERATE AT 1200 BAUD.
2. ANY VOICE GRADE FACILITY (DIGITAL OR ANALOG) MAY BE USED.
3. A UNIQUE LINE CLASS CODE SHOULD BE USED.
4. SPECIAL SCREENING SHOULD BE USED TO PERMIT ONLY LINES WITH A PARTICULAR LINE CLASS CODE TO ACCESS THIS LINE.
5. THE 212A DATA SET MUST BE OPTIONED TO DISCONNECT UPON LOSS OF CARRIER, 1200 BAUD OPERATION, AND ANSWER MODE. SEPARATE PORTS OF THE TN74B ARE USED FOR PRINTER AND VIDEO DISPLAY TERMINAL.
6. A DIAL-UP CONNECTION USING THE DDD NETWORK IS NOT RECOMMENDED DUE TO THE LACK OF SECURITY OR PASSWORD FEATURES ON THE IOP FOR THE REMOTE STLWS.
7. WHEN THE OPTIONAL PRINTER IS USED, THE TERMINATING LINES FOR BOTH THE VIDEO DISPLAY TERMINAL AND THE PRINTER MUST TERMINATE ON SEPARATE PORTS OF THE SAME IOP CIRCUIT PACK (TN74B).



REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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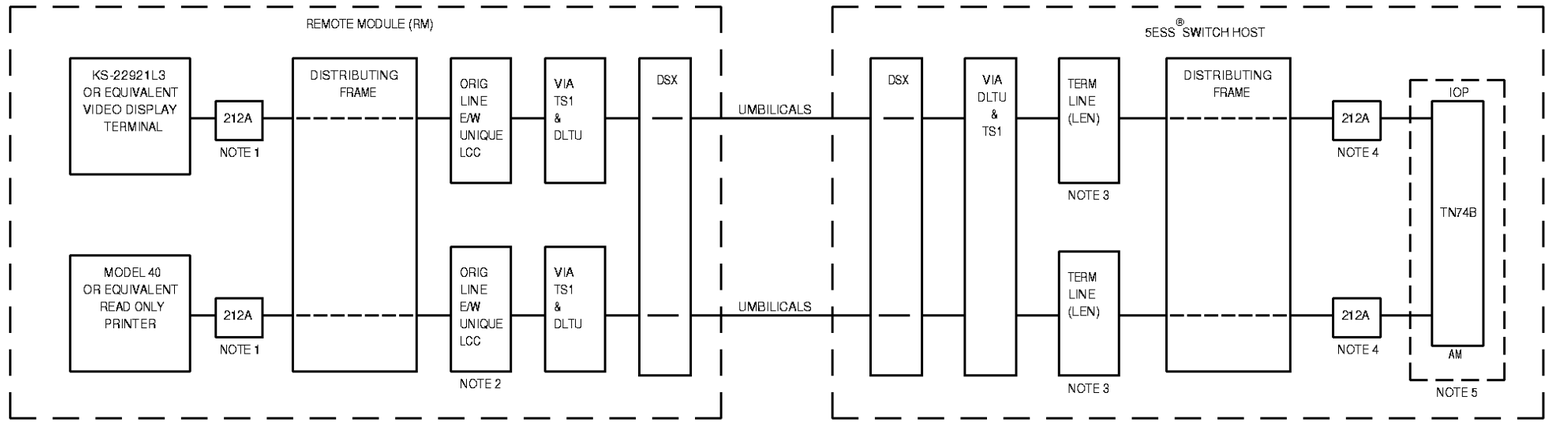
BD 10

BLOCK DIAGRAM OF THE RSM MAINTENANCE
USING REMOTE STLWS WITH RSM PROVIDING SWITCHED ACCESS (M)

NOTES:

1. DATA PHONE IS REQUIRED TO ORIGINATE CALL. THE 212A DATA SET WILL OPERATE AT 1200 BAUD.
2. A UNIQUE LINE CLASS CODE SHOULD BE USED.
3. SPECIAL TERMINATING SCREENING SHOULD BE USED TO PERMIT ONLY LINES WITH A PARTICULAR LINE CLASS CODE TO ACCESS THIS LINE.
4. THE 212A DATA SET MUST BE OPTIONED TO DISCONNECT UPON LOSS OF CARRIER, 1200 BAUD OPERATION, AND ANSWER MODE.
5. SEPARATE PORTS OF THE TN74B CIRCUIT PACK ARE USED FOR PRINTERS AND VIDEO DISPLAY TERMINALS.
6. THE SWITCHING CONTROL CENTER (SCC) MAY BE USED TO PROVIDE MAINTENANCE OF THE RSM THE TELCO MAY CHOOSE TO UTILIZE THE SCC VIA DIALED-UP CONNECTIONS TO THE SCC FROM THE RSM FOR THE RSM MAINTENANCE TERMINAL CAPABILITIES. THE SCC PERMITS DIALED-UP ACCESS TO SOME OF ITS PORTS WITH PASSWORD AND DIAL-BACK CAPABILITIES FOR SECURITY.



REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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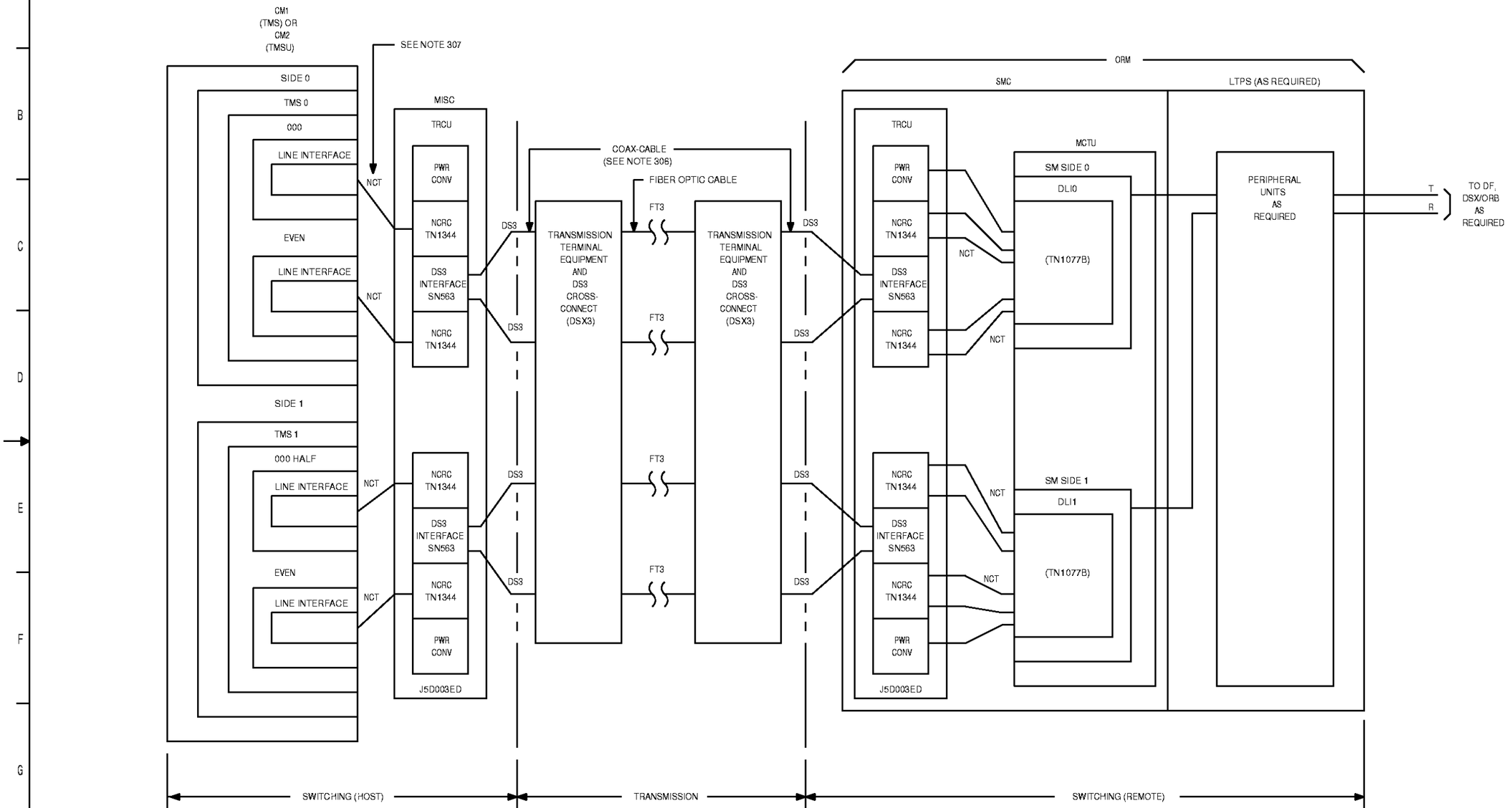
BD 11

BLOCK DIAGRAM OF A TYPICAL ORM
HOST TO REMOTE INTERCONNECTION



REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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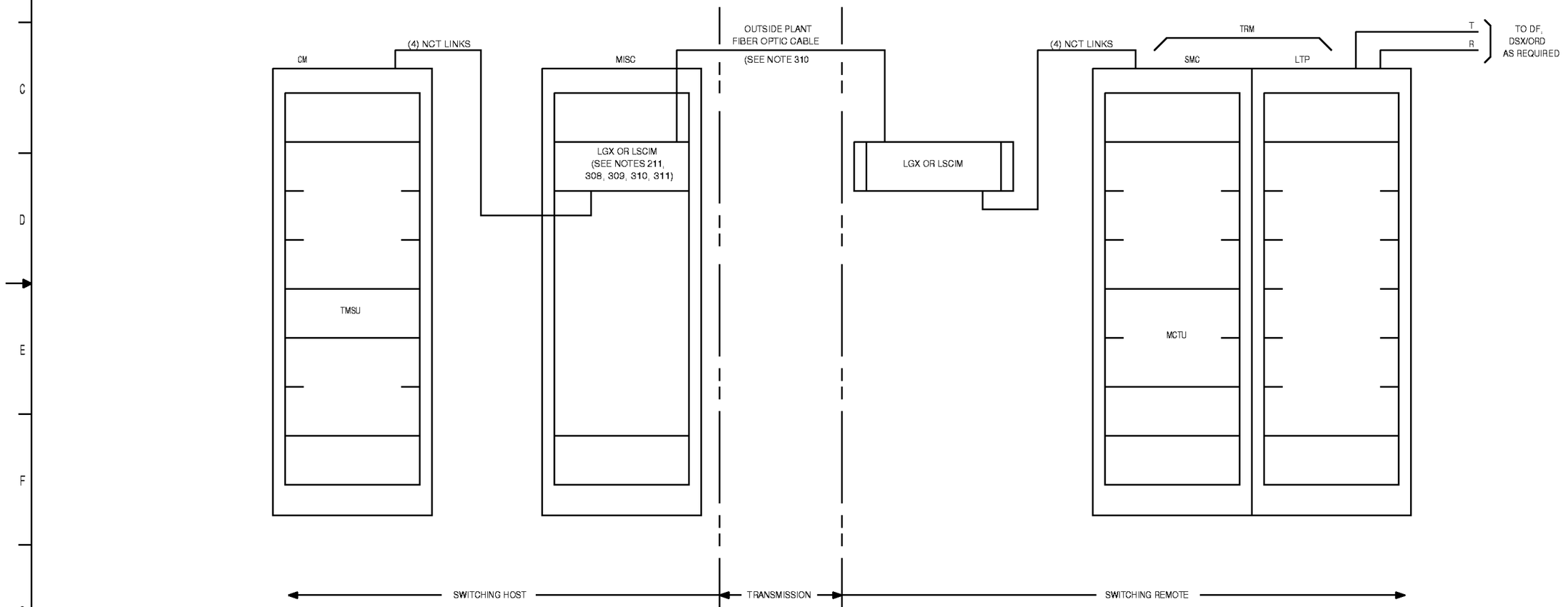
BD 12

BLOCK DIAGRAM OF A TYPICAL TRM
HOST TO REMOTE INTERCONNECTION
(SEE NOTE 309)



REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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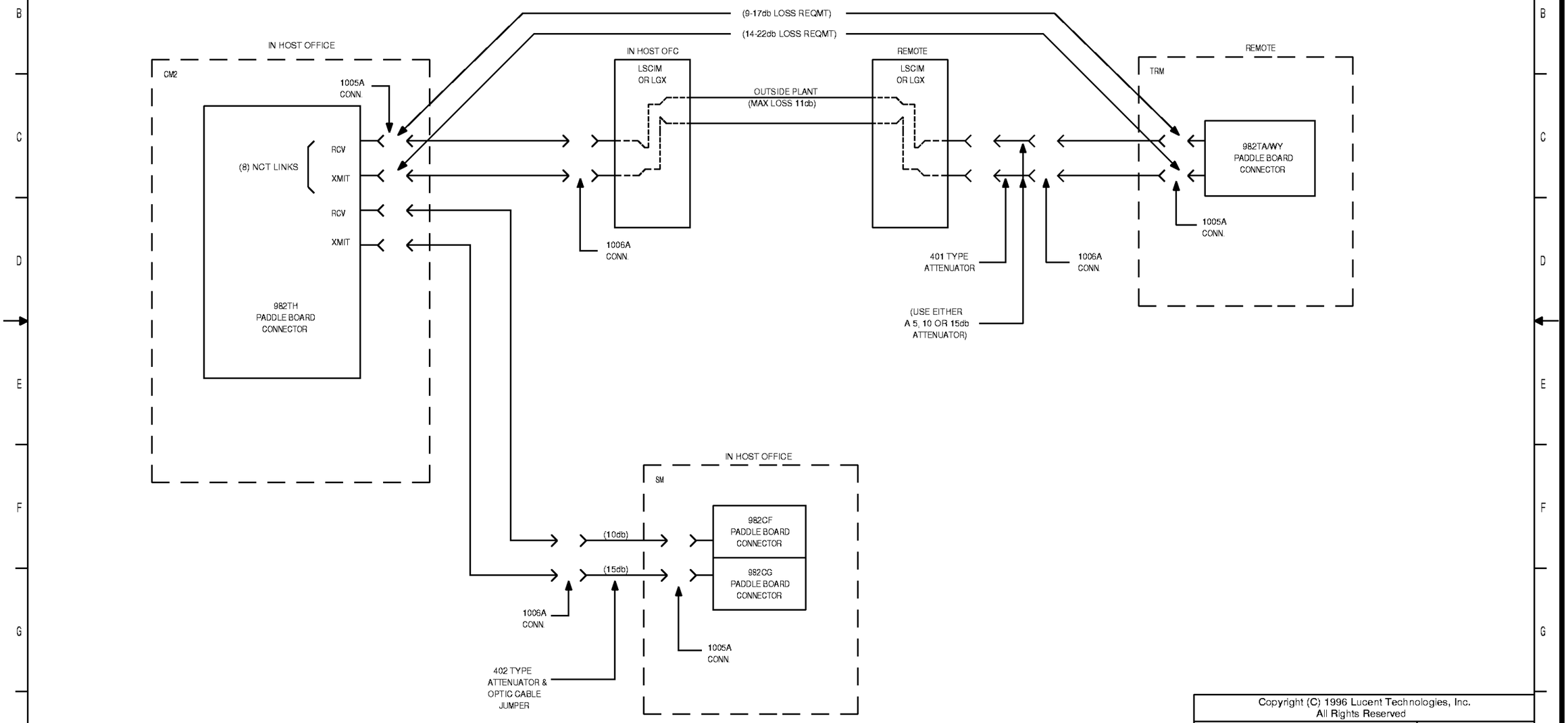
BD 13

TYPICAL CM2 TO TRM INTERCONNECTION
AND POSSIBLE CM2 TO SM INTERCONNECTION
FROM THE SAME 982TH CONNECTOR



REMOTE APPLICATIONS SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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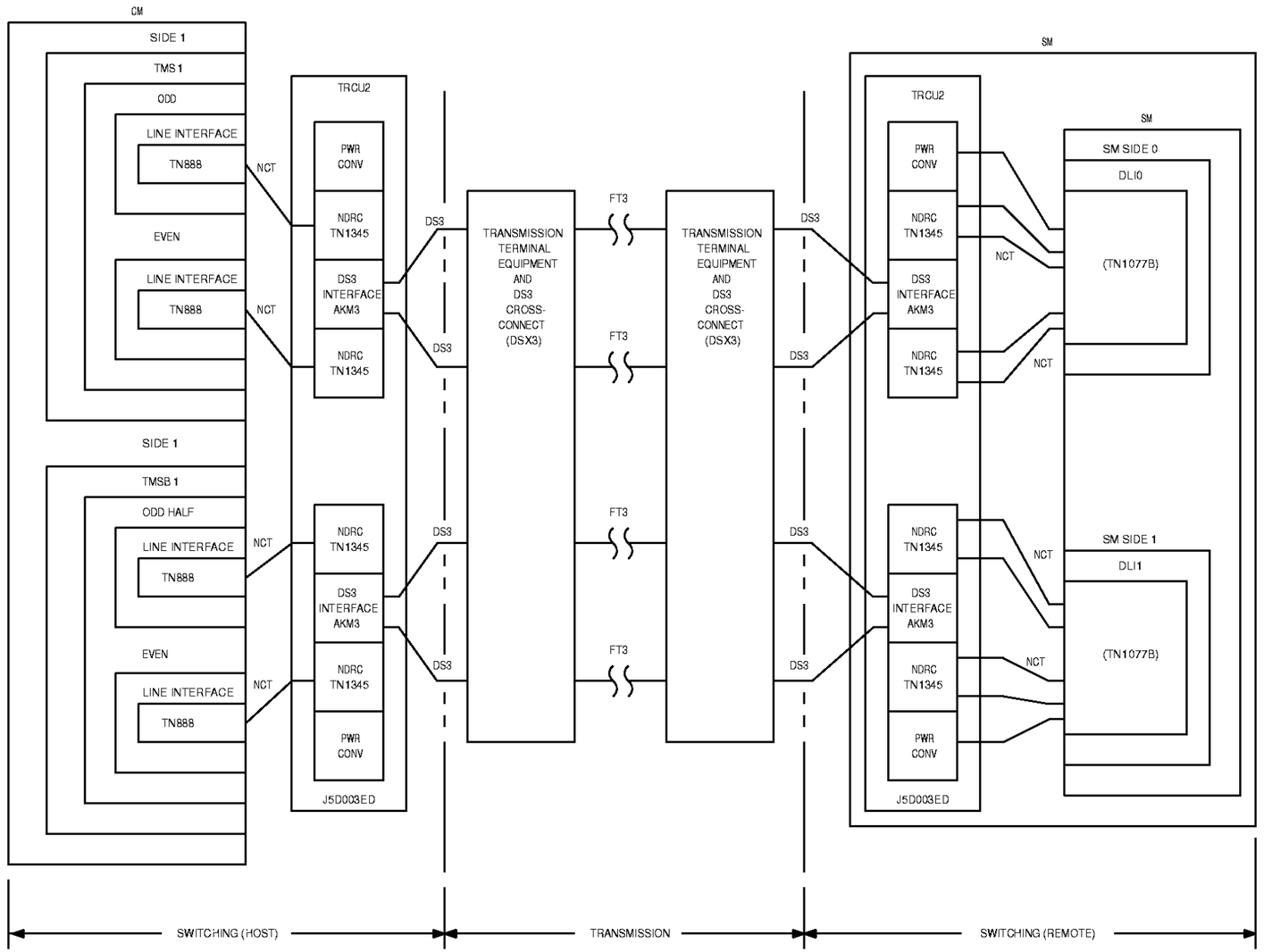
PART OF BD 14

TRCU2 SYSTEM APPLICATION DIAGRAM
ORM NCT LINKS
(DSX-3 CABLING)



REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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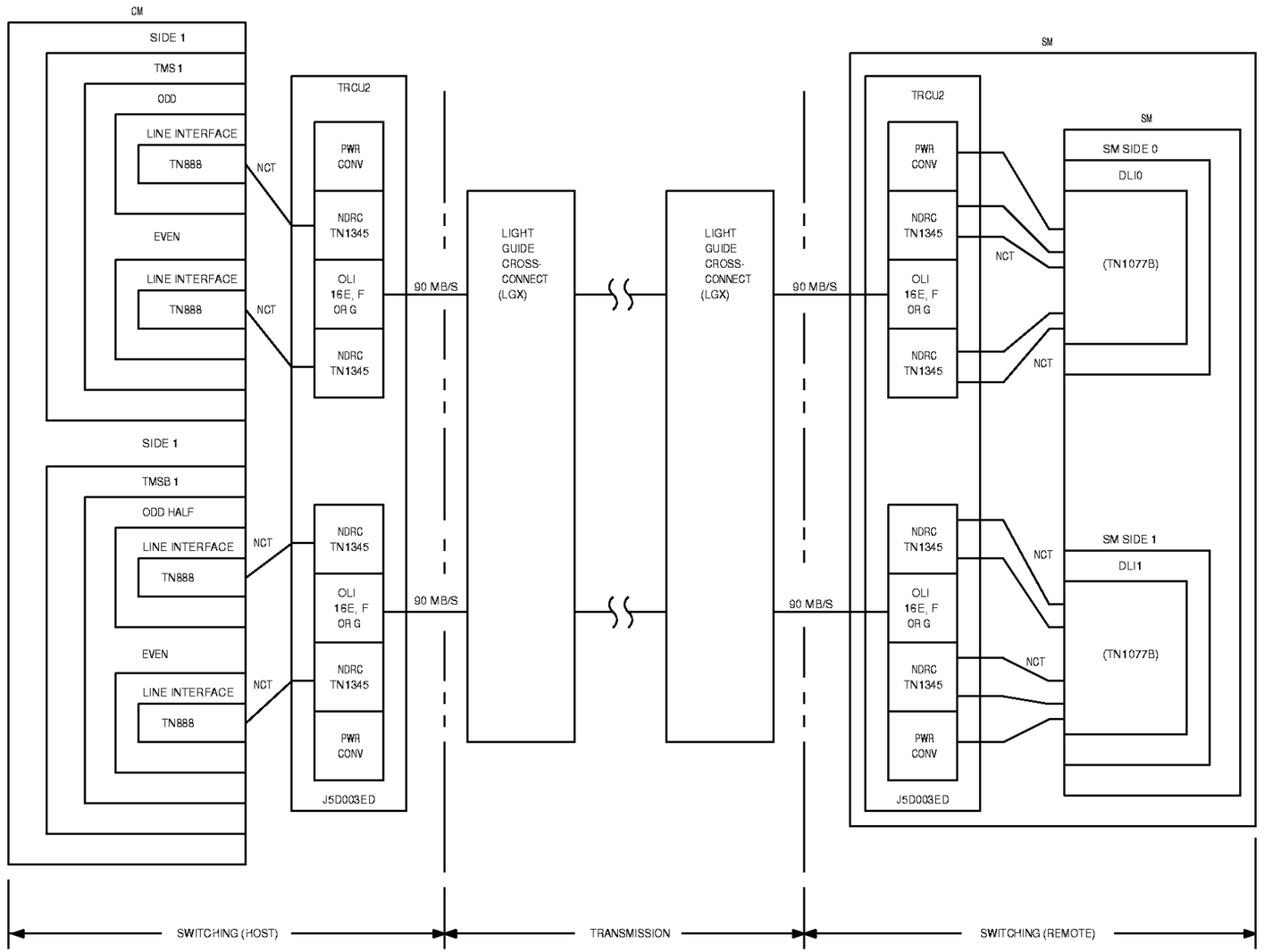
PART OF BD 14

TRCU2 SYSTEM APPLICATION DIAGRAM
ORM NCT LINKS
(LIGHT WAVE CABLING)



REMOTE APPLICATIONS
SCHEMATIC

DWG SIZE	ISSUE
C2	6M

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