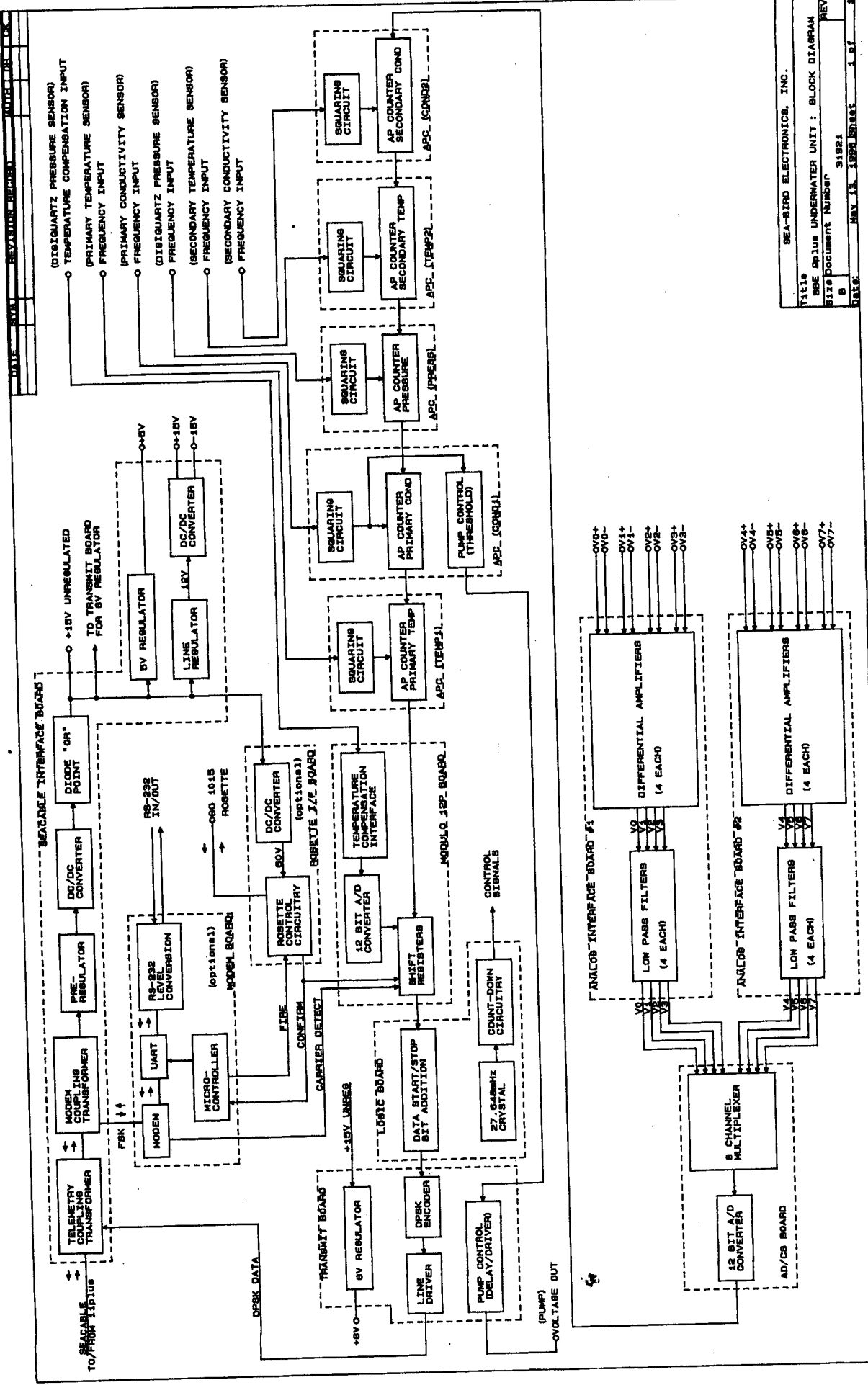


DRAWINGS

| | |
|---|----|
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| Dwg 20887b SBE 9plus Horizontal Layout..... | 2 |
| Dwg 50077a SBE 9plus Top Endcap, Connector, ISO +12V..... | 3 |
| Dwg 32119b SBE 9plus Top Endcap, Wiring, ISO +12V..... | 4 |
| Dwg 31388a SBE 9plus Top Endcap I/F Board, Schematic, ISO +12V..... | 5 |
| Dwg 40581d SBE 9plus Top Endcap I/F Board, Assembly, ISO +12V..... | 6 |
| Dwg 50078a SBE 9plus Bottom Endcap, Connector..... | 7 |
| Dwg 31430a SBE 9plus Bottom Endcap, Wiring..... | 8 |
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DRAWINGS

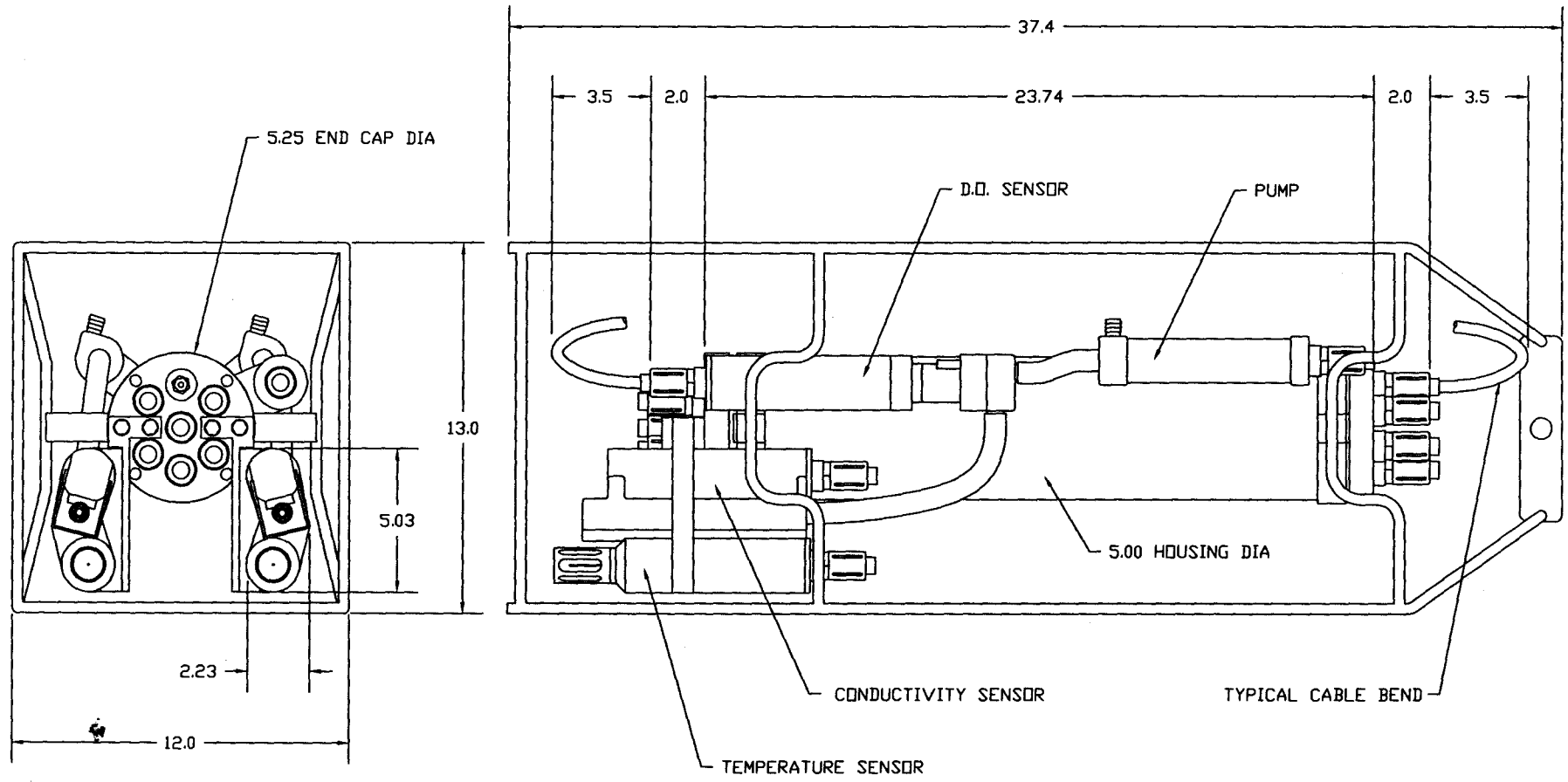
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|---|----|
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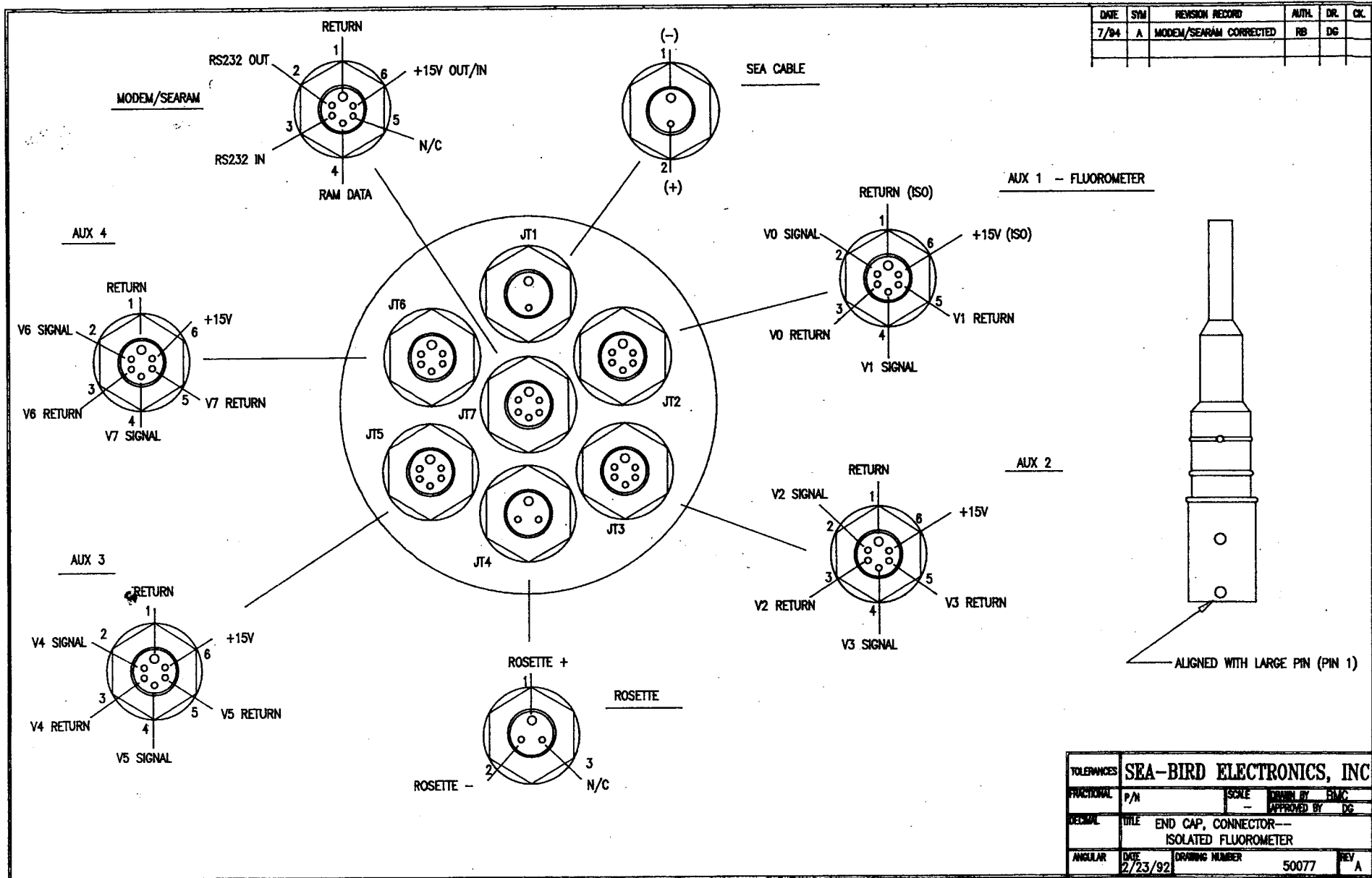
| | | | | |
|------|----------|-----------------|------|----|
| DATE | REVISION | REVISION NUMBER | UNIT | DR |
| | | | | |

| | |
|----------------------------|---|
| BEA-BIRD ELECTRONICS, INC. | |
| T1119 | SSE 801us UNDERMATER UNIT : BLOCK DIAGRAM |
| B | Size Document Number 31921 |
| REV 13 | REV 13 1999 Error 1.01 |

| DATE | SYM | REVISION RECORD | AUTH. | DR. | CK. |
|------|-----|-----------------|-------|-----|-----|
| | | | | | |
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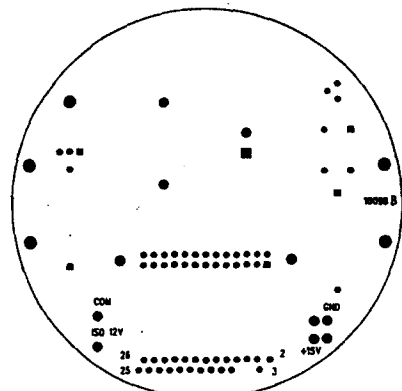
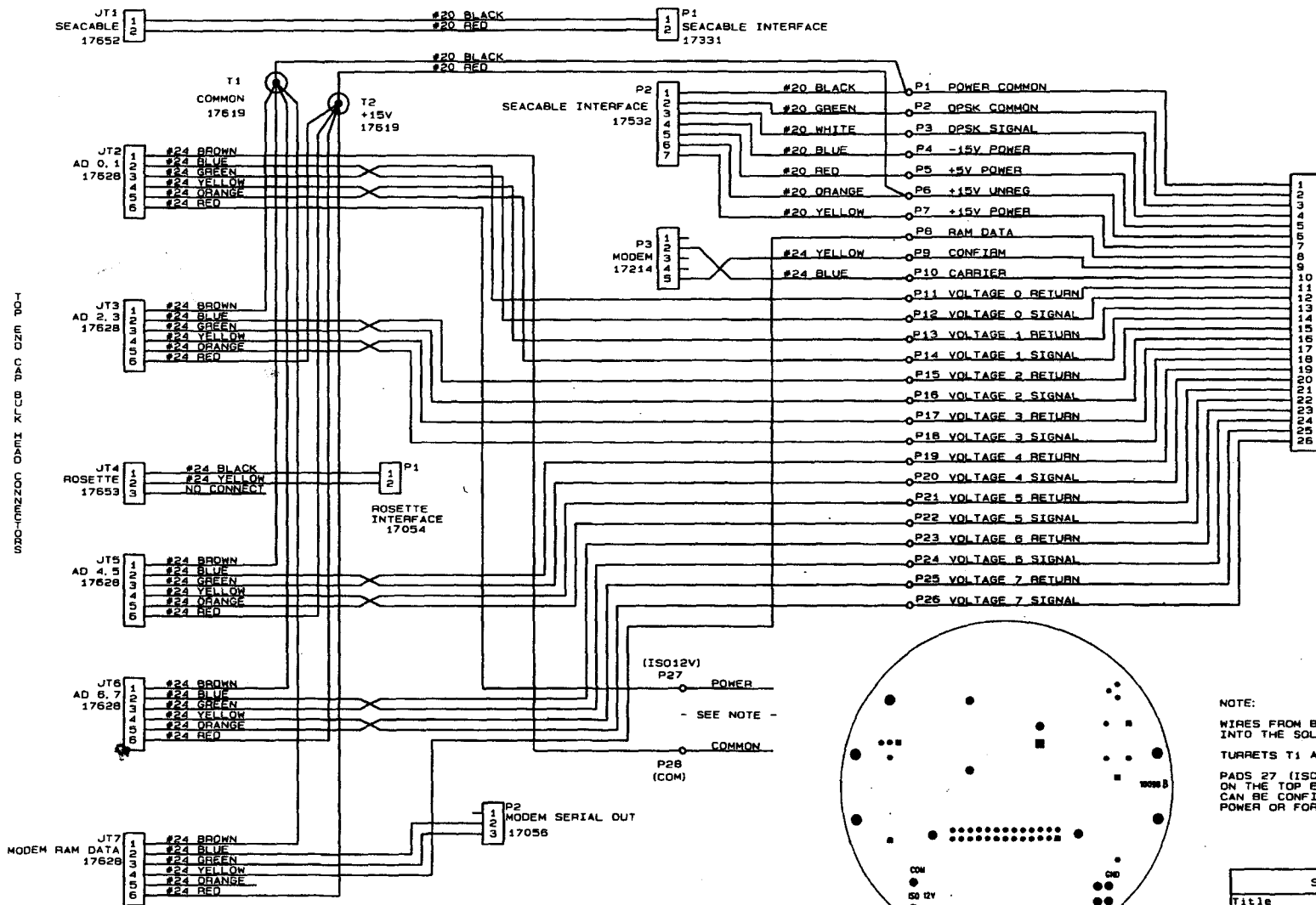


| | | | | |
|------------|---------------------------|----------------|-------------|-----|
| TOLERANCES | SEA-BIRD ELECTRONICS, INC | | | |
| FRACTIONAL | P/N | SCALE | DRAWN BY DW | |
| DECIMAL | TITLE | 1 : 4 | APPROVED BY | |
| ANGULAR | DATE | DRAWING NUMBER | 20887 | REV |
| | 11-22-94 | | | B |



4016

| DATE | BY | REVISION BEFORE | AUTH | DR | CHK |
|----------|----|------------------------|------|----|-----|
| 01/12/99 | A | ECN610: P3 WAS 2 PIN | | DG | |
| 02/12/00 | B | CHANGE BULKHEADS TO SS | CB | CB | |

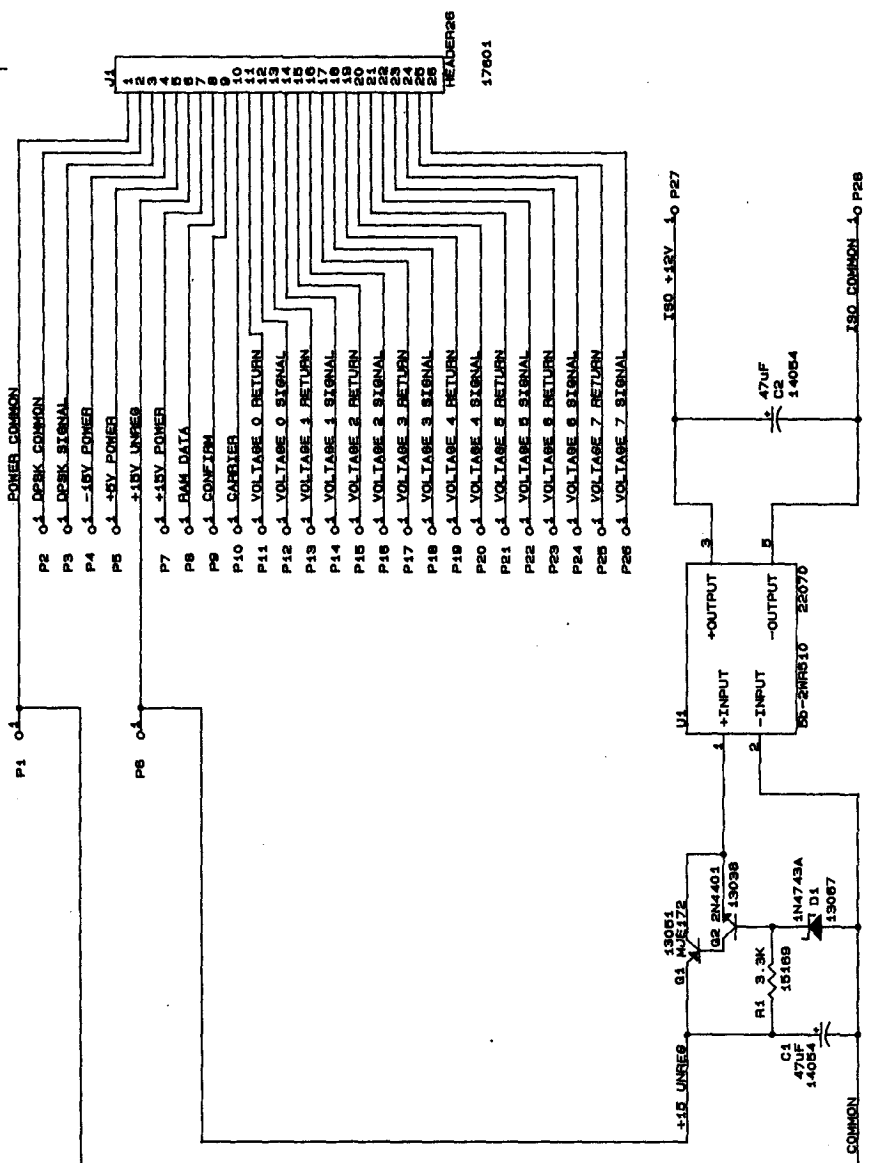


NOTE:
 WIRES FROM BULKHEAD CONNECTORS ARE SOLDERED INTO THE SOLDER SIDE OF BOARD 100988
 TURRETS T1 AND T2 ARE PLACED ON TOP END CAP
 PADS 27 (ISO12V) AND 28 (COM) ARE LOCATED ON THE TOP END CAP INTERFACE BOARD, WHICH CAN BE CONFIGURED EITHER FOR STANDARD +15V POWER OR FOR ISOLATED +12V POWER & GROUND.

| | | |
|---------------------------|--|--------------|
| SEA-BIRD ELECTRONICS INC. | | |
| Title | SBE 9+ TOP END CAP WIRING, STD OR ISO +12V | |
| Size | Document Number | REV |
| B | 32119 | B |
| Date: | June 12, 2000 | Sheet 1 of 1 |

030-001000 04MI X7CB 040 02M 001

DATE: 07/11/88 BY: J. W. HARRISON FOR: AUTH: DR/EX
SIZE: A VI CHANGED TO 2000000



21119 PCB 100888

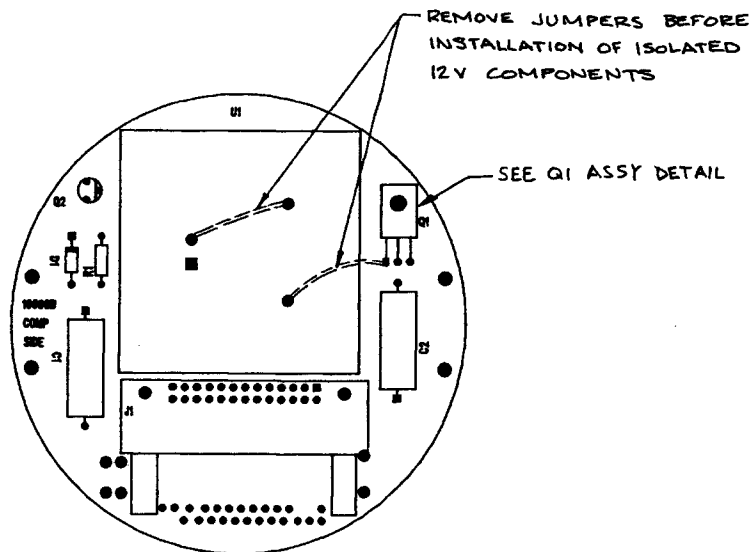
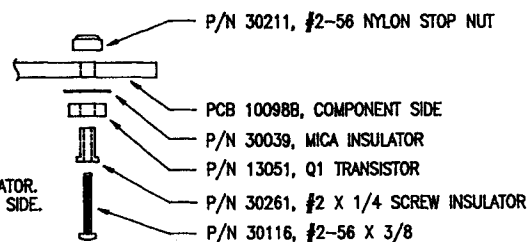
SEA-BIRD ELECTRONICS INC.
 ASSEMBLY 40888 / PN 80888
 SBE 8+ ISOLATED 12V 6 TOP END CAP INTERFACE
 Size Document Number 31988
 REV A
 Date: March 28, 1988 Sheet 1 of 1

DR16

| DATE | SYM | REVISION RECORD | AUTH. | DR. | CK. |
|--------|-----|---------------------------------------|-------|-----|-----|
| 4/74 | A | ADDED Q1 DETAIL | | D6 | |
| 5/4/74 | B | SHOW JUMPERS | | D6 | |
| 8/2/75 | C | CHANGED MNT. SCREW | | 78 | |
| 3/86 | D | PM913 changed to ^{ES} 2-wire | AWM | | |

Q1 ASSEMBLY DETAIL - SIDE VIEW

- ASSEMBLE PARTS AS SHOWN;
TRIM MICA INSULATOR TO FIT.
USE HEAT GREASE ON BOTH SIDES OF MICA INSULATOR.
TRIM SCREW INSULATOR EXTRA LENGTH AT SOLDER SIDE.



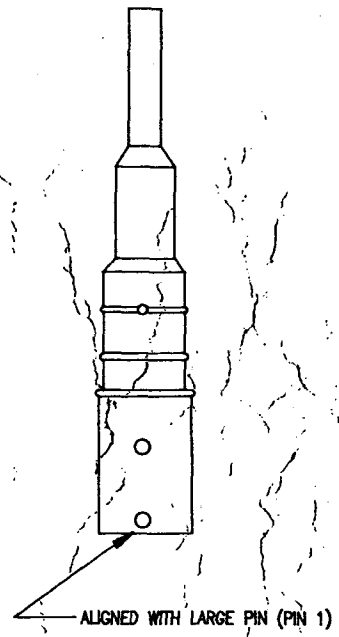
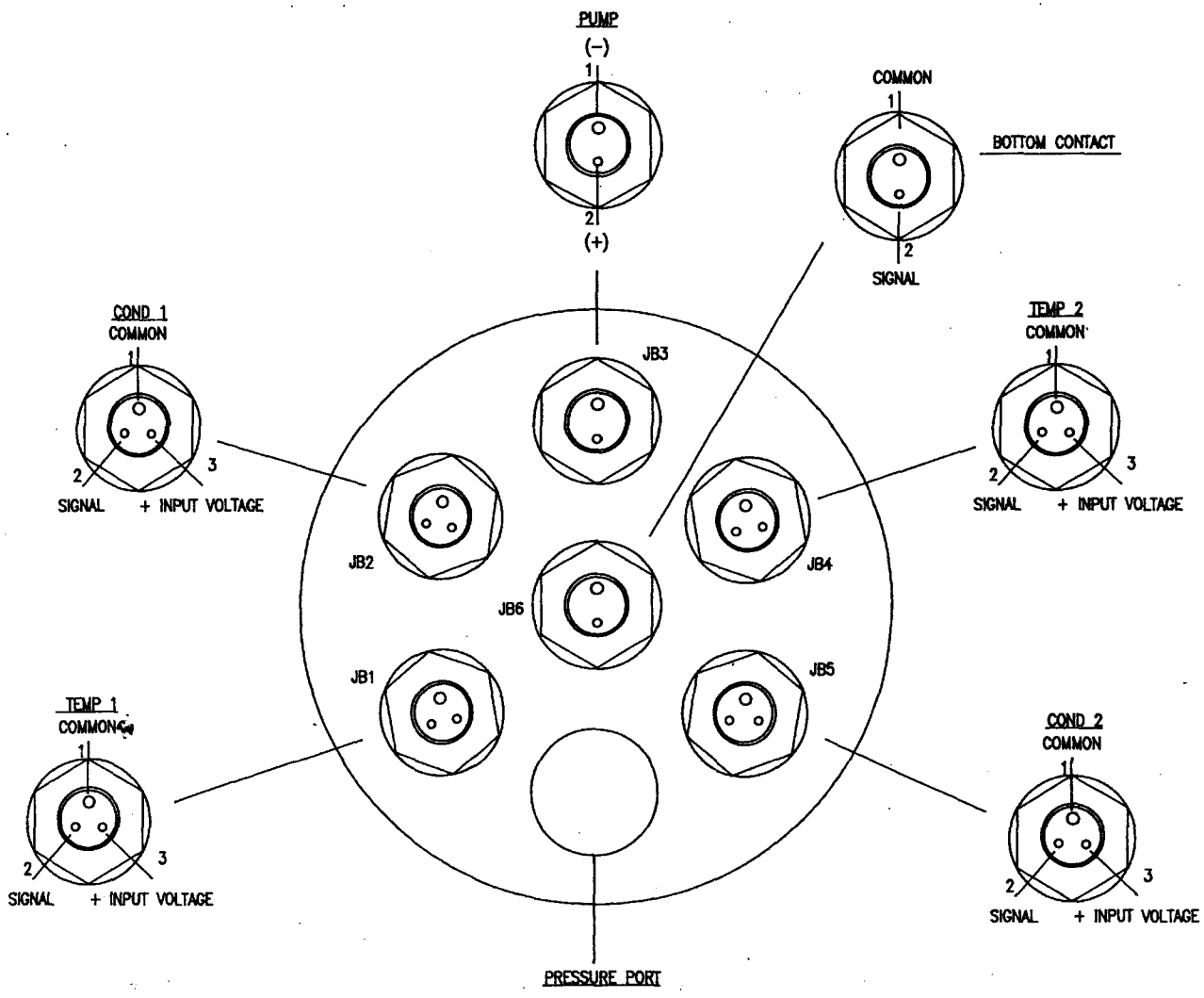
SLB PRINTED ON 09:39:44 28 MAR 1996

| PART NUMBER | DESCRIPTION | QPA | ITM | REF | DESIG |
|-------------|---|--------|-----|-----|-------|
| | | | | | NR |
| 80617 | SBE 9+ ISOLATED 12V TOP CARD FILE/ 40581P | | | | |
| 13038 | XISTOR, 2N4401 | 1.0000 | | | Q2 |
| 13051 | XISTOR, MJE 172, PNP | 1.0000 | | | Q1 |
| 13067 | ZENER DIODE, 13 VOLT, 1N4743A | 1.0000 | | | D1 |
| 14054 | CAP, 47 uF, 20V TANT, 40SS476C020K1A | 2.0000 | | | C1 C2 |
| 15169 | RES, 3.3K OHM, 5%, 1/4 W | 1.0000 | | | R1 |
| 17601 | CONN, 26 PIN HEADER, AMP 102322-6 | 1.0000 | | | J1 |
| 21119 | PCB, SBE 9+ ISO 12V, TOP CARD FILE/ 10098B | 1.0000 | | | PCB |
| 22070 | DC/DC CONV, ASTRODYNE 5B-2WR510, 12V/400MA | 1.0000 | | | U1 |
| 30039 | MICA INSULATOR, B08853A001 | 1.0000 | | | |
| 30116 | MACH SCREW, 2-56 X 3/8 PH, SS | 1.0000 | | | |
| 30211 | NUT, 2-56 NYLON STOP, SS | 1.0000 | | | |
| 30261 | SCREW INSUL, # 2 X 1/4", IN-2/4 | 1.0000 | | | |

| TOLERANCES | SEA-BIRD ELECTRONICS, INC | | |
|------------|---------------------------|---|---------------------------------|
| FRACTIONAL | P/N 31388 | SCALE | DRAWN BY OWA APPROVED BY OWA |
| DECIMAL | TITLE | SBE 9+ ISOLATED 12V POWER SUPPLY TOP CARD FILE | |
| ANGULAR | DATE 3/18/92 | DRAWING NUMBER 40581 | REV. 12 |

DOW

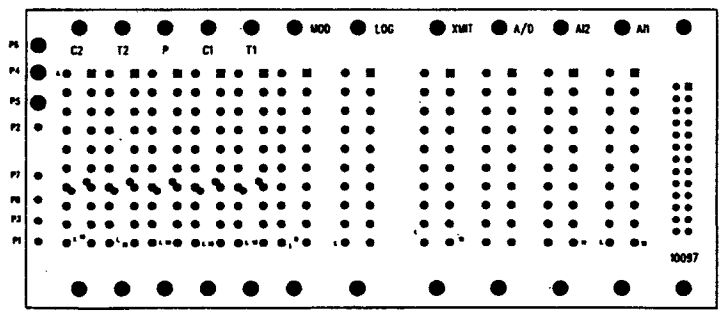
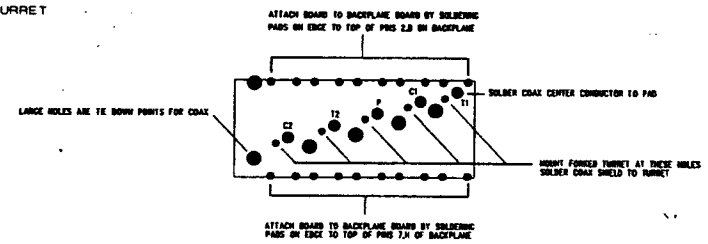
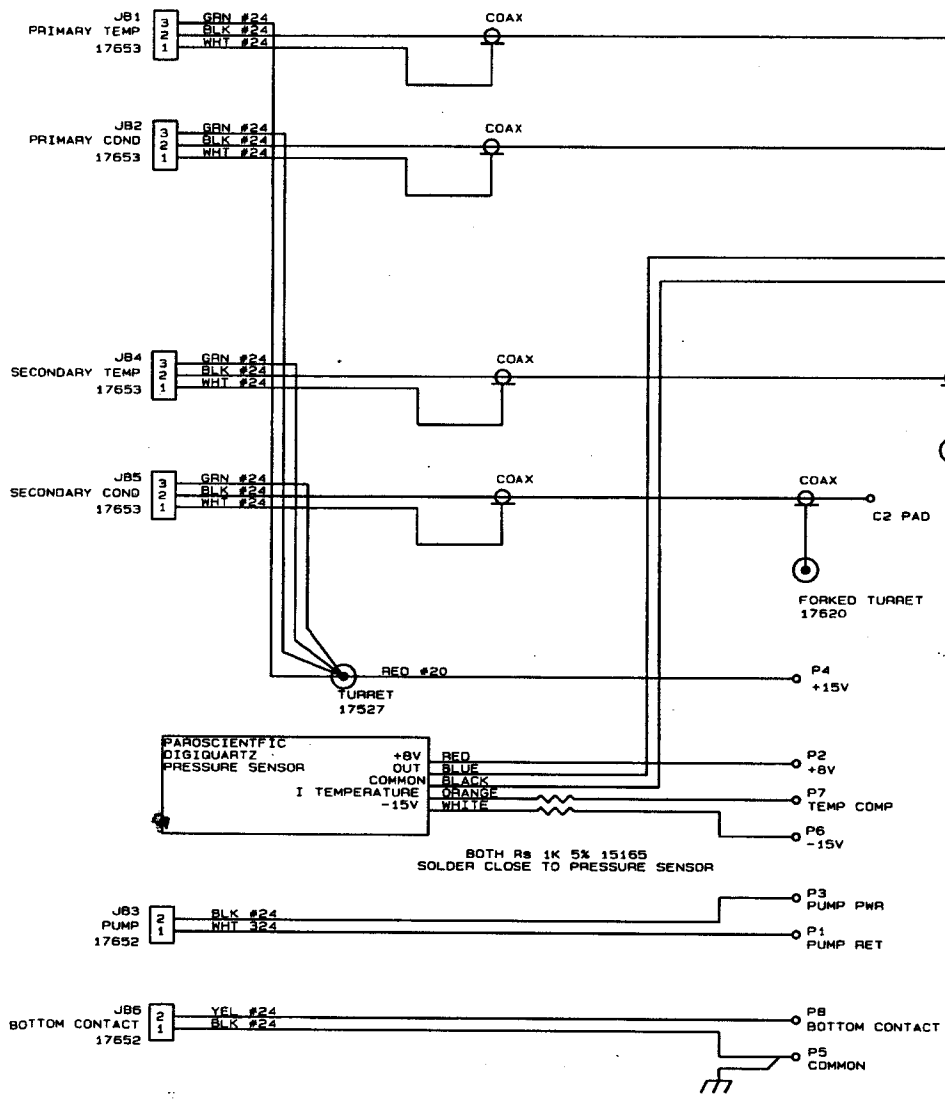
| DATE | SYM | REVISION RECORD | AUTH | DR. | CK. |
|------|-----|-----------------|------|-----|-----|
| 4/92 | A | ADDED JB6 | DG | BMc | #5 |



| | | | | | |
|------------|---------------------------|----------------|-------------|-----|---|
| TOLERANCES | SEA-BIRD ELECTRONICS, INC | | | | |
| FRACTIONAL | P/N | SCALE | APPROVED BY | BMC | |
| DECIMAL | TITLE | | APPROVED BY | | |
| ANGULAR | DATE | DRAWING NUMBER | 50078 | REV | A |

0516

| DATE | SYM | REVISION REQUIRED | AUTH | DR | CR |
|----------|-----|------------------------|------|----|----|
| 06/12/00 | A | CHANGE BULKHEADS TO BS | CB | CB | |



ASSEMBLY NOTES:

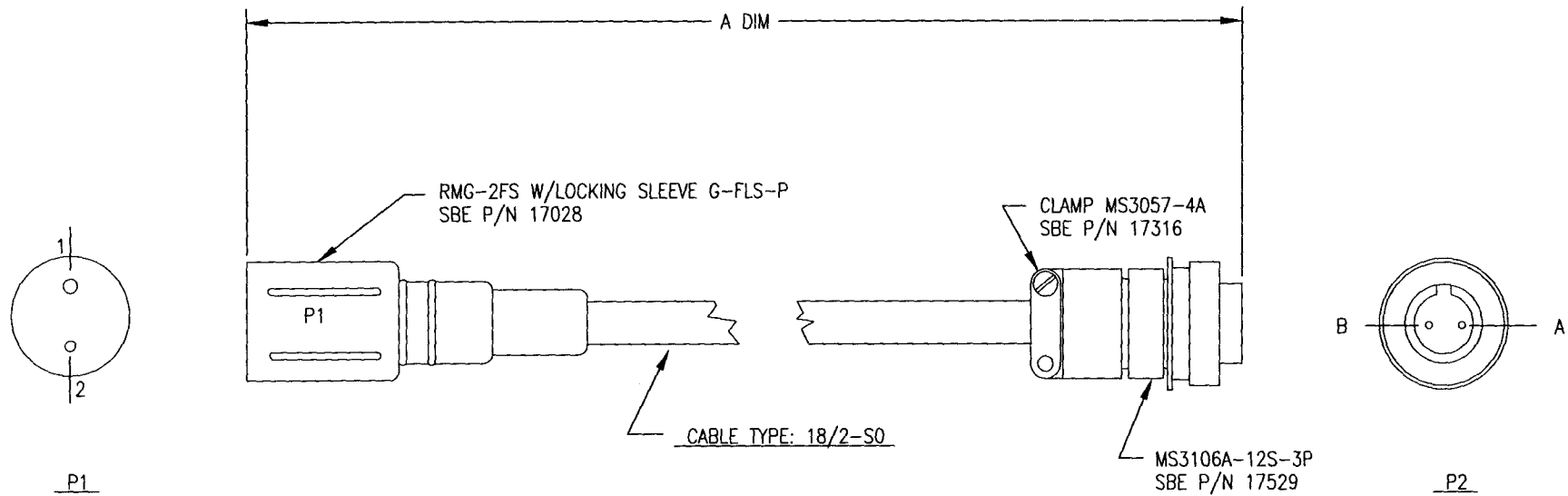
PADS P1 - P8 ARE ON PCB 10097 AS SHOWN

COAX CONDUCTORS ARE SOLDERED TO PCB 10101 AS SHOWN

DIGIQUARTZ SIGNAL AND COMMON ARE CONNECTED TO PCB 10101

| | |
|----------------------------|---------------------------------|
| SEA-BIRD ELECTRONICS, INC. | |
| Title | SBE 9plus BOTTOM END CAP WIRING |
| Size | Document Number |
| B | 31430 |
| Date: | June 12, 2000 Sheet 01 |
| REV | A |

| DATE | SYM | REVISION RECORD | AUTH. | DR. | CK. |
|------|-----|-----------------|-------|-----|-----|
| 1/92 | A | DELETE BUSHING | | BMC | |
| 6/92 | B | ADD DIM TABLE | | | |

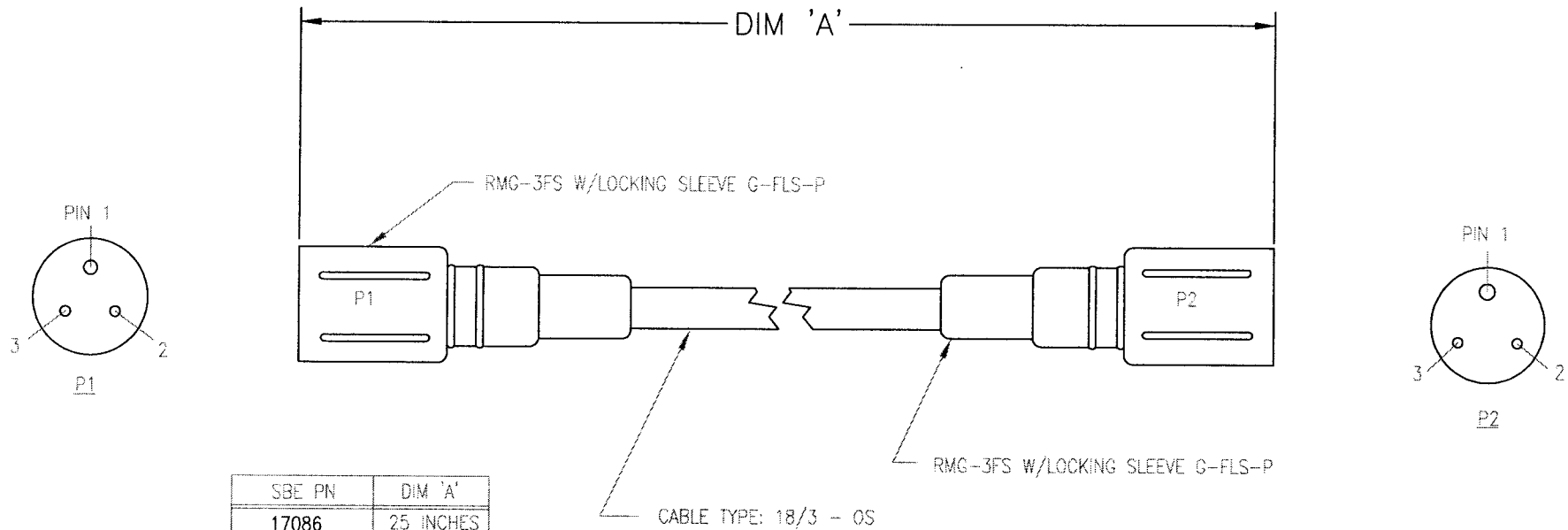


| SBE PN | DIM A | PIGTAIL PN DWG 30579 |
|--------|--------|-------------------------|
| 80591 | 8 FT | 17028 |
| 80620 | 50 FT | 17605 |
| 80813 | 20 FT | 17860 |
| 80903 | 150 FT | 17942 |
| 80915 | 33 FT | 17963 |
| 801039 | 10 FT | 17305 |
| 801414 | 13 FT | 171767 |

| WIRING CONNECTIONS | | |
|--------------------|-------|----|
| P1 | COLOR | P2 |
| PIN 1 | WHITE | A |
| PIN 2 | BLACK | B |

| | | | | |
|------------|-----------------------------------|----------------|---------------------------------|-------|
| TOLERANCES | SEA-BIRD ELECTRONICS, INC | | | |
| FRACTIONAL | P/N SEE TABLE | SCALE NTS | DRAWN BY BMC APPROVED BY KDL | |
| DECIMAL | TITLE TEST CABLE, SBE 911 PLUS | | | |
| ANGULAR | DATE 12/91 | DRAWING NUMBER | 31314 | REV B |

| DATE | REV | REVISION RECORD | AUTH. | DR. | CR. |
|------|-----|-----------------|-------|-----|-----|
| | | | | | |

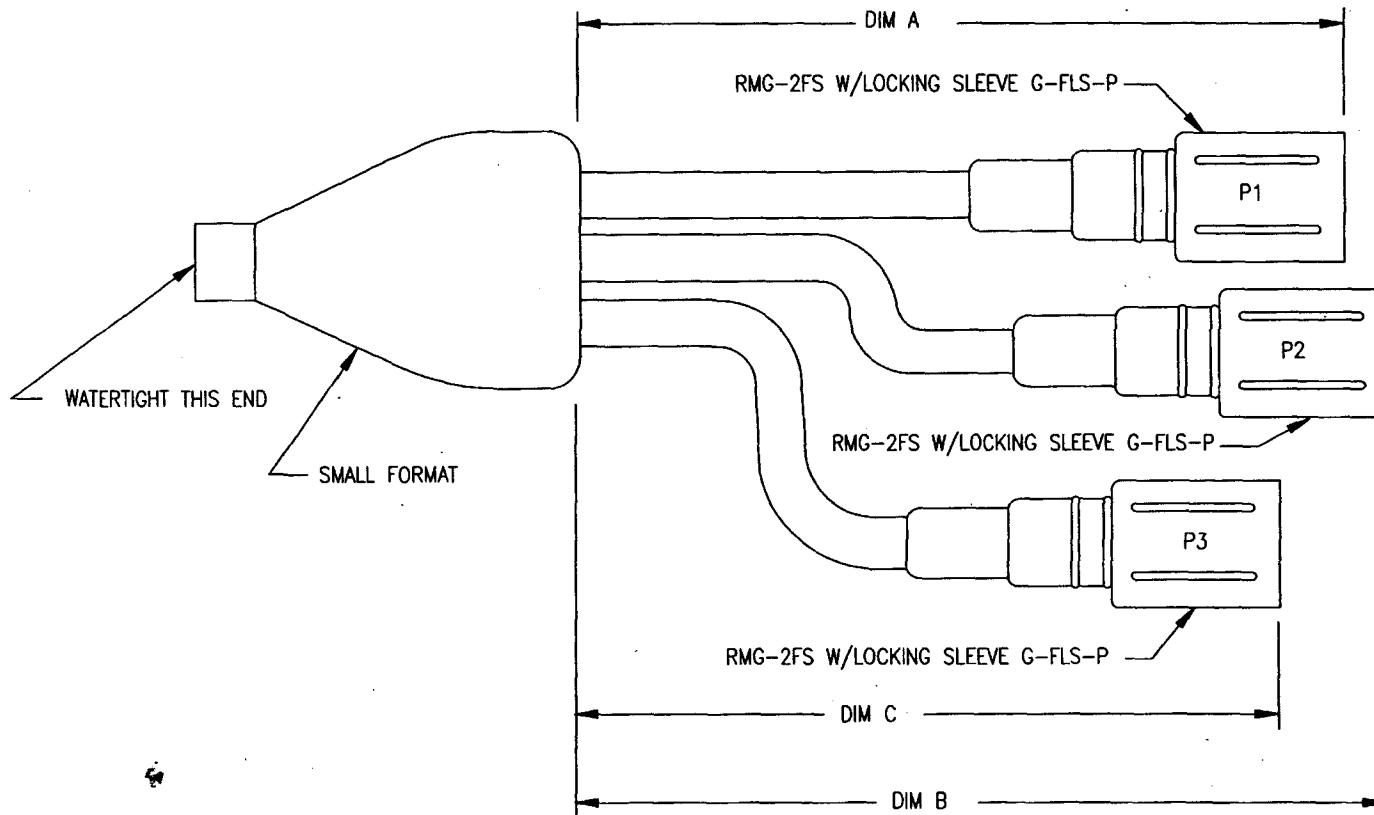


| SBE PN | DIM 'A' |
|--------|------------|
| 17086 | 25 INCHES |
| 17087 | 31 INCHES |
| 17196 | 98 INCHES |
| 17257 | 36 INCHES |
| 17288 | 158 INCHES |
| 17291 | 40 INCHES |
| 17353 | 72 INCHES |
| 17395 | 18 INCHES |
| 17396 | 20 INCHES |
| 17397 | 22 INCHES |
| 17418 | 120 INCHES |
| 17451 | 24 IN |
| 17589 | 48 INCHES |
| 17695 | 11 INCHES |
| 17856 | 60 INCHES |
| 171153 | 8 INCHES |
| 171248 | 40 CM |

| P1 | P2 |
|-------|-------|
| PIN 1 | PIN 1 |
| PIN 2 | PIN 2 |
| PIN 3 | PIN 3 |

| | | | | |
|------------|--|-----------------|-----------------|---------------------|
| TOLERANCES | SEA-BIRD ELECTRONICS, INC | | | |
| FRACTIONAL | P/N SEE TABLE | SCALE N.T.S. | DRAWN BY CEG | APPROVED BY P.C. |
| DECIMAL | TITLE CABLE, 3 PIN/3 PIN RMG-3FS + L.S. | | | |
| ANGULAR | DATE 10.13.97 | DRAWING NUMBER | 30566 | REV |

| DATE | SYM | REVISION RECORD | AUTH. | DR. |
|------|-----|--------------------|-------|-----|
| 4/94 | A | ADDED PART NO | | |
| 4/96 | B | C'RRCTD DWG&PART # | | JEB |



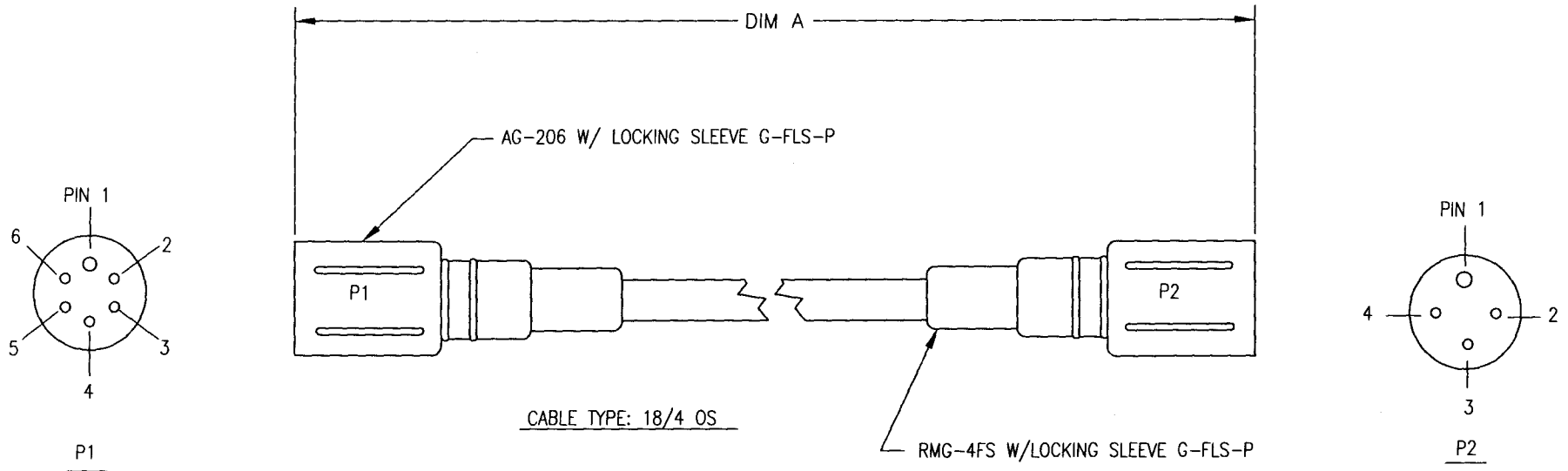
| PART NO | DIM A | DIM B | DIM C |
|---------|-----------|-----------|-----------|
| 17694 | 20 INCHES | 14 INCHES | 20 INCHES |
| 17799 | 36 INCHES | 14 INCHES | 36 INCHES |
| 17951 | 40 INCHES | 40 INCHES | 40 INCHES |
| | | | |
| | | | |

| P1 | P2 | P3 |
|-------|-------|-------|
| PIN 1 | PIN 1 | PIN 1 |
| PIN 2 | PIN 2 | PIN 2 |
| | | |
| | | |

NOTE: CABLE TYPE 1802

| | | | | |
|------------|---------------------------|---------|-------|-------|
| TOLERANCES | SEA-BIRD ELECTRONICS, INC | | | |
| FRACTIONAL | P/N SEE TABLE | SCALE - | DRAWN | BMC |
| DECIMAL | TITLE Y-CABLE, DUAL PUMPS | | | |
| ANGULAR | DATE 4/93 | DWG NO | 31522 | REV B |

| DATE | SYM | REVISION RECORD | AUTH. | DR. | CK. |
|------|-----|-----------------|-------|-----|-----|
| | | | | | |
| | | | | | |

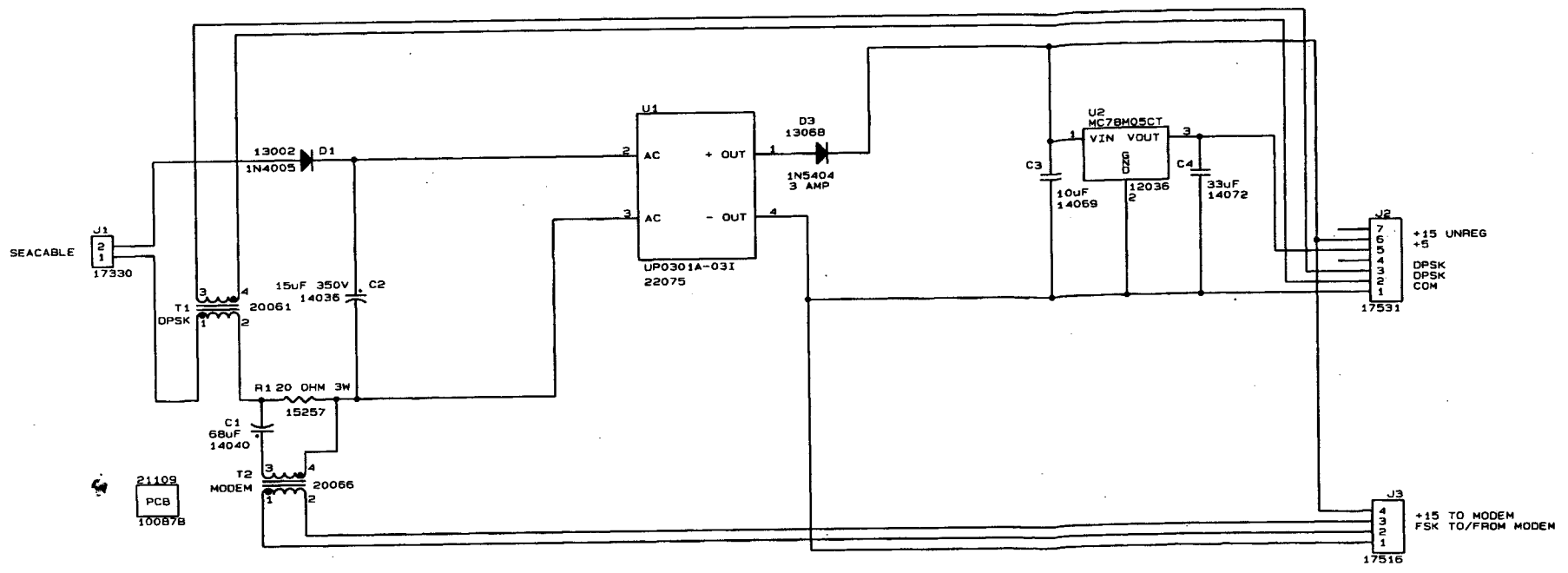


| SBE PN | DIM A |
|--------|--------|
| 17186 | 31 IN |
| 17312 | 36 IN |
| 17445 | 20 IN |
| 17606 | 48 IN |
| 171391 | 79 IN |
| 171491 | 30 IN |
| 171507 | 40 IN |
| 171653 | 72 IN |
| 171686 | 120 IN |

| P1 AG-206 | P2 RMG-4FS |
|-----------|------------|
| PIN 1 | PIN 1 |
| PIN 2 | PIN 2 |
| PIN 3 | PIN 3 |
| PIN 4 | --- |
| PIN 5 | --- |
| PIN 6 | PIN 4 |

| | | | | |
|--------------------------------------|----------------------------------|-----------|-------------|--|
| TOLERANCES | SEA-BIRD ELECTRONICS, INC | | | |
| FRACTIONAL | P/N SEE TABLE | SCALE 1:1 | DRAWN BY MJ | |
| DECIMAL | APPROVED BY | | | |
| ANGULAR | TITLE | | | |
| DATE 02.20.01 | DRAWING NUMBER 32496 | | REV | |
| Cable, SBE43 Interface (Diff Inputs) | | | | |

| DATE | SVN | REVISION REASON | AUTH | DR | PK |
|----------|-----|-------------------------------|------|----|----|
| 10/15/98 | A | ELNREQ: CORRECT U1 PART VALUE | | | |



| | |
|---|-------------------------------|
| SEA-BIRD ELECTRONICS, INC | |
| ASSEMBLY 40933 / PN 801064 | |
| Title | |
| 9plus SEACABLE INTERFACE, W/UNIVERSAL INPUT | |
| Size | Document Number |
| B | 32125 |
| Date: | October 16, 1998 Sheet 1 of 1 |

CR16.

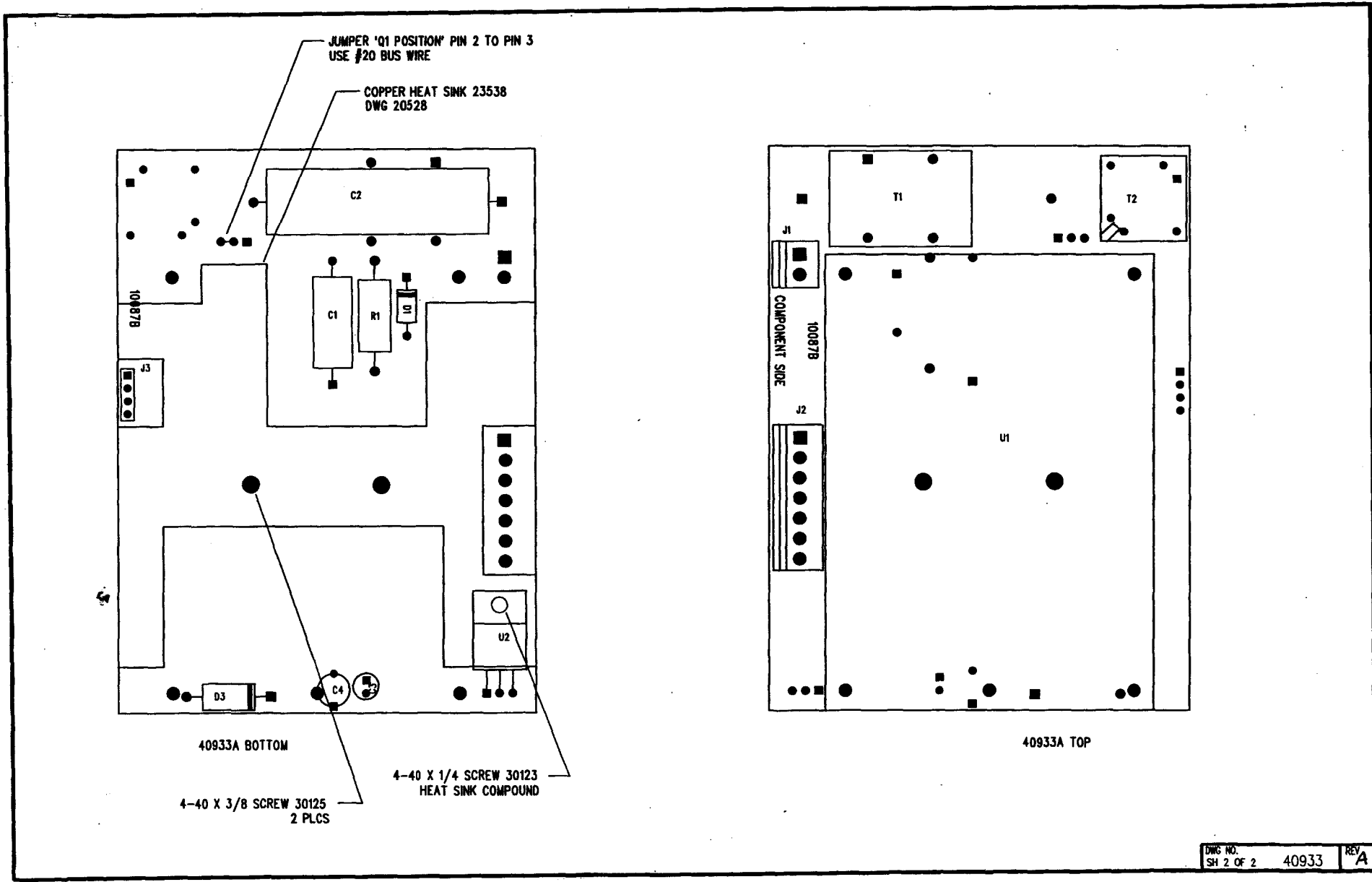
| DATE | SYM | REVISION RECORD | AUTH. | DR. | CK. |
|----------|-----|-------------------------|-------|-----|-----|
| 10/28/98 | A | ECN584 CORRECT HARDWARE | | DC | |

SLB PRINTED ON 08:02:47 28 OCT 1998

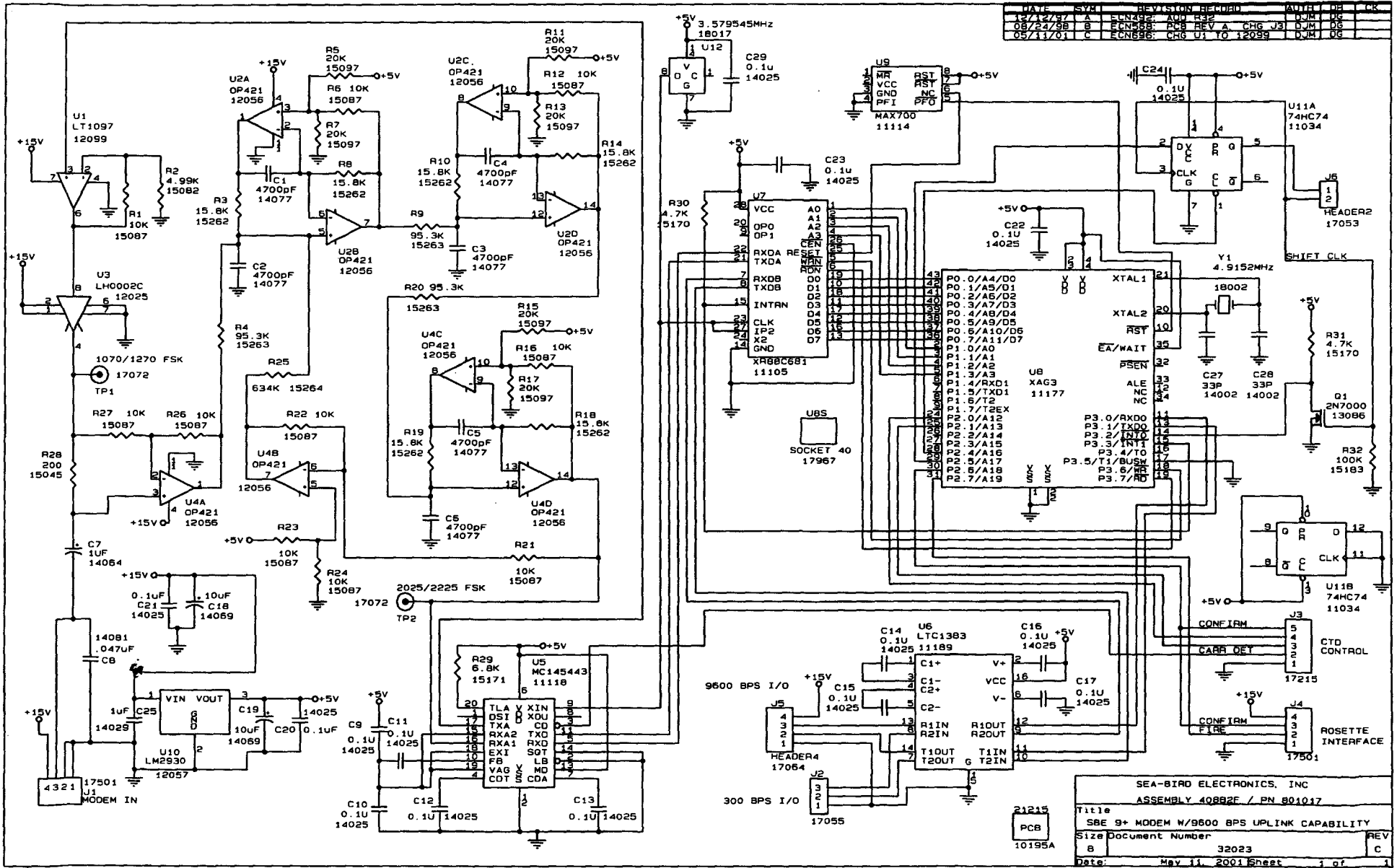
| PART NUMBER | DESCRIPTION | SRFC QPA | ITM REF DESIG |
|-------------|---|----------|---------------|
| | | MNT | NBR |
| 801064 | SBE 9+ SEACABLE INTERFACE, UNIVERSAL /40933A | | |
| 12036 | IC, MC78M05CT, 5V PWR. REG. | 1.0000 | U2 |
| 13002 | DIODE, 1N4005, HI-VOLTAGE | 1.0000 | D1 |
| 13068 | DIODE, 1N5404 HI-VOLTAGE, MOT. | 1.0000 | D3 |
| 14036 | CAP, 15 uf, 350V AL ELECT, TVA1607 | 1.0000 | C2 |
| 14040 | CAP, 68 uf, 15V TANT, CSR13D686KP | 1.0000 | C1 |
| 14069 | CAP, 10 uf, 20V DIPPED TANT, T350E106K020AS | 1.0000 | C3 |
| 14072 | CAP, 33 uf, 25V DIPPED TANT, TAP336K025HSB | 1.0000 | C4 |
| 15257 | RES, 20 OHM, 3 WATT, 5%, OHMITE 23J20R | 1.0000 | R1 |
| 17330 | HEADER, 2 PIN, MOLEX 41671-26-48-2025 | 1.0000 | J1 |
| 17516 | SOCKET, 4 PIN, SAMTEC SS-104-G-2 | 1.0000 | J3 |
| 17531 | HEADER, 7 PIN MOLEX 41671-26-48-2075 | 1.0000 | J2 |
| 20061 | SBE 9 SEACABLE TELEMETRY XFMR, /DWG 40503 | 1.0000 | T1 |
| 20066 | MODEM COUPLING XFMR, DRWG 40506 | 1.0000 | T2 |
| 21109 | PCB, SBE 9+ SEACABLE VER 2, /DWG 10087B | 1.0000 | PCB |
| 22075 | POWER SUPPLY, UP0301A-03I 90-264 VAC INPUT | 1.0000 | U1 |
| 23538 | COPPER SBE 9+ SEACABLE HEATSINK, /20528C | 1.0000 | |
| 30123 | MACH SCREW, 4-40 X 1/4 PH, SS | 1.0000 | U2 |
| 30125 | MACH SCREW, 4-40 X 3/8 PH, SS | 2.0000 | U1 |

| | | | | |
|------------|---------------------------|-----------------|-------------|--|
| TOLERANCES | SEA-BIRD ELECTRONICS, INC | | | |
| FRACTIONAL | P/N 801064 SCH 32125 | SCALE | DRAWN BY DC | |
| DECIMAL | TITLE | APPROVED BY | | |
| ANGULAR | DATE | DWG NO. | REV | |
| | 1/14/98 | SH 1 OF 2 40933 | A | |

CR10.



OP 16.



| DATE | BY | REVISION | REASON | UNIT | BY | CHK |
|----------|----|----------|-----------------|------|----|-----|
| 12/12/97 | A | ECN492 | ADD R32 | DJM | DC | |
| 08/24/98 | B | ECN588 | ACB REV A | CHG | J3 | DJM |
| 05/11/01 | C | ECN696 | CHG U1 TO 12059 | DJM | DC | |

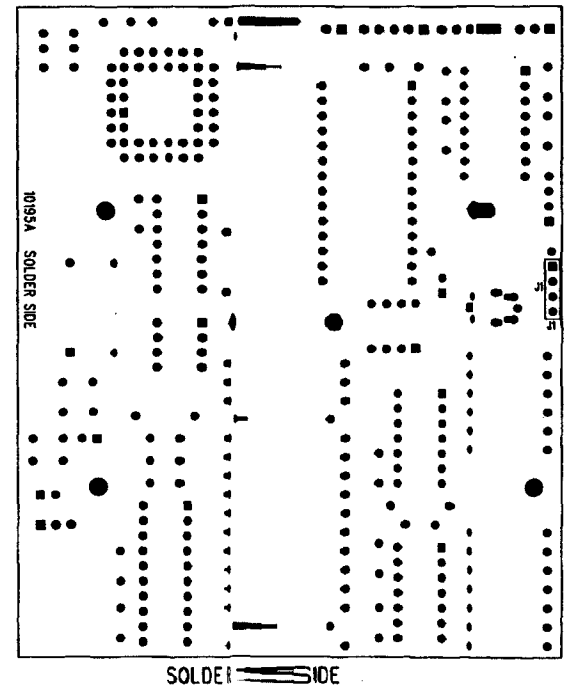
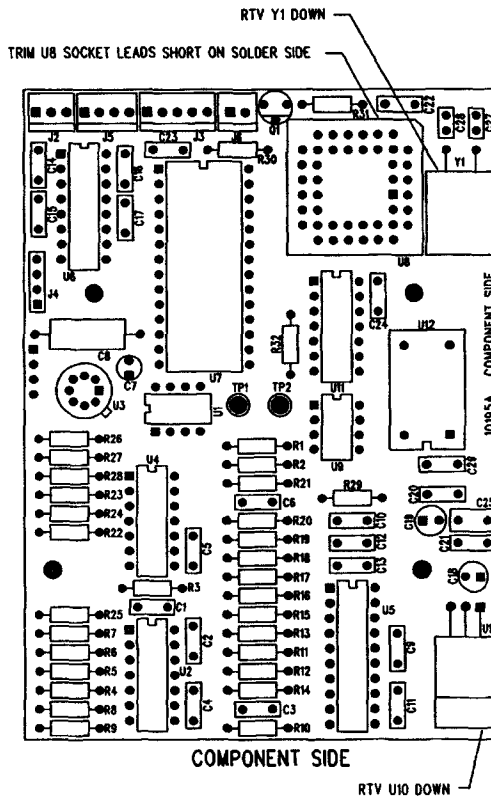
SEA-BIRD ELECTRONICS, INC
 ASSEMBLY 40882E / PN 801017

| | | | |
|-------|---|-------|--------|
| Title | SBE 9+ MODEM W/9600 BPS UPLINK CAPABILITY | REV | C |
| Size | Document Number | 32023 | |
| Date | May 11, 2001 | Sheet | 1 of 1 |

PCB
10195A

ART NUMBER. DESCRIPTION. QPA. ITM REF DESIG.
NBR

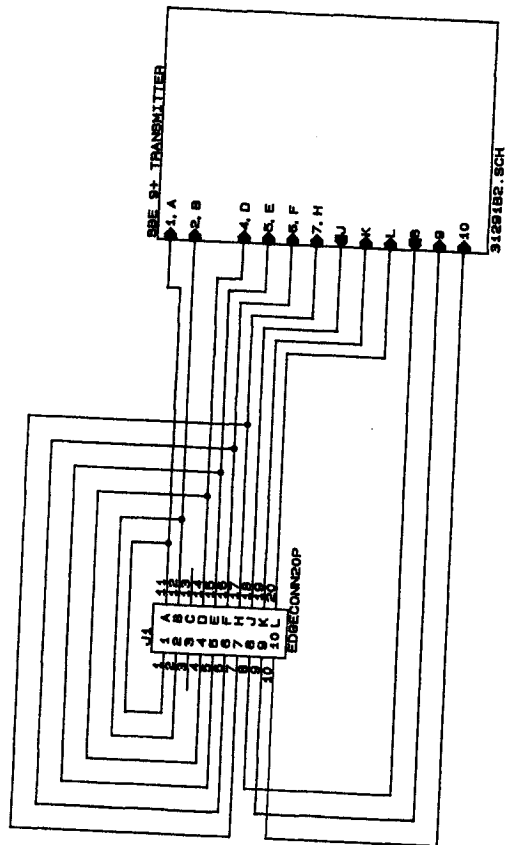
| | | | | |
|-------|--|---------|--|--|
| 01017 | SBE 9+ MODEM W/9600 UPLINK CAPABILITY /40882F | | | |
| 11034 | IC, 74HC74N, FLIP. FLOP | 1.0000 | U11 | |
| 11105 | IC, XR-88C681CP/28 CMOS DUART | 1.0000 | U7 | |
| 11114 | IC, MAXIM, MAX700CPA | 1.0000 | U9 | |
| 11118 | IC, MC145443P | 1.0000 | U5 | |
| 11189 | IC, LTC1383CN RS232 INTRFC, LINEAR TECH | 1.0000 | U6 | |
| 11194 | IC, SBE 9P MODEM 9600 BPS UPLINK EPROM | 1.0000 | U8 INSTAL IN TEST | |
| 12025 | IC, HA2-5002-5, CURRENT AMP | 1.0000 | U3 | |
| 12056 | IC, OP421HY OP AMP | 2.0000 | U4 U2 | |
| 12057 | IC, LM2930T-5.0, 5V REG. | 1.0000 | U10 | |
| 12099 | IC, LT1097CN8, LINEAR TECH OP AMP | 1.0000 | U1 | |
| 13086 | XISTOR, 2N7000 | 1.0000 | Q1 | |
| 14002 | CAP, 33 pF, 100V CER, SR151A330KAA, NPO | 2.0000 | C27 C28 | |
| 14025 | CAP, 1uF, 100V 10% X7R SR211C104KAA, AVX | 15.0000 | C9 C10 C11 C12 C13 C14 C15 C16 C17 C20 C21 C22 C23 C24 C29 | |
| 14029 | CAP, 1 uF, 50V CER, SR305E105MAA, Z5U | 1.0000 | C25 | |
| 14064 | CAP, 1 uF, 35V DIPPED TANT, T350A105K035AS | 1.0000 | C7 | |
| 14069 | CAP, 10 uF, 20V DIPPED TANT, T350E106K020AS | 2.0000 | C18 C19 | |
| 14077 | CAP, 4700 pF, SR211A472JAA AVX | 6.0000 | C1 C2 C3 C4 C5 C6 | |
| 14081 | CAP, .047uF 100V 5% 32MM-4702-J1 MTLZD PLYESTR | 1.0000 | C8 | |
| 15045 | RES, 200 OHM, 1%, 1/4 W | 1.0000 | R28 | |
| 15082 | RES, RN55C4991F, 4.99K OHM 1% 1/4W | 1.0000 | R2 | |
| 15087 | RES, RN55C1002F, 10K 1% 1/4W, DALE | 10.0000 | R1 R6 R12 R16 R21 R22 R23 R24 R26 R27 | |
| 15097 | RES, 20K OHM, 1%, 1/4 W | 6.0000 | R5 R7 R11 R13 R15 R17 | |
| 15170 | RES, 4.7K OHM, 5%, 1/4 W | 2.0000 | R30 R31 | |
| 15171 | RES, 6.8K OHM, 5%, 1/4 W | 1.0000 | R29 | |
| 15183 | RES, 100K OHM, 5%, 1/4 W | 1.0000 | R32 | |
| 15262 | RES, 15.8K OHM, 1%, 1/4 W | 6.0000 | R3 R8 R10 R14 R18 R19 | |
| 15263 | RES, 95.3K OHM, 1%, 1/4 W | 3.0000 | R4 R9 R20 | |
| 15264 | RES, 634K OHM, 1%, 1/4 W | 1.0000 | R25 | |
| 17053 | HEADER, 2 PIN, MOLEX 6373-22-11-2022 | 1.0000 | J6 | |
| 17055 | HEADER, 3 PIN, MOLEX 6373-22-11-2032 | 1.0000 | J2 | |
| 17064 | HEADER, 4 PIN, MOLEX 6373-22-11-2042 | 1.0000 | J5 | |
| 17072 | TERMINAL, PCB, 1/16", CONCORD 12-206-2-01 | 2.0000 | TP2 TP1 | |
| 17215 | HEADER, 5 PIN, MOLEX 6373-22-11-2052 | 1.0000 | J3 | |
| 17501 | HEADER, 4 PIN STRIP, BBS-104-G-B | 2.0000 | J4 J1 | |
| 17967 | SOCKET, 44 PIN AUGAT PLCC, PCS-044A-1 | 1.0000 | U8S | |
| 18017 | OSC, 970T1B2A, 3.57954 MHZ | 1.0000 | U12 | |
| 18034 | CRYSTAL, FOX 12.280 MHZ FOX128-20 | 1.0000 | Y1 | |
| 21215 | PCB, SBE 9+ MODEM W/9600 BAUD UPLINK /10195A | 1.0000 | PCB | |



| DATE | SYM | REVISION RECORD | AUTH. | DR. | CK. |
|---------|-----|--------------------------|-------|-----|-----|
| 6/97 | A | INSTALL IN TEST TO U8 | EBA | | |
| 7/97 | B | REMOVED 11200 TO P/L | EBA | | |
| 12/97 | C | 4492: ADD R32 | CLM | DG | |
| 2/2/98 | D | 4503: ADD U8 NOTE | CB | DG | |
| 9/2/98 | E | 4568: PCB REV A, J3, R32 | CLM | DG | |
| 5/11/01 | F | 4696: CHG U1 TO 12099 | CLM | DG | |

| | | | |
|------------------------------------|--------|----------|--------|
| SEA BIRD ELECTRONICS, INC | | | |
| PART NO. | 801017 | BD SCALE | 1.25 |
| SCHEM. | 32023C | PL SCALE | 1.00 |
| TITLE: SBE 9plus MODEM BOARD | | | |
| PTH: TH 9600 BPS UPLINK CAPABILITY | | | |
| DATE | 9/97 | DWG NO. | 40-882 |
| | | | REV F |

| | | | | |
|-----|------|----|-----|------|
| REV | DATE | BY | CHK | AUTH |
| | | | | |



SEA-SIRD ELECTRONICS, INC.
 ASSEMBLY 405338 / PN 80581
 SBE G+ TRANSMITTER AND PUMP DELAY
 Size Document Number 31281
 DATE: JANUARY 6, 1982 Sheet 1 of 2

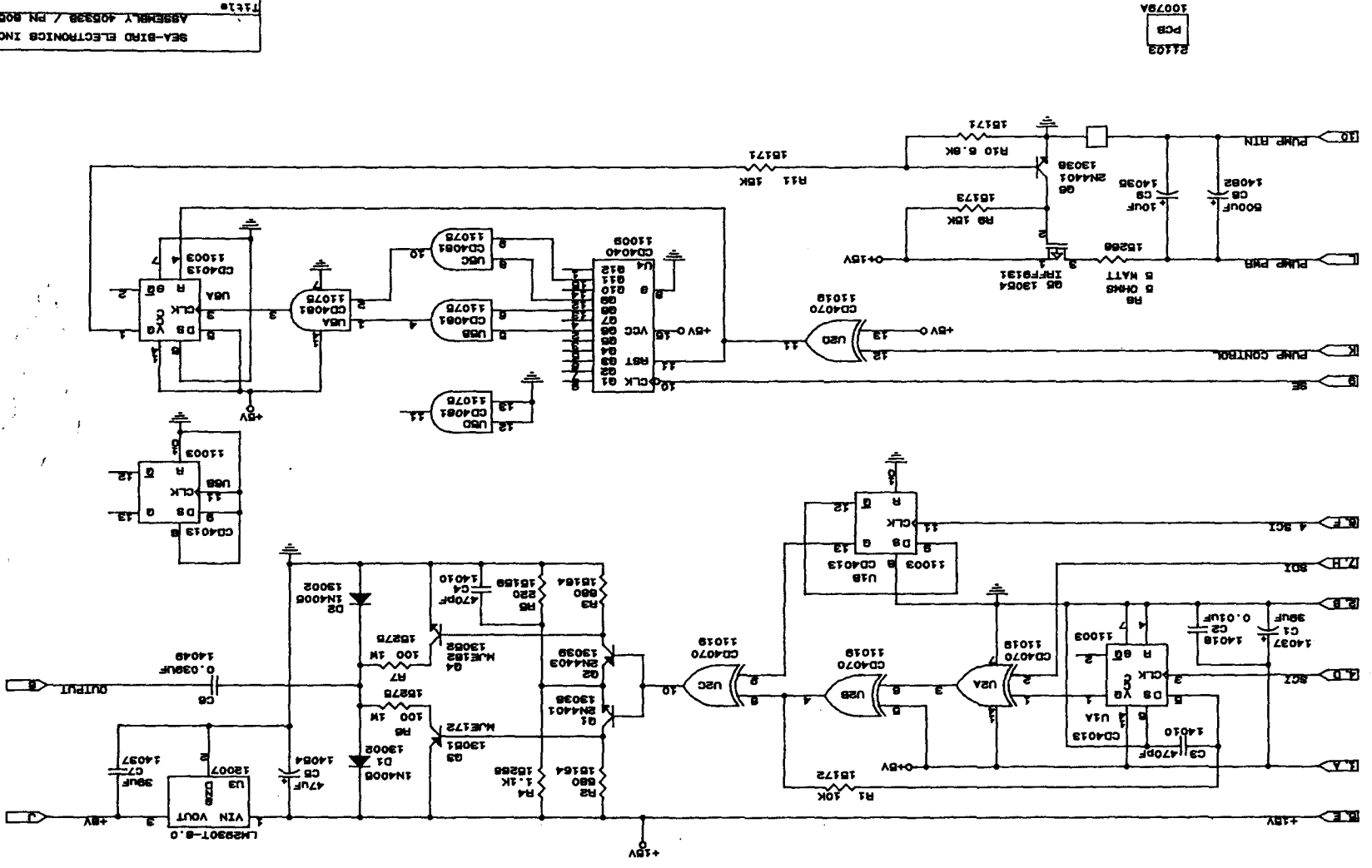
NOTE: SHEET 2 IS INTENTIONALLY MARKED 'SHEET 1 OF 1'

ORIG

SEA-BIRD ELECTRONICS INC.
 ASSEMBLY 40538 / PN 80581
 SEE 9+ TRANSMITTER AND PUMP DELAY
 31281
 REV B

NOTE: ORCAD FILE 91281B1.SCH IS FOR NETLISTING TO USE WITH PADS ONLY

0R16



21193
 PCB
 10078A

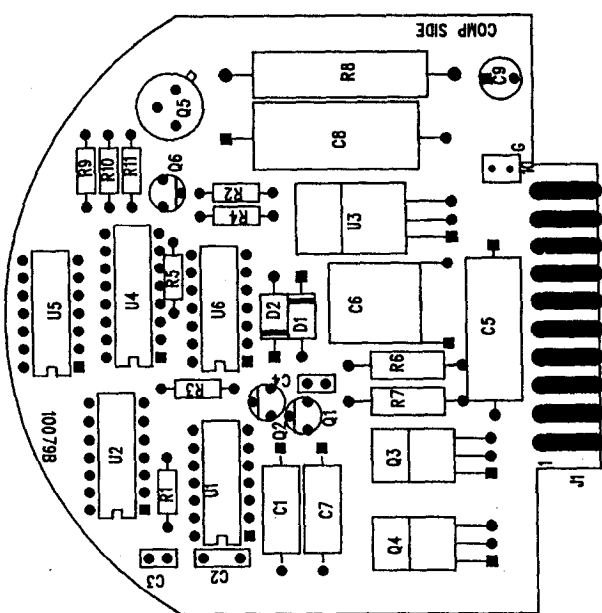
1 of 1
 JANUARY 9, 1982 Board
 31281

| DATE | BY | REVISION REQUIRED | ARTK. | PK. | CR. |
|---------|----|---------------------------------------|-------|-----|----------|
| 1/12/81 | B | MONST 26 ON BACK | | | BAF |
| 1/13/81 | C | MONST 26 TO DAY 26 | | | DM |
| 1/14/81 | C | CONNECTED KIT PRICE ON 255V. BLUE-GR. | | | BA BA BA |

SINGLE LEVEL BILLS PAGE 1
 SLB PRINTED ON 10:16:33 03 JUN 1994

PART NUMBER DESCRIPTION QPA ITEM REF DESIG NBR

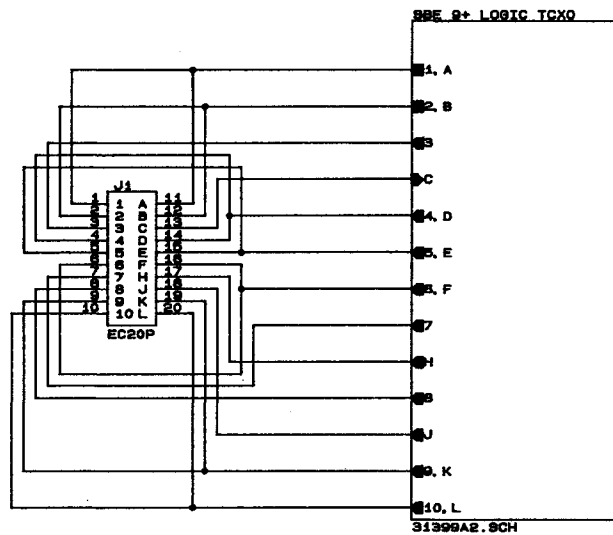
| | | | | | |
|-------|---------------------------------|--------|--|--|-------|
| 80561 | SBE 9+ TRANSMITTER, /TMC 40533 | | | | |
| 11003 | IC, CMOS138E, DUAL D. FLIP FLOP | 2.0000 | | | U1 U6 |
| 11009 | IC, CMOS6408E, RIFFLE CTR. | 1.0000 | | | U4 |
| 11039 | IC, CMOS6408E, RIFFLE CTR. | 1.0000 | | | U2 |
| 12002 | IC, CMOS6408E, QUAD 2-INPUT AND | 1.0000 | | | U5 |
| 13002 | IC, 14C9307-8 Q, 8V REG. | 1.0000 | | | U3 |
| 13008 | DIODE 1N4005 HI-VOLTAGE | 2.0000 | | | D1 D2 |
| 13038 | RESISTOR 2M4001 | 2.0000 | | | Q1 Q6 |
| 13039 | RESISTOR 2M4001 | 1.0000 | | | Q2 |
| 13051 | RESISTOR 1/2W 172.5K | 1.0000 | | | Q3 |
| 13052 | RESISTOR 1/2W 182.5K | 1.0000 | | | Q4 |
| 13054 | RESISTOR 1/2W 182.5K | 1.0000 | | | Q5 |
| 14010 | CAP. 470 PF, 100V CER. | 2.0000 | | | C3 C4 |
| 14018 | SR151AA713AA, NFO | 1.0000 | | | C2 |
| 14037 | SR211C103KAA, X7R | 2.0000 | | | C1 C7 |
| 14049 | 40SS396B010K1A | 1.0000 | | | C6 |
| 14054 | CAP. 039 uF, 100V CER. | 1.0000 | | | C5 |
| 14069 | SR50LA393KAA, NFO | 1.0000 | | | C9 |
| 14082 | 40SS476020K1A | 1.0000 | | | C8 |
| 15159 | CAP. 10 uF, 20V DIPPED TANT. | 1.0000 | | | R5 |
| 15164 | CAP. 500uF, 16V ELECTRO. | 2.0000 | | | R2 R3 |
| 15171 | SPRAGUE TVA 1162 | 1.0000 | | | R10 |
| 15172 | RES. 220 OHM, 5%, 1/4 W | 1.0000 | | | R1 |
| 15173 | RES. 680 OHM, 5%, 1/4 W | 1.0000 | | | R11 |
| 15266 | RES. 6.8K OHM, 5%, 1/4 W | 2.0000 | | | R4 |
| 15268 | RES. 10K OHM, 5%, 1/4 W | 1.0000 | | | R3 |
| 15275 | RES. 1.1K OHM, 5%, 1/4 W | 1.0000 | | | R6 R7 |
| 21103 | RES. 5 OHM, 5%, 5 WATT, OHMITE | 1.0000 | | | PCB |
| 30503 | RES. 100 OHM, 1 WATT OHMITE | 1.0000 | | | J1 |



1. SECURE Q3, Q4, C6, U3 WITH RTV
 NOTE:

| | |
|-----------------|---------------------------|
| TOLERANCES | SEA-BIRD ELECTRONICS, INC |
| DESIGN | DATE 12/13/91 |
| SCALE | BY 505/291 |
| APPROVED BY | DATE 12/13/91 |
| TITLE | SBE 9+ TRANSMITTER |
| PRINTING NUMBER | 40533 |
| REV | C |

| | | | | | | | |
|----------|-------|-----|-----------|-----|------|----|-----|
| DATE | BY | REV | BY | REV | DATE | BY | REV |
| 04/24/84 | J. W. | WAS | P/N 31399 | | | | |

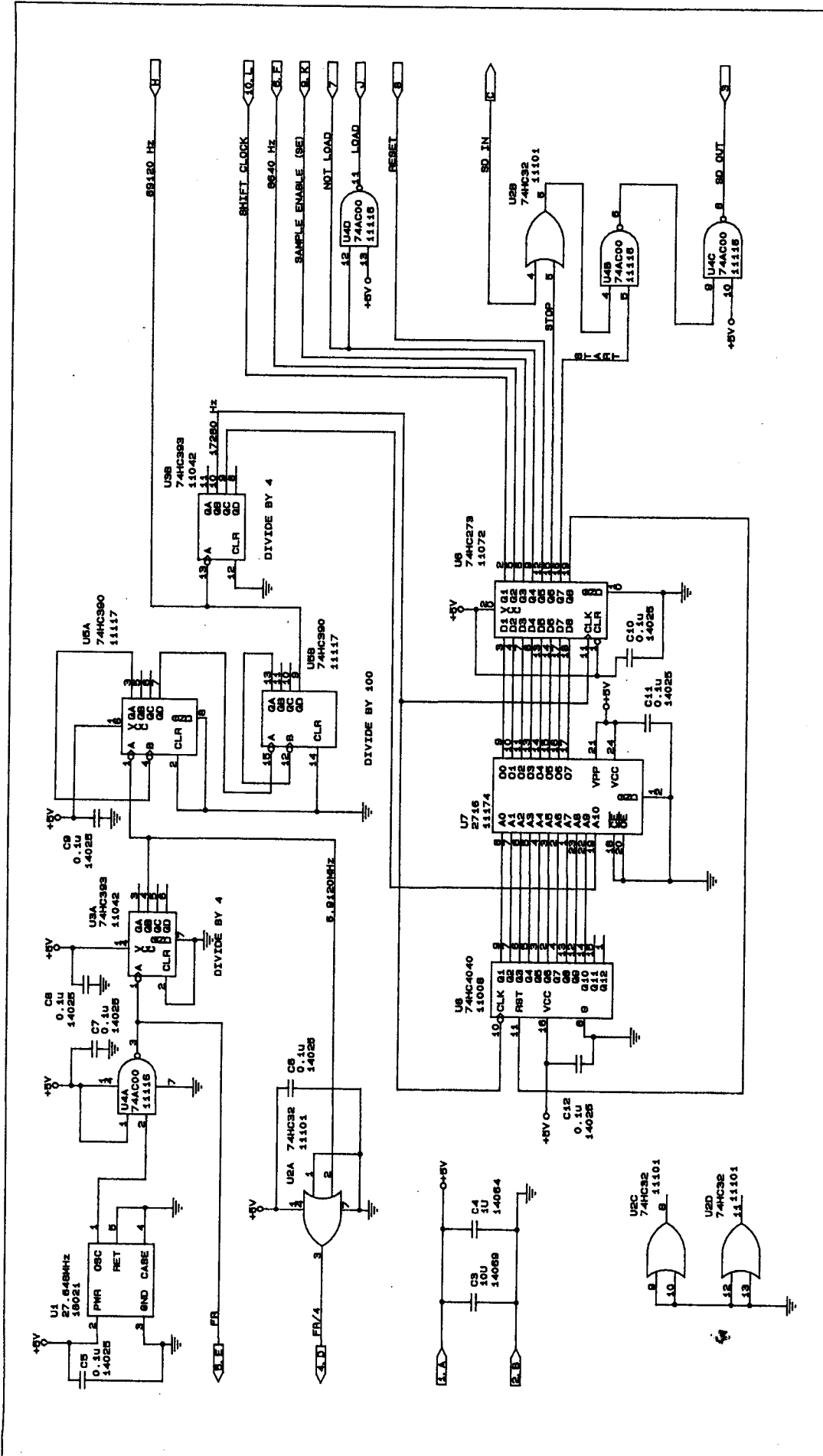


101008
PCB
21121

NOTE: SHEET 2 IS INTENTIONALLY MARKED 'SHEET 1 OF 1'

| | | |
|----------------------------|-------------------|--------------|
| SEA—BIRD ELECTRONICS, INC. | | |
| ASSEMBLY 40505 / PN 80521 | | |
| Titl | SBE 9+ LOGIC TCXO | |
| SI2 | Item | Number |
| B | | 31399 |
| REV | A | |
| Date | Apr 23, 1988 | Sheet 1 of 2 |

0216

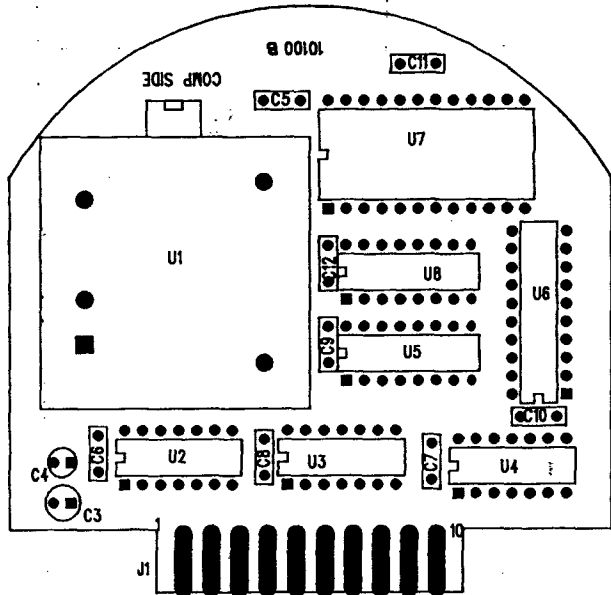


| | |
|---------------------------|--------------------------|
| SEA-SIRD ELECTRONICS | |
| ASSEMBLY 40585 / PN 80821 | |
| Title | SSE 9+ LOGIC TCXO |
| Size | Document Number 31398 |
| REV | A |
| Date: | Aug 11, 2008 10:00:00 AM |

NOTE: ORCAD FILE 31398A1.SCH IS FOR NETLISTING WITH PADS ONLY

02/16

| DATE | SYM | REVISION RECORD | AUTH. | DR. | CK. |
|---------|-----|-------------------------|-------|-----|-----|
| | A | ADD U1 NOTE | | D6 | |
| 6/16/95 | B | PCB REV 8, DEL. U1 NOTE | | D6 | |
| 9/23/96 | C | UT PIN WAS 11059 | | D6 | |



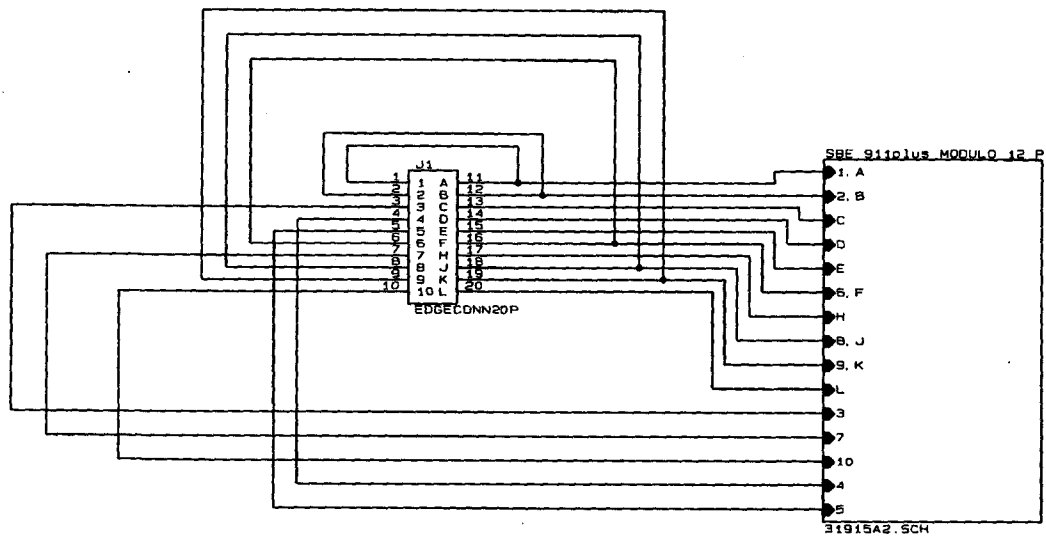
SLB PRINTED ON 13:10:58 22 APR 1996

PART NUMBER. DESCRIPTION..... QPA..... ITM REF DESIG.....
NBR

| | | | | |
|-------|--|--------|-------------------------------|--|
| 80621 | SBE 9+ LOGIC, TCXO, /DWG 40585 | | | |
| 11008 | IC, 74HC4040N, HC RIPPLE CTR. | 1.0000 | U8 | |
| 11042 | IC, 74HC393N | 1.0000 | U3 | |
| 11072 | IC, 74HC273N, OCTAL FLIP-FLOPS | 1.0000 | U6 | |
| 11101 | IC, 74HC32AN QUAD OR GATE | 1.0000 | U2 | |
| 11116 | IC, MC74AC00N | 1.0000 | U4 | |
| 11117 | IC, MC74HC390N | 1.0000 | U5 | |
| 11174 | IC, V1.0 SBE 9P LOGIC 1 EPROM | 1.0000 | U7 | |
| 14025 | CAP, .1 uf, 100V CER, SR211C104KAA, X7R | 8.0000 | C5 C6 C7 C8 C9 C10 C11 C12 | |
| 14064 | CAP, 1 uf, 35V DIPPED TANT. T350A105K035AS | 1.0000 | C4 | |
| 14069 | CAP, 10 uf, 20V DIPPED TANT, T350E106K020AS | 1.0000 | C3 | |
| 18021 | OSC, 27.648 MHZ, 257Y2032 VECTRON CMOS | 1.0000 | U1 | |
| 21121 | PCB, SBE 9+ LOGIC TCXO, /DWG 10100B | 1.0000 | PCB | |
| 30503 | 20 PIN GOLD TIP PLATING | 1.0000 | J1 | |

| | | | | |
|------------|-----------------------------|---------------|-------------|--|
| TOLERANCES | SEA-BIRD ELECTRONICS, INC | | | |
| FRACTIONAL | P/N 31399 | SCALE - | DRAWN BY BM | |
| DECIMAL | APPROVED BY | | | |
| ANGULAR | TITLE SBE 9+ LOGIC, TCXO | | | |
| | DATE 8/25/92 | DWG NO. 40585 | REV C | |

| REV | DATE | ECN | ADPR |
|-----|----------|-----|------|
| A | 07/19/95 | | QJN |



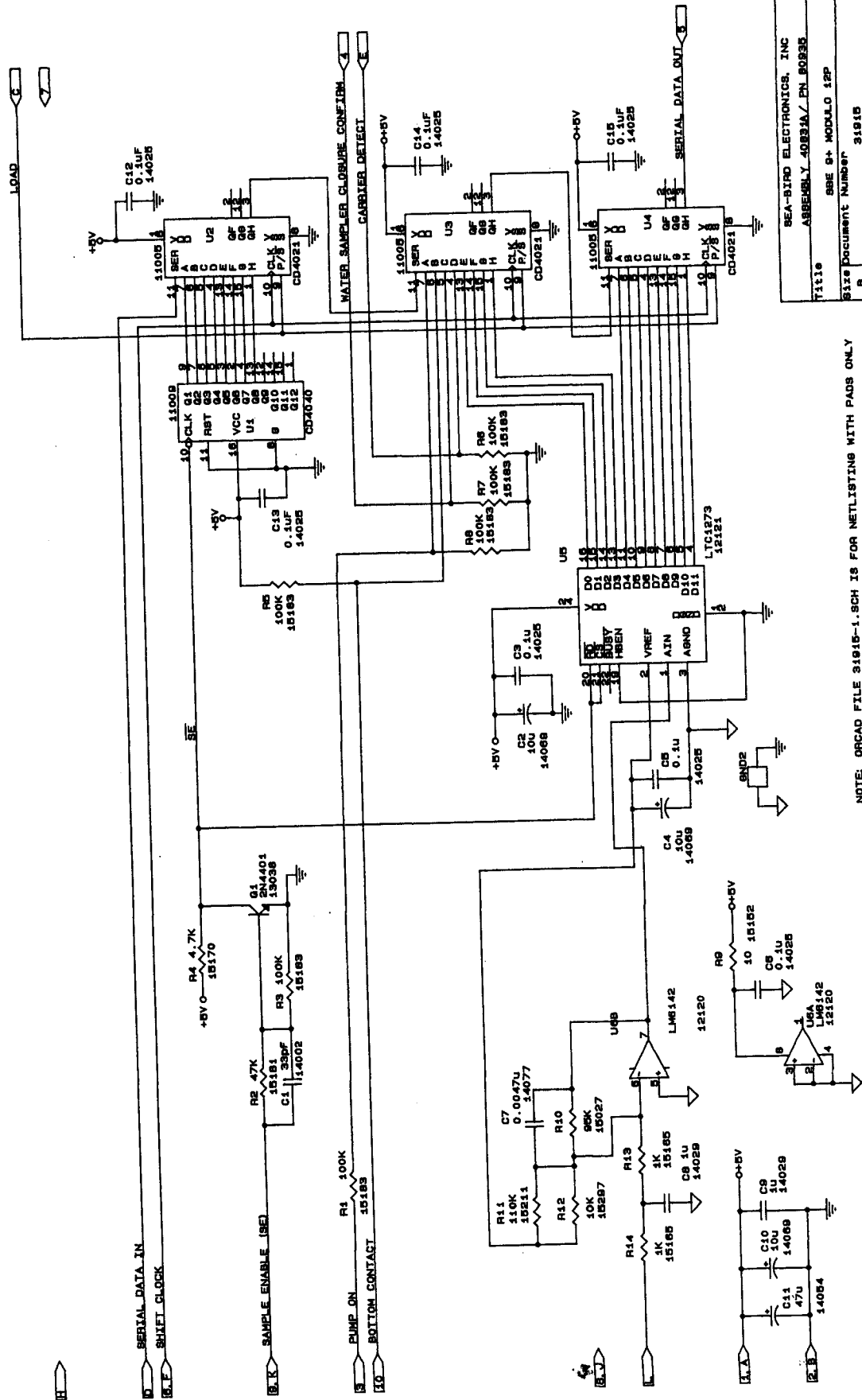
31915A2.SCH

10169A
PCB
21169

NOTE: SHEET 2 IS INTENTIONALLY MARKED 'SHEET 1 OF 1'

| | | |
|----------------------------|------------------|--------------|
| SEA-BIRD ELECTRONICS, INC. | | |
| ASSEMBLY 40831A / PN 80935 | | |
| Title | | |
| SBE 9+ MODULO 12P | | |
| Size | Document Number | REV |
| B | 31915 | A |
| Date: | December 4, 1997 | Sheet 1 of 2 |

DATE: 8/17/88 BY: J. B. BROWN, DESIGNER APPROVED: AUTH: J. B. BROWN



NOTE: ORCAD FILE 31915-1.SCH IS FOR NETLISTING WITH PADS ONLY

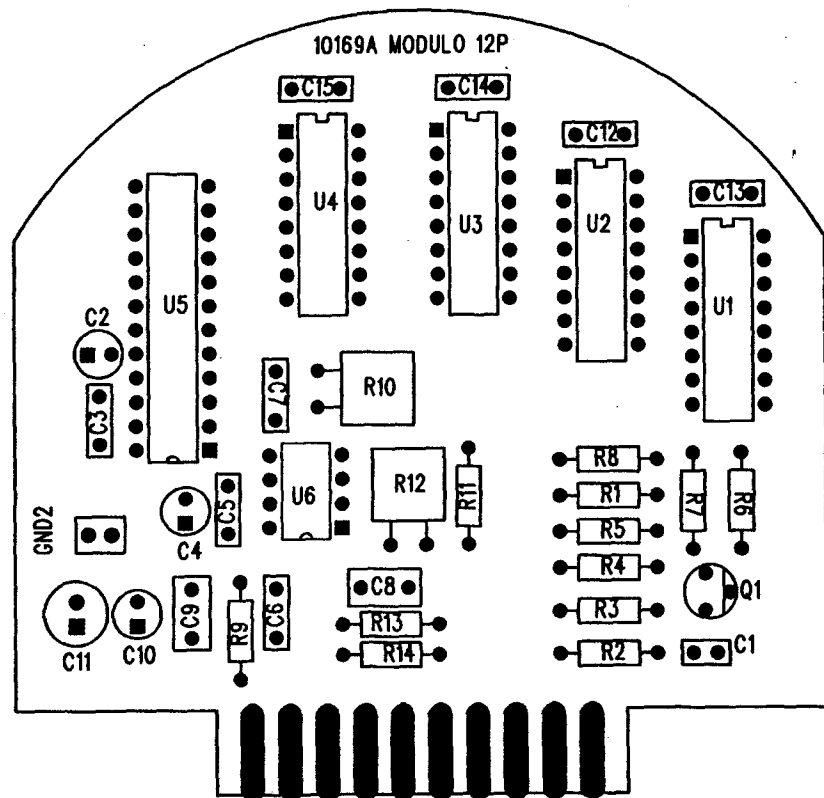
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| REV | B |
| REV | C |
| REV | D |
| REV | E |
| REV | F |
| REV | G |
| REV | H |
| REV | I |
| REV | J |
| REV | K |
| REV | L |
| REV | M |
| REV | N |
| REV | O |
| REV | P |
| REV | Q |
| REV | R |
| REV | S |
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| REV | V |
| REV | W |
| REV | X |
| REV | Y |
| REV | Z |

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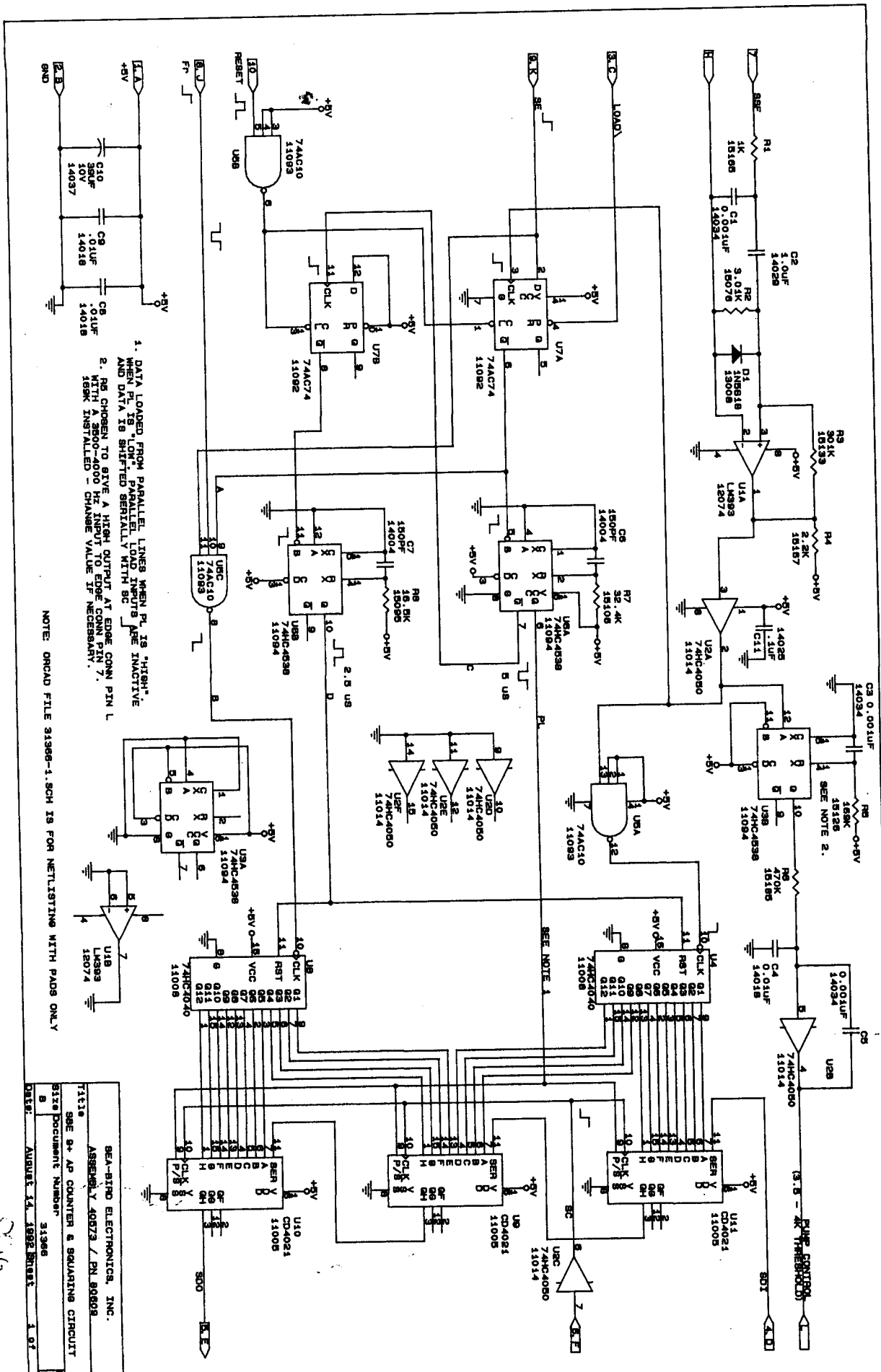
| DATE | SYM | REVISION RECORD | AUTH. | DR. | CK. |
|------|-----|----------------------|-------|-----|-----|
| 4/96 | A | CORRECTION AT U6/S&B | | | |

SLB PRINTED ON 11:47:11 30 MAY 1996

| PART NUMBER | DESCRIPTION | QPA | ITM REF | DESIG | DRAWING NUMBER |
|-------------|--|--------|----------------------|-------|----------------|
| 80935 | SBE 9P MODULO 12 P, /DWG 40831 | | | | 40831 31915 |
| 11005 | IC, CD4021BE / MC14021, MOT. SHIFT REG. | 3.0000 | U2 U3 U4 | | |
| 11009 | IC, MC1404BCP, MOT RIPPLE COUNTER | 1.0000 | U1 | | |
| 12120 | IC, LM6142AIN DUAL OP AMP | 1.0000 | U6 | | |
| 12121 | IC, LTC1273BCN 12 BIT A/D CONVERTER | 1.0000 | U5 | | ACN PREFERRE D |
| 13038 | XISTOR, 2N4401 | 1.0000 | Q1 | | |
| 14002 | CAP, 33 pf, 100V CER, SR151A330KAA, NPO | 1.0000 | C1 | | AVX, 10% |
| 14025 | CAP, .1 uf, 100V CER, SR211C104KAA, X7R | 7.0000 | C3 C5 C6 C12 C13 C14 | | AVX, 10% |
| 14029 | CAP, 1 uf, 50V CER, SR305E105MAA, Z5U | 2.0000 | C8 C9 | | AVX, 20% |
| 14069 | CAP, 10 uf, 20V DIPPED TANT, T350E106K020AS | 3.0000 | C2 C4 C10 | | KEMET, 10% |
| 14070 | CAP, 39 uf, 10V DIPPED TANT, 199D396X9010DA2 | 1.0000 | C11 | | SPRAGUE, 10% |
| 14077 | CAP, 4700 pf, SR211A472JAA AVX | 1.0000 | C7 | | |
| 15027 | RES, 95K OHM, .1%, VISHAY S102C | 1.0000 | R10 | | |
| 15152 | RES, 10 OHM, 5%, 1/4 W | 1.0000 | R9 | | |
| 15165 | RES, 1K OHM, 5%, 1/4 W | 2.0000 | R13 R14 | | |
| 15170 | RES, 4.7K OHM, 5%, 1/4 W | 1.0000 | R4 | | |
| 15181 | RES, 47K OHM, 5%, 1/4 W | 1.0000 | R2 | | |
| 15183 | RES, 100K OHM, 5%, 1/4 W | 6.0000 | R1 R3 R5 R6 R7 R8 | | |
| 15211 | RES, 110K OHM, 1%, 1/4W, RN55C | 1.0000 | R11 | | |
| 15297 | RES, 10K OHM, .1% VISHAY S102K | 1.0000 | R12 | | |
| 21189 | PCB, SBE 9P MODULO 12 P, /DWG 10169A | 1.0000 | PCB | | 10169 |
| 30503 | 20 PIN GOLD TIP PLATING | 1.0000 | J1 | | |



| | | | |
|------------|---------------------------|----------------------|----------------|
| TOLERANCES | SEA-BIRD ELECTRONICS, INC | | |
| FRACTIONAL | P/N 80935 | SCALE | DRAWN BY D.J.M |
| DECIMAL | TITLE | APPROVED BY | |
| ANGULAR | DATE 5/15/96 | DRAWING NUMBER 40831 | REV 24 |



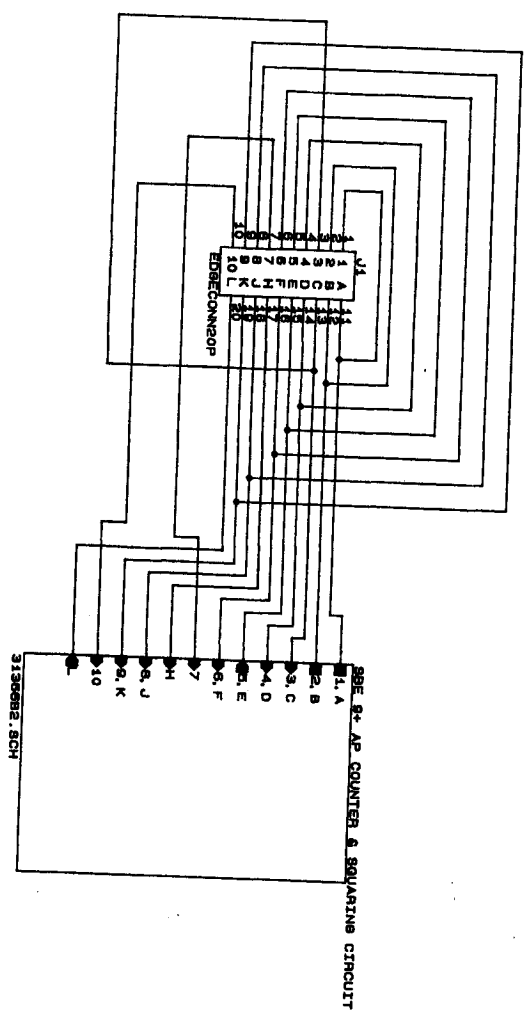
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2. RB CHOSEN TO GIVE A HIGH OUTPUT AT EDGE CONN PIN L WITH A 3800-4000 HZ INPUT TO EDGE CONN PIN 7. 159K INSTALLED - CHANGE VALUE IF NECESSARY.

NOTE: ORCAD FILE 31386-1.SCH IS FOR NETLISTING WITH PADS ONLY.

| |
|----------------------------|
| SEA-BIRD ELECTRONICS, INC. |
| ASSEMBLY 40873 / DN 80809 |
| SIZE DOCUMENT NUMBER 31386 |
| DATE: AUGUST 11, 1992 |
| REV B |

0216

| DATE | BY | REVISION | REASON |
|----------|----|----------|--------|
| 08/14/82 | A | REV 200 | |
| | | | |
| | | | |



10095
PCB
2116

NOTE: SHEET 2 IS INTENTIONALLY MARKED 'SHEET 1 OF 1'

| | |
|----------------------------|--------------------------------------|
| SEA-BIRD ELECTRONICS, INC. | |
| ASSEMBLY 40873 / PN 80809 | |
| Title | SBE 9+ AP COUNTER & SQUARING CIRCUIT |
| Size | Document Number 31368 |
| Date | AUGUST 14 1982 Sheet 1 of 1 |

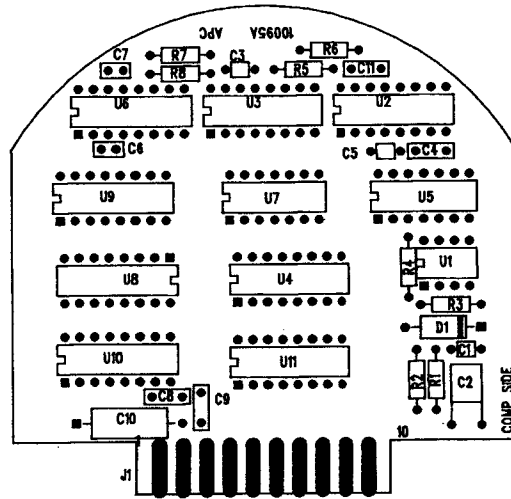
2616

| DATE | SYM | REVISION RECORD | AUTH | DR | CK |
|---------|-----|-----------------|------|-----|----|
| 5/24/92 | A | ECN 369 | | OG | |
| 5/11/92 | B | NEW ARTWORK | DG | BAF | OK |
| 5/11/92 | C | ECN 380 | DJM | BAF | OK |

SLB PRINTED ON 11:43:06 14 AUG 1992

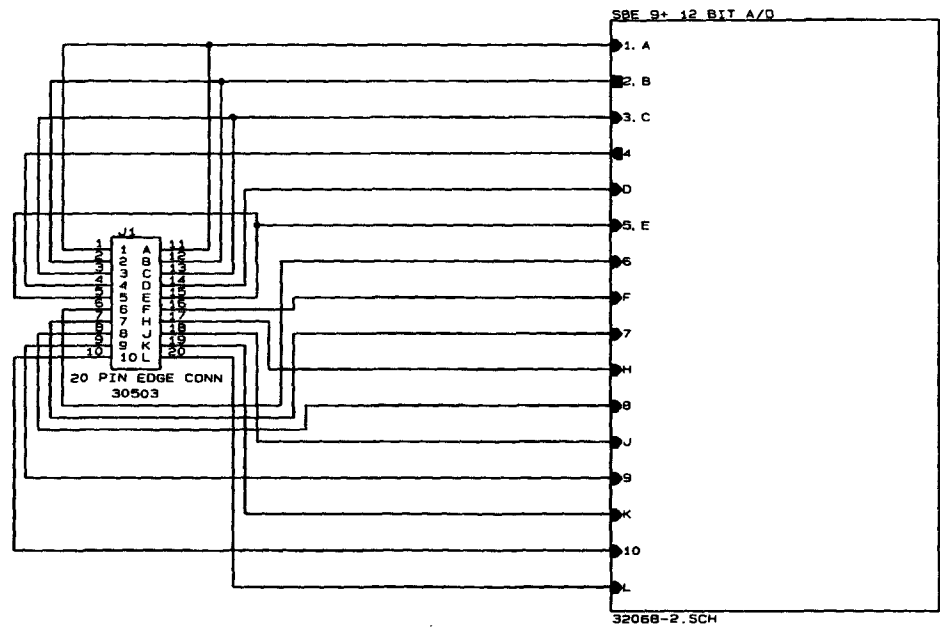
PART NUMBER. DESCRIPTION..... QPA..... ITM REF DESIG.....
NBR

| | | | |
|-------|--|--------|------------|
| 80609 | SBE 9+ AP CTR + SQUARING, /DWG 40573 | | |
| 11005 | IC, CD4021BE / MC14021, MOT. SHIFT REC. | 3.0000 | U9 U10 U11 |
| 11008 | IC, 74HC4040N, HC RIPPLE CTR. | 2.0000 | U8 U4 |
| 11014 | IC, 74HC4050N, HEX BUFFER | 1.0000 | U2 |
| 11092 | IC, 74AC74PC | 1.0000 | U7 |
| 11093 | IC, 74AC10PC | 1.0000 | U5 |
| 11094 | IC, 74HC4538, DUAL SINGLE SHOT | 2.0000 | U3 U6 |
| 12074 | IC, LM393N, COMPARATOR | 1.0000 | U1 |
| 13008 | DIODE, 1N5818, SCHOTKEY | 1.0000 | D1 |
| 14004 | CAP, 150 pF, 100V CER, SR151A151KAA, NPO | 2.0000 | C6 C7 |
| 14018 | CAP, .01 uF, 100V CER, SR211C103KAA, X7R | 3.0000 | C4 C8 C9 |
| 14025 | CAP, .1 uF, 100V CER, SR211C104KAA, X7R | 1.0000 | C11 |
| 14029 | CAP, 1 uF, 50V CER, SR305E105MAA, Z5U | 1.0000 | C2 |
| 14034 | CAP, .001 uF, 200V CER, C322C102J2G5CA, NPO | 3.0000 | C1 C3 C5 |
| 14037 | CAP, 39 uF, 10V TANT, 40SS396B010K1A | 1.0000 | C10 |
| 15076 | RES, 3.01K OHM, 1%, 1/4 W | 1.0000 | R2 |
| 15095 | RES, 16.5K OHM, 1%, 1/4 W | 1.0000 | R8 |
| 15106 | RES, 32.4K OHM, 1%, 1/4 W | 1.0000 | R7 |
| 15126 | RES, 169K OHM, 1%, 1/4 W | 1.0000 | R5 |
| 15133 | RES, 301K OHM, 1%, 1/4 W | 1.0000 | R3 |
| 15165 | RES, 1K OHM, 5%, 1/4 W | 1.0000 | R1 |
| 15167 | RES, 2.2K OHM, 5%, 1/4 W | 1.0000 | R4 |
| 15185 | RES, 470K OHM, 5%, 1/4 W | 1.0000 | R6 |
| 21116 | PCB, SBE 9+ AP COUNTER & SQUARING/DWG 10095A | 1.0000 | PCB |
| 30503 | 20 PIN GOLD TIP PLATING | 1.0000 | J1 |



| TOLERANCES | SEA-BIRD ELECTRONICS, INC | | | |
|------------|---------------------------|---------|-----------------|--|
| FRACTIONAL | P/M 31366 | SCALE | DRAWN BY JEL | |
| DECIMAL | TITLE | | APPROVED BY DJM | |
| ANGULAR | DATE | DWG NO. | REV | |
| | 4/20/92 | 40573 | C | |

ORIG



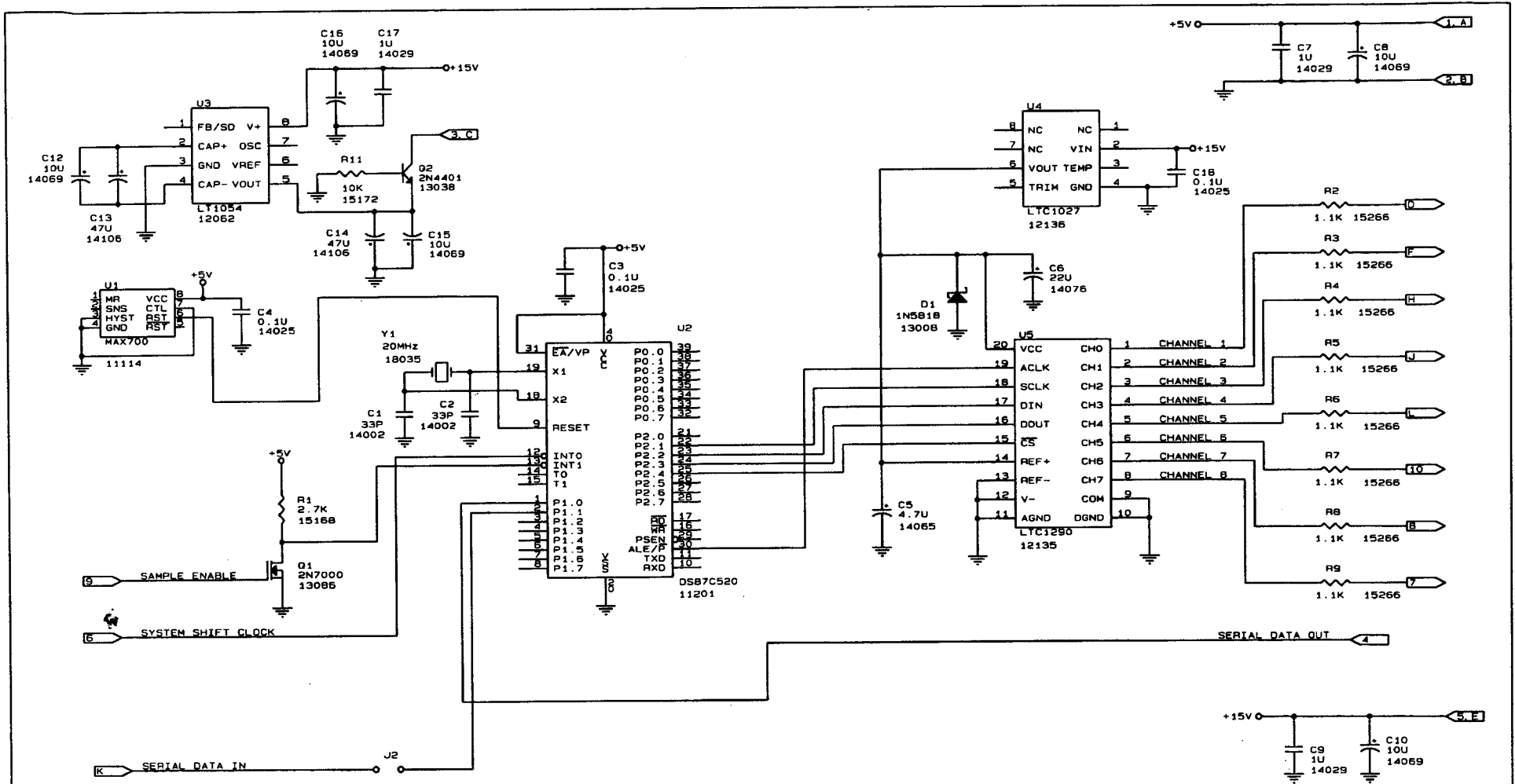
SBE 9+ 12 BIT A/D

32068-2.SCH

21226
PCB
10205

| | |
|----------------------------|----------------------------|
| SEA-BIRD ELECTRONICS, INC. | |
| ASSEMBLY 40904 / 801042 | |
| Title SBE 9+ 12 BIT A/D | |
| Size | Document Number |
| B | 32068 |
| Date: | July 18, 1997 Sheet 1 of 2 |

OK



| | | |
|--------------------------------|-----------------|--------|
| SEA-BIRD ELECTRONICS, INC. | | |
| ASSEMBLY 40904 / 801042 | | |
| SBE 9+ 12 BIT A/D | | |
| Size | Document Number | REV |
| B | 32068 | |
| Date: September 29, 1997 Sheet | | 2 of 2 |

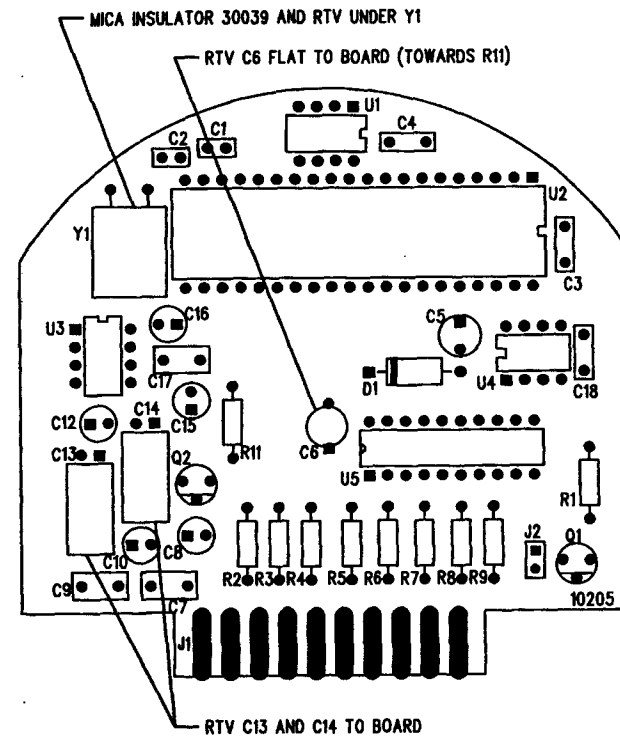
NOTE: R10 AND C11 ARE NOT PRESENT ON THIS DRAWING

CR16

| DATE | SYM | REVISION RECORD | AUTH. | DR. | CK. |
|-------|-----|-------------------------|-------|-----|-----|
| 11/97 | A | ECN490:ADD NOTES, 30039 | | 06 | |
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SLB PRINTED ON 13:52:52 19 NOV 1997

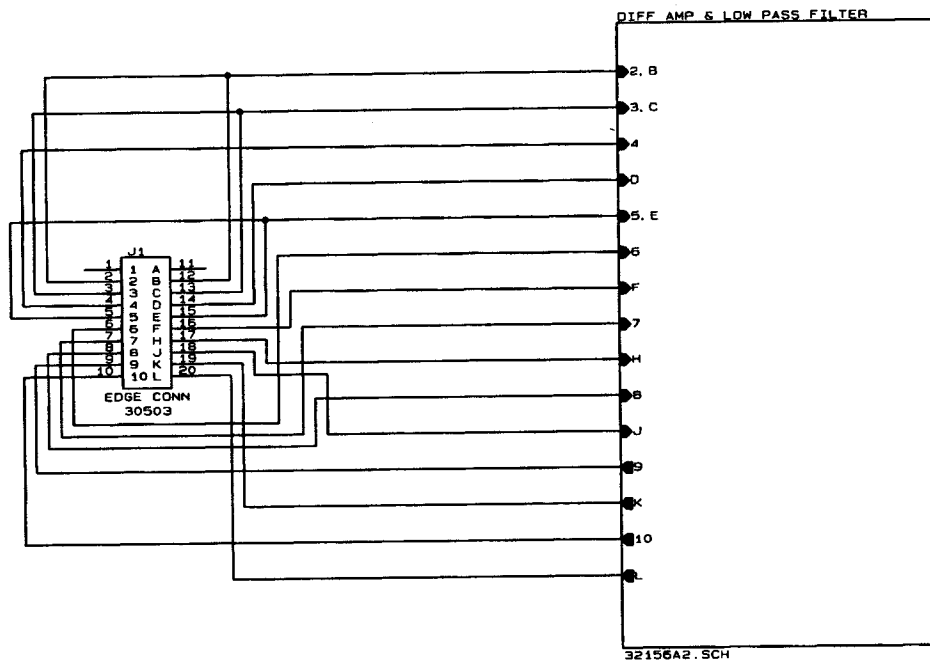
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|-------------|--|------|--------|-----|-----|-------------------------|
| | | MNT | NBR | NBR | | |
| 801042 | SBE 9+ 12BIT A/D, /DWG 40904 | | | | | |
| 11114 | IC, MAXIM, MAX700CPA | | 1.0000 | | | U1 |
| 11201 | IC, PROGRAMMED DS87C520 FOR 9+ A/D | | 1.0000 | | | U2 |
| 12062 | IC, LT1054CN8 | | 1.0000 | | | U3 |
| 12135 | IC, LTC1290BCN 12 BIT SERIAL ADC | | 1.0000 | | | U5 |
| 12136 | IC, LT1027BCN8-5, LINEAR TECH 5V REF. | | 1.0000 | | | U4 |
| 13008 | DIODE, 1N5818, SCHOTTKY | | 1.0000 | | | D1 |
| 13038 | XISTOR, 2N4401 | | 1.0000 | | | Q2 |
| 13086 | XISTOR, 2N7000 | | 1.0000 | | | Q1 |
| 14002 | CAP, 33 pF, 100V CER, SR151A330KAA, NPO | | 2.0000 | | | C1 C2 |
| 14025 | CAP, .1 uF, 100V CER, SR211C104KAA, X7R | | 3.0000 | | | C3 C4 C18 |
| 14029 | CAP, 1 uF, 50V CER, SR305E105MAA, Z5U | | 3.0000 | | | C7 C9 C17 |
| 14065 | CAP, 4.7 uF, 25V DIPPED TANT, T350C475K025AS | | 1.0000 | | | C5 |
| 14069 | CAP, 10 uF, 20V DIPPED TANT, T350E106K020AS | | 5.0000 | | | C8 C10 C12 C15 C16 |
| 14076 | CAP, 22 uF, 35V DIPPED TANT, TAP226K035HSB | | 1.0000 | | | C6 |
| 14106 | CAP, 47 uF 25V, NICHICON UPLIE470MEH | | 2.0000 | | | C13 C14 |
| 15168 | RES, 2.7K OHM, 5%, 1/4 W | | 1.0000 | | | R1 |
| 15172 | RES, 10K OHM, 5%, 1/4 W | | 1.0000 | | | R11 |
| 15266 | RES, 1.1K OHM, 5%, 1/4 WATT | | 8.0000 | | | R2 R3 R4 R5 R6 R7 R8 R9 |
| 18034 | CRYSTAL, FOX 12.280 MHZ FOX128-20 | | 1.0000 | | | Y1 |
| 21226 | PCB, SBE 9+ 12 BIT A/D, DWG / 10205 | | 1.0000 | | | PCB |
| 30039 | MICA INSULATOR, B08853A001 | | 1.0000 | | | |
| 30503 | 20 PIN GOLD TIP PLATING | | 1.0000 | | | J1 |



SEA-BIRD ELECTRONICS, INC

| | | | | | |
|-------|-------------------|----------------|--------------|-------------|-----|
| P/N | 21226 | SCALE | 2/1 | DRAWN BY | DJM |
| | | | | APPROVED BY | |
| TITLE | SBE 9+ 12 BIT A/D | | | | |
| DATE | 07/29/97 | DRAWING NUMBER | 40904 1 OF 1 | REV | A |

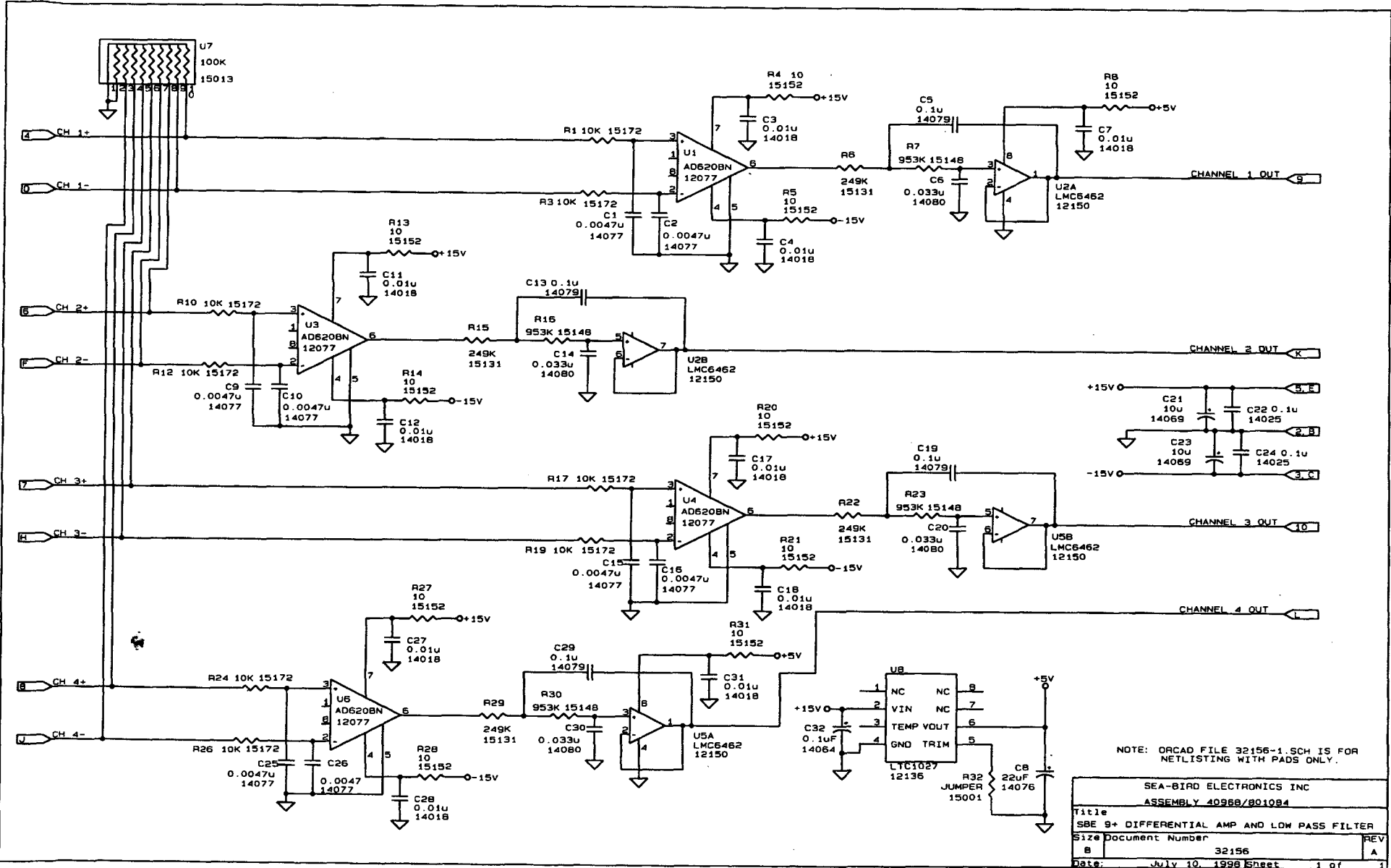
| DATE | SYM | REVISION | REASON | AUTH | CHK |
|----------|-----|----------|--------|-------|-----|
| 07/10/98 | A | EDN55B | JUN 98 | DEL | HS |
| | | | | 27/08 | HS |



21232
PCB
10215

NOTE: SHEET 2 IS INTENTIONALLY
MARKED "SHEET 1 OF 1"

| | |
|--|----------------------------|
| SEA-BIRD ELECTRONICS, INC. | |
| ASSEMBLY 40960/801084 | |
| Title | |
| SBE 9+ 4 CH DIFF AMP AND LOW PASS FILTER | |
| Size | Document Number |
| B | 32156 |
| Date: | July 10, 1998 Sheet 1 of 2 |
| REV | A |



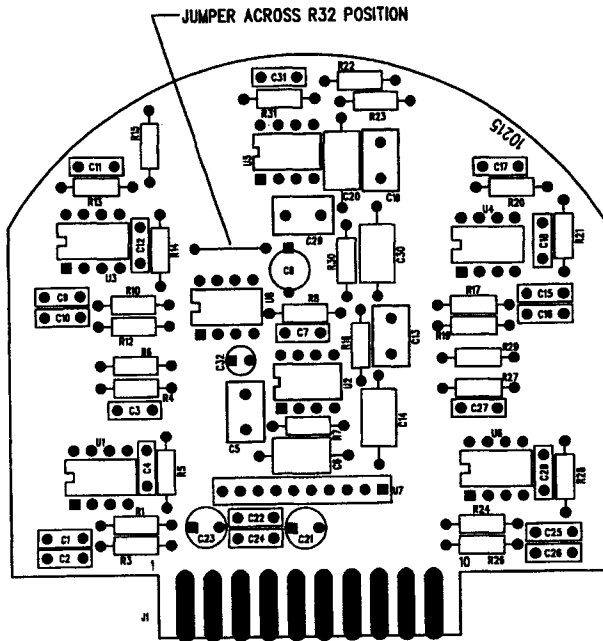
NOTE: ORCAD FILE 32156-1.SCH IS FOR NETLISTING WITH PADS ONLY.

SEA-BIRD ELECTRONICS INC
 ASSEMBLY 40988/801084

| | | | |
|-------|---------------|---|--------|
| Title | | SBE 9+ DIFFERENTIAL AMP AND LOW PASS FILTER | |
| Size | | Document Number | |
| B | 32156 | REV | A |
| Date: | July 10, 1998 | Sheet | 1 of 1 |

| DATE | SYM | REVISION RECORD | AUTH. | DR. | CK. |
|---------|-----|--------------------------|-------|-----|-----|
| 7/14/98 | A | ECN558: JUMP R32, DEL R9 | PF | H | |

SLB PRINTED ON 09:04:09 14 JUL 1998



40968A

10215 TOP LAYER

| PART NUMBER | DESCRIPTION | SRFC MNT | QPA | ITM | REF | DESIG. |
|-------------|--|----------|---------|-----|-----|--------------------------------|
| | | | | | | NBR |
| 801084 | SBE 9+ DIFF AMP & LO-PASS FILTER /DWG 40968A | | | | | |
| 12077 | IC, AD620BN, DIFF AMP, ANALOG DEVICE | | 4.0000 | U1 | U3 | U4 U6 |
| 12136 | IC, LT1027BCN8-5, LINEAR TECH 5V REF. | | 1.0000 | U8 | | |
| 12150 | IC, LMC6462AIN, OP AMP NATIONAL | | 2.0000 | U2 | U5 | |
| 14018 | CAP, .01 uF, 100V CER, SR211C103KAA, X7R | | 10.0000 | C3 | C4 | C7 C11 C12 C17 C18 C27 C28 C31 |
| 14025 | CAP, .1 uF, 100V CER, SR211C104KAA, X7R | | 2.0000 | C22 | C24 | |
| 14064 | CAP, 1 uF, 35V DIPPED TANT. T350A105K035AS | | 1.0000 | C32 | | |
| 14069 | CAP, 10 uF, 20V DIPPED TANT, T350E106K020AS | | 2.0000 | C21 | C23 | |
| 14076 | CAP, 22 uF, 35V DIPPED TANT, TAP226K035HSB | | 1.0000 | C8 | | |
| 14077 | CAP, 4700 pf, SR211A472JAA AVX | | 8.0000 | C1 | C2 | C9 C10 C15 C16 C25 C26 |
| 14079 | CAP, .1UF 5% NICHICON QYS1H104KTP | | 4.0000 | C5 | C13 | C19 C29 |
| 14080 | CAP, .033 uF, 50V POLY, WBSKO 32MPC-3302J05 | | 4.0000 | C6 | C14 | C20 C30 |
| 15001 | JUMPER WIRE | | 1.0000 | R32 | | |
| 15013 | RES-NET, 100K OHM SIP, 4310R-101-104 | | 1.0000 | U7 | | |
| 15131 | RES, 249K OHM, 1%, 1/4 W | | 4.0000 | R6 | R15 | R22 R29 |
| 15148 | RES, 953K OHM, 1%, 1/4 W | | 4.0000 | R7 | R16 | R23 R30 |
| 15152 | RES, 10 OHM, 5%, 1/4 W | | 10.0000 | R4 | R5 | R8 R13 R14 R20 R21 R27 R28 R31 |
| 15172 | RES, 10K OHM, 5%, 1/4 W | | 8.0000 | R1 | R3 | R10 R12 R17 R19 R24 R26 |
| 21232 | PCB, SBE 9+ ANALOG INTERFACE DWG / 10215 | | 1.0000 | PCB | | |

| | | | | |
|------------|---------------------------|---------|-------------|-------|
| TOLERANCES | SEA-BIRD ELECTRONICS, INC | | | |
| FRACTIONAL | P/N 801084 | SCALE | DRAWN BY DG | |
| DECIMAL | SCH 32156 | - | APPROVED BY | |
| ANGULAR | DATE 4/30/98 | DWG NO. | 40968 | REV A |

016