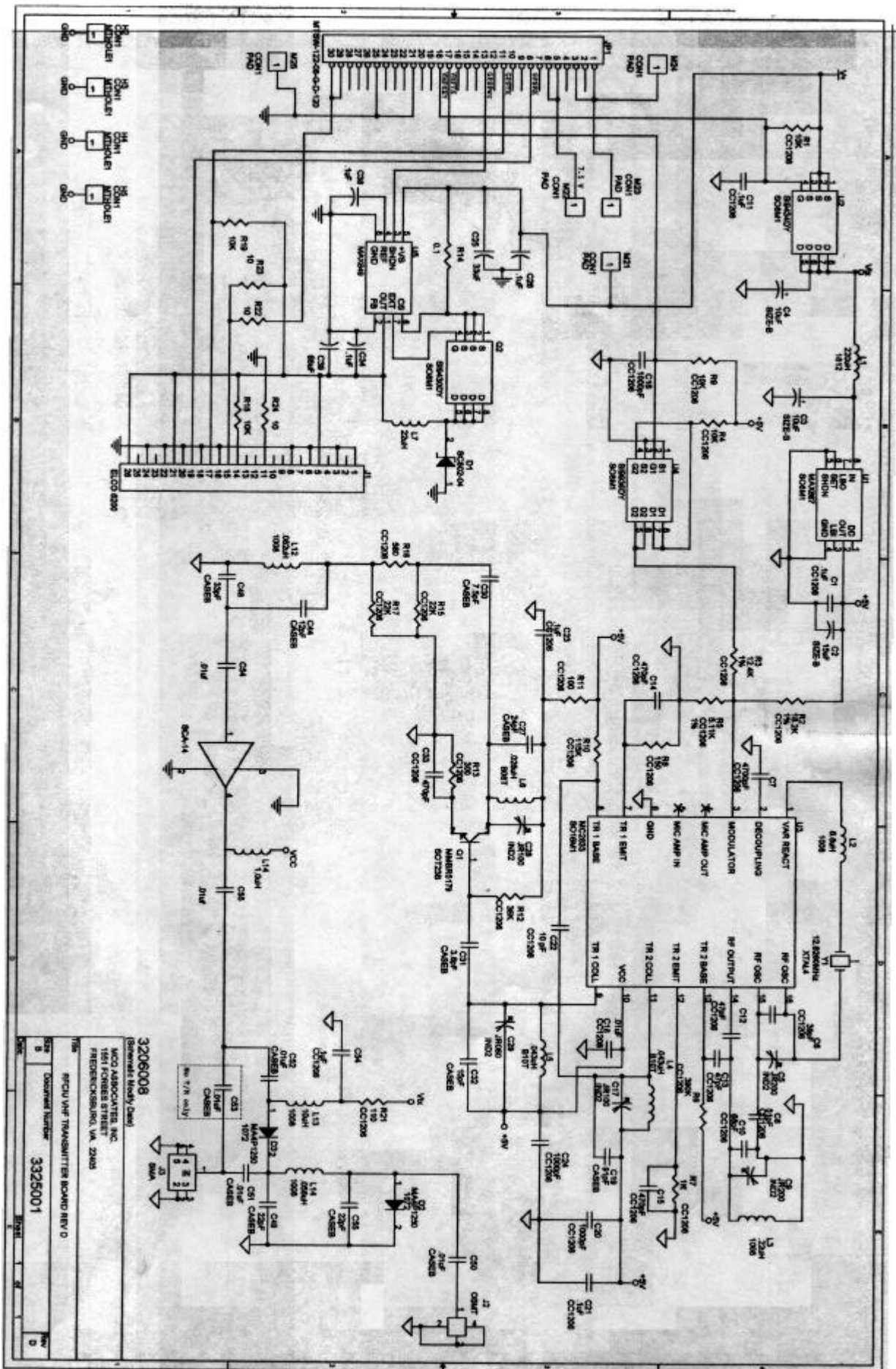
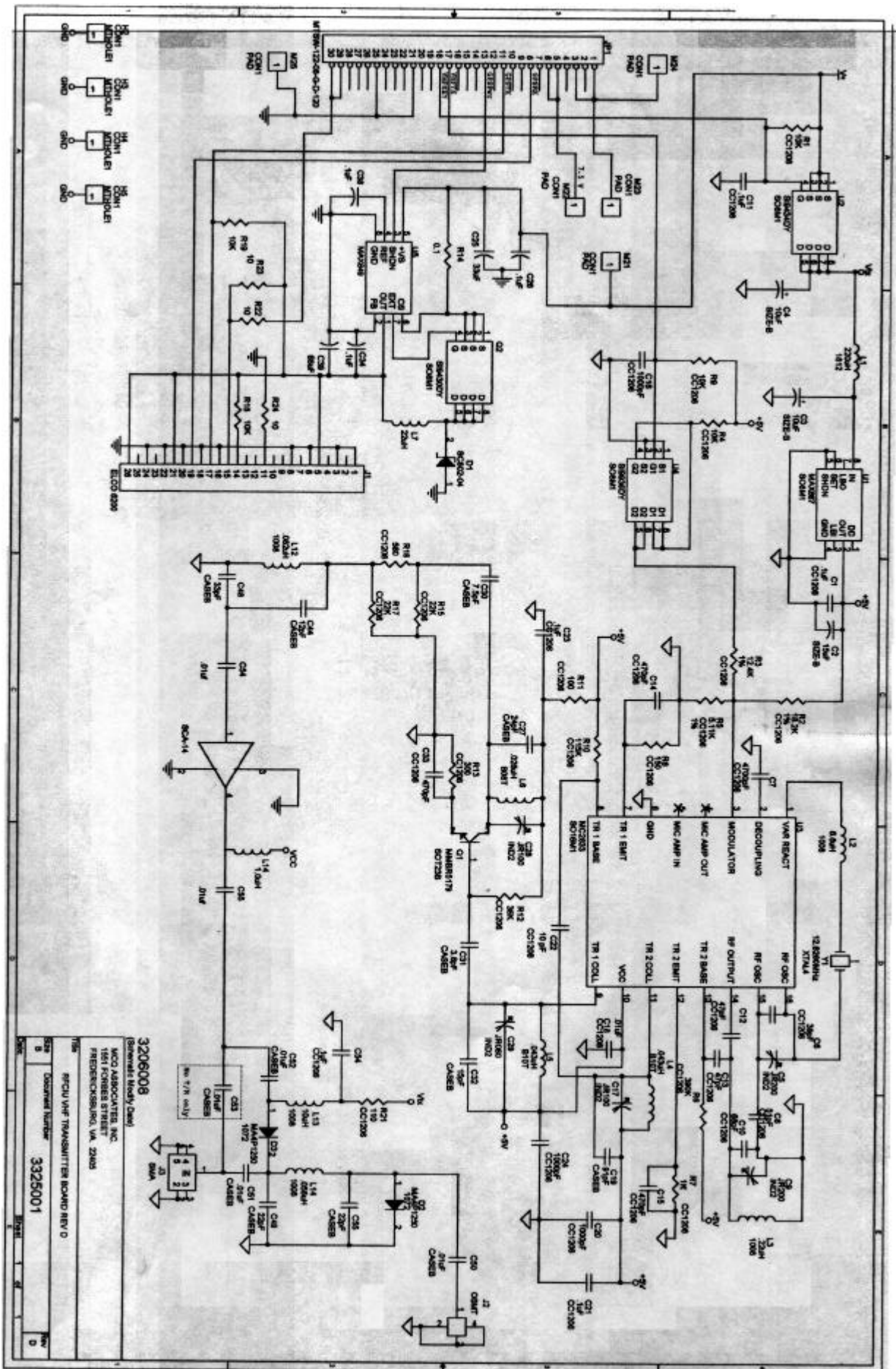
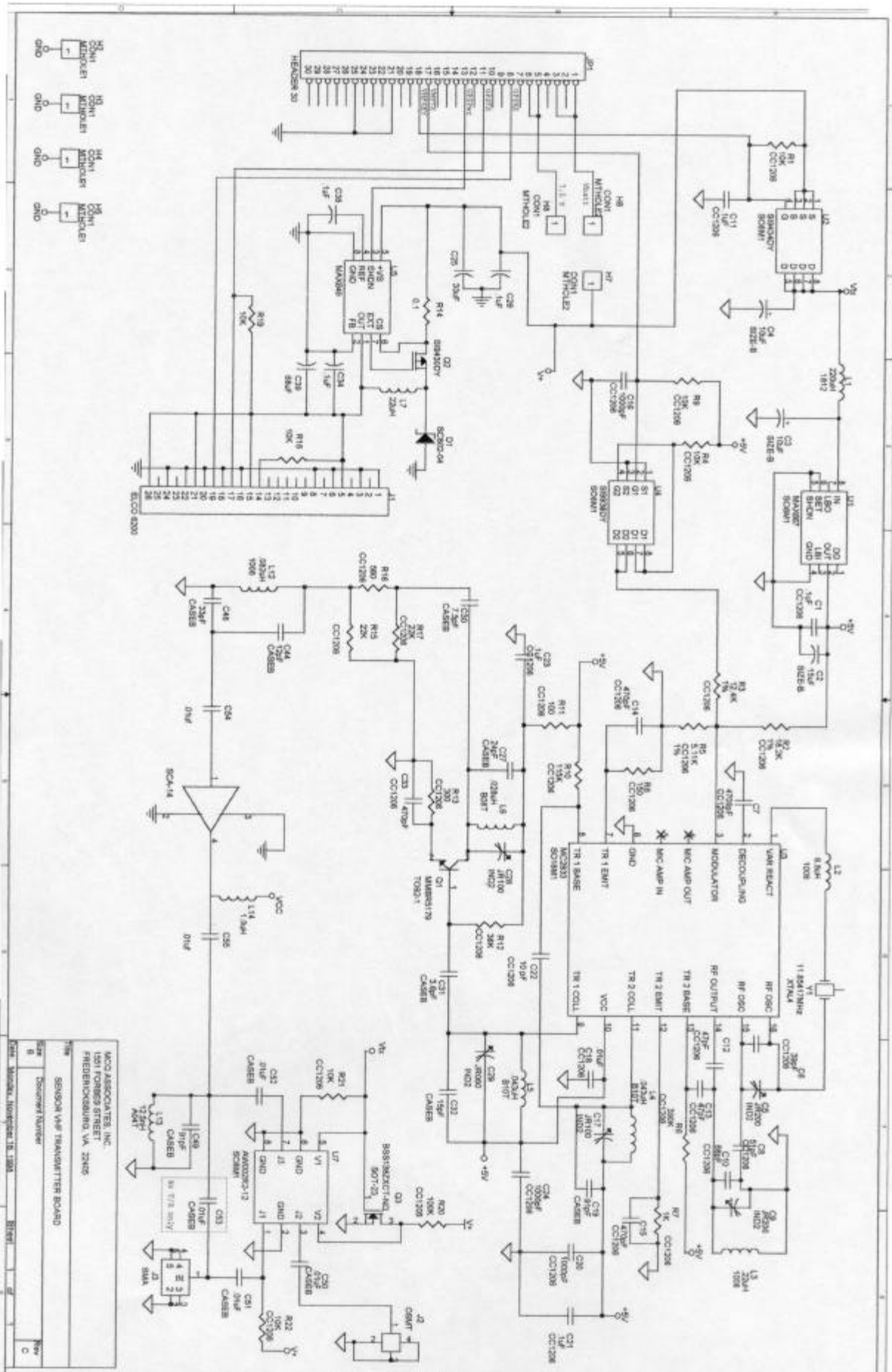


6.0 SCHEMATICS





3206008
 (REVISED 12/28/64)
 MCO ASSOCIATES, INC.
 1851 FORBES STREET
 FREDERICKSBURG, VA 22405
 3325001
 RFCAU VHF TRANSMITTER BOARD REV. D
 3325001
 1/1

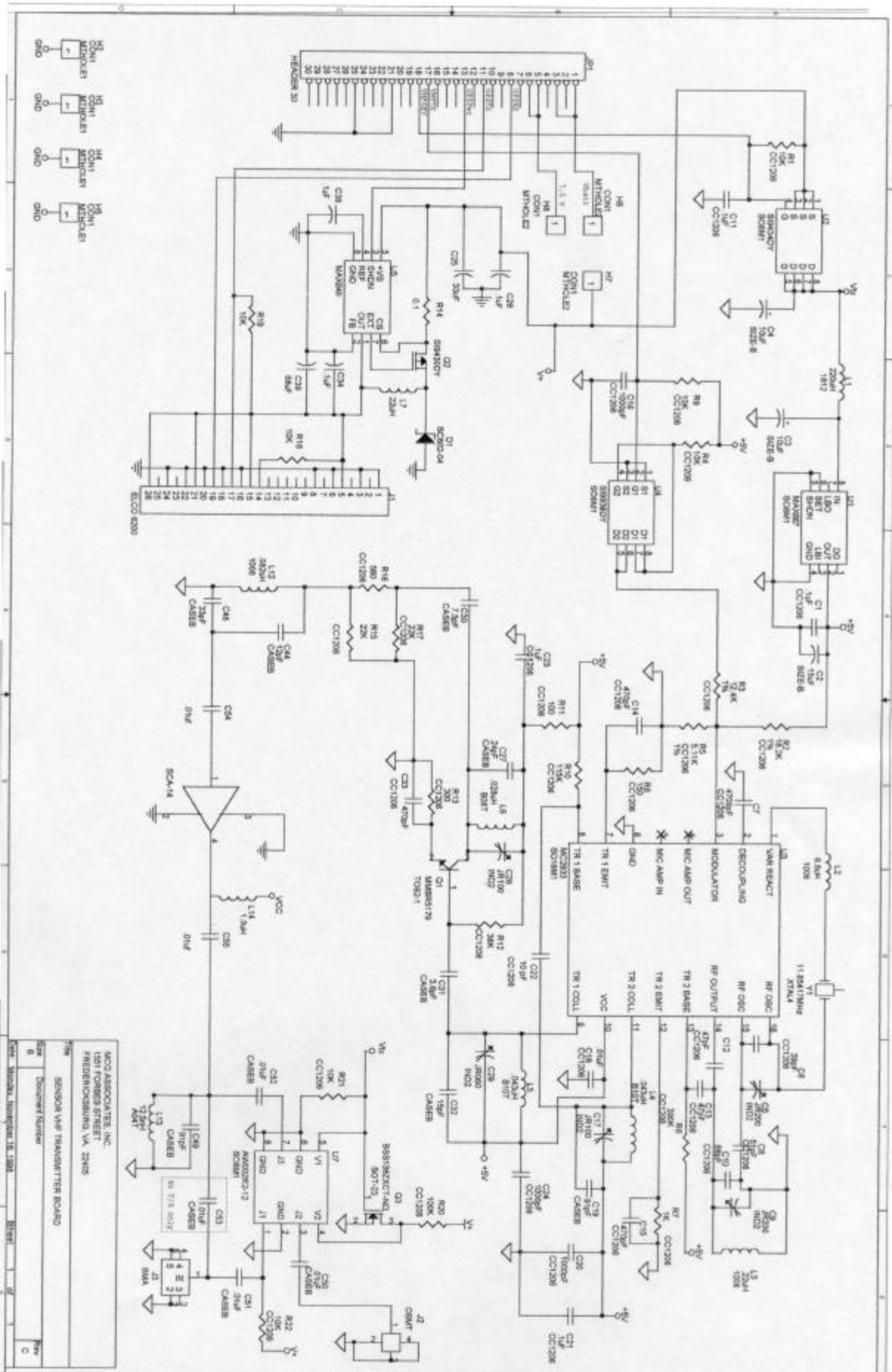


MCC ASSOCIATES, INC.
 1501 FORBES STREET
 FREDERICKSBURG, VA 22405

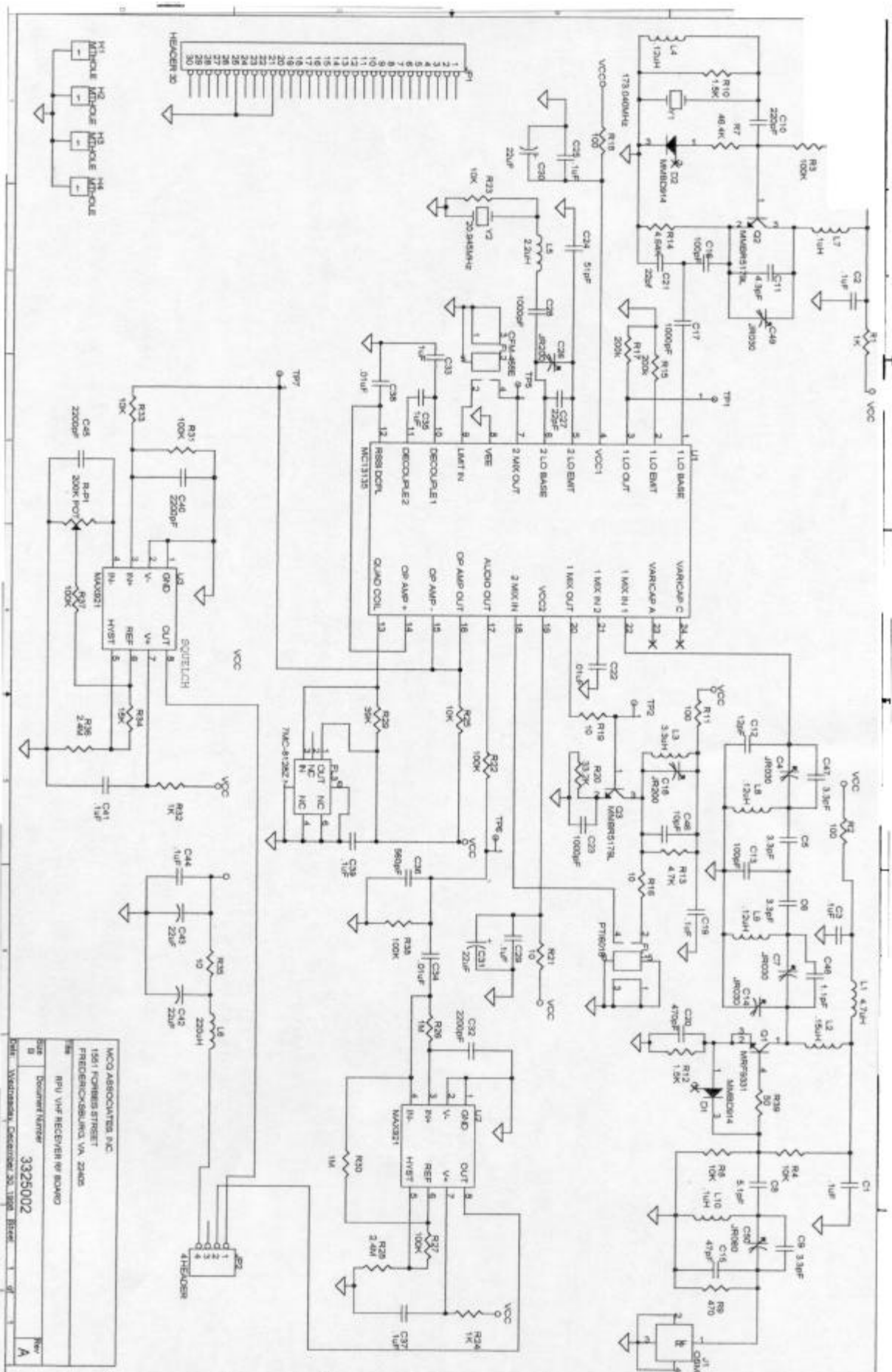
SENSOR VHF TRANSMITTER BOARD

Drawing Number

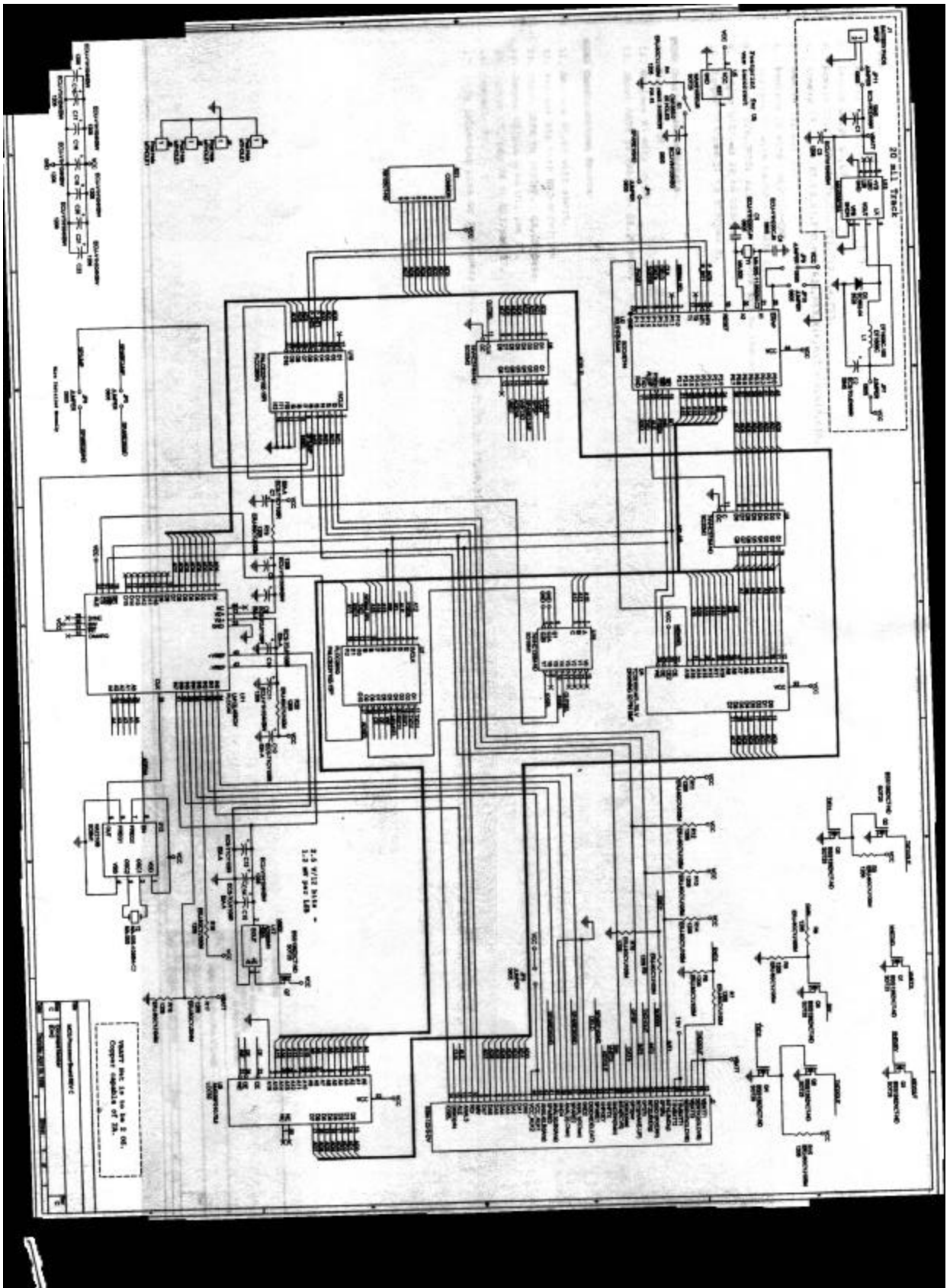
REV. 1.0



MCC ASSOCIATES, INC.
 1501 FORBES STREET
 FREDERICKSBURG, VA 22405
 SENSOER VHF TRANSMITTER BOARD
 Drawing Number: 1000
 Part: Manual, November 11, 1981



MCO ASSOCIATES, INC.
 1561 FORBES STREET
 FREDERICKSBURG, VA. 22405
 801 971 VHF RECEIVER w/ BOARD
 3325002
 Date: _____
 Drawn: _____
 Checked: _____
 Rev: _____
 3/1/80



ERRATA:

1. Rotate V2 (reset) clockwise 1 pin.
2. Replace L5 with 22 uf 50V35P-223 (only if using onboard S volt supply) U10 with longer leads at 4th, use single supply for now (change on new board)
3. Add 100K pullup to J76 pin 10
4. J1, J5 shield and signal backwards (correct in external wiring)
5. Change R5, R10, R11 to 10K
6. Change R12 to 10K, correct connection now
7. U11 LIFT pin 5 and connect to 4 or switch to 9430
8. Remove R15 and R24
9. Connect U4, R6 to U01, J28 (Acht to RWY)
10. Connect U12, R13 to U01, J28 (Acht to RWY)
11. L47F U01-06 and short to 94 (GND)
12. L47F U01-05 and move to 94 pad
13. L47F U01-103 and short to J27
14. Remove U1
15. Add 100K pullup (R29 20.23 888 on top of PAD9, M03C118 chip (R29 to board))
16. Connect 2 crystal pins to U01-2,3
17. Remove C6,C7
18. Add 1.1 uf inductor. Connect U0-3 to Inductor
19. Add 1.1 uf inductor. Connect U0-4 to Inductor
20. Connect U0-1 to GND pin 20 (VCC)
21. Connect U0-4 to GND
22. Connect U0-8 to VCC
23. Connect outside pad of old oscillator to inside side of C24
24. Connect other side of capacitor to GND.
25. Connect other side of capacitor to GND.
26. Disconnect U0-40 for use of clock (L11F)
27. Add 100K pullup to J76 legs (R3-2,4,10,14)
28. Pinout, footprints are backwards need to be switched (no change)
29. Add 100K pullup to J76 legs (R3-2,4,10,14)
30. J17 U02-23 and tie to GND
31. J17 U02-21 and tie to VCC
32. J17 U02-19 tie to VCC
33. J17 U02-18 tie to VCC
34. Take out U20, tie pin 1 and 4 together on board. tie pin 4 to GND
35. Add 10 pf cap between pins 54 and 56 of U9

- U01 - connect all 3 pins
 - U02 - U01-39 to U0-71
 - U03 - U01-5 to VCC
 - U04 - U01-6 to VCC
 - U05 - U01-8 to VCC
 - U06 - U01-9 to VCC
 - U07 - 1-2 install
 - U08 - 1-2 install
 - U09 - install J28G only
 - U10 - install head only
 - U11 - short 1 to 2, 5 to 6, 9 to 10, 13 to 14
 - U12 - to GND
- All others no install.

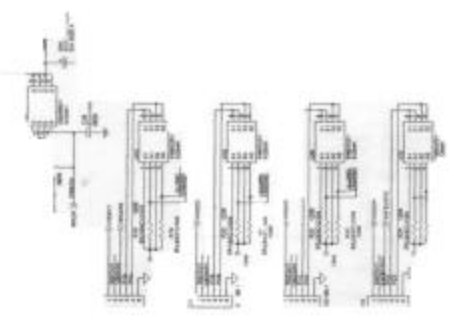
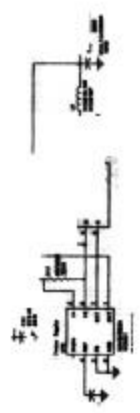
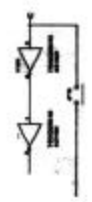
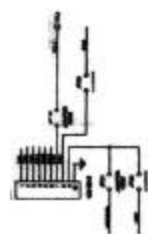
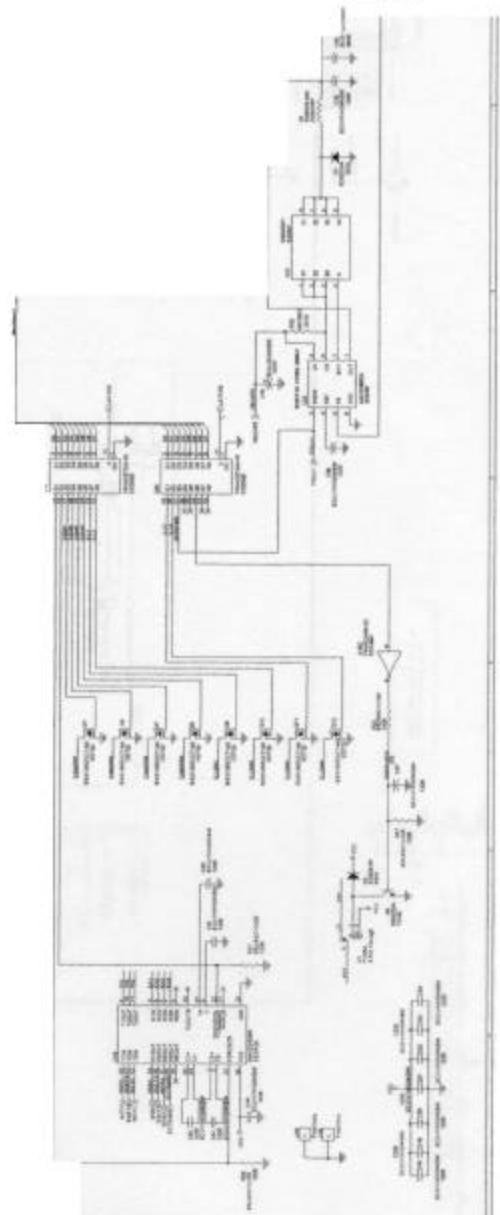
- for VCC type system
1. U07 type system
 2. L47E pin 13 and 13 from pin 13
 3. L47E pin 1 from pad and connect to U02 pin13
 4. Connect U02-10 to pin 27 of 44 pin connector (J4)
 5. Cut lead from U0-12 and connect pin to U02-4
 6. Connect U02-17 to U02-14 (GND)
 7. Connect U02-17 to U02-14 (GND)
 8. L47E U02-9 and connect to J4-16
 9. Connect U0-93 to U02-13
 10. Connect U02-4 to J4-18
 11. Connect U02-4 to J4-18
 12. Connect U02-4 to J4-18
- set rid of H161, connect camera direct to 7111

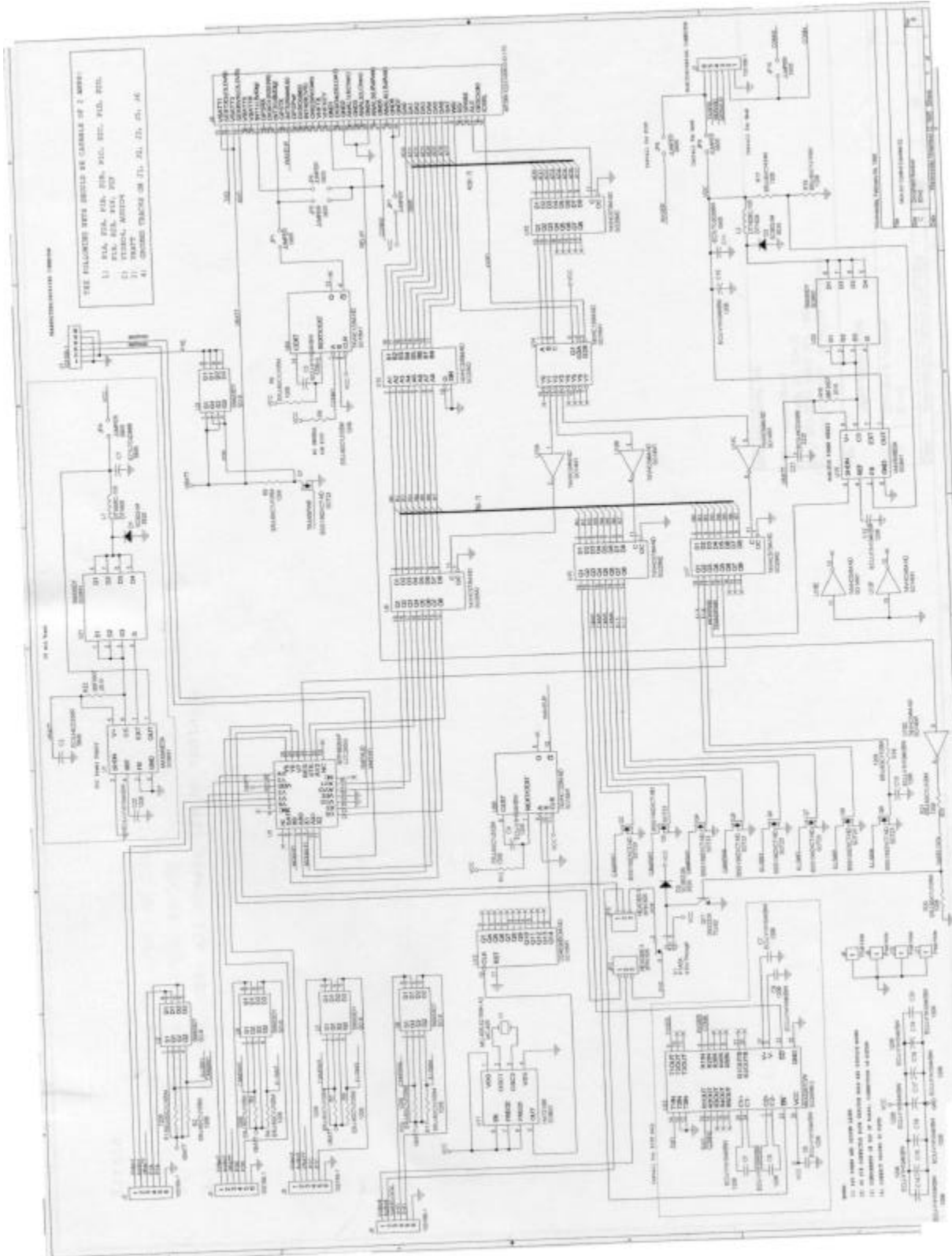
REV A Errata:

- 1.) Jumper U0/pin 41 to U0/pin 87 (move PAD_09 set to U0/pin 87).
 - 2.) Jumper U1/pin 15 to M02/pin 13 (tie RT/RT set to VCC through pullup)
 - 3.) Jumper U0/pin 15 to M02/pin 13 (tie RT/RT set to VCC through pullup)
 - 4.) U0 part number is incorrectly use M12-M103237.
 - 5.) J2/pin 3 is wrong net; should be VCC.
 - 6.) J2/pin 5 is wrong net; should be VCC.
 - 7.) J2 is placed too close to post hole to allow PAD programmer connector to connect.
 - 8.) Footprints/orientation is incorrect.
 - 9.) For production, remove J241. Install Jumper J241-2.
 - 10.) Disconnect WR net from U0/pin 37.
 - 11.) Run VSW to U13, U14, U16, U17 instead of VSWRT. 12.) Add JUNCTION to VCC's at U8
 - 13.) Add JUNCTION to VA at C18
 - 14.) Removed pullup from U00 at M0
- up in white track is on

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.





THE FOLLOWING ITEMS SHOULD BE CHECKED BY THE USER:
 1) ALL PINS ARE CORRECTLY WELDED TO THE BOARD.
 2) ALL PINS ARE CORRECTLY WELDED TO THE BOARD.
 3) THE BOARD IS CORRECTLY WELDED TO THE BOARD.
 4) THE BOARD IS CORRECTLY WELDED TO THE BOARD.

THIS BOARD IS A...
 IT IS...
 IT IS...
 IT IS...

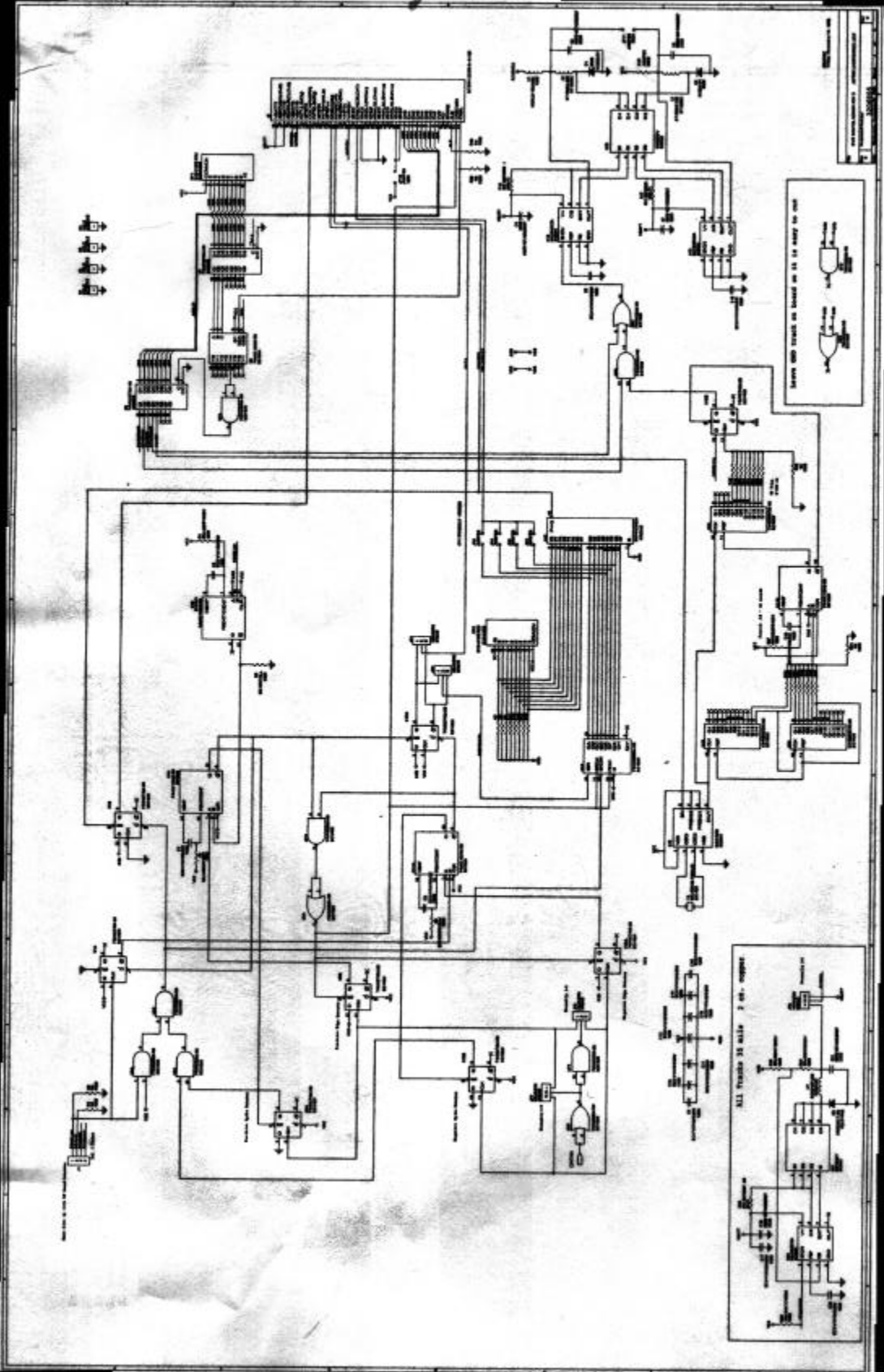
Errata:

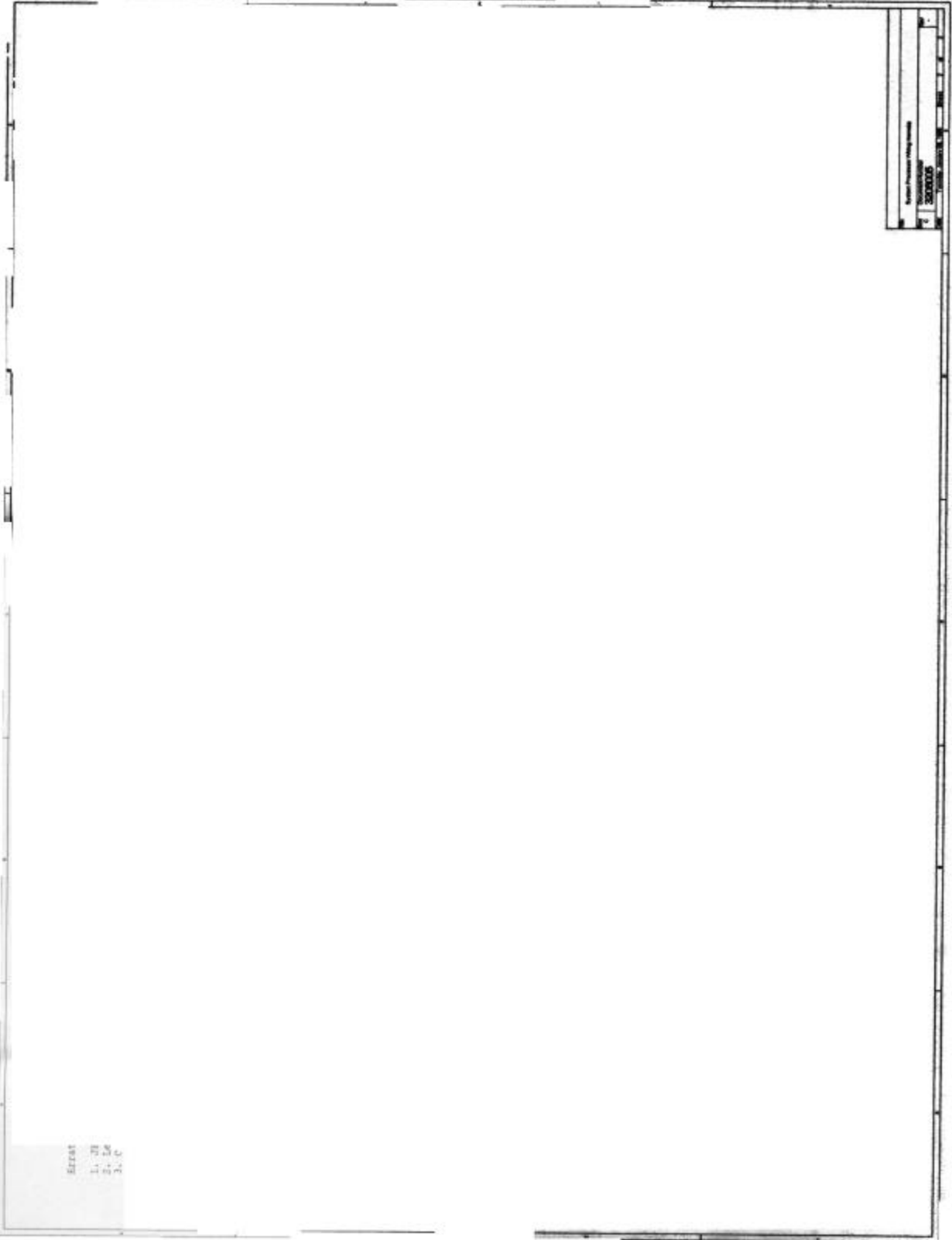
- 1.) Tie U22/Pin 23 (/EN) to GND.
- 2.) Tie U22/Pin 22 (/SD) to VCC.
- 3.) Install JP7, JP8; all others are no install.

Mid Associates, Inc.

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| Type | Document Number | Rev |
|------------------------------------|-----------------|------|
| Digital Video Errata | | |
| Size A | (Doc) | |
| Date: Wednesday, February 04, 1998 | Sheet 1 | of 1 |





Ernst
1. 21
2. 24
3. 0

Ernst & Young
1. 21
2. 24
3. 0