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DWG ISS	CD ISS	DATE ISSD	DRN	APP
1	1 APPX -	12-01-93		
2M	2 APPX -	12-18-96		

CONTENTS	SHEET NO.	SHEET ISSUE NO.
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THIS SD HAS BEEN SUPERCEDED BY THE "CONDENSED FRAME CONNECTIVITY"
FILE DISTRIBUTED WITH THE 1B UTILITY SYSTEM.

SUPPORTING INFORMATION				SHEET INDEX NOTES
SYSTEM USED ON	DESIGN CONTROL	CATEGORY	NO.	
4ESS	IH			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.

Lucent Technologies, Inc. - PROPRIETARY
Use pursuant to Company Instructions

BT13

**ELECTRONIC SWITCHING SYSTEM
4ESS™
1B PROCESSOR COMPLEX AND
UNITS CONDENSED CIRCUIT**

DWG SIZE C2	ISSUE 2M
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Lucent Technologies, Inc. **SD-4A153-01** SHEET **A1**
OF **2**

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NOTES:

1. THIS DRAWING DOES NOT CONTROL ANY HARDWARE.
IT IS A COMBINATION OF THE CONNECTION INFORMATION FROM
THE FOLLOWING DRAWINGS:

- SD-4A145-03 ISSUE 7M
- SD-4A146-03 ISSUE 2M
- SD-4A147-03 ISSUE 3B
- SD-4A148-03 ISSUE 3B
- SD-4A149-03 ISSUE 4B

IT IS SORTED BY TERMINAL EQL STARTING AT THE LOWER RIGHT
CORNER OF THE COMPLEX VIEWED FROM THE WIRING SIDE.
BAY 0 TERMINALS ARE LISTED FIRST, AND THEN BAY 1 TERMINALS ARE LISTED.

2. WHEN A '>' APPEARS AFTER A CABLE FIELD, IT INDICATES THAT
THE CABLE LEAVES THE COMPLEX. THE DESTINATION IS SHOWN ON THE
NEXT LINE.

3. WHEN A '*' APPEARS AFTER A CABLE FIELD, IT INDICATES THAT
ONE OR MORE CONNECTORS ON THE OTHER END OF THE CABLE COULD
NOT BE ASSOCIATED WITH A NET. THIS SHOULD NOT OCCUR AND IS AN
ERROR IN THE DATABASE, WHICH WILL BE FIXED IN THE NEXT ISSUE
OF THIS DRAWING

4. THE OPTIONAL CIRCUIT PACKS FOR 4E20 AND 4E21 ARE INCLUDED.
THAT IS, BOTH KLV5 & KLV105, KLV16 & KLV116, KLV17 & KLV117,
AND KLV22 & KLV122 ARE ALL PRESENT EVEN THOUGH ONLY ONE OF A
PAIR CAN BE PRESENT AT A TIME. A PIN FOR A 100 SERIES PACK IS
INCLUDED IMMEDIATELY AFTER THE PIN FOR ITS NON-100 SERIES
PACK. OPTION LETTERS ARE NOT SHOWN WITH ANY PACKS, EVEN THE
KLV1 & KLV2 PACKS.

5. THE LATEST VERSION OF THIS DRAWING IS 2856 PAGES AND IS FAR
TOO BIG TO BE USED IN PAPER FORM. ITS CONTENT IS DISTRIBUTED
WITH THE 1B UTILITY SYSTEM, WHERE IT CAN BE SEARCHED ON LINE.
THIS IS THE LAST ISSUE OF THIS SD.

WHAT THIS SD IS:

THIS DRAWING IS INFORMALLY CALLED THE "CONDENSED FRAME CONNECTIVITY". IT
HAS AN SD NUMBER, BUT IT IS NOT A SCHEMATIC DRAWING IN ANY TRADITIONAL SENSE.
IT WAS MEANT TO ANSWER THE QUESTION "WHAT OTHER PINS IS THIS PIN CONNECTED TO?"
SO IT IS ACTUALLY A GIANT "NET LISTING" OF ALL THE LEADS IN THE FRAME (ACTUALLY
2 BAY COMPLEX) AND IN EACH OF THE FASTECH UNITS. EACH "NET" IS A COLLECTION OF
ELECTRICALLY COMMON POINTS, AND IS LISTED SEPARATELY. WITHIN EACH NET, EACH TERMINAL
IS LISTED IN FRAME-RELATIVE EQL ORDER. THE ORDER OF THE NETS IN THE LISTING IS BY THE
LEFT HAND (FIRST) TRMNO. EACH LINE OF THE NET SHOWS ANOTHER PIN CONNECTED TO THE FIRST
PIN. EVERY PIN IN THE COMPLEX APPEARS ON THE LEFT SIDE ONCE. BUT SINCE MANY OF THOSE
PINS ARE NOT THE LOWEST EQL PIN IN THEIR RESPECTIVE NETS, THEY WILL JUST POINT TO THE
LOWEST PIN OF THEIR RESPECTIVE NET WITH A LINE WHICH LOOKS LIKE THIS:

024-006-011T REF TO 024-006-011B FNN=0CS5VT

FORMAT OF THE LISTING:

THE FIRST TERMINAL OF THE NET (LOWEST EQL SORT ORDER) IS SHOWN ON THE LEFT SIDE UNDER
"TRMNO" COLUMN. THE CODE OF THE CIRCUIT PACK (CP), LUG (PWRLUG, GRDLUG), OR PIN ARRAY
(PNARY) IS SHOWN UNDER THE "CODE" COLUMN. THE CP OR CONNECTOR PIN EQL (TRMNO) IS SHOWN UNDER THE
"CP/CONN EQL" COLUMN. ALSO SHOWN IS THE TERMINAL FUNCTION (I - INPUT, O - OUTPUT, B - BIPUT
P - POWER, G - GROUND) UNDER THE "FN" COLUMN. EACH LINE WILL ALWAYS HAVE A UNIT NET NAME
UNDER THE "UNITNET" COLUMN. IT MAY HAVE A FRAME NET NAME UNDER THE "FRMNET" COLUMN, AND
IT MAY HAVE A CP NET NAME (ACTUALLY THE CP TERMINAL MODIFIER OR TRMMOD), IF IT IS A CP PIN,
SHOWN UNDER THE "PACKNET" COLUMN. THE FRAME NET NAME WILL BE PRESENT IF THE NET IS FRAME
CONNECTION (ALL BUT A FEW STRAPS ARE WIRES IN CABLES). BUT ONLY THE UNIT NET NAME (NO FRMNET)
WILL BE PRESENT FOR THOSE NETS WHICH ARE IMPLEMENTED AS PRINTED WIRE IN ONE OF THE FASTECH
BACKPLANES AND ARE NOT CABLED ANYWHERE. IF A PIN IN A NET IS WHERE A CABLE OR BUS TERMINATOR
PADDLEBOARD (BTR) PLUGS ON, THE CABLE ED DRAWING NUMBER AND GROUP OR THE BTR CODE IS SHOWN
UNDER THE "CABLE OR BTR" COLUMN. IF THE CABLE LEAVES THE COMPLEX THAT IS INDICATED BY A
> SYMBOL AFTER THE ED AND GROUP AND THE DESTINATION IS SHOWN IN THE NEXT LINE
(E.G. "TO API0-072-06-300").

THERE MAY BE MORE THAN ONE FRAME NET NAME IN THE FRMNET COLUMN OF THE CONNECTIVITY
FOR A PARTICULAR SET OF CONNECTED PINS. THIS CAN OCCUR IF A CABLE CONNECTS TWO UNITS
AND THEN THE PRINTED WIRE IN ONE OF THE UNITS ALSO CONNECTS TO ANOTHER CABLE WHICH
CONNECTS ELSEWHERE. TRACING THIS KIND OF CONNECTION WITH REGULAR SD'S MIGHT REQUIRE
YOU TO TRACE THROUGH A UNIT SD, OUT TO A FRAME SD, INTO ANOTHER UNIT SD, BACK OUT
TO THE FRAME SD AGAIN AND INTO ANOTHER UNIT SD.

USE OF THIS SD:

THE BEST WAY TO USE THIS DRAWING IS AN ON LINE FILE SEARCHED WITH A TEXT EDITOR (E.G., VI, EMACS)
OR VIEWER (E.G., MORE, PG). THEN YOU CAN SEARCH FOR EITHER THE TERMINAL OR NET NAME WHICH INTERESTS
YOU. SINCE IT IS ALMOST IMPOSSIBLE TO FIND ANYTHING IN PAPER VERSION, THIS SD IS BEING TERMINATED
WITH THIS ISSUE. ITS CONTENT WILL BE KEPT UP TO DATE IN THE UTILITY SYSTEM OF THE 1B PROCESSOR
(BUT THAT FILE WILL NO LONGER BE CALLED AN SD).

SEE PROPRIETARY NOTICE ON SHEET ONE

1B PROCESSOR COMPLEX AND
UNITS CONDENSED CIRCUIT

DWG SIZE
C2

ISSUE
2M

Lucent Technologies, Inc.

SD-4A153-01

SHEET
A2

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