

	1	2	3	4	5	6	7	8		
A										A
B										B
C										C
D										D
E										E
F										F

RUBY MV1-BUILD FINAL			
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DATE	CHANGE NO.	REV		

	EE	DATE	POWER	DATE
DRAWER	MORRIS CHANG	24 / 07 / 2003		
DESIGN	MORRIS CHANG	24 / 07 / 2003		
CHECK	JOE CHANG	12 / 08 / 2003		
RESPONSIBLE	JOE CHANG	12 / 08 / 2003		
SIZE = 3 VER : A				
FILE NAME : RUBY10-6050A0032201-MB-A03-13				
P/N	131MBD2600A0	DATE BEGINNING :	24 / 06 / 2003	

INVENTEC			
TITLE MODULES, RUBY1.0			
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6- SELECT & BATTERY CONN
7- SYSTEM POWER(3V/5V/12V)
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9- SYSTEM POWER(VCCP/1.2V)
10- SYSTEM POWER(2.5V/1.25V)
11- CPU POWER(VCC_CORE)
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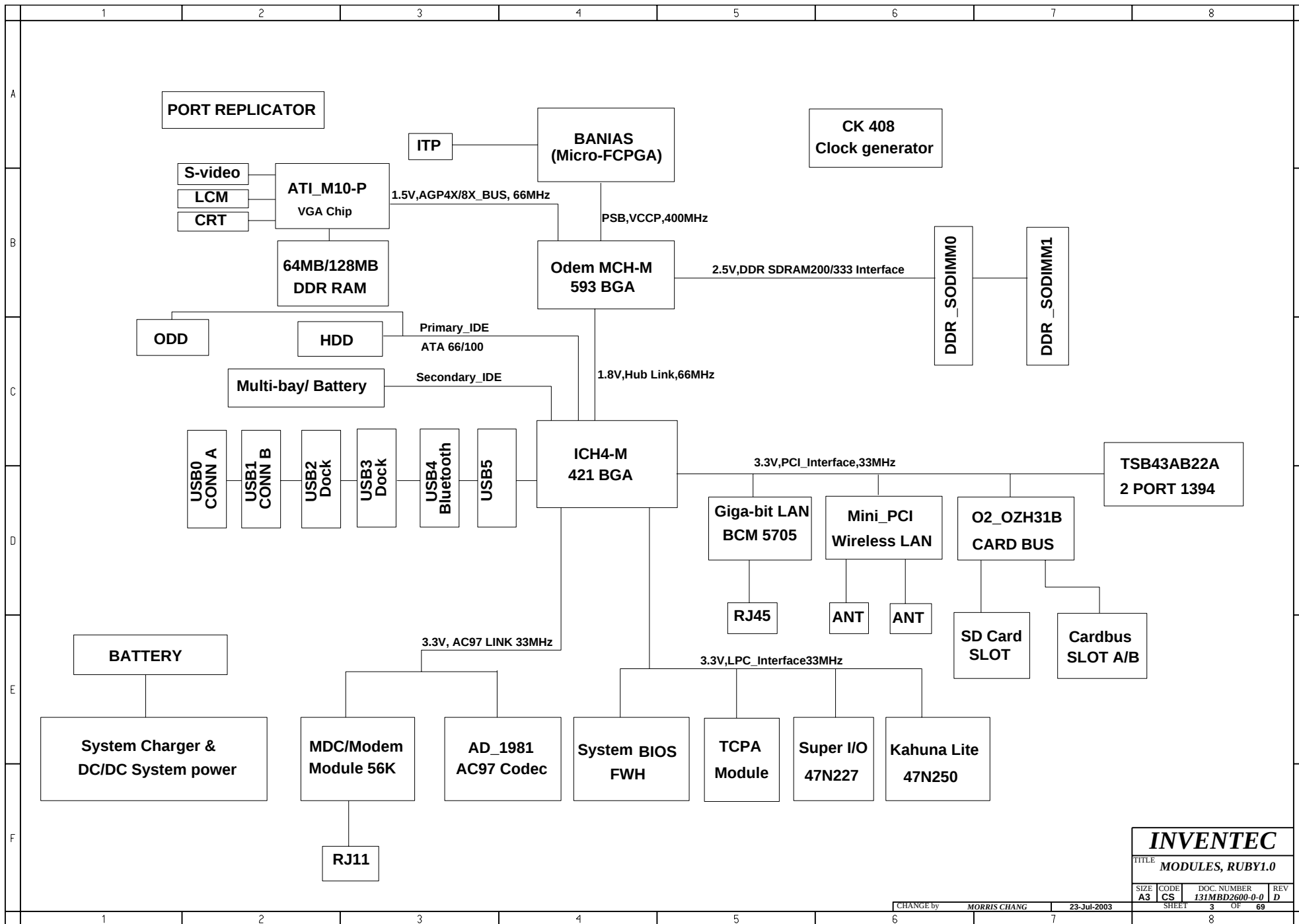
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SIZE A3	CODE CS	DOC. NUMBER 131MBD2600-0-0	REV D
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CHANGE by **MORRIS CHANG** 23-Jul-2003

SHEET **2** OF **69**



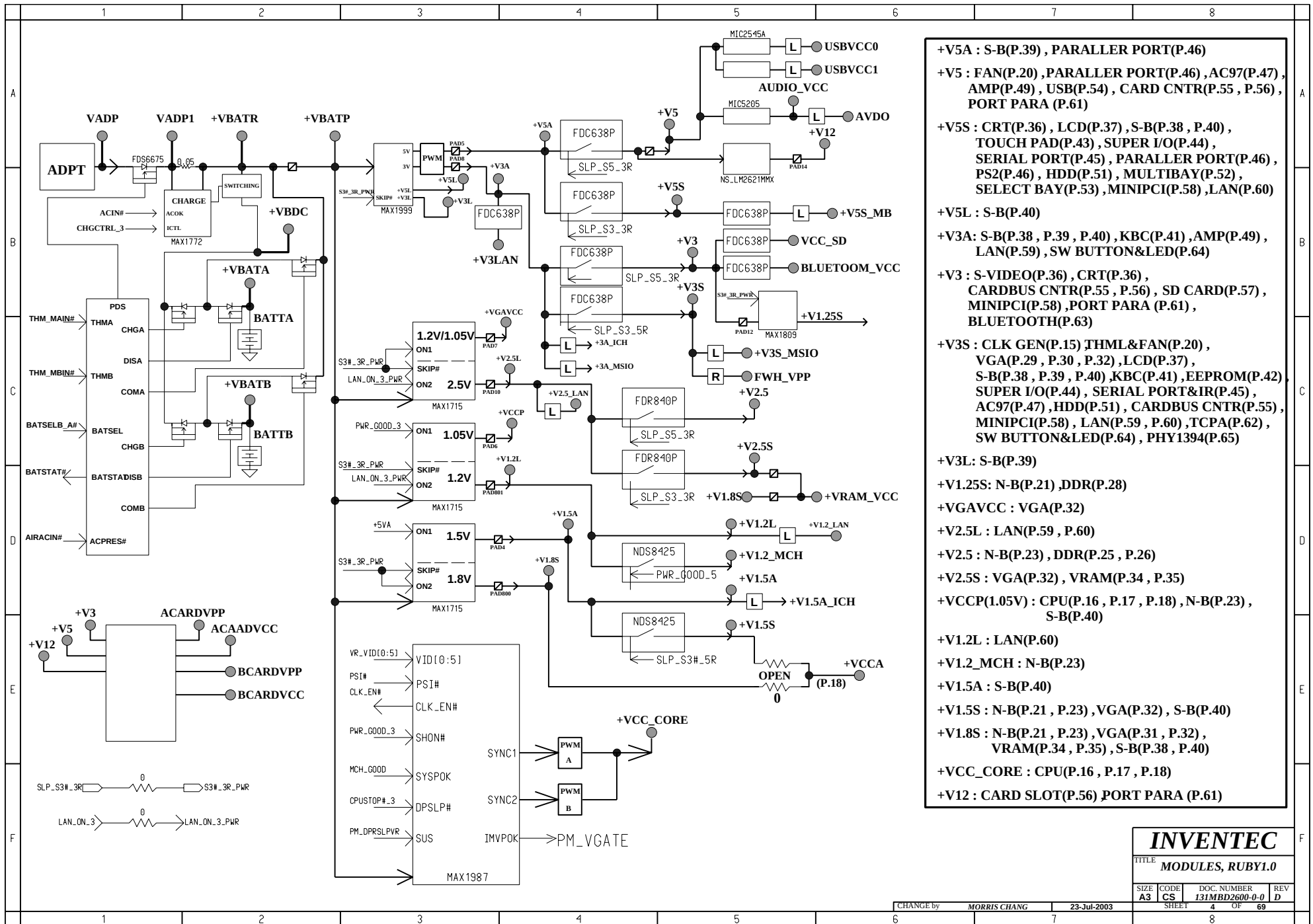
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CHANGE by **MORRIS CHANG** 23-Jul-2003

SHEET **3** OF **69**

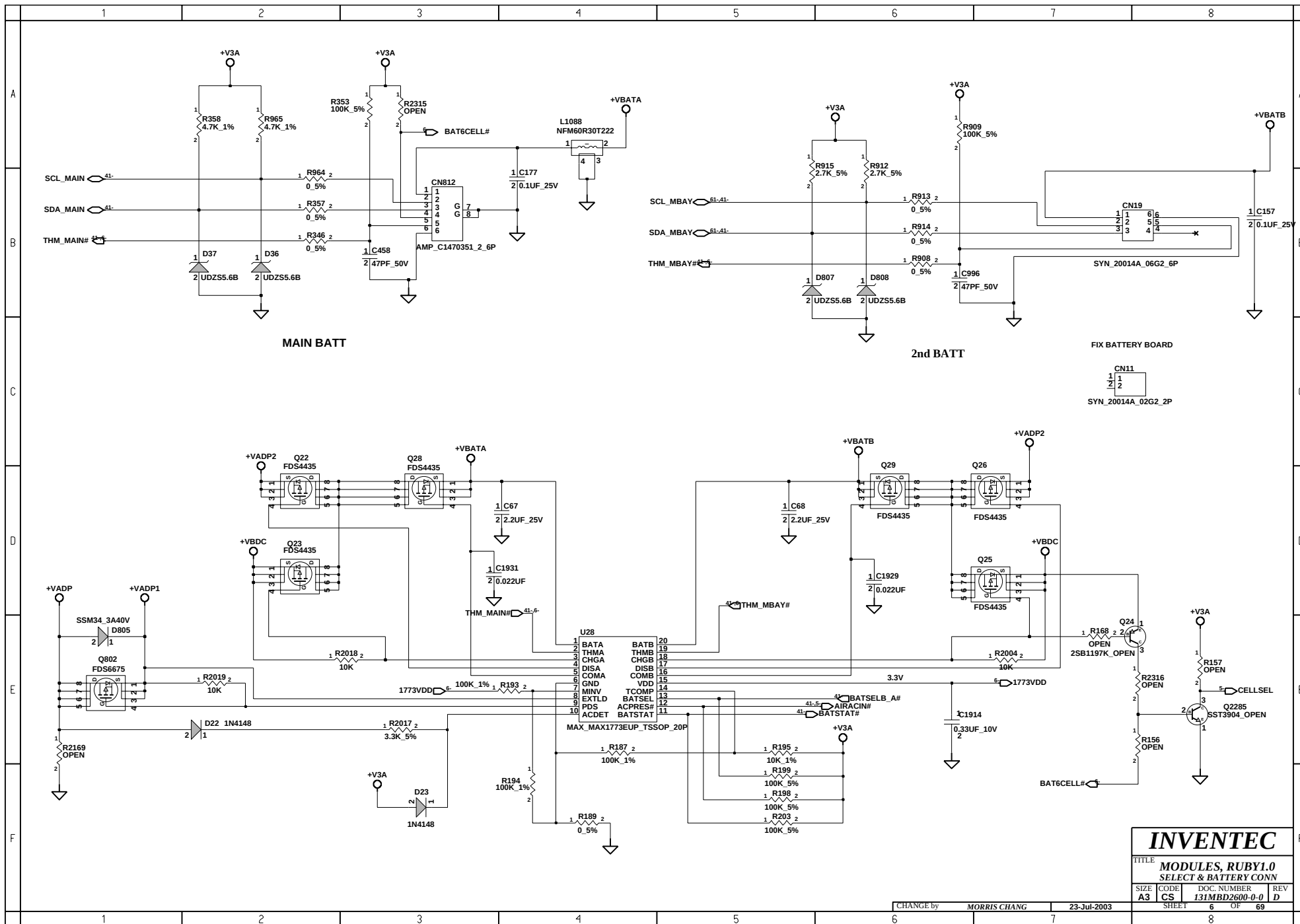


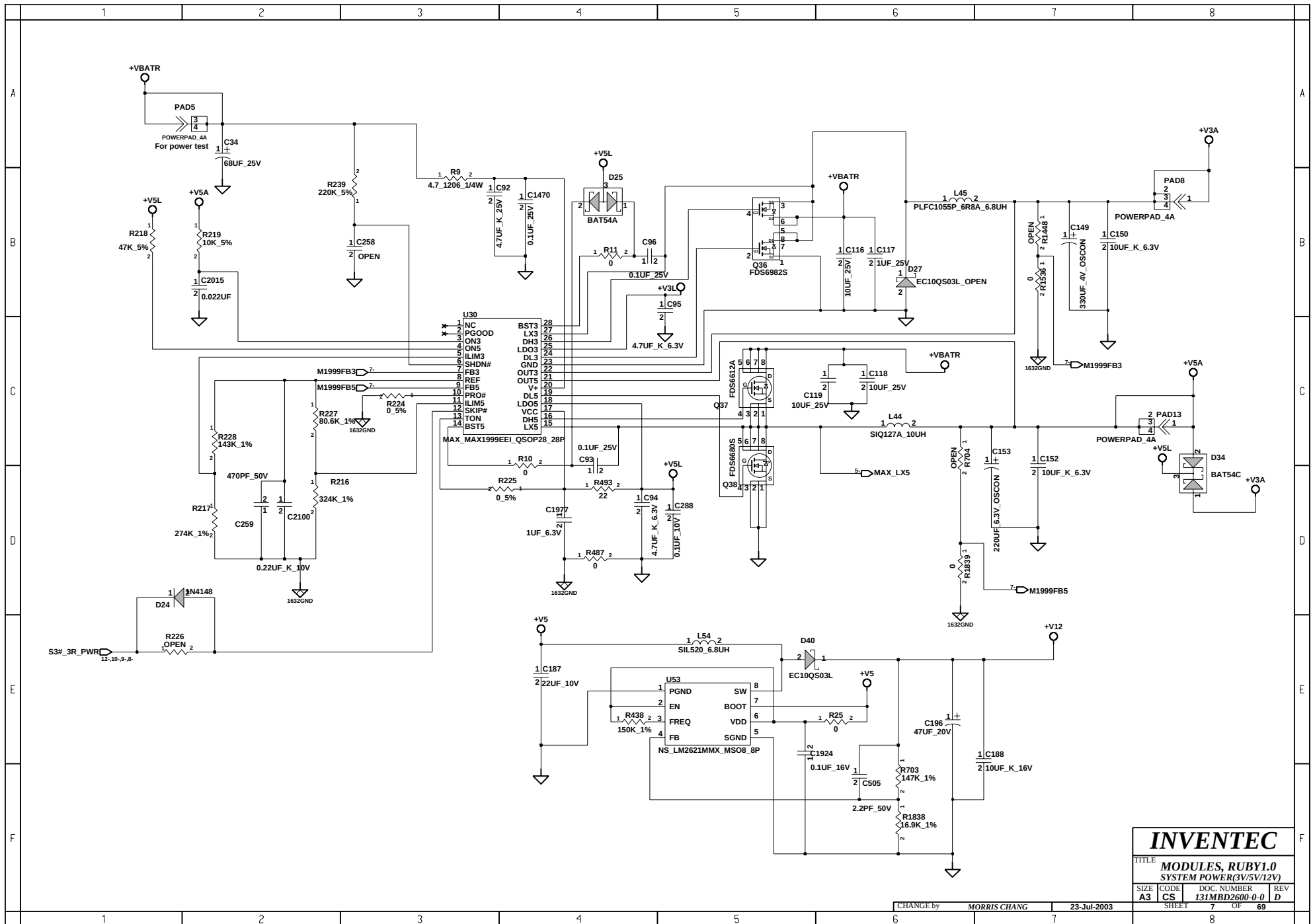
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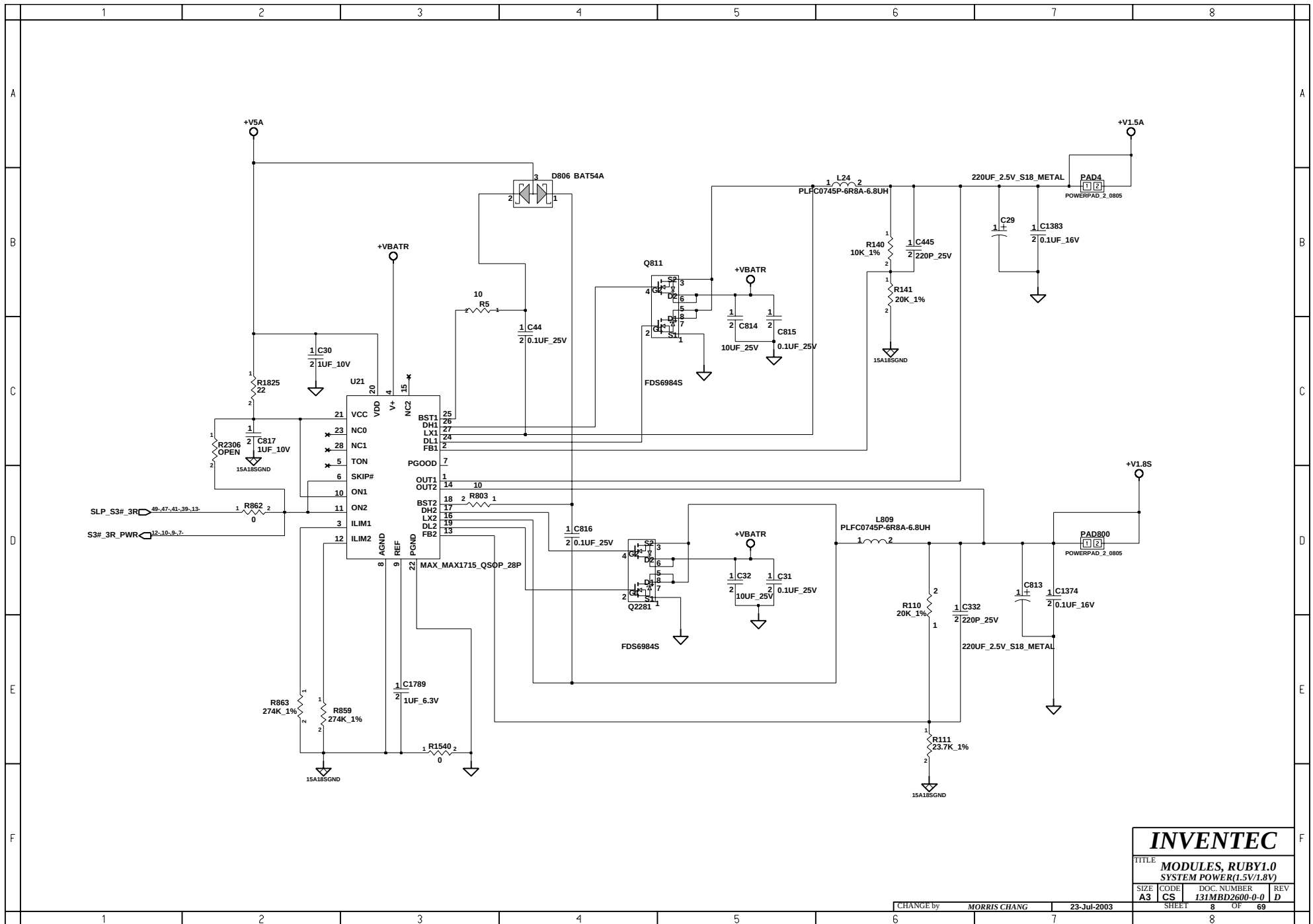
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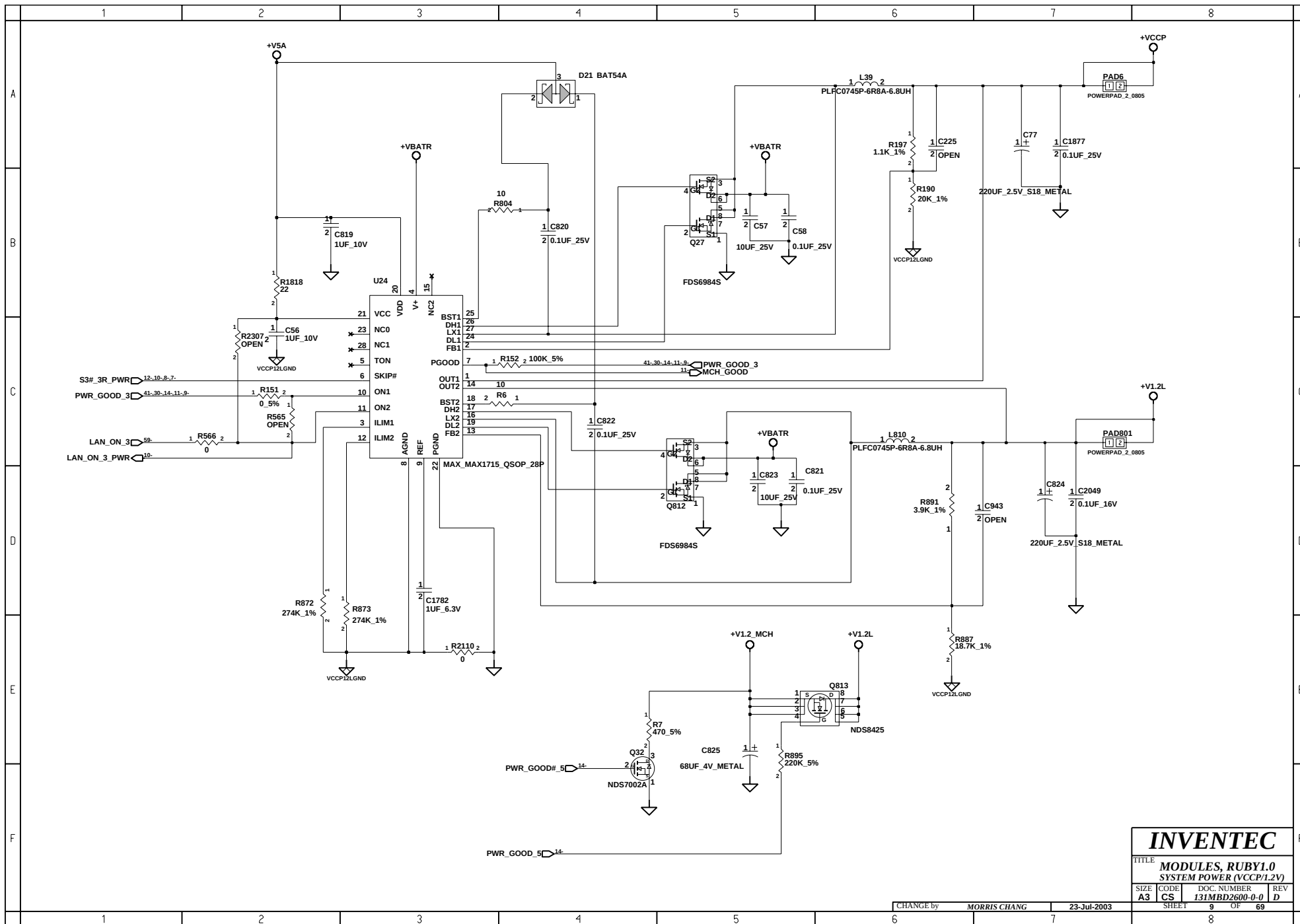
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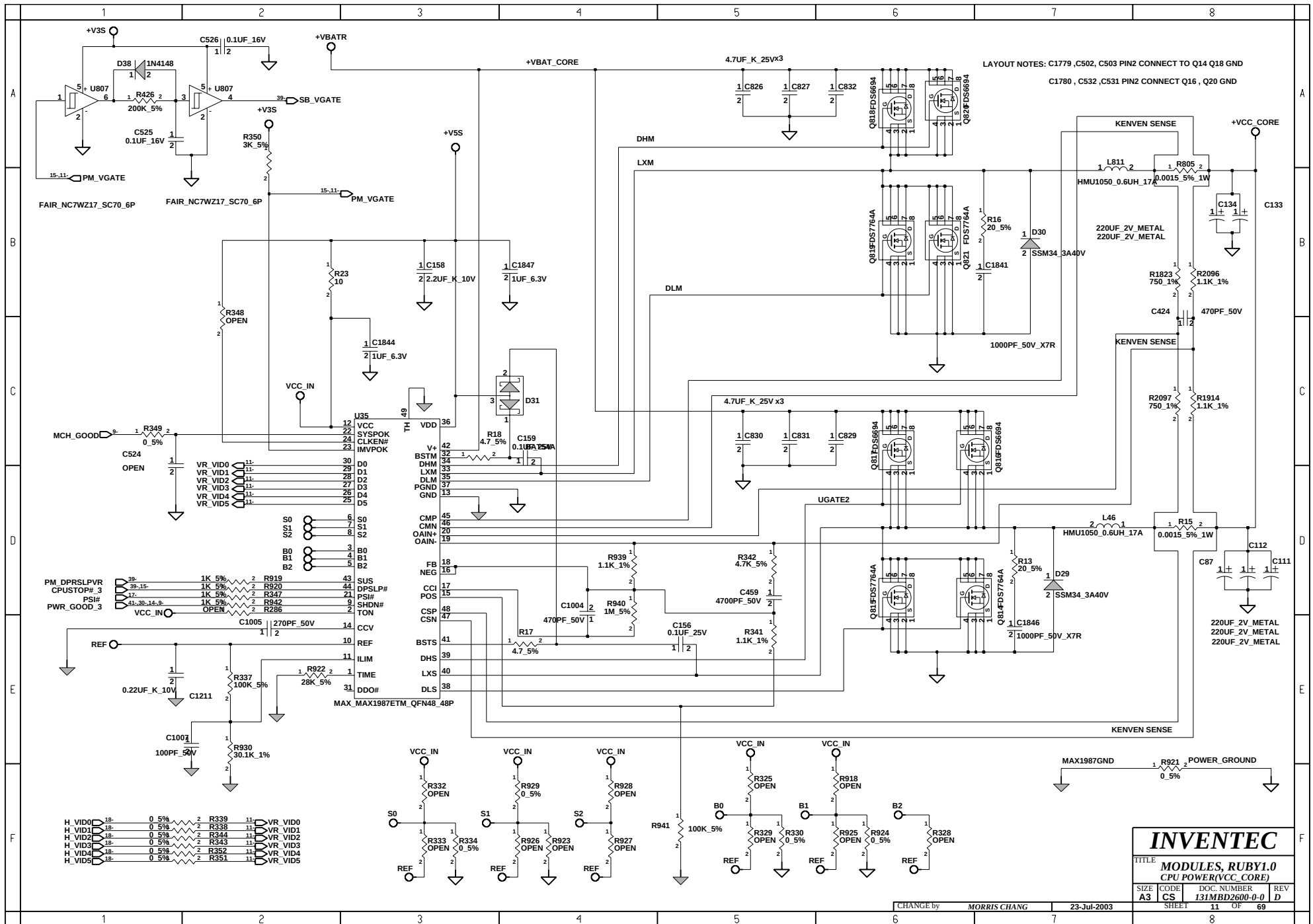


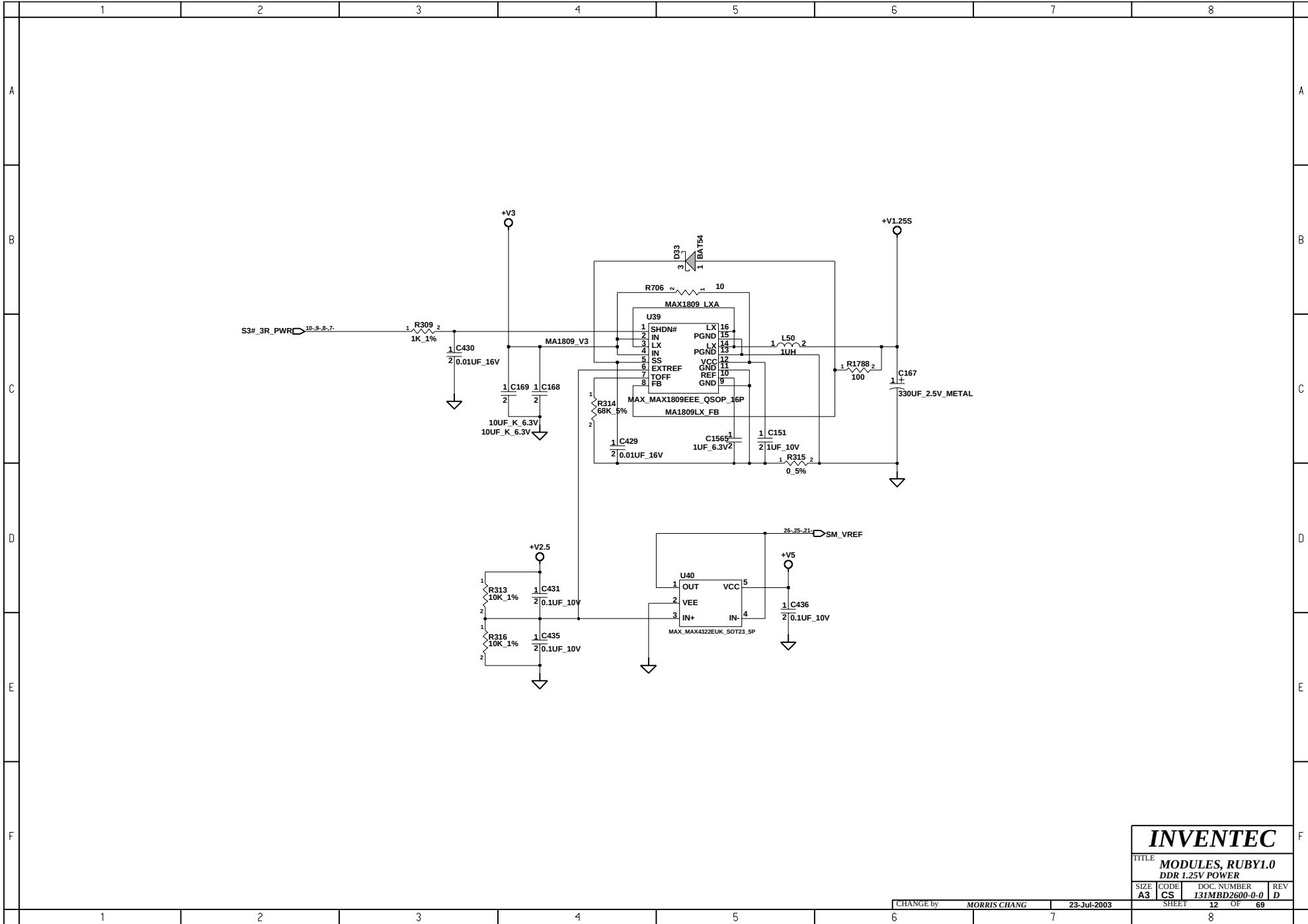


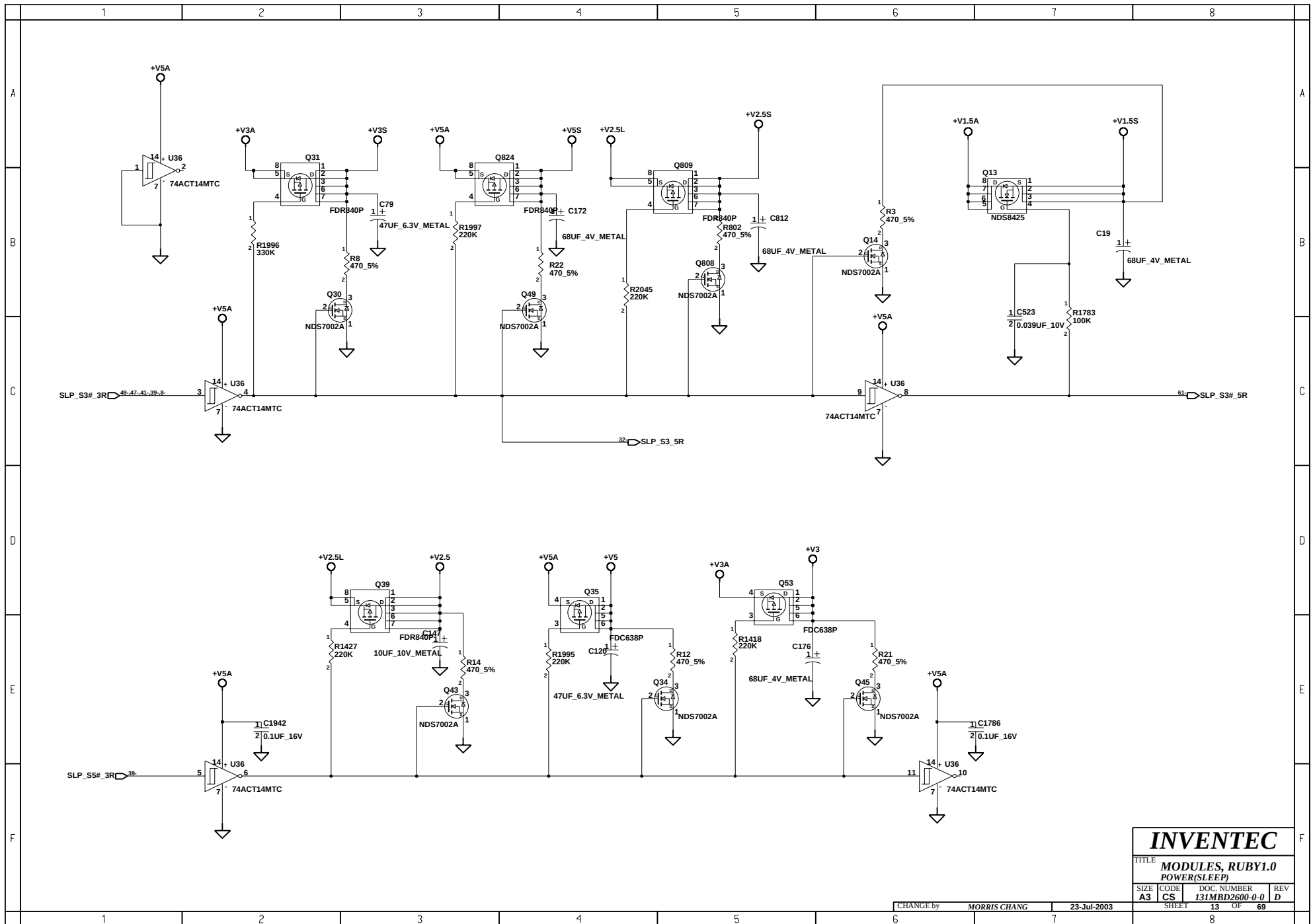


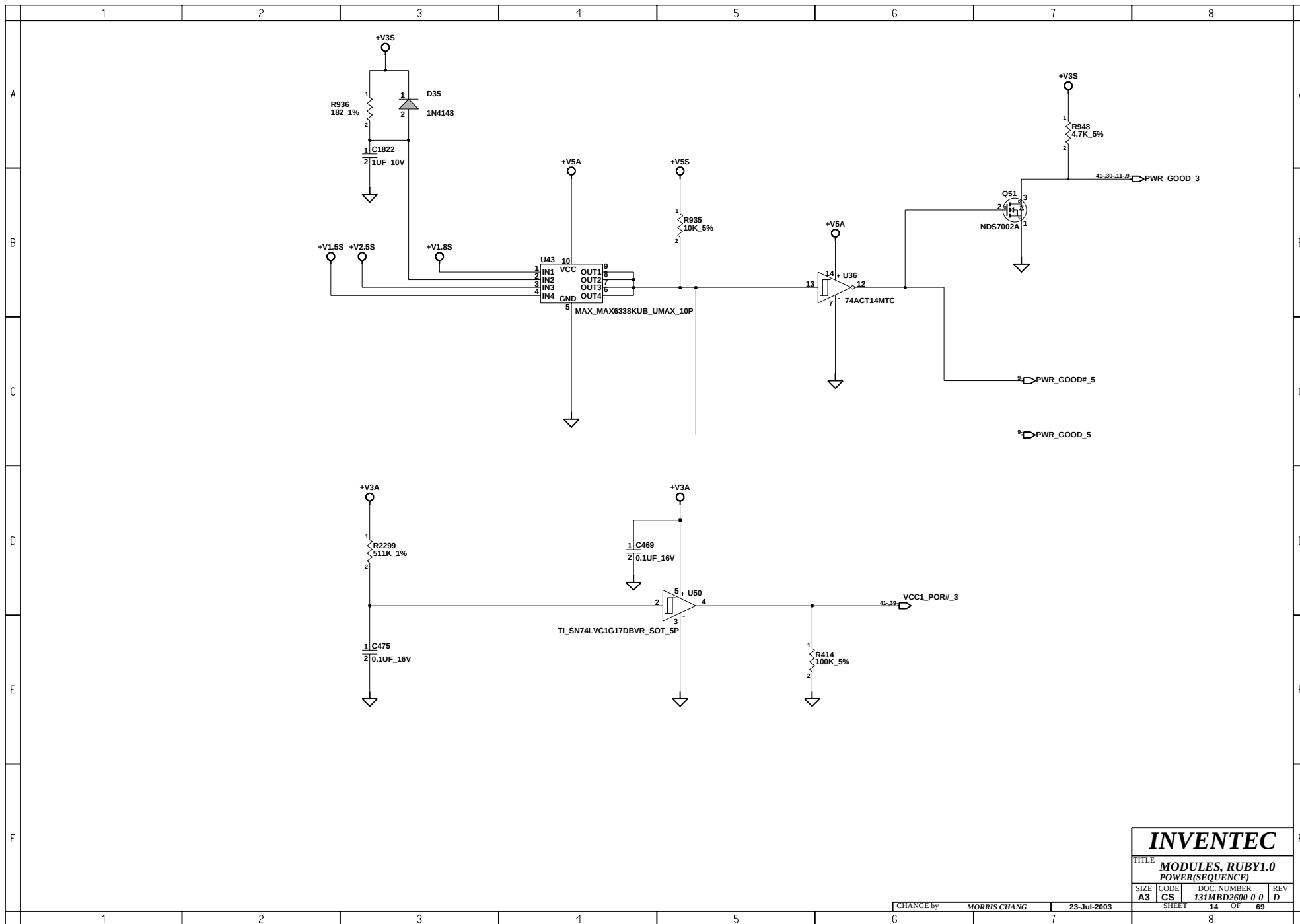






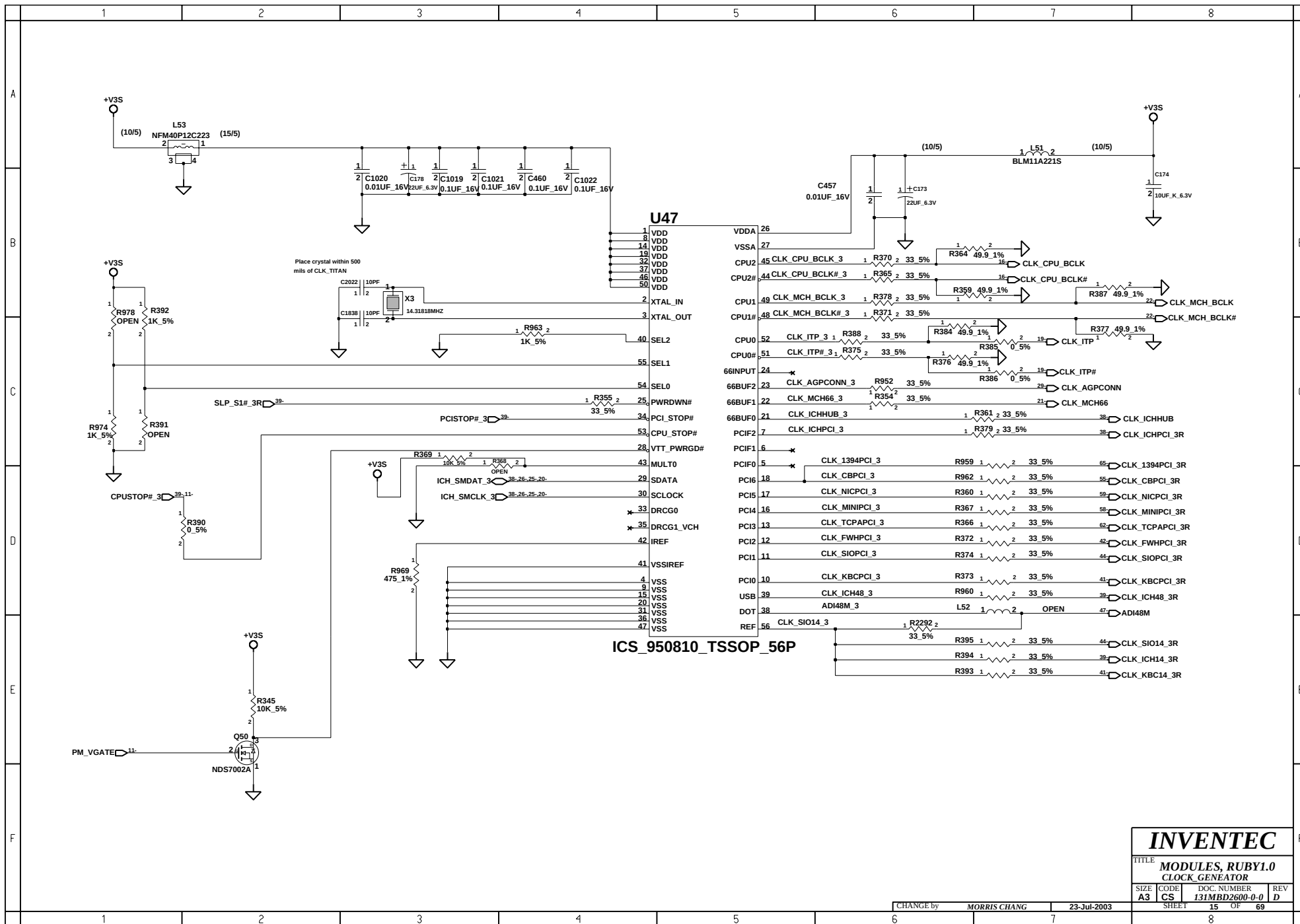


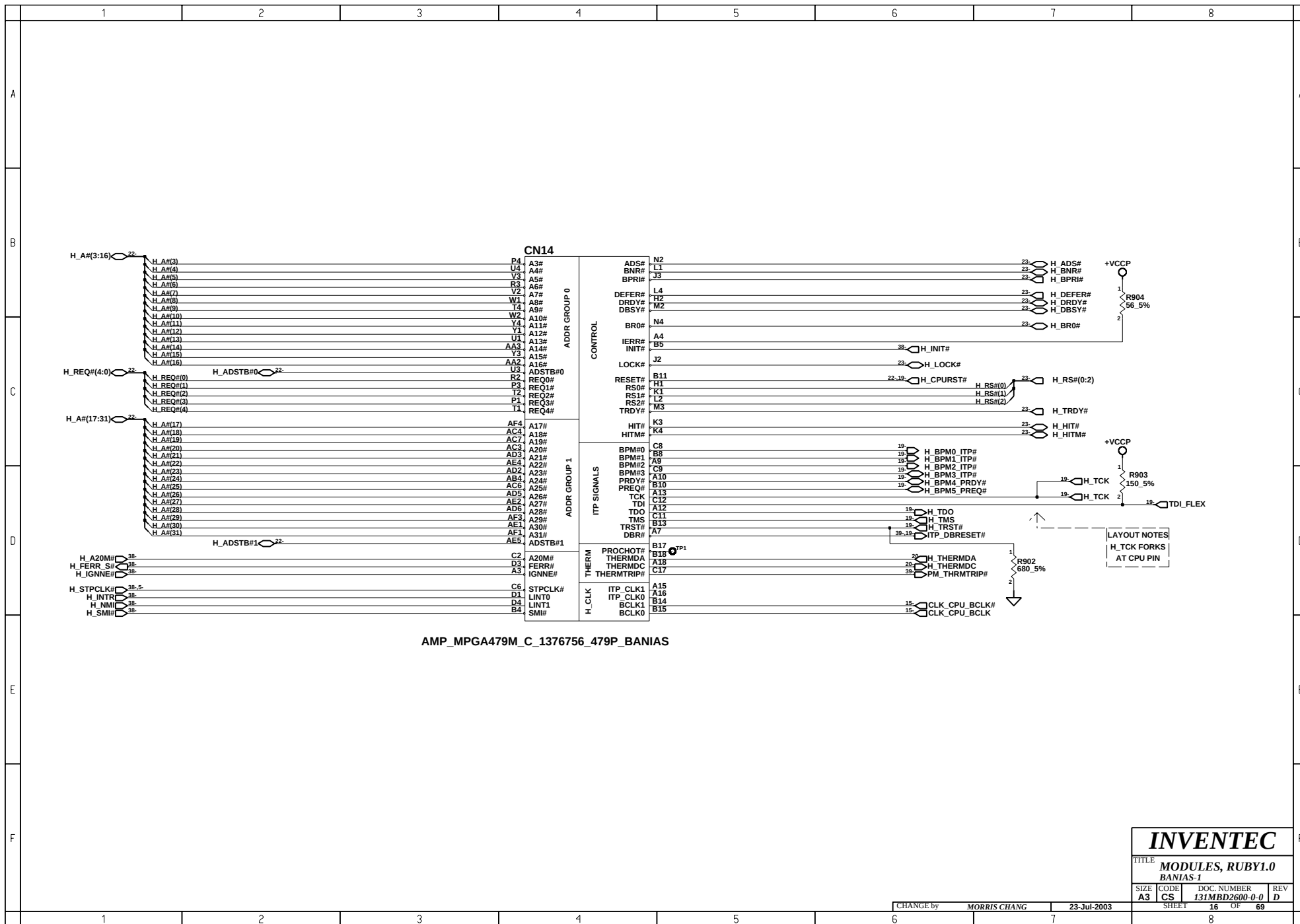


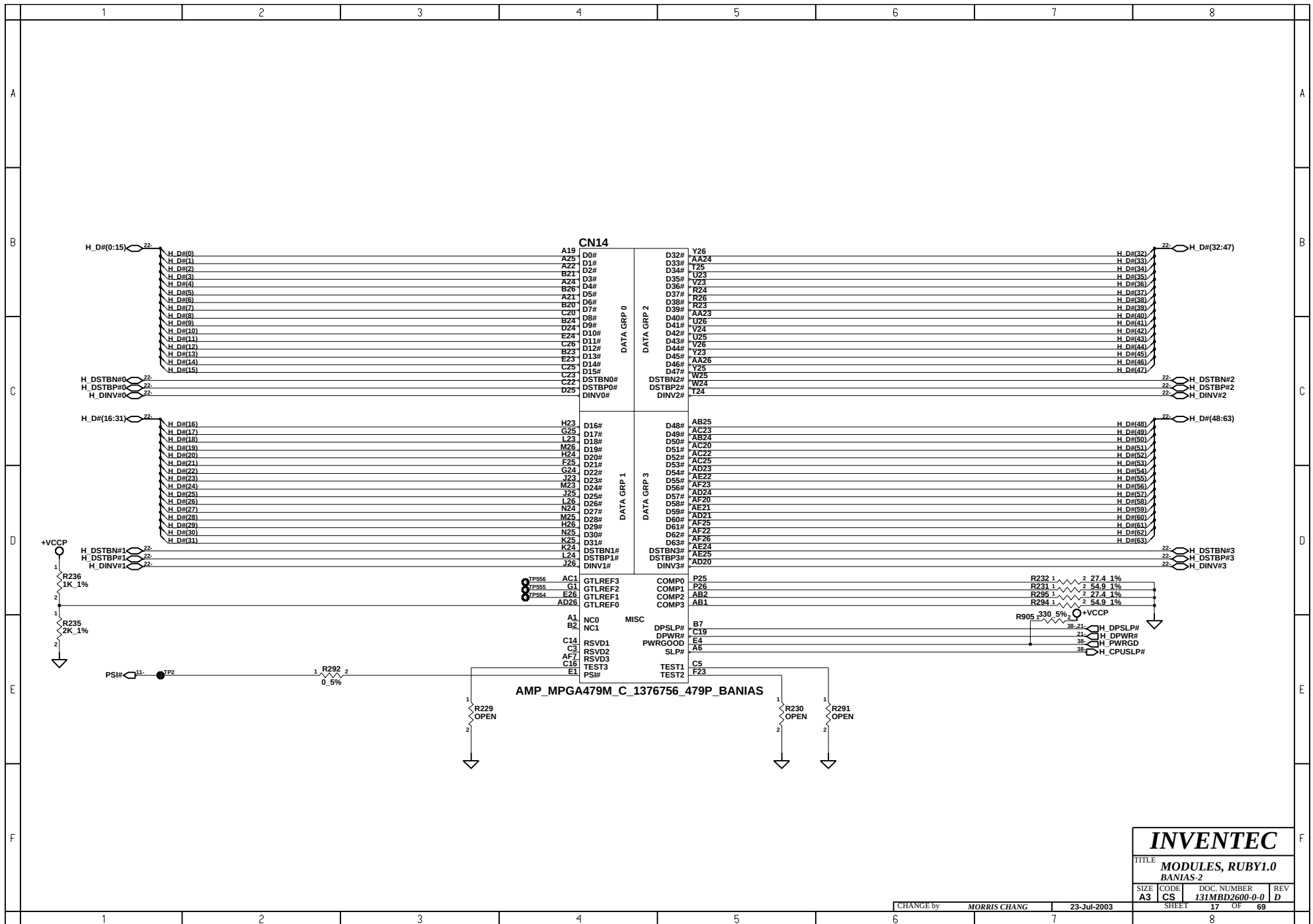


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POWER(SEQUENCE)			
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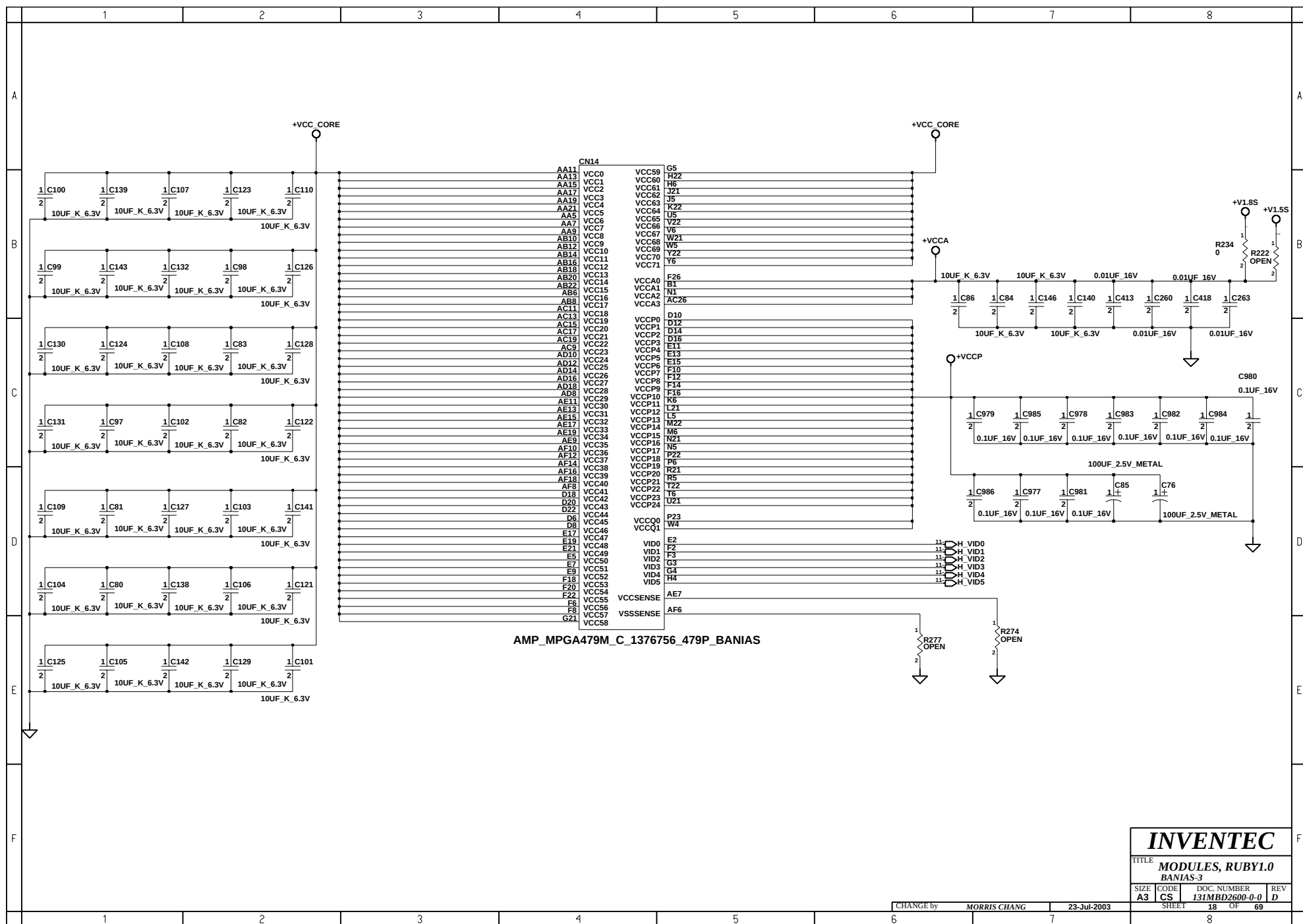
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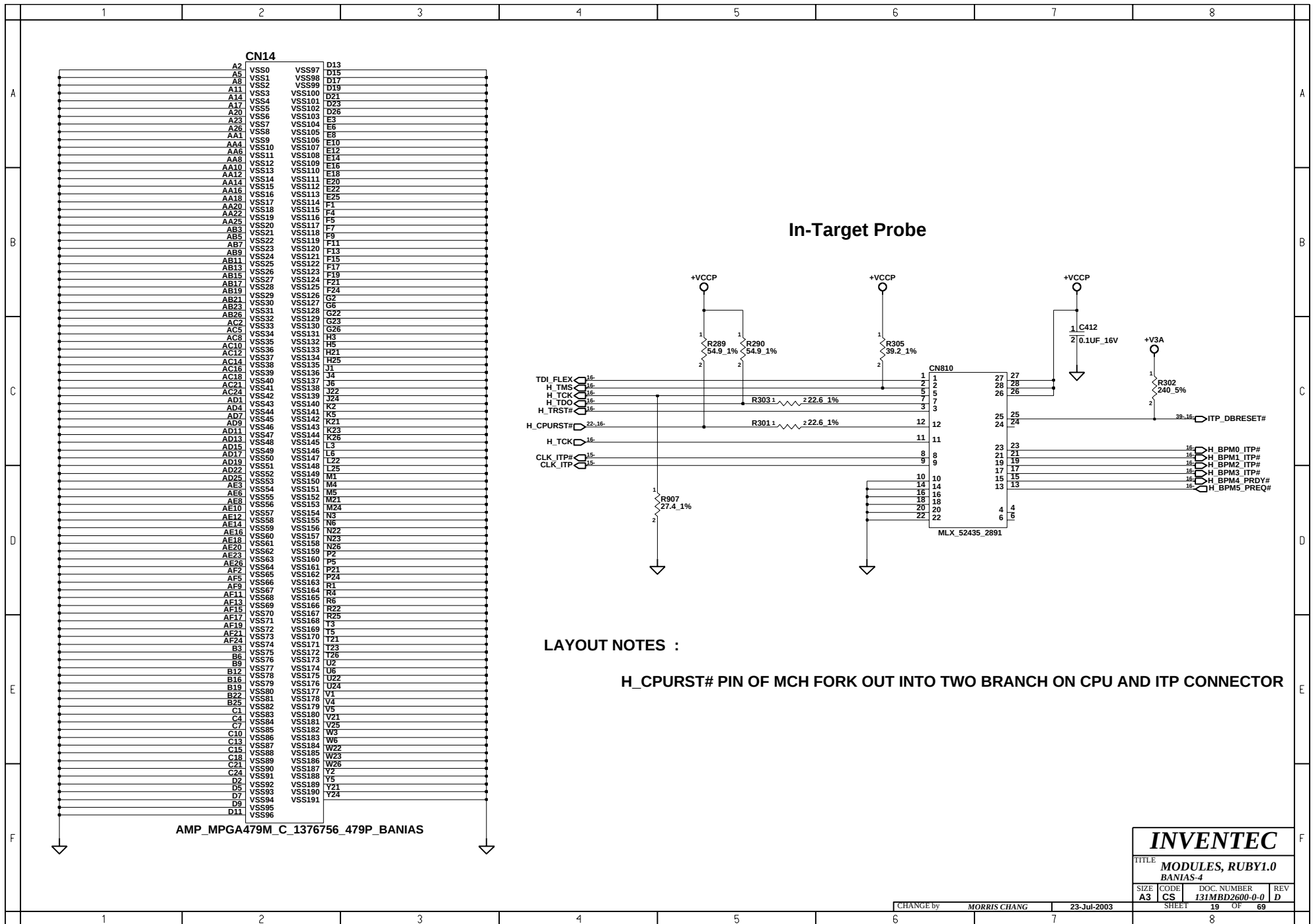
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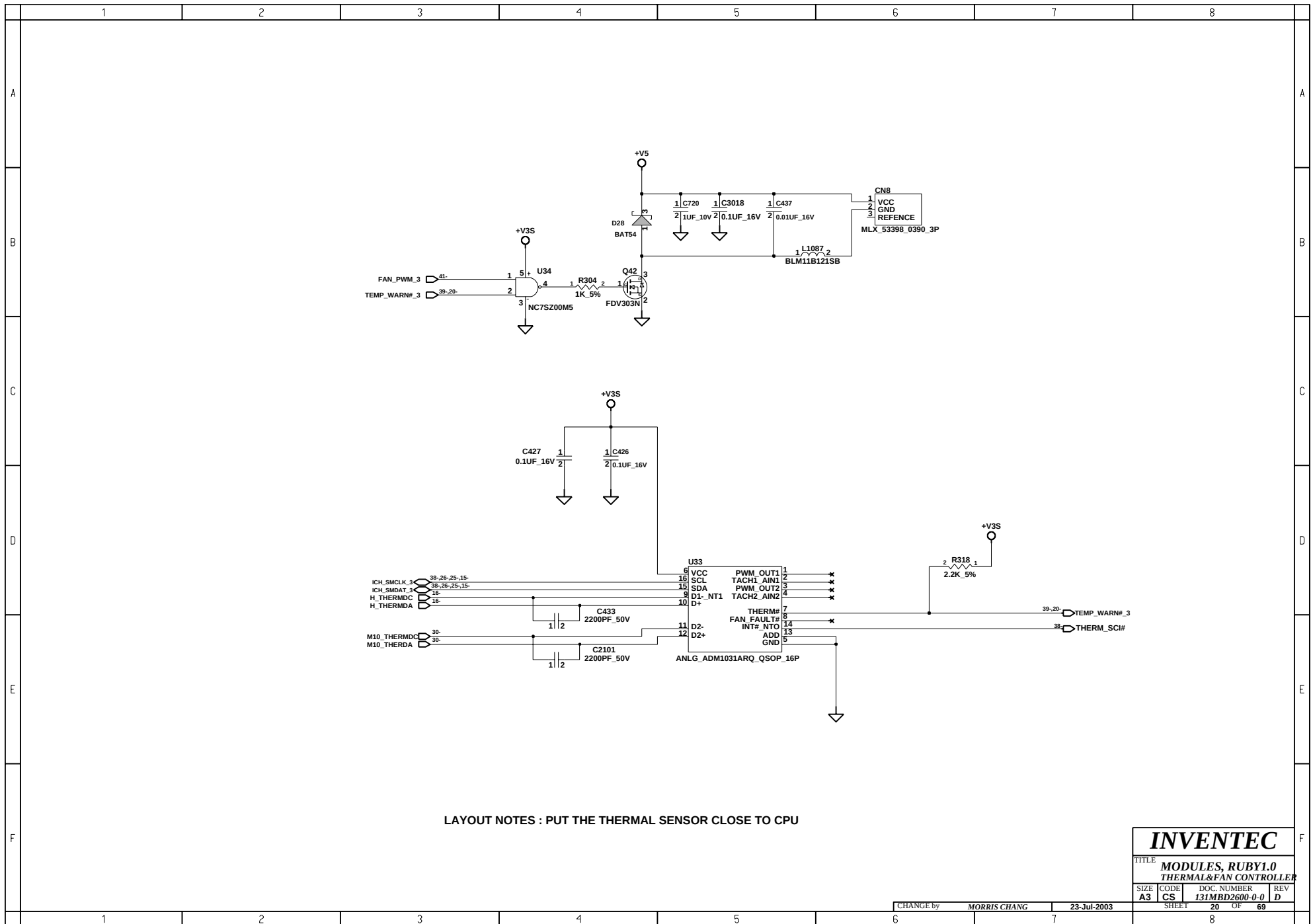
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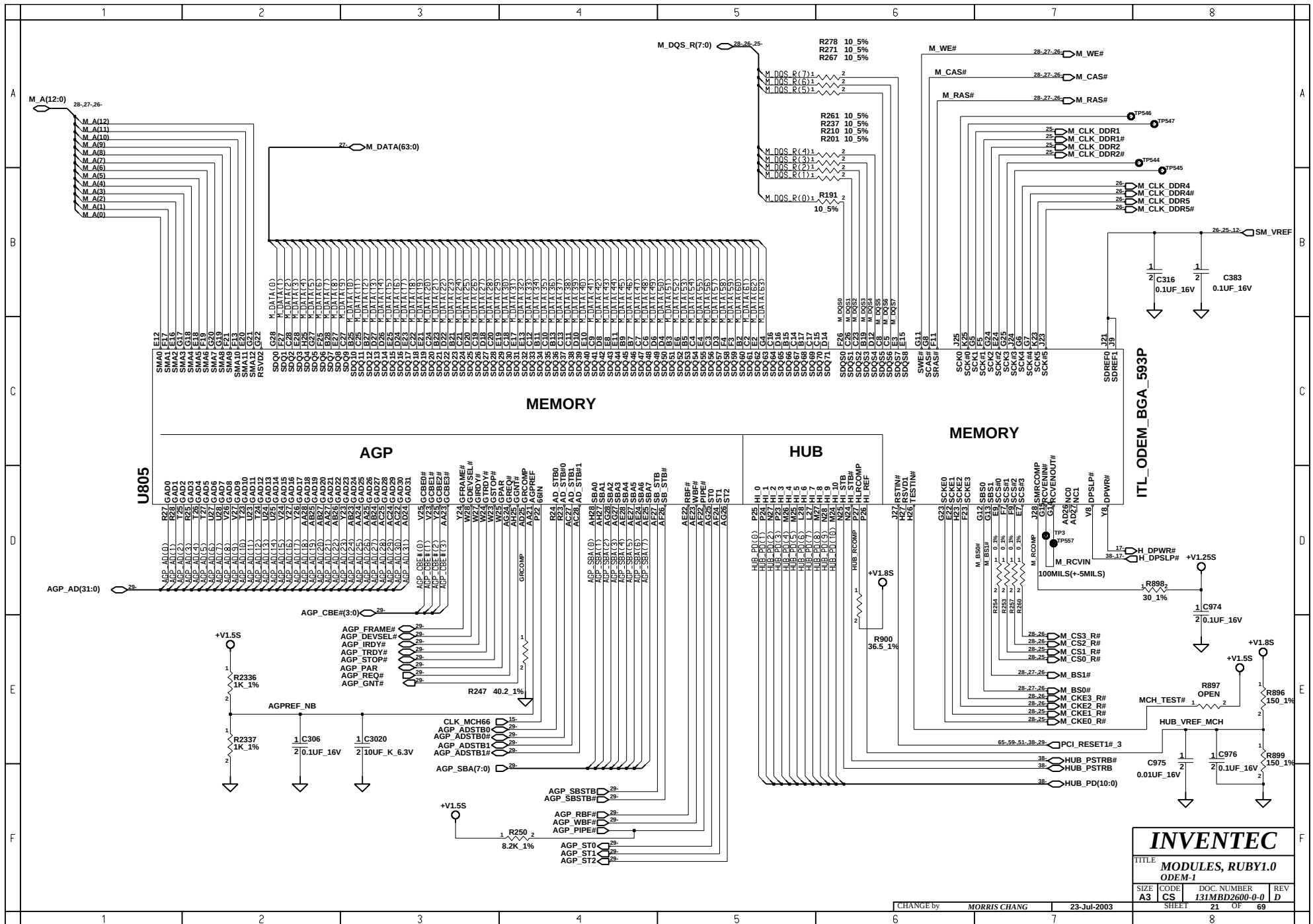
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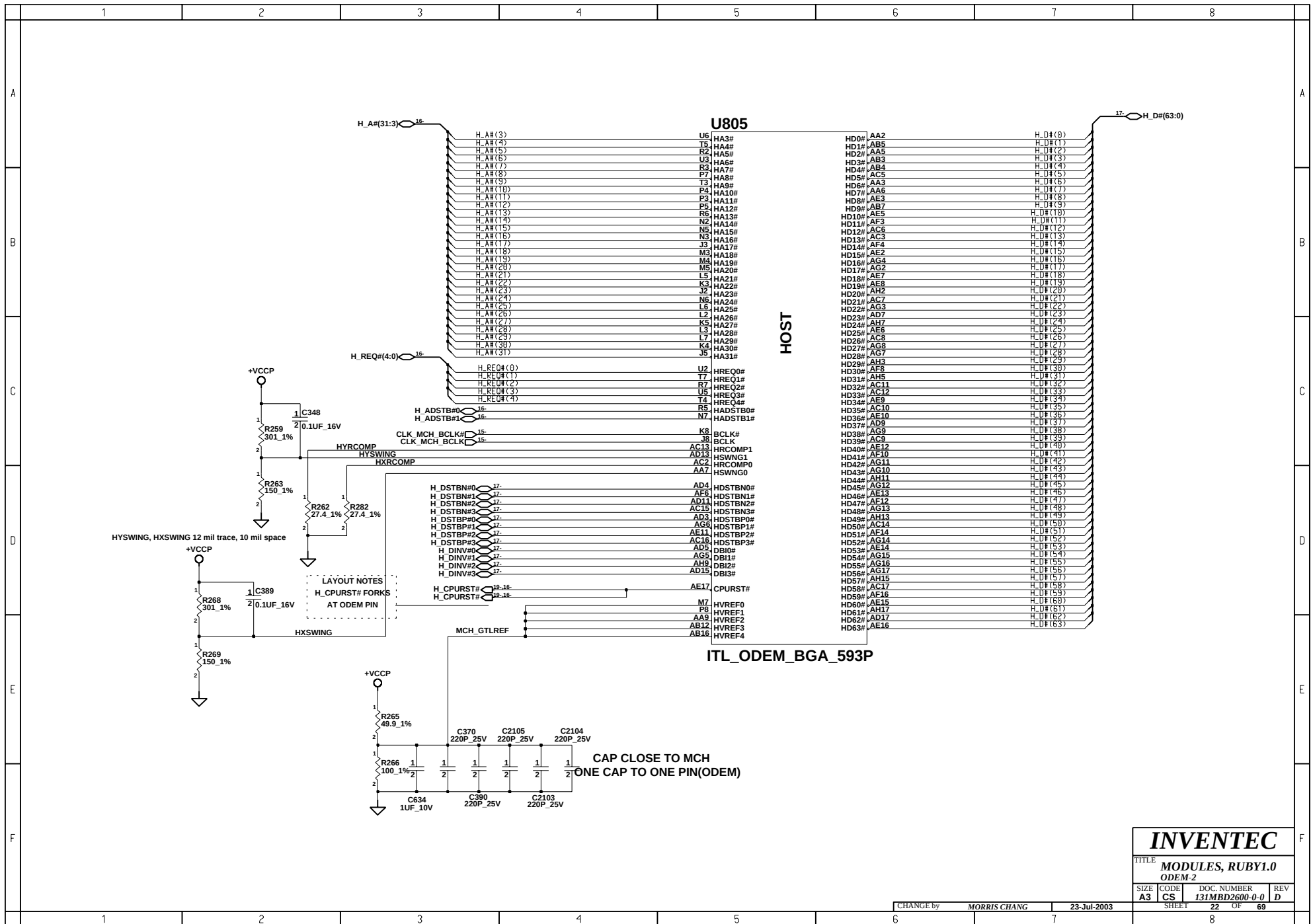
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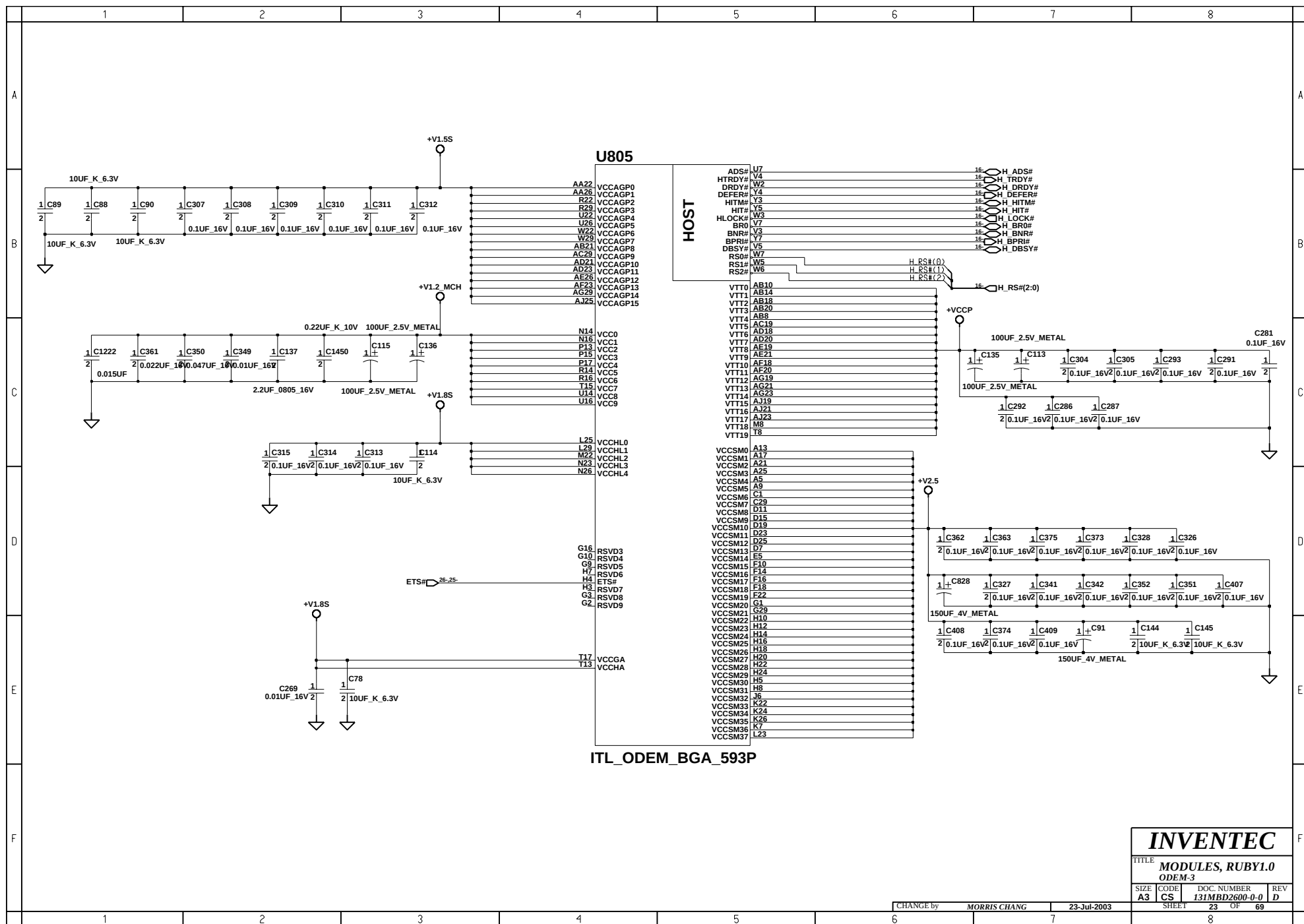
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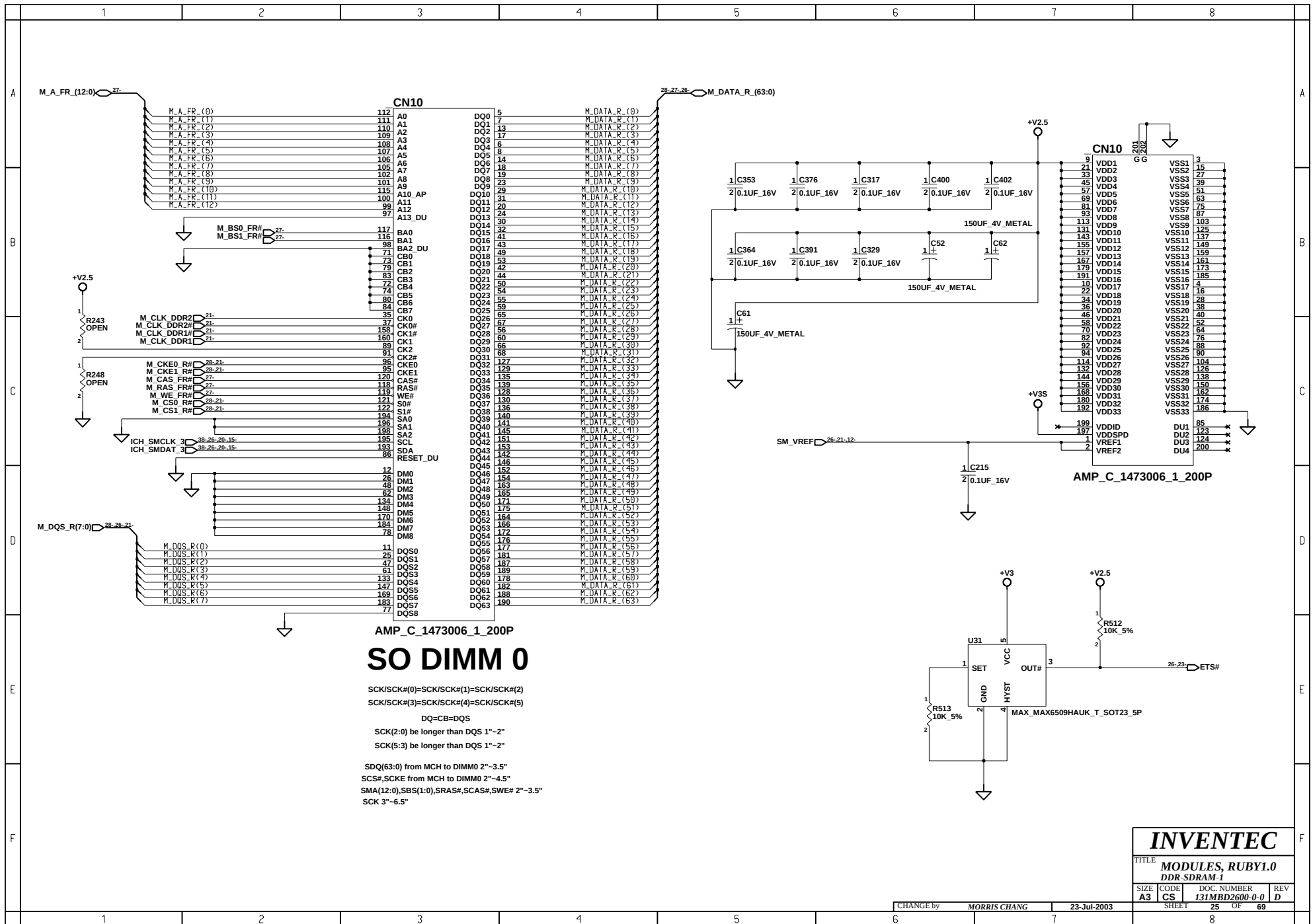
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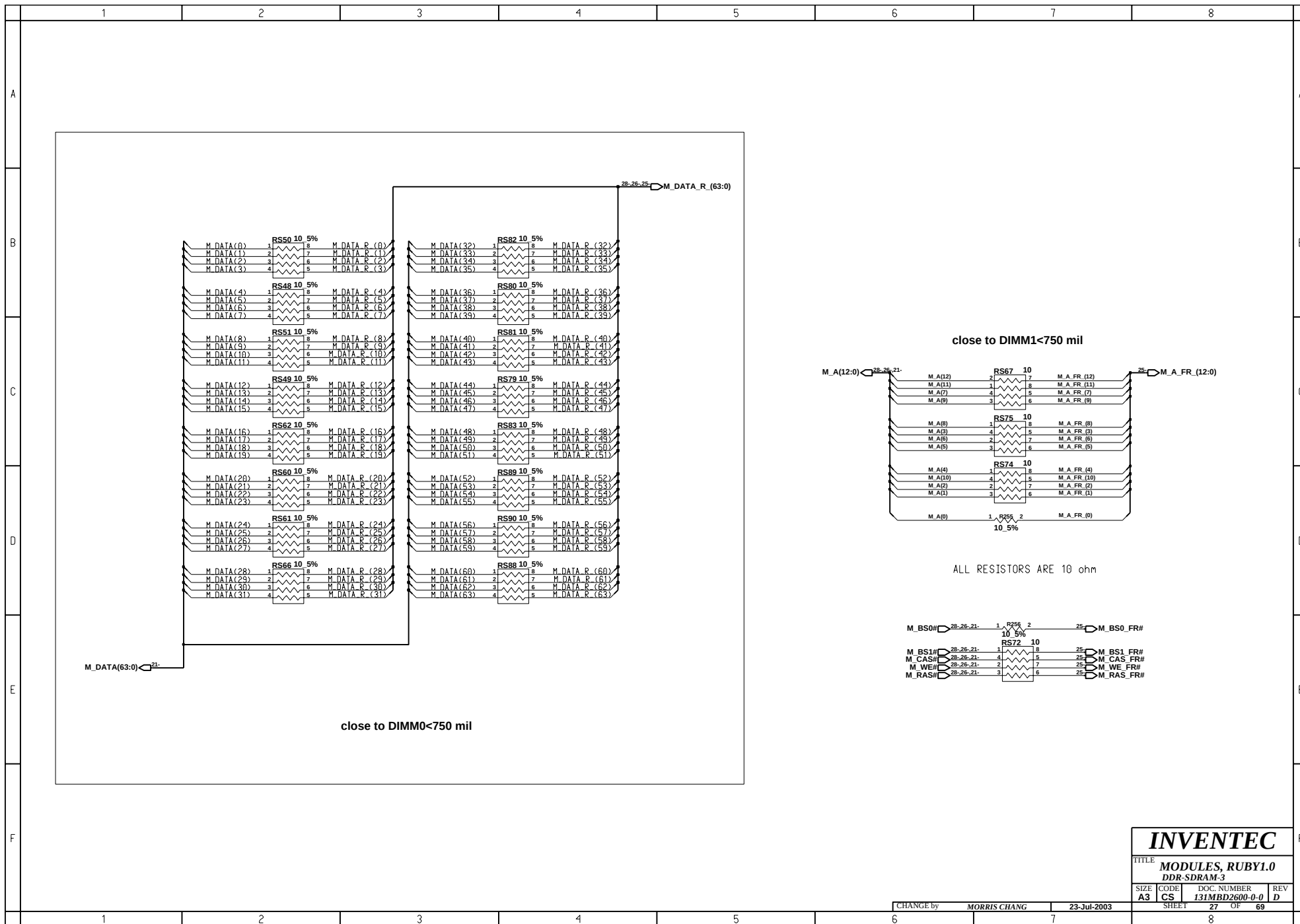
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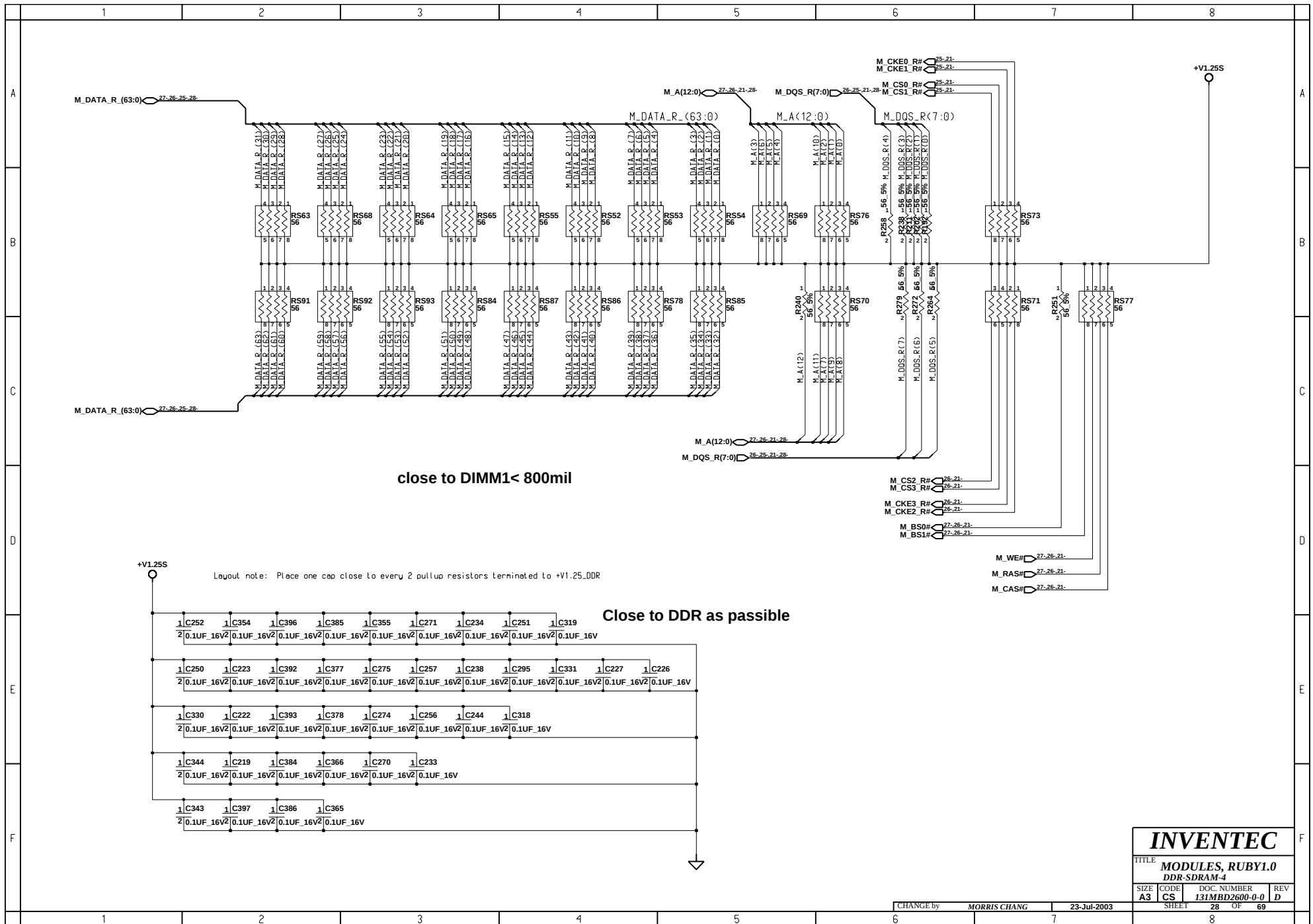
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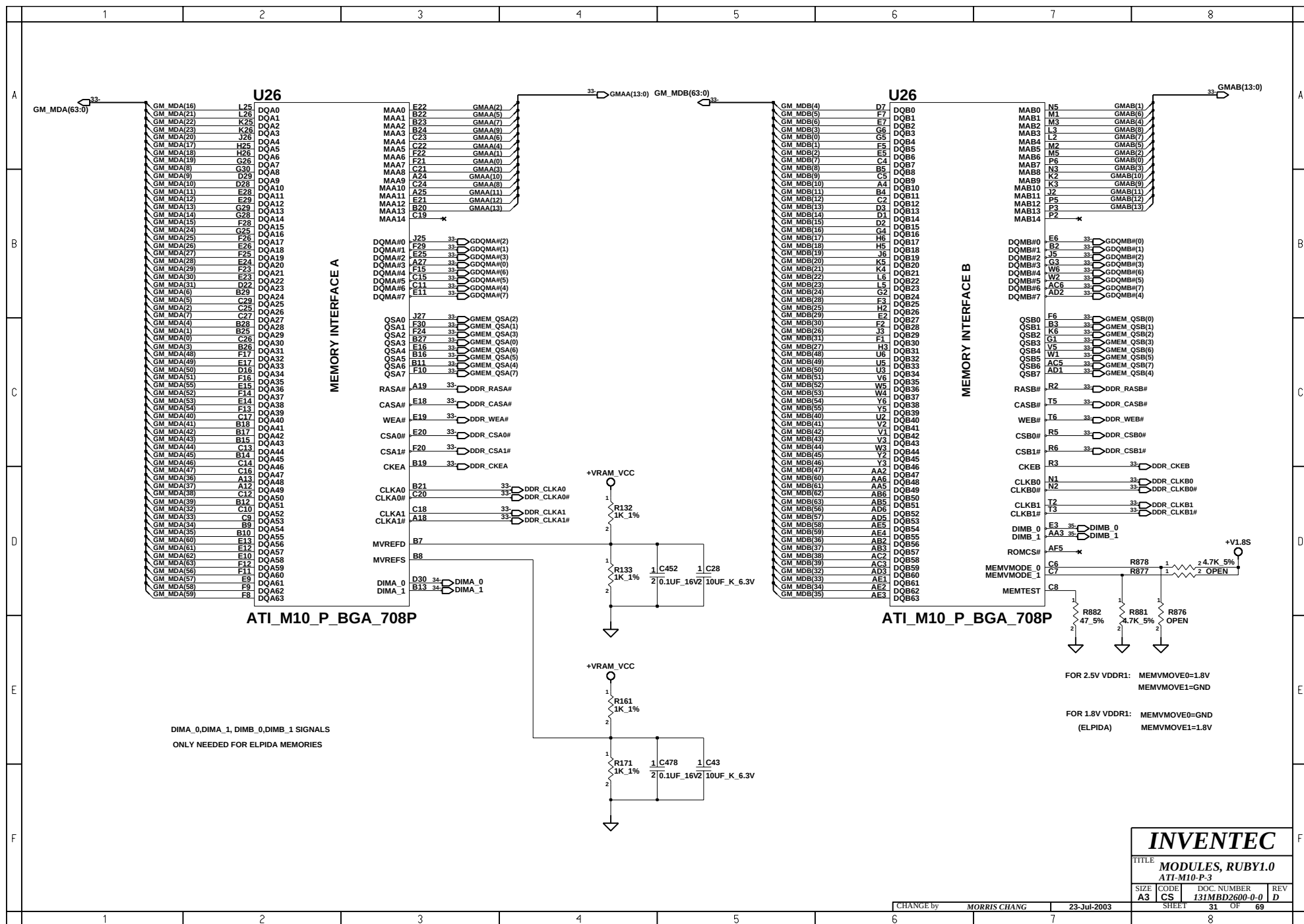


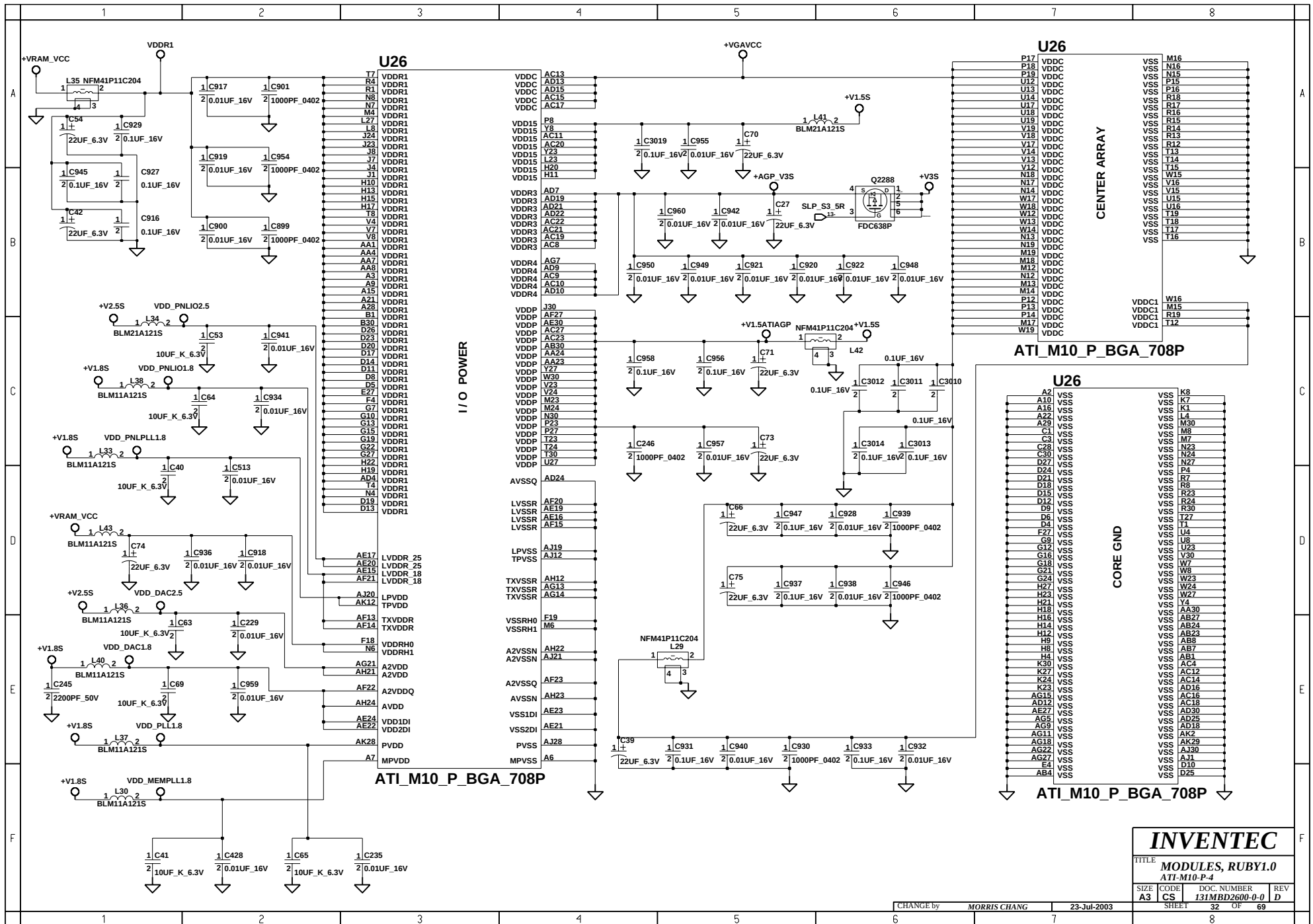
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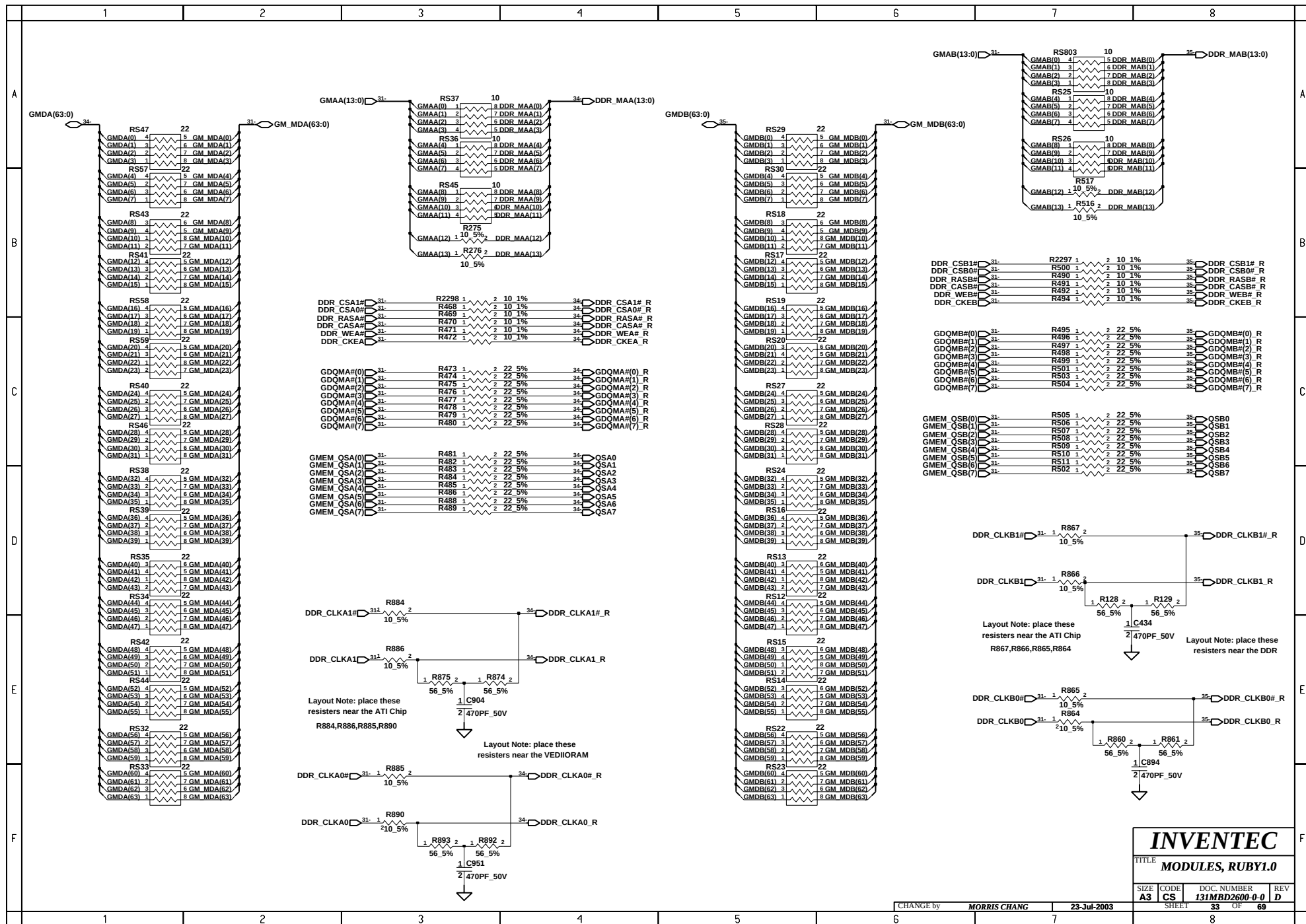


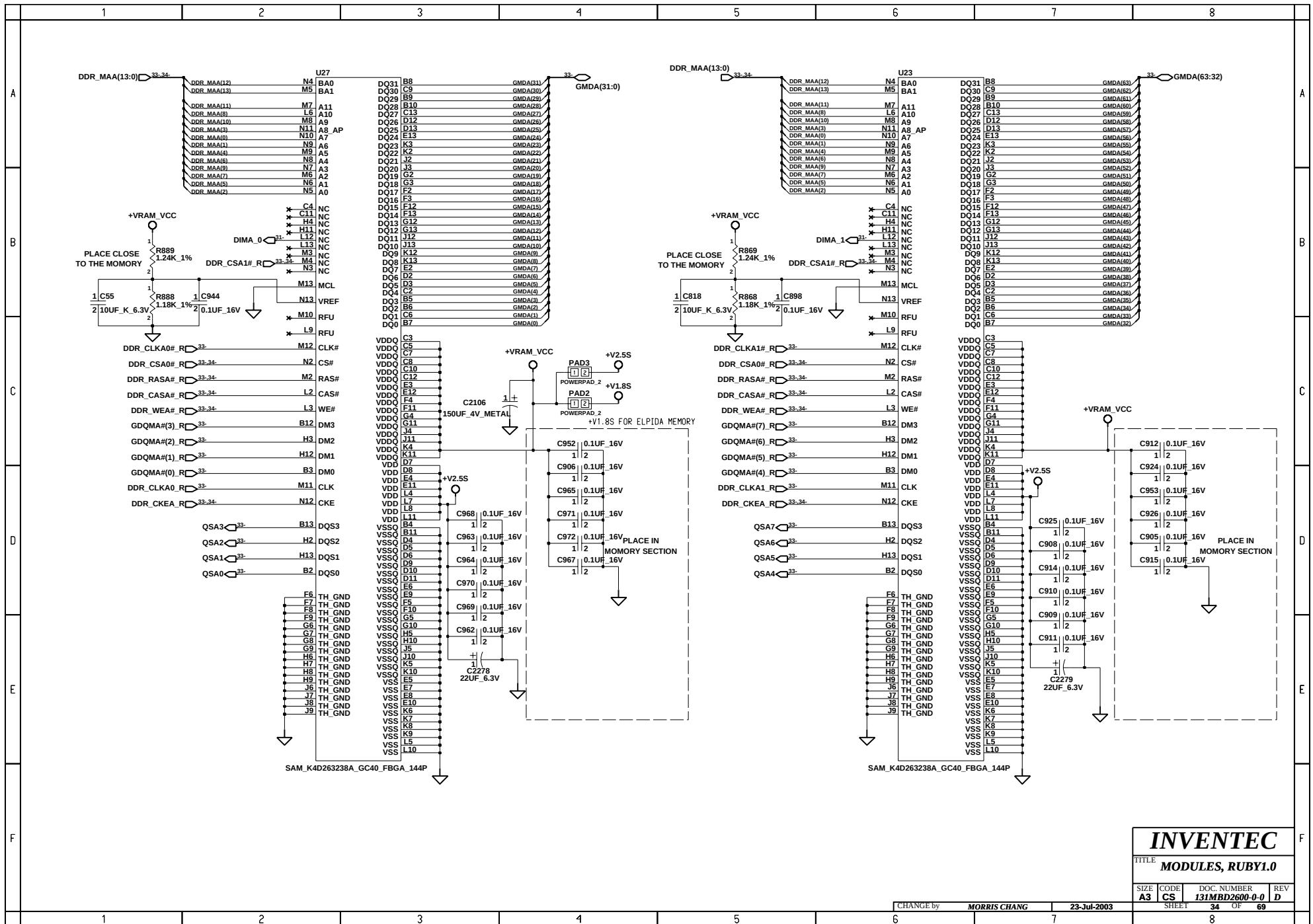


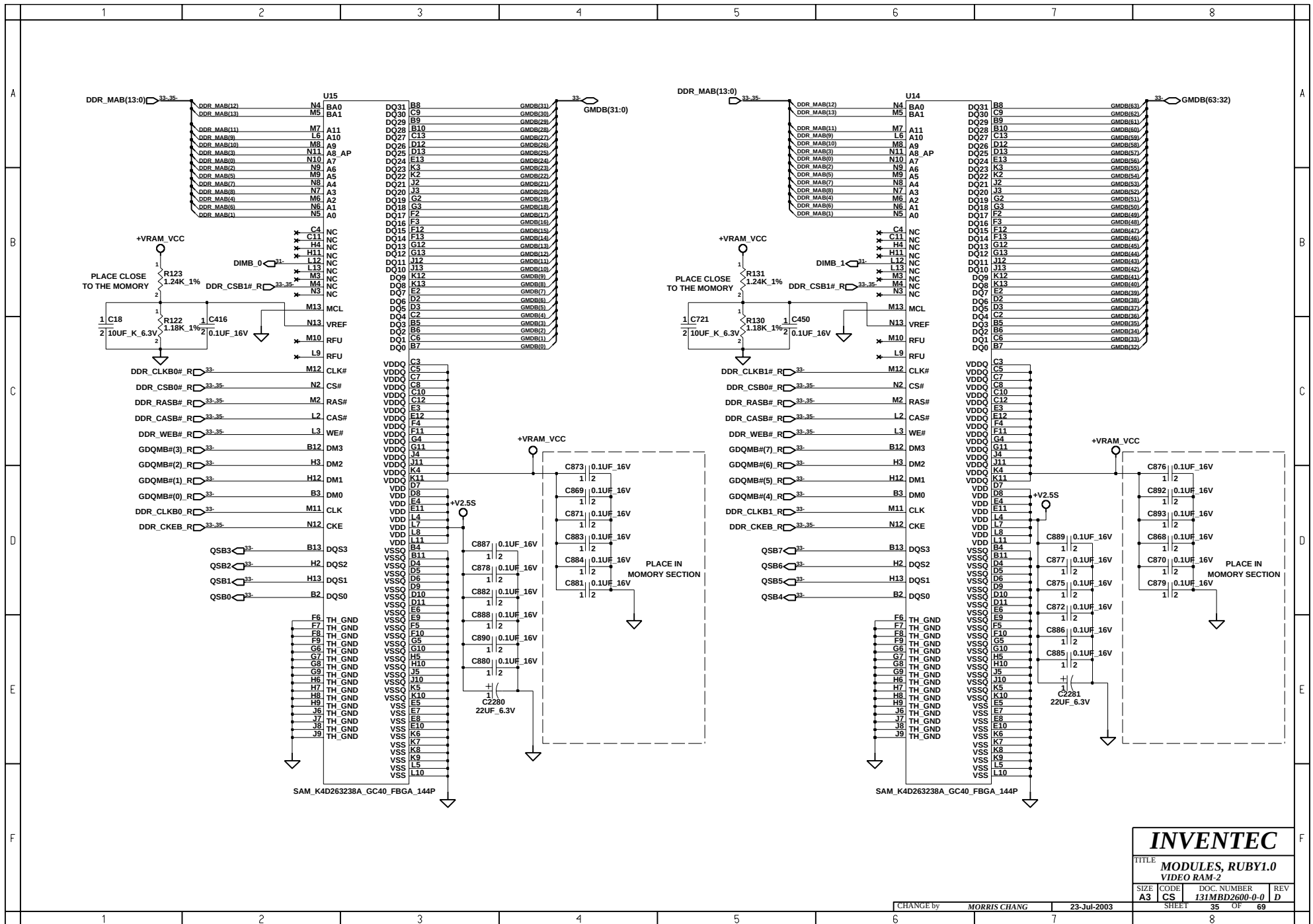












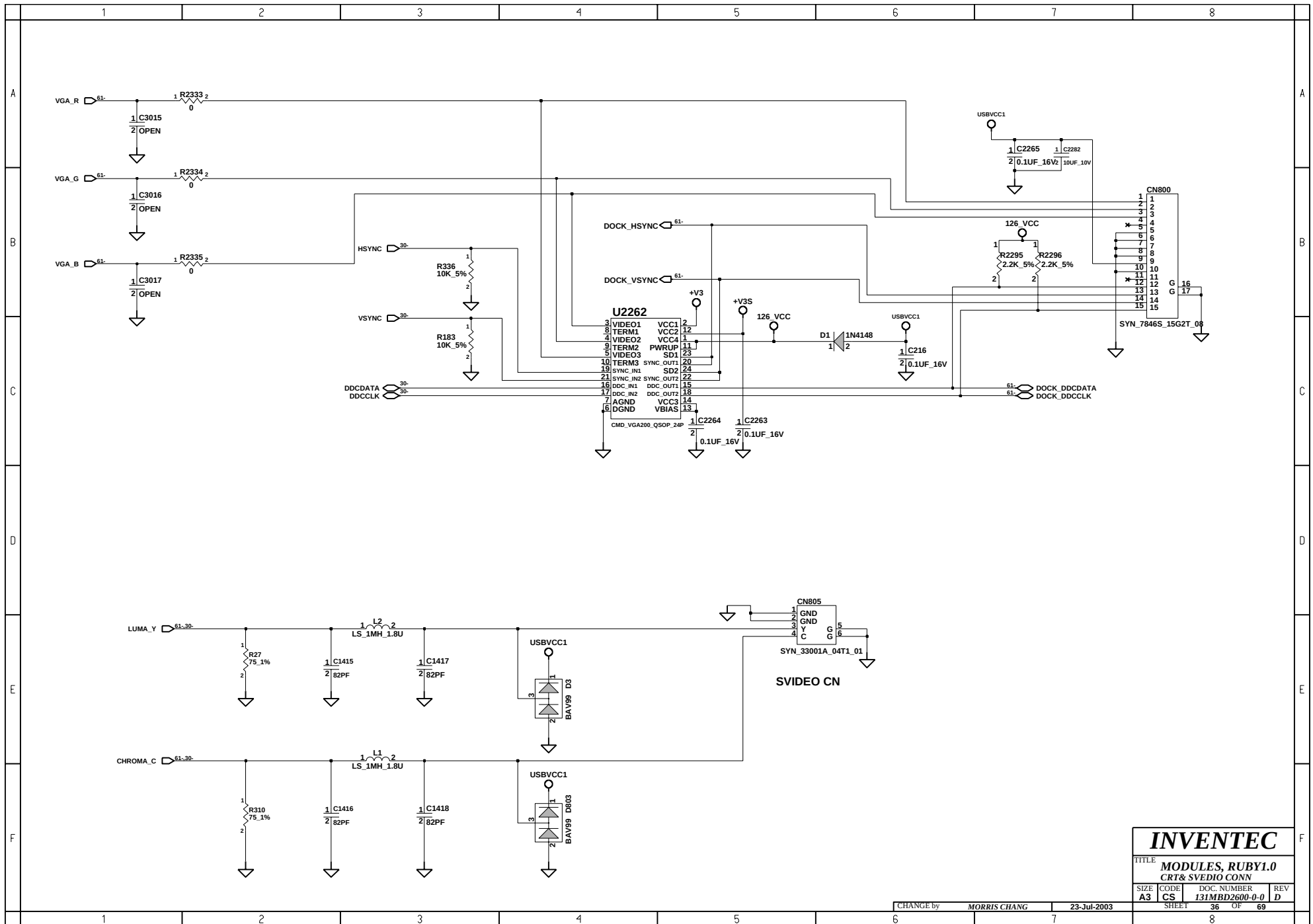
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MODULES, RUBY1.0
VIDEO RAM-2

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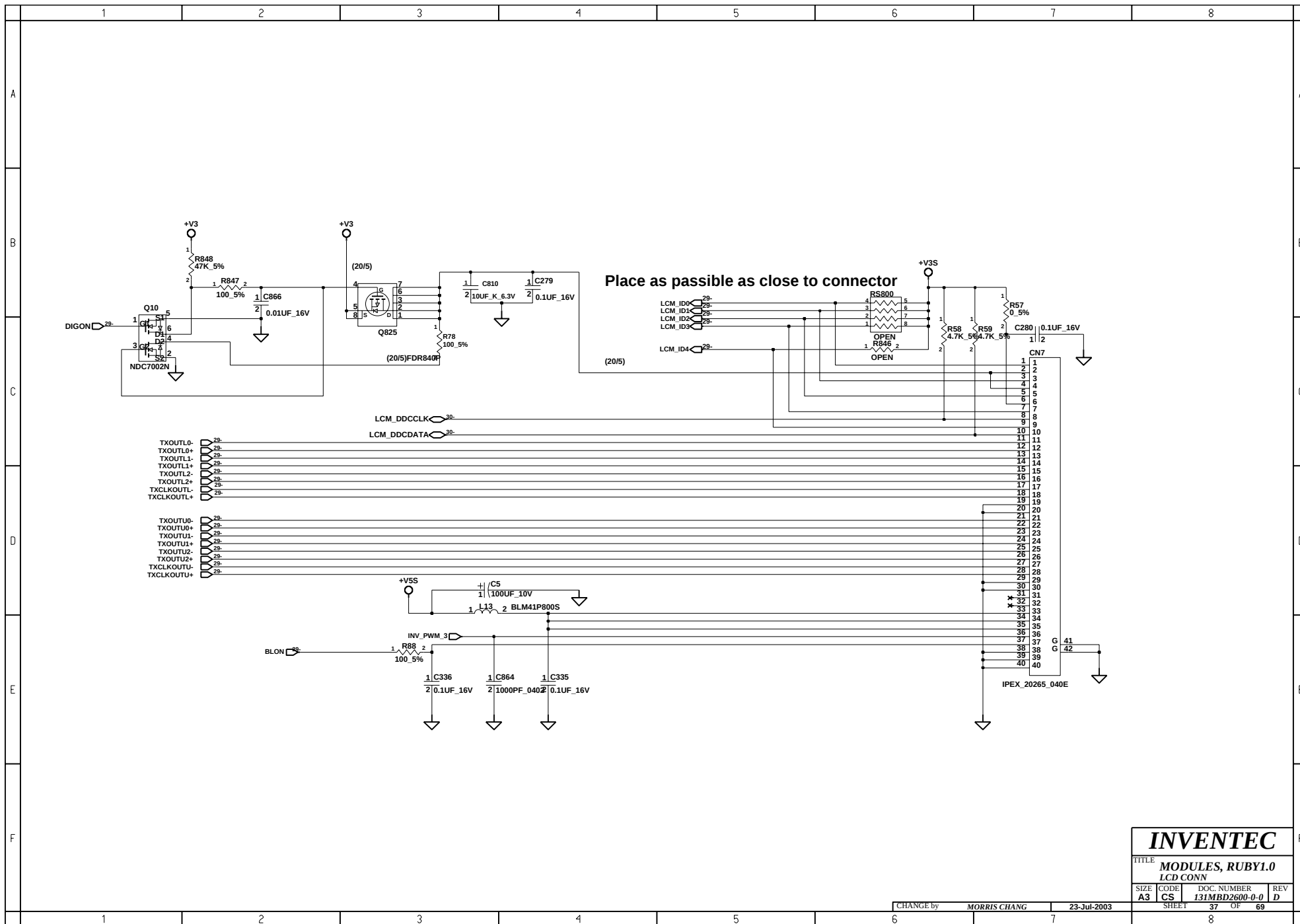
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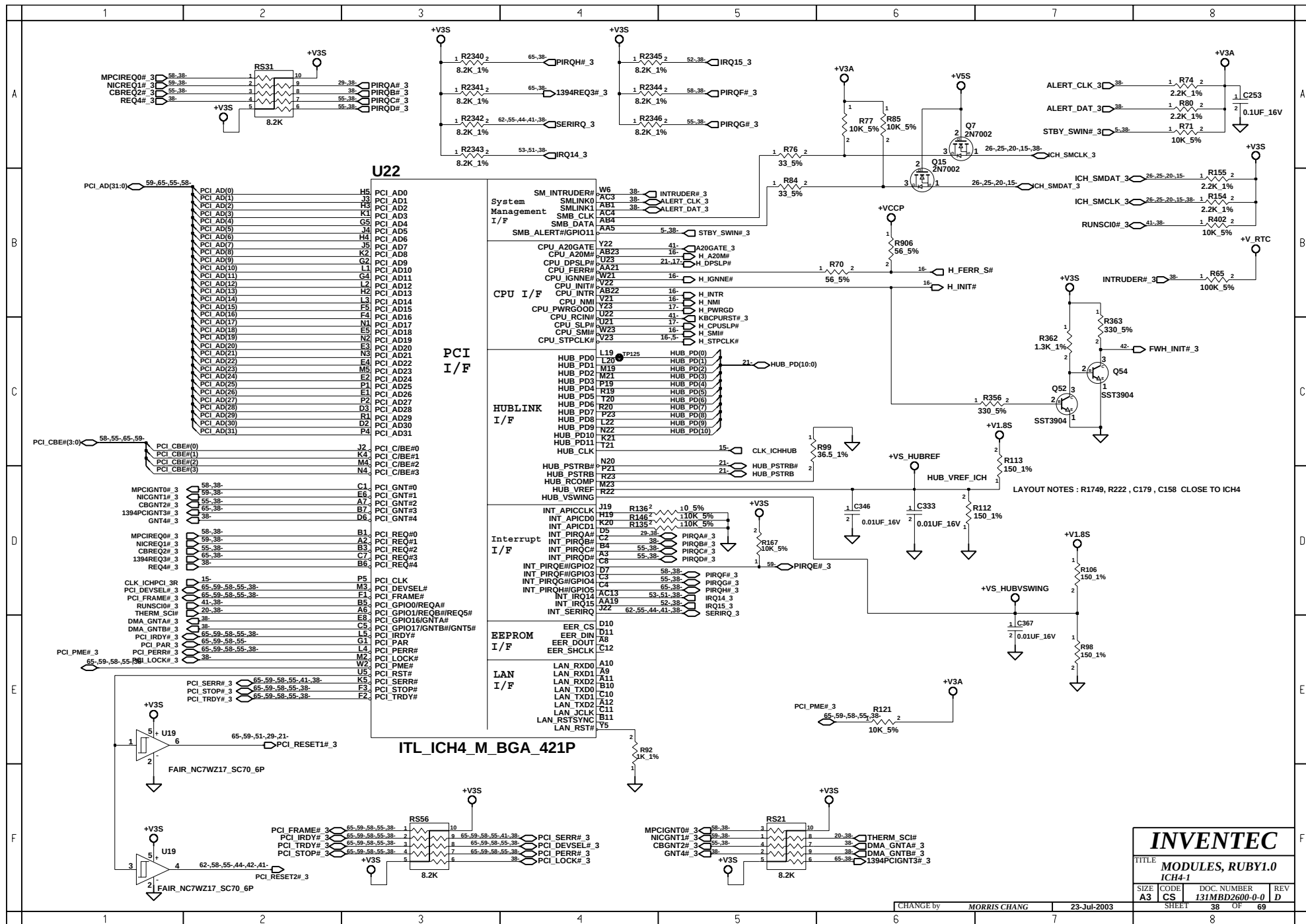
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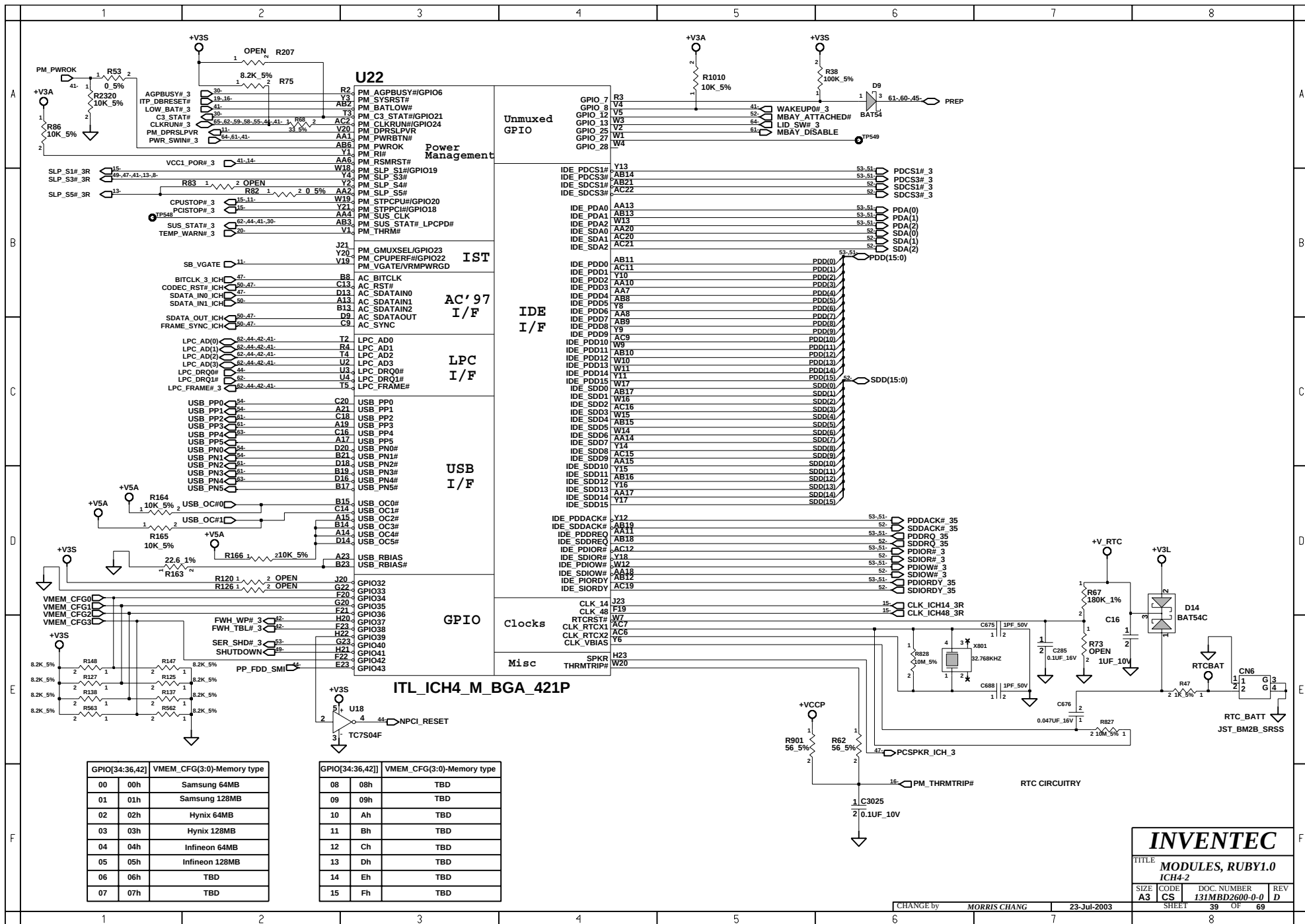
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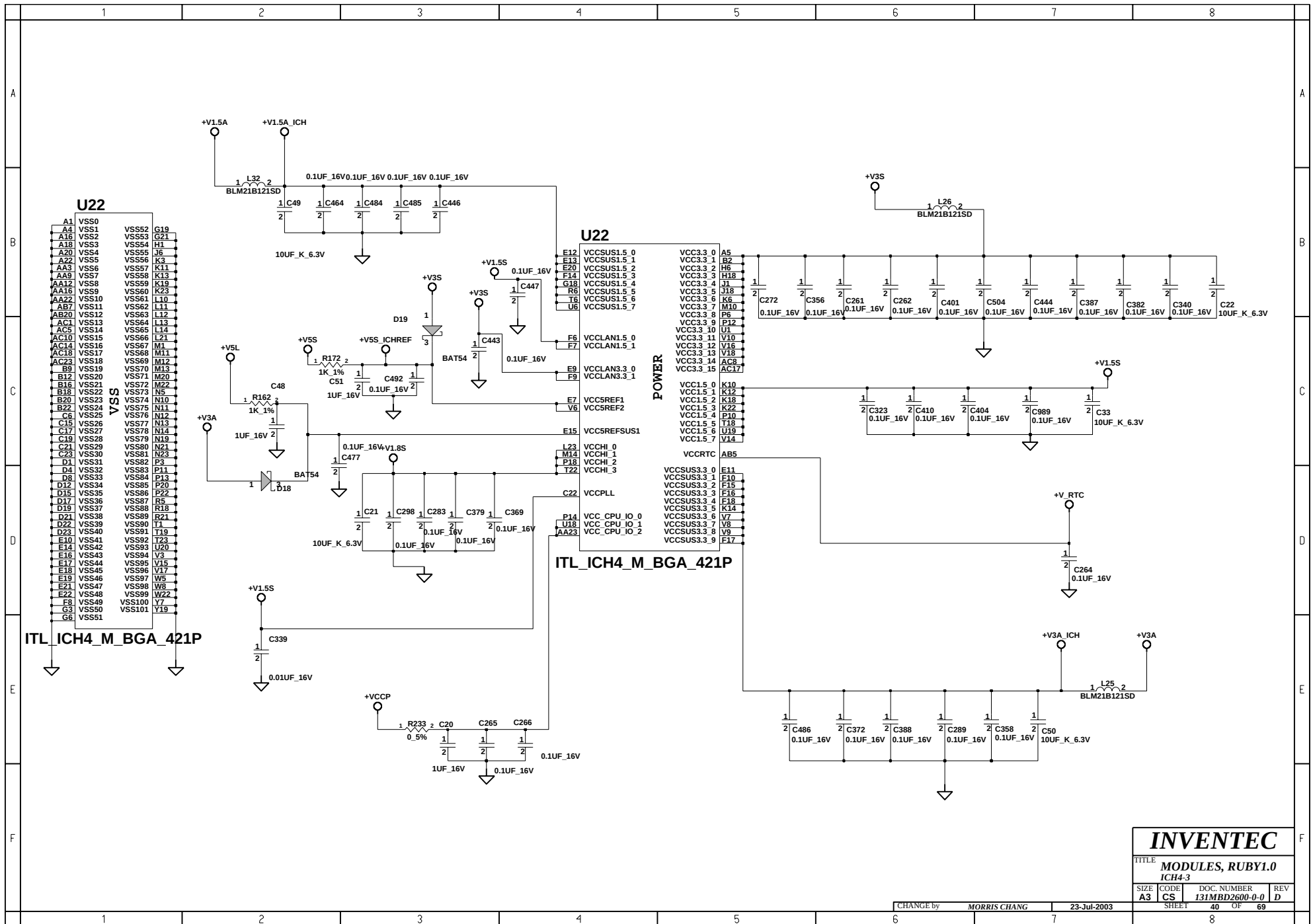
CHANGE by **MORRIS CHANG** 23-Jul-2003

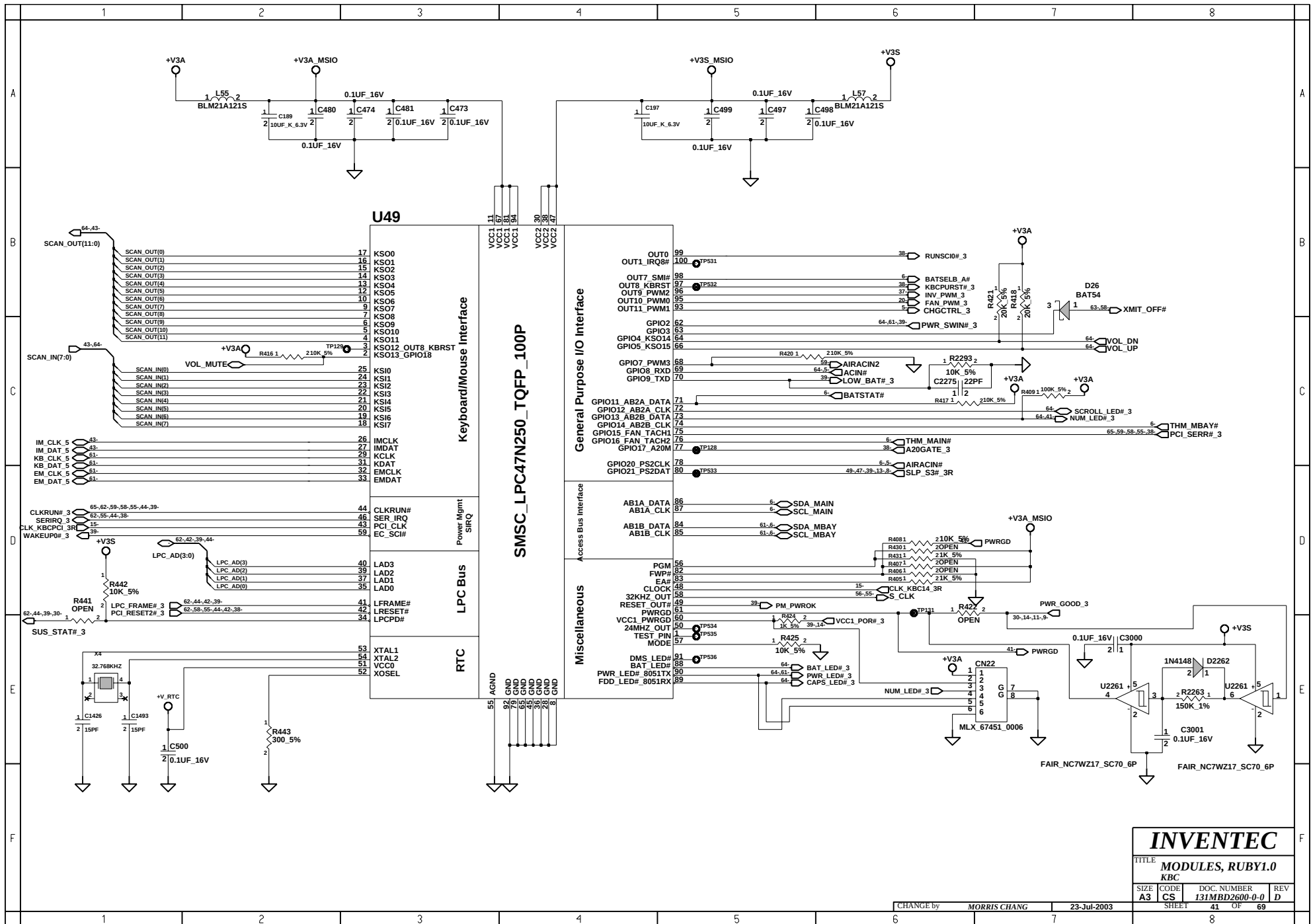
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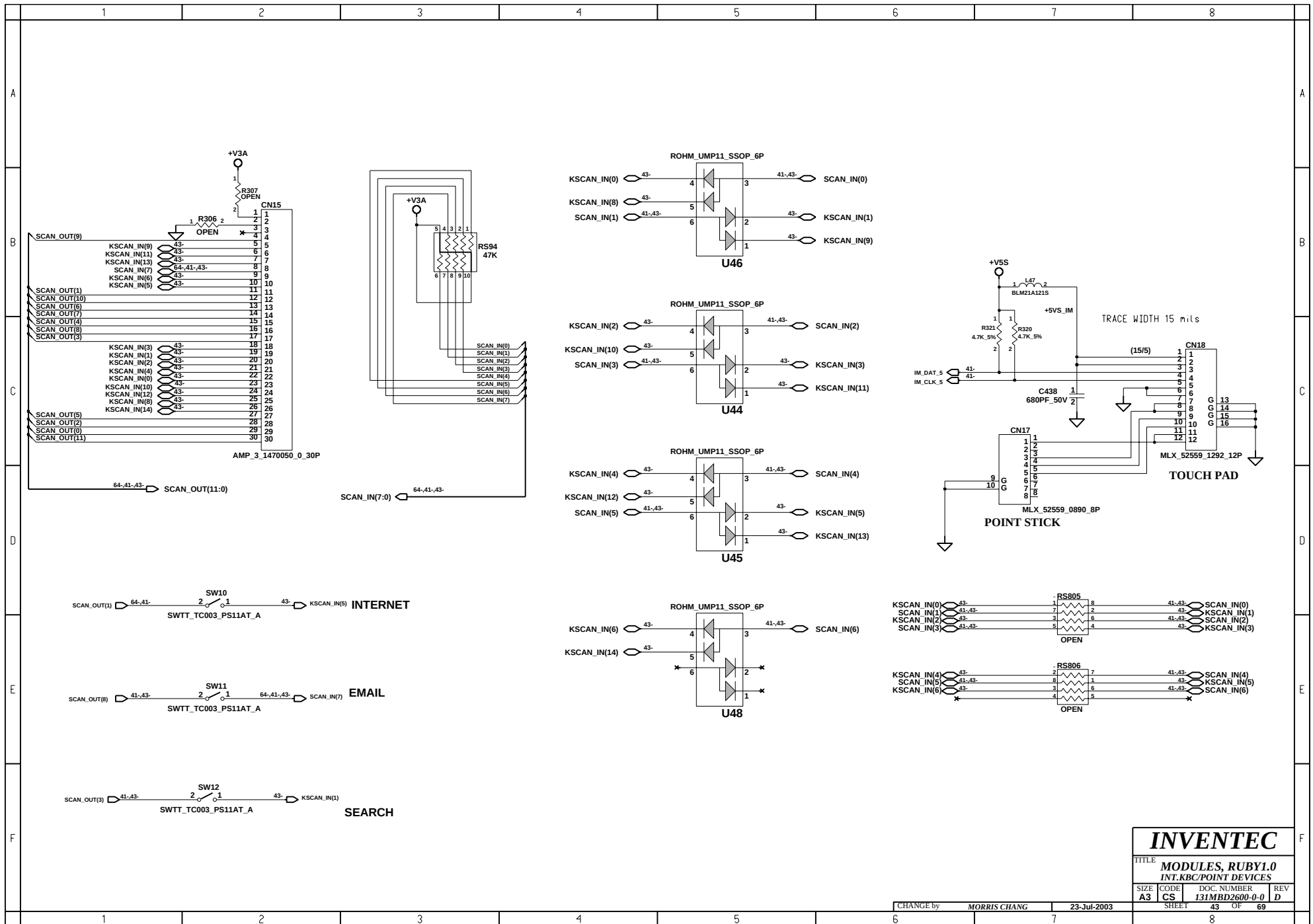


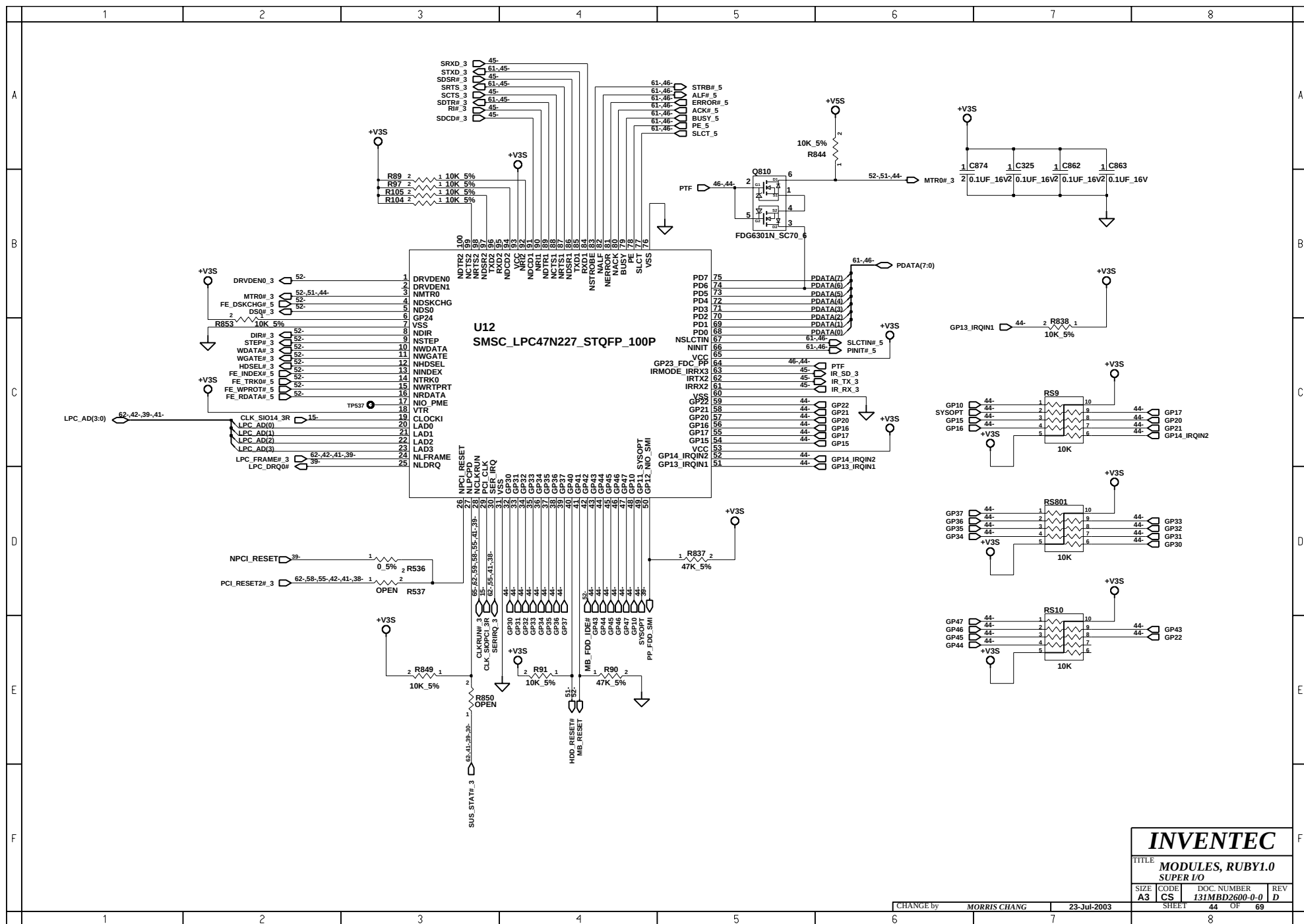


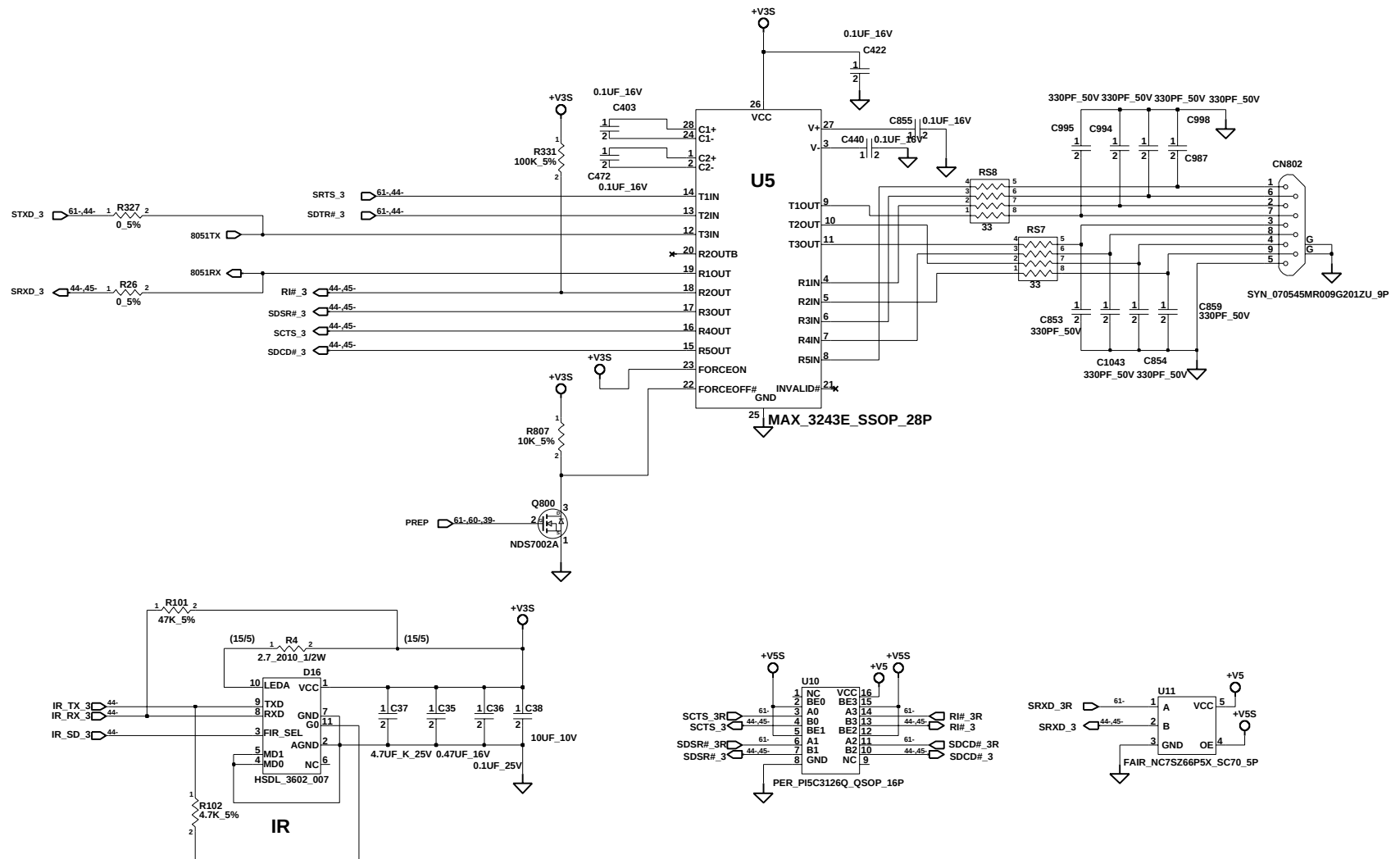


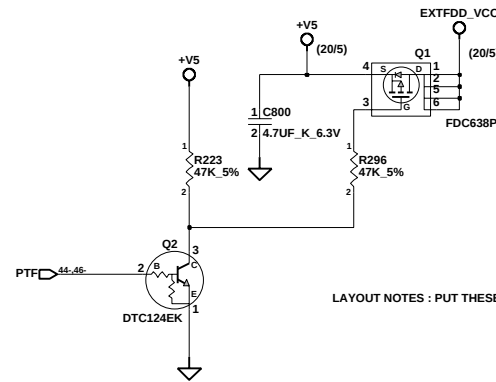
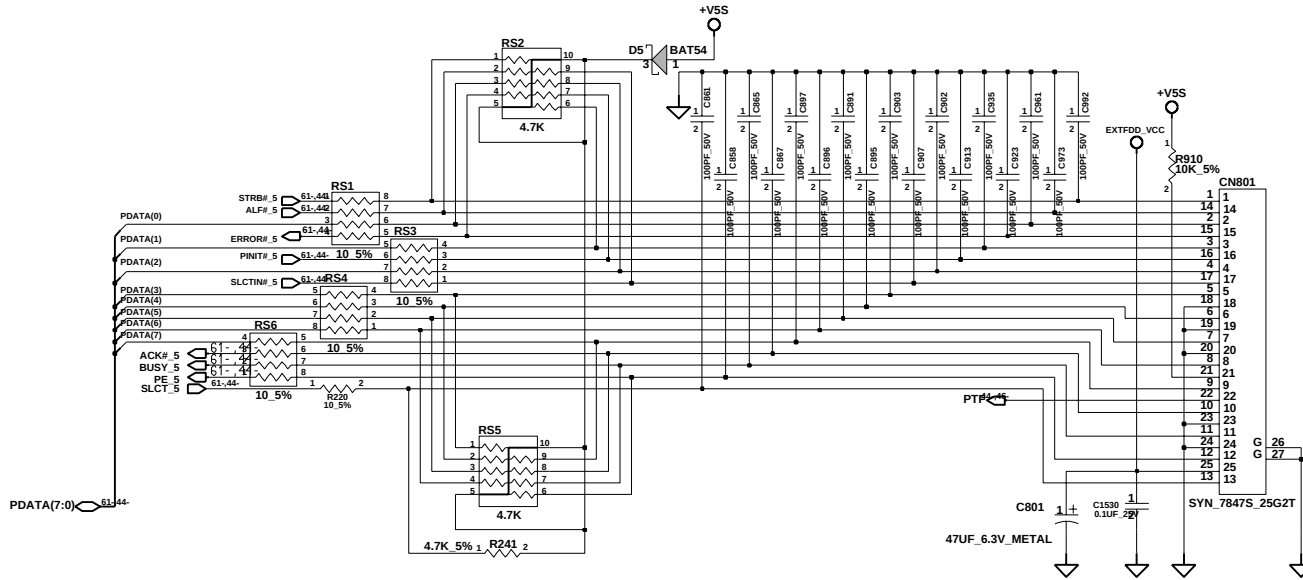






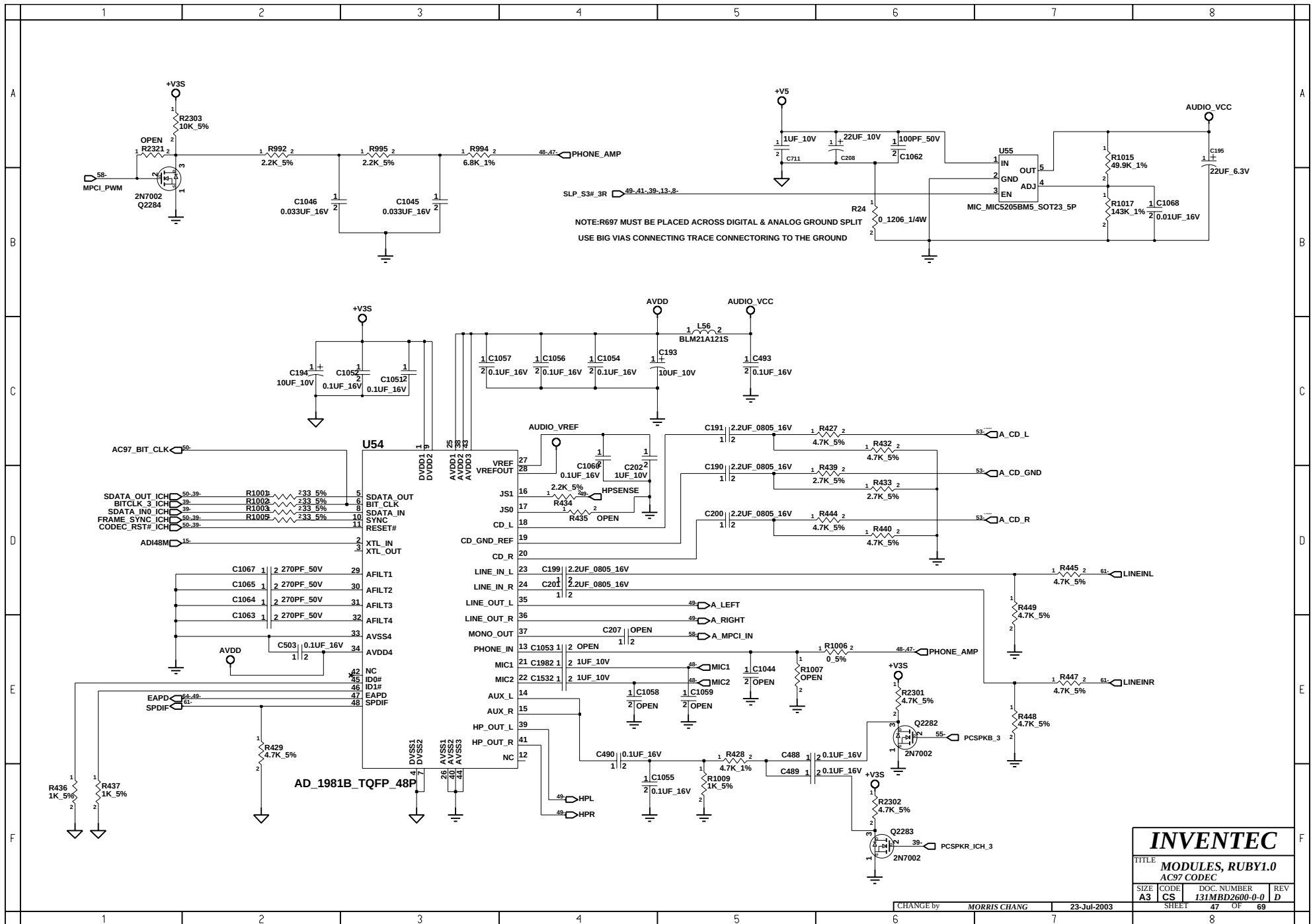


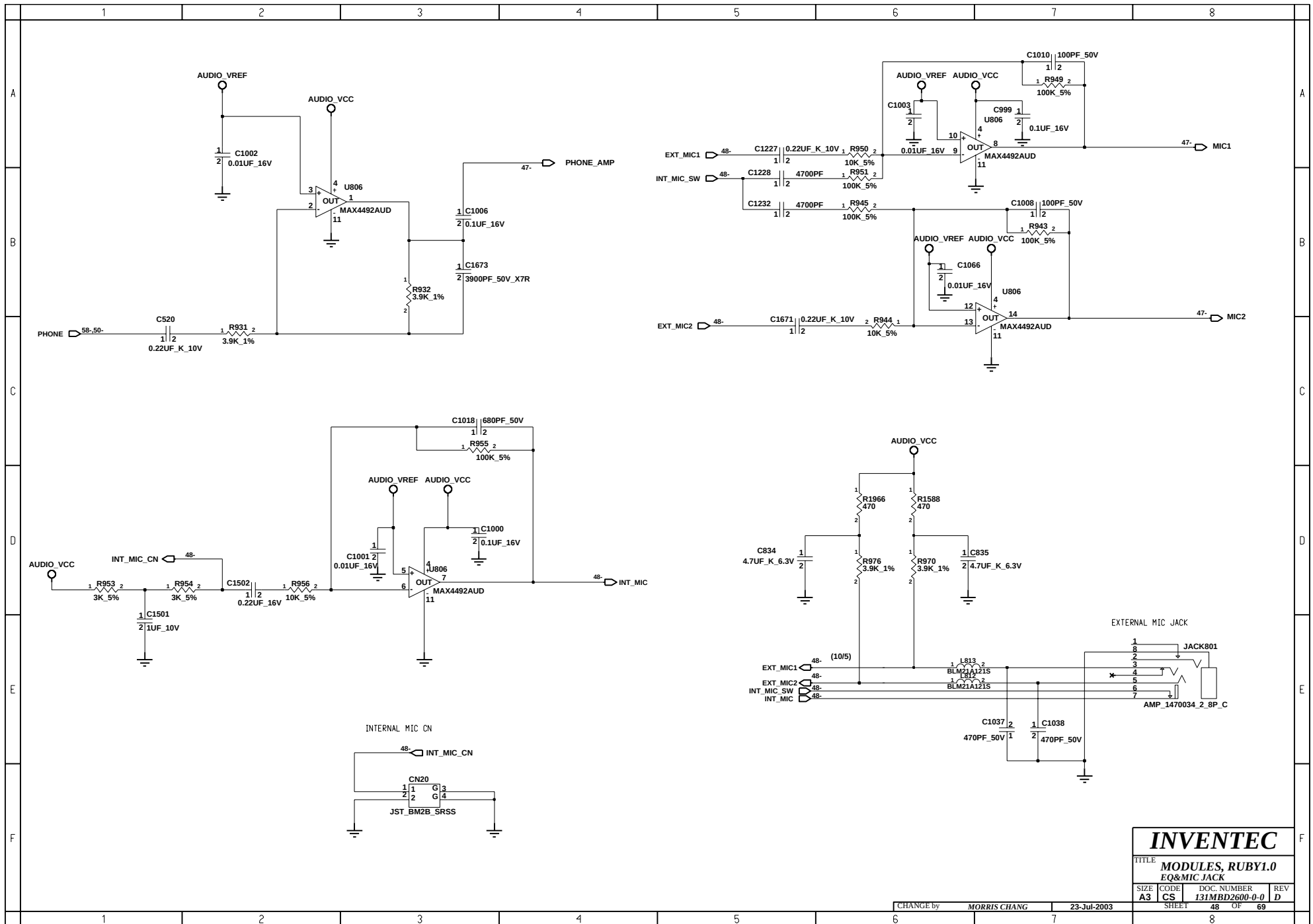




LAYOUT NOTES : PUT THESE CIRCUIT CLOSE TO PRINTPORT

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TITLE			
MODULES, RUBY1.0 PARALLER PORT			
SIZE	CODE	DOC. NUMBER	REV
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CHANGE by		23-Jul-2003	
MORRIS CHANG			
SHEET		46	69
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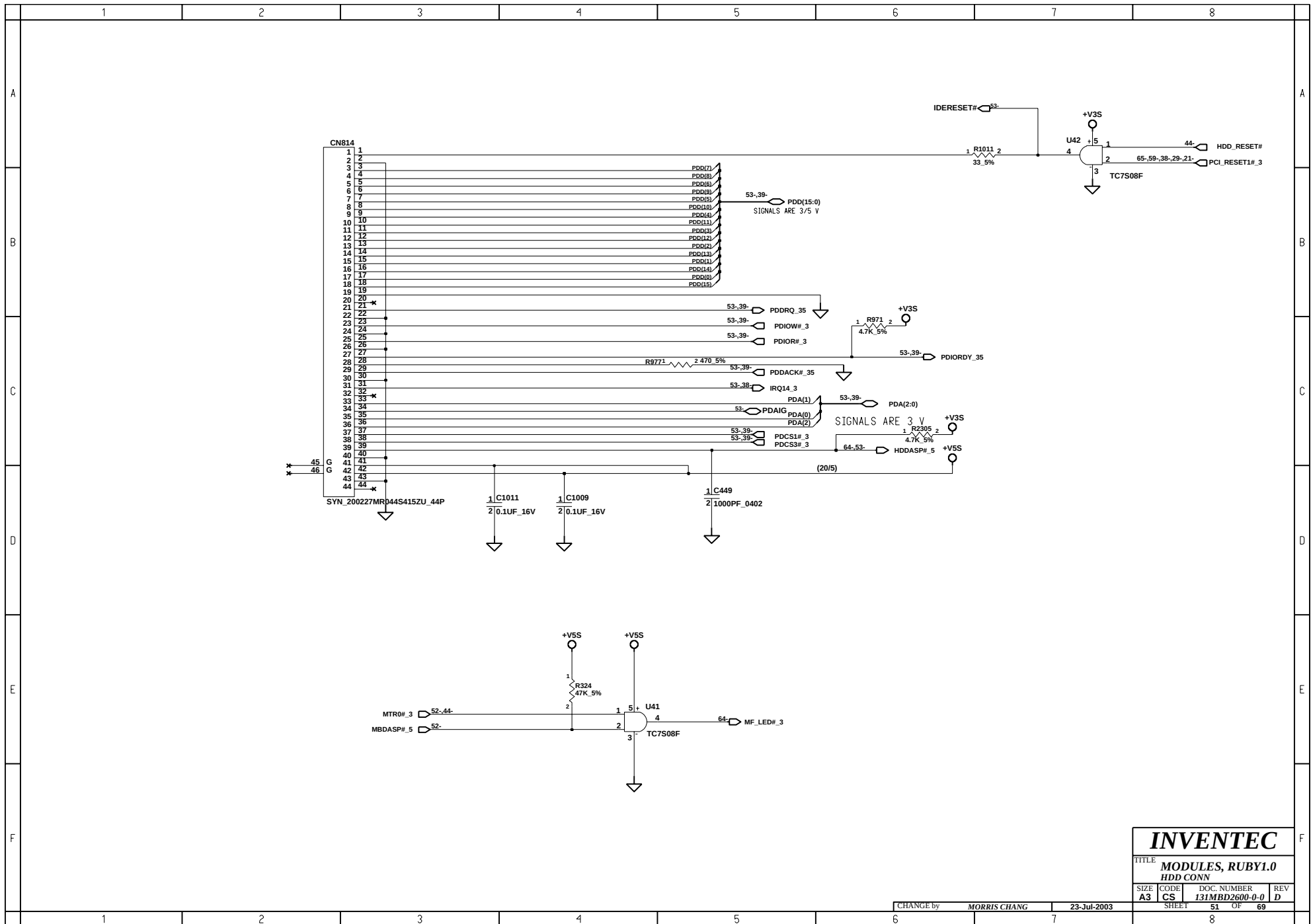
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MODULES, RUBY1.0
EQ&MIC JACK

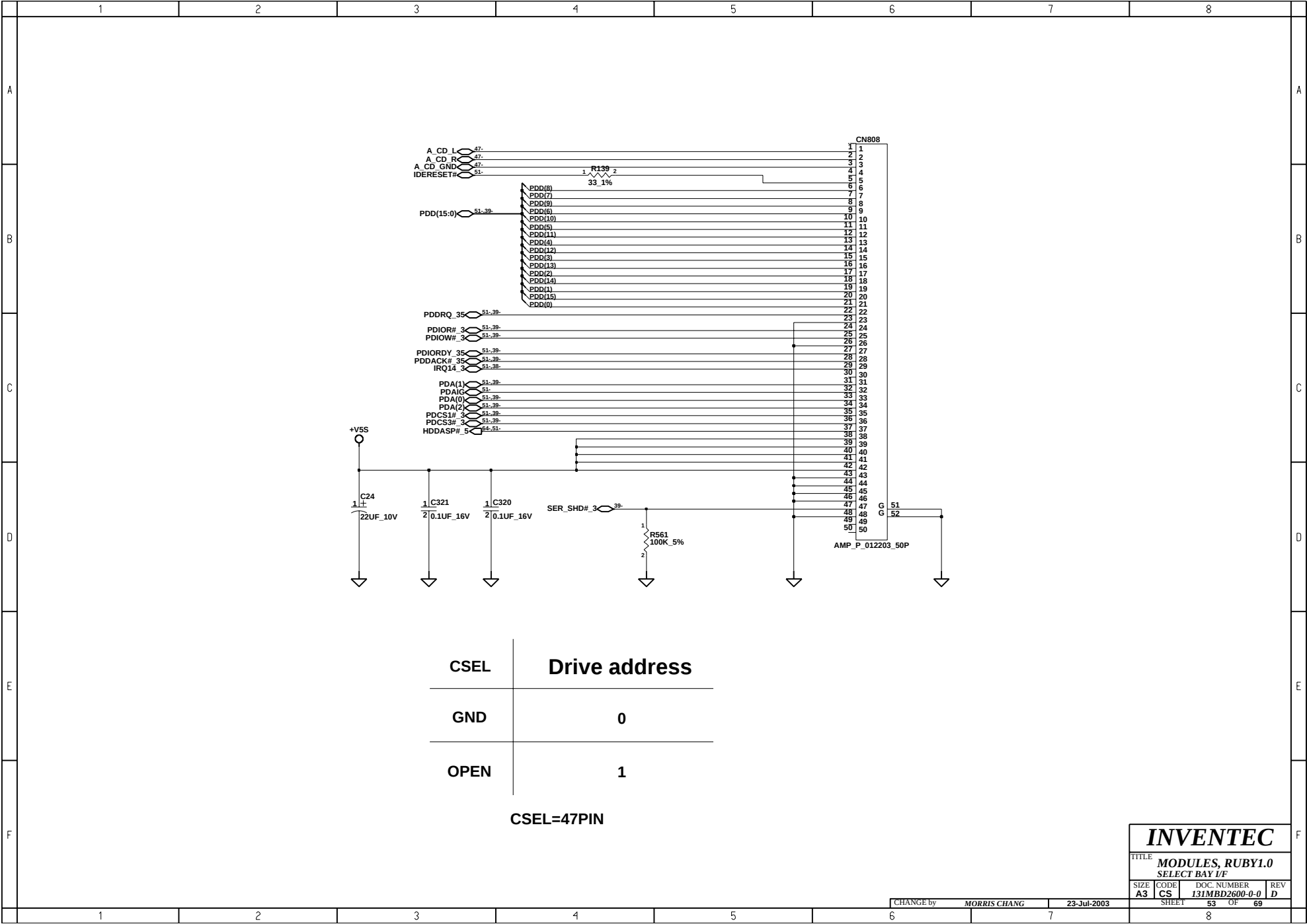
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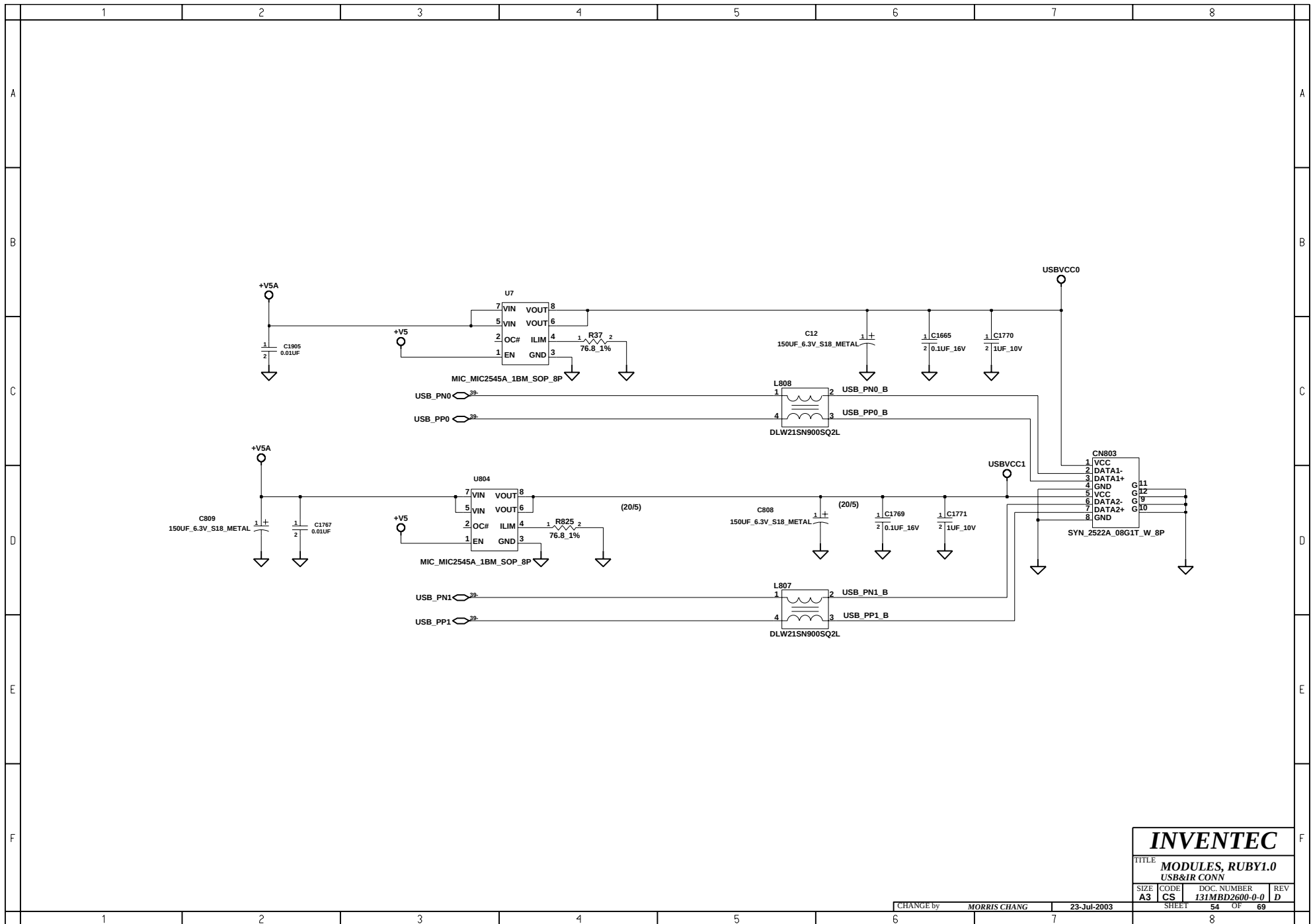
CHANGE by **MORRIS CHANG** 23-Jul-2003

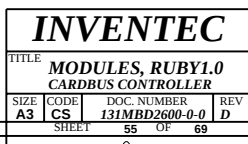
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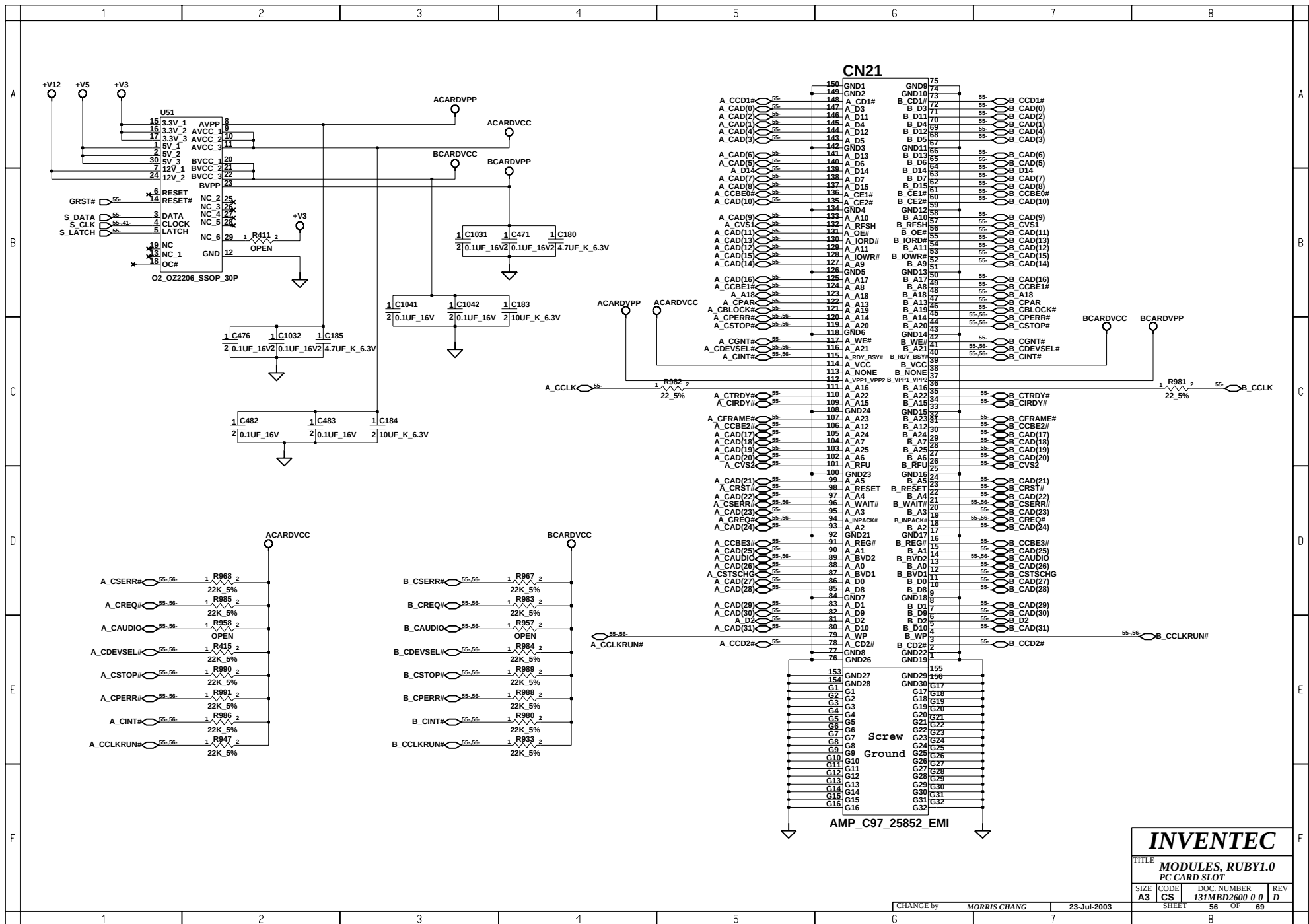


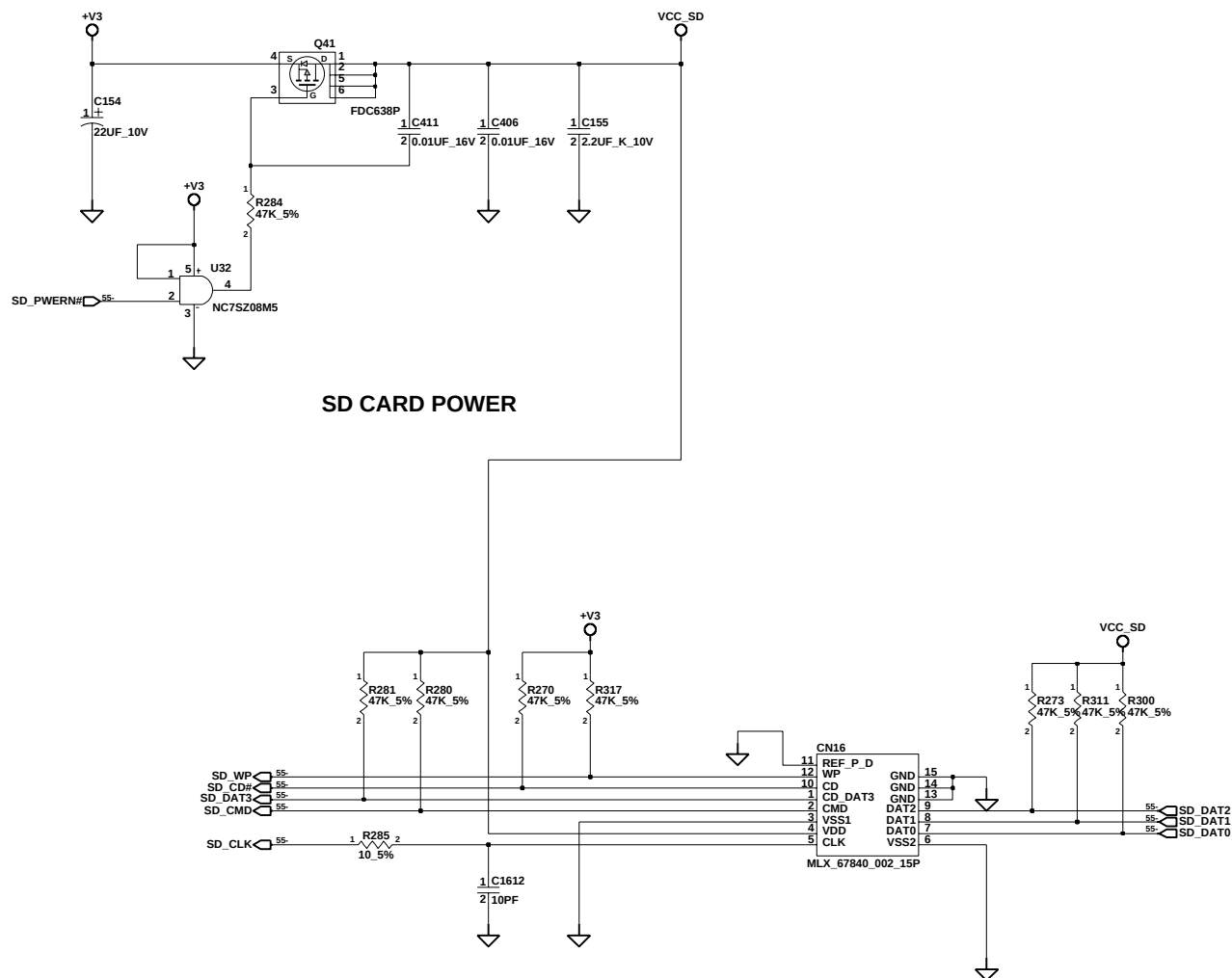
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SHEET		51	OF 69







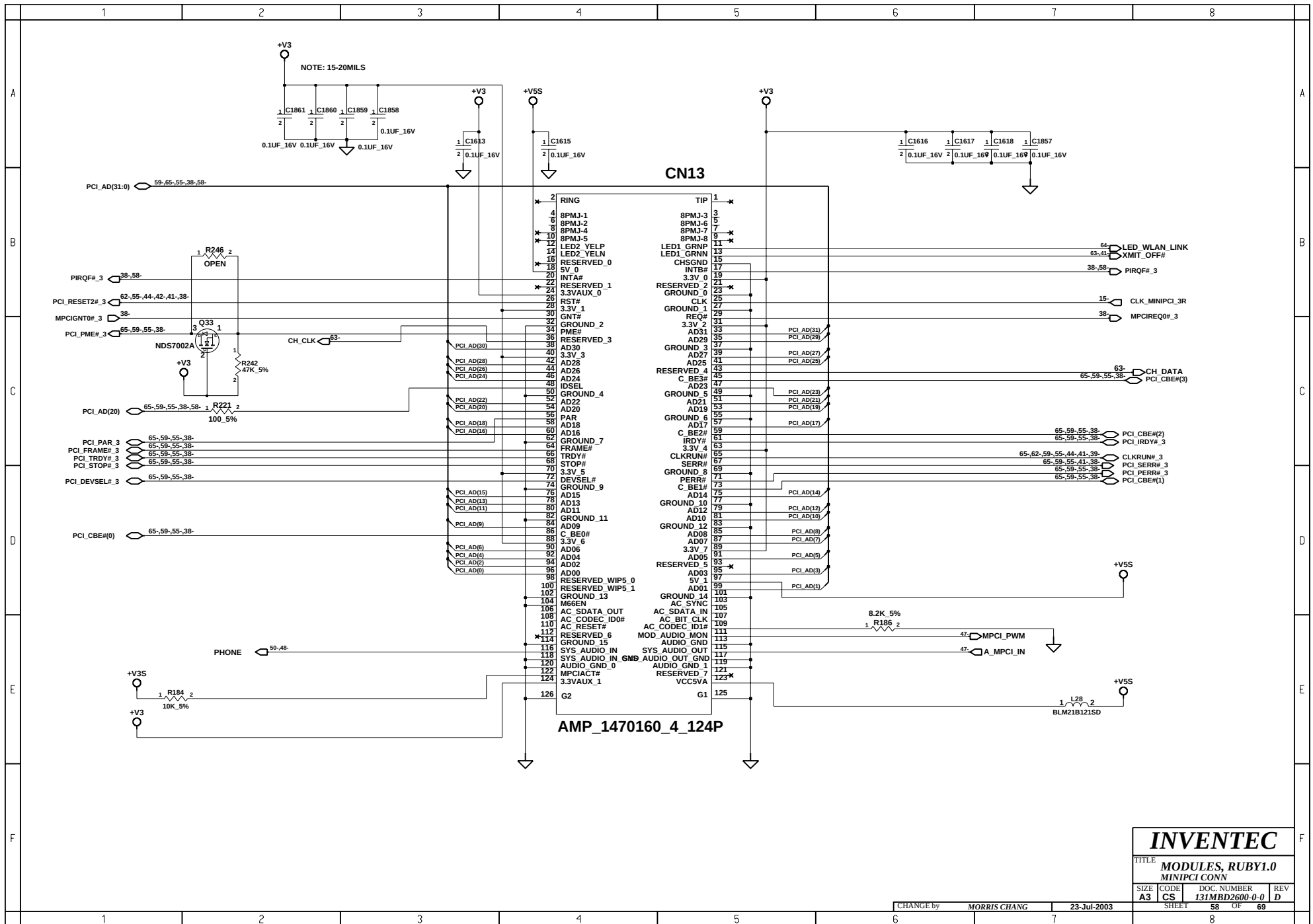


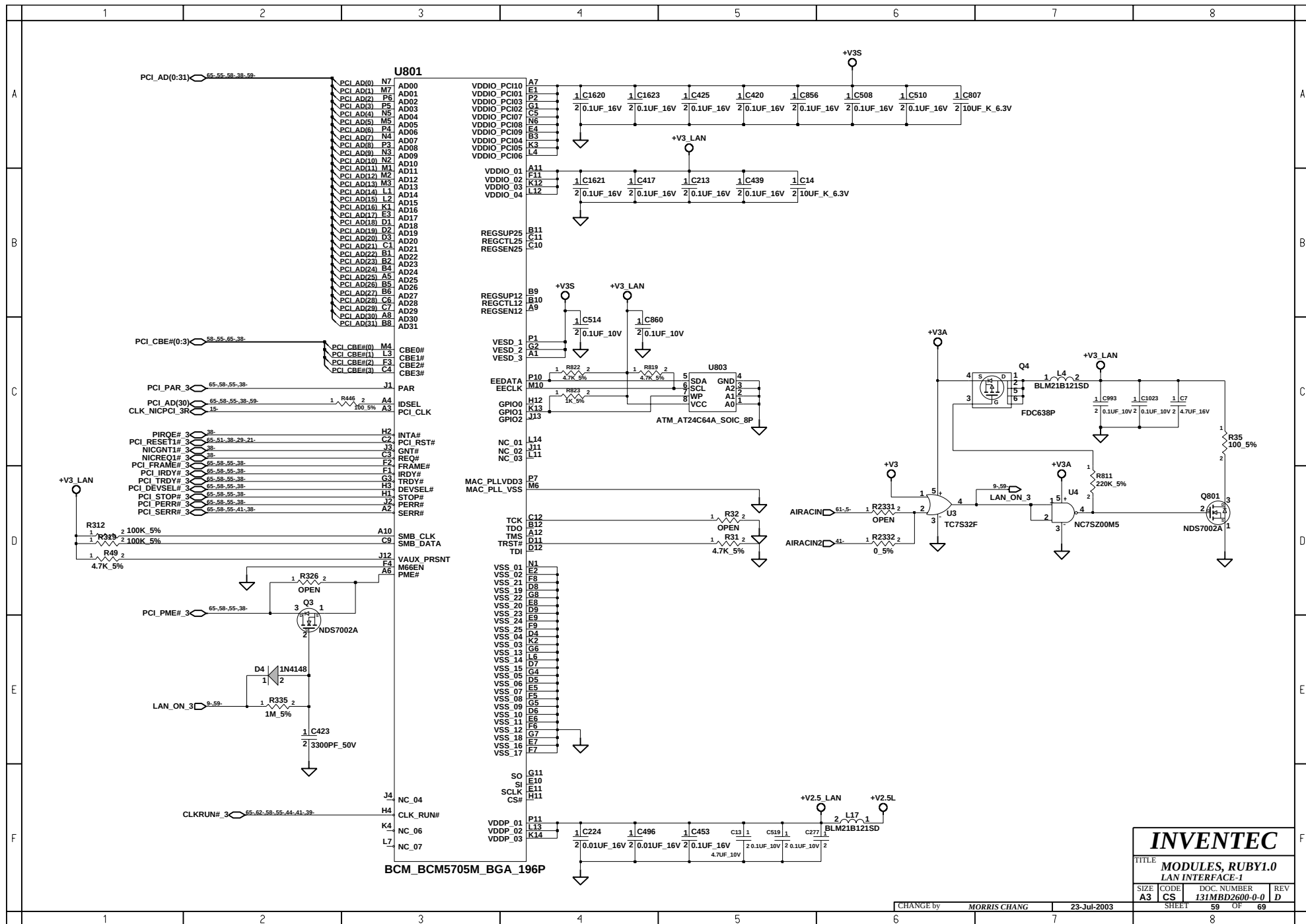


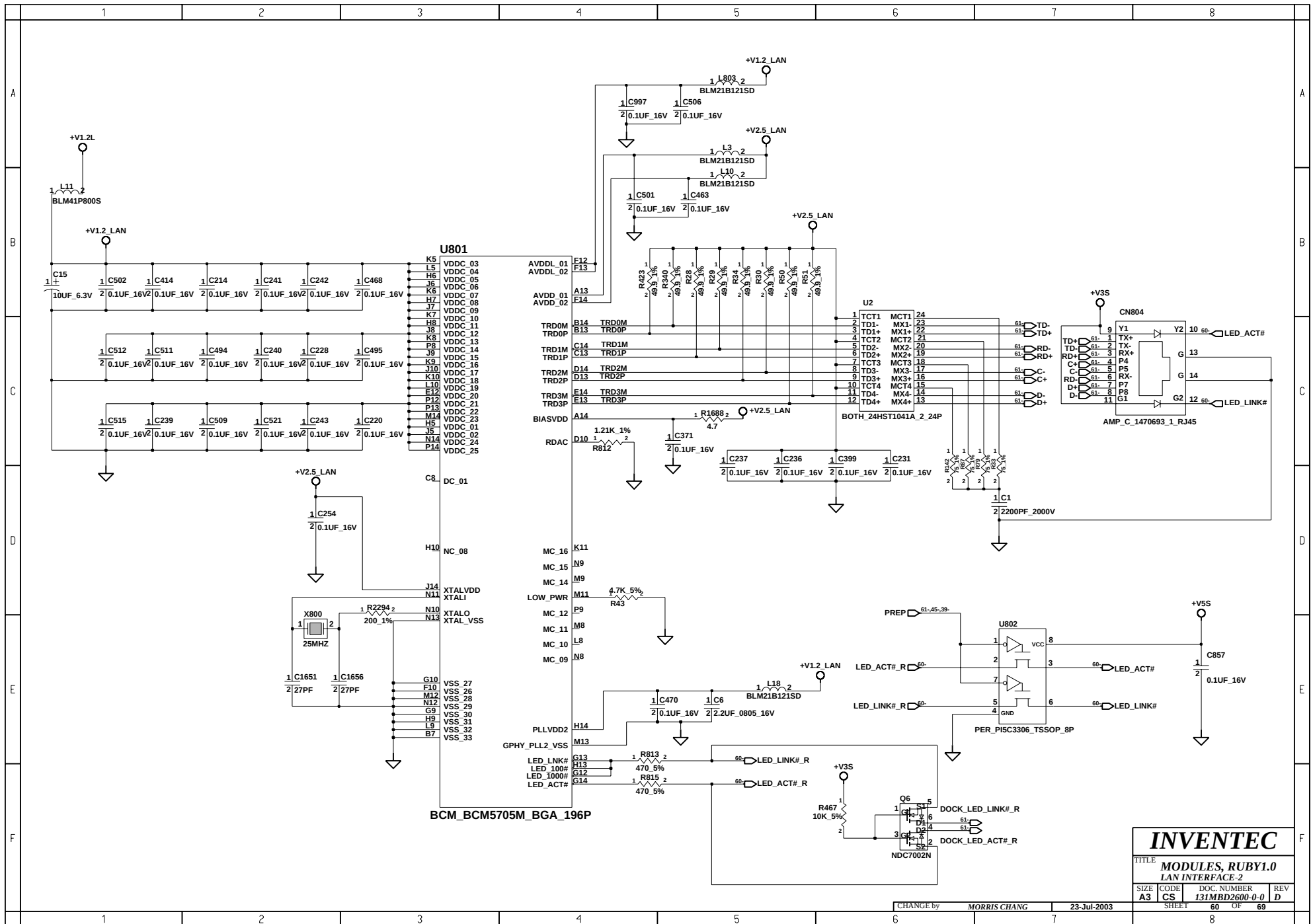
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CHANGE by		SHEET	OF
MORRIS CHANG		57	69

23-Jul-2003

8





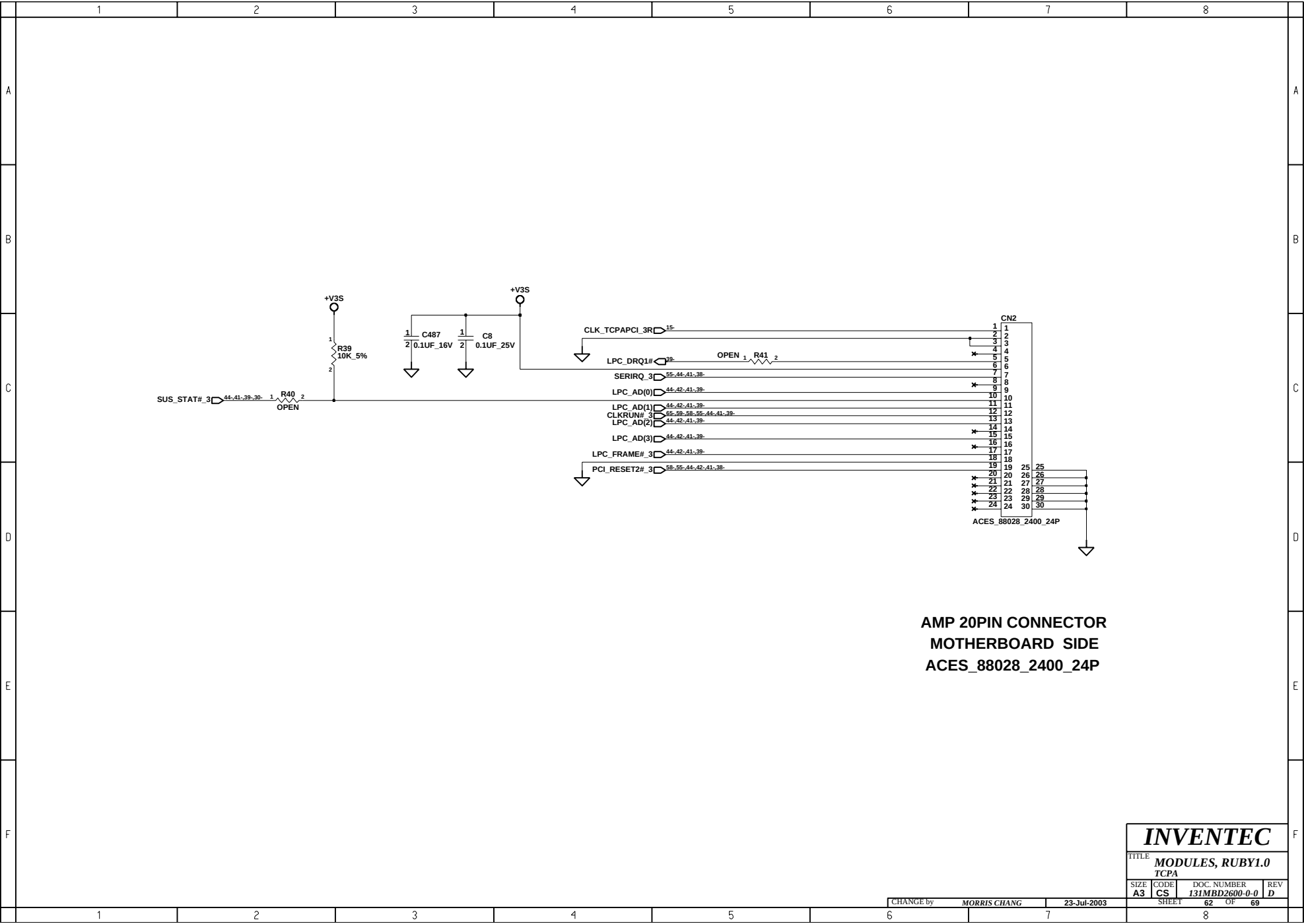


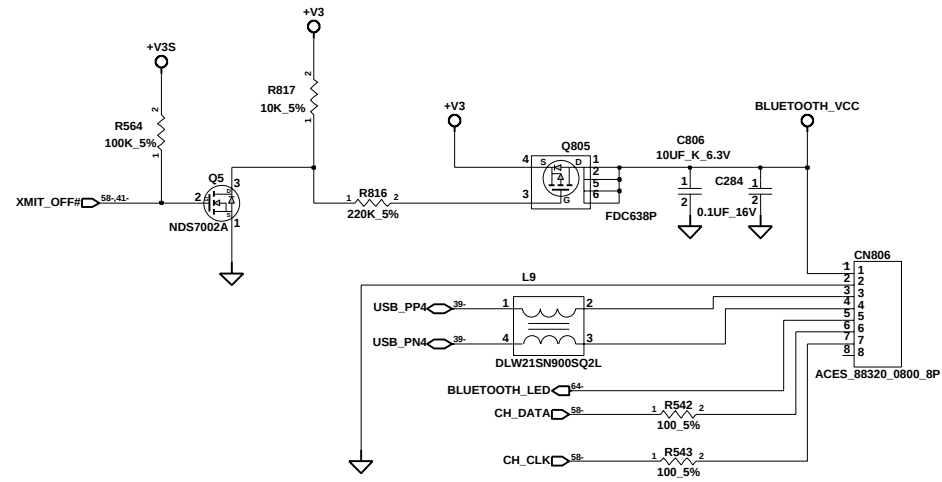
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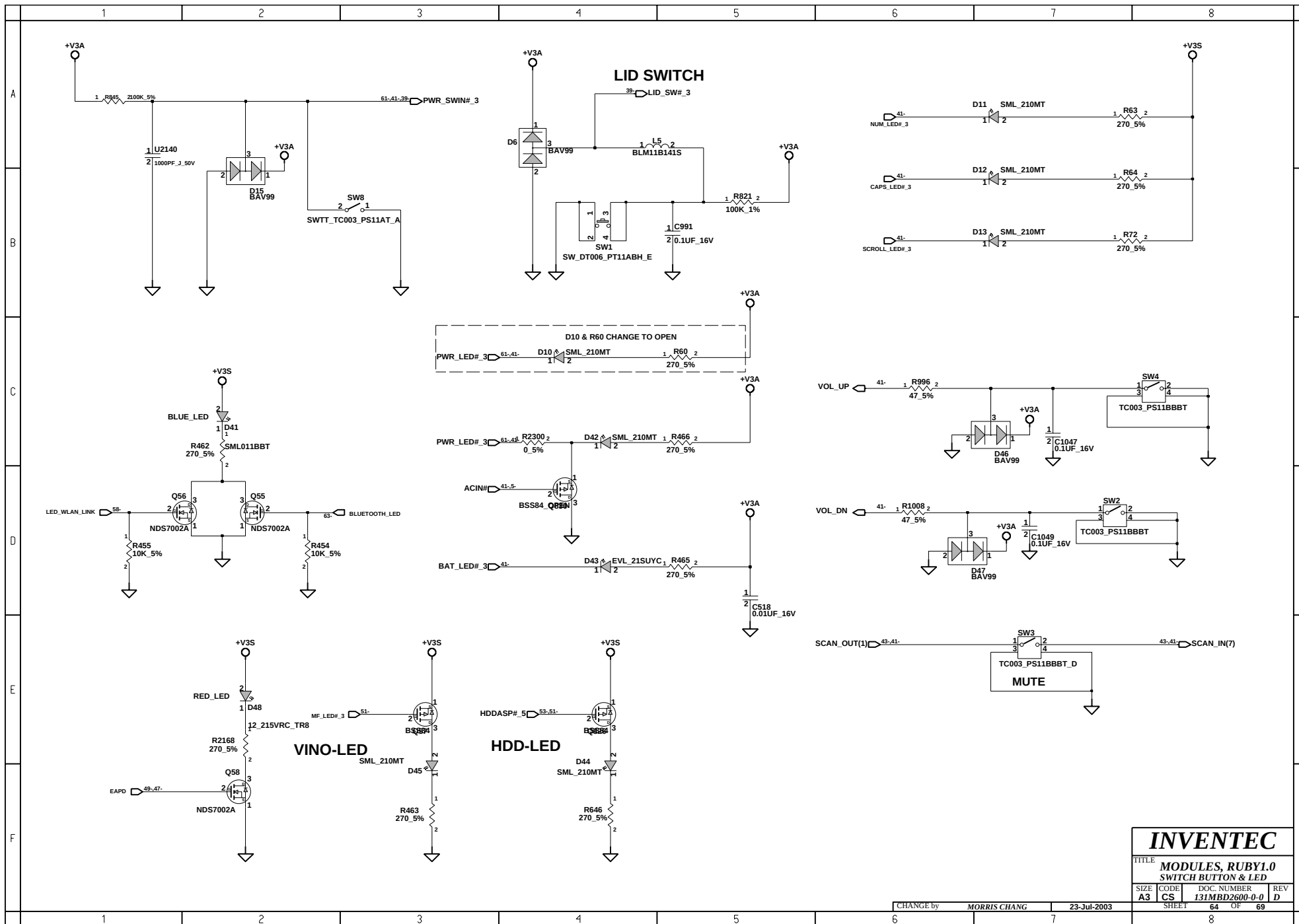
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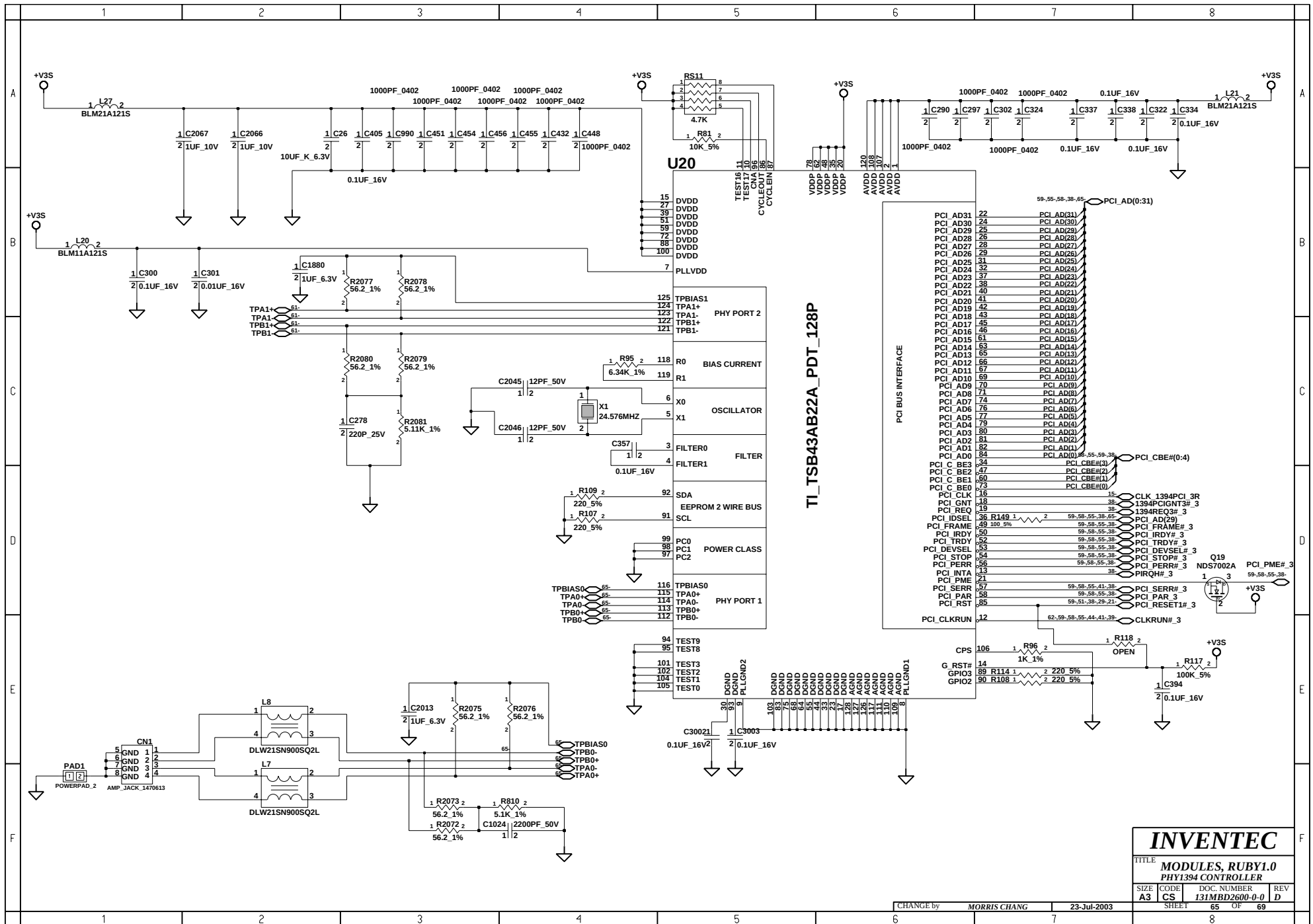
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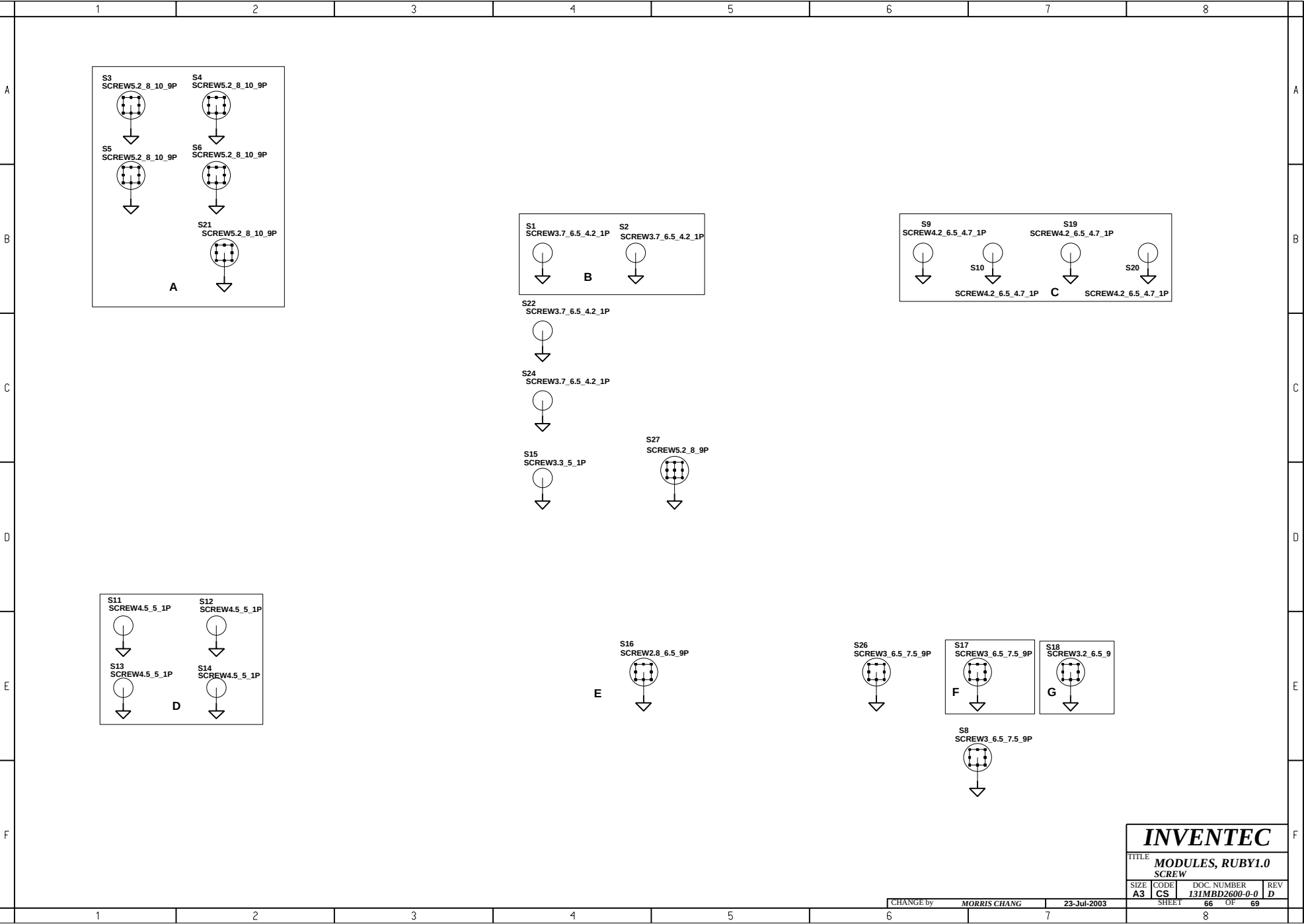




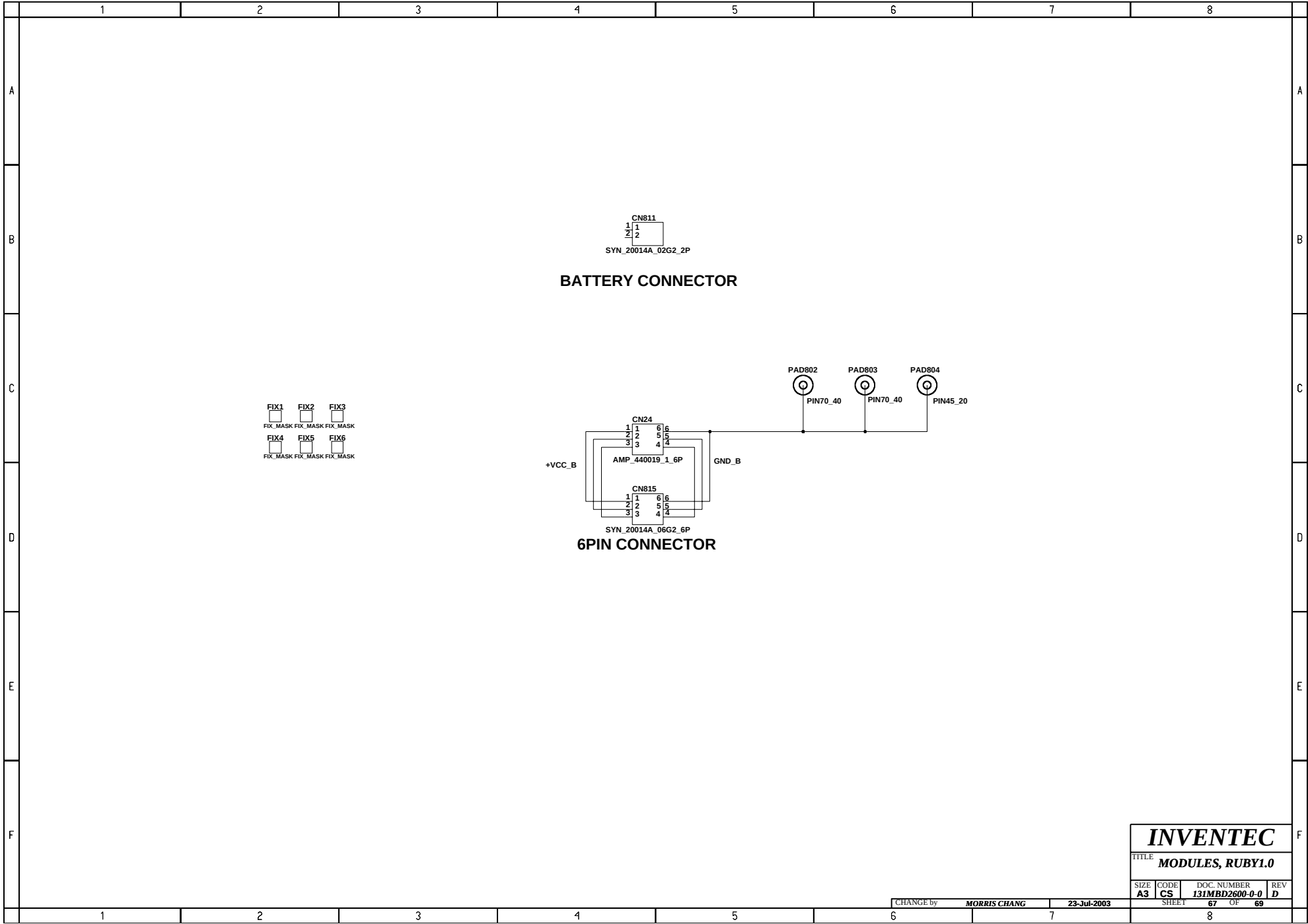
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CHANGE by		23-Jul-2003	
MORRIS CHANG			
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INVENTEC			
TITLE			
MODULES, RUBY1.0			
SCREW			
SIZE	CODE	DOC. NUMBER	REV
A3	CS	I31MBD2600-0-0	D
SHEET		66	OF 69



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SHEET 10

1. R1293 CHANGE FROM 4.99K TO 5.6K

2. R322 CHANGE FROM 10K TO 200K AND ADD CAP(0.01UF) IN R322 PIN2 TO GND

NOTE: FOR ATI POWER SEQUENCE

SHEET 11

1. ADD PM_VGATE DELAY CIRCUIT : U46 , U58 ,R426 , C525 , C526

2. R349 CHANGE FROM 1K TO 0 (OHM) AND ADD CAP (0.01UF) IN R349 RIN2 TO GND

NOTE : FOR PCI_RESET , PC1_CLOCK , PM_VGATE TIMING

SHEET 13

1. R1783 CHANGE FROM 220K TO 100K AND ADD CAP(0.1UF) IN R1783 PIN1 TO GND

NOTE : FOR ATI POWER SEQUENCE(ADJUSTED TIMING OF THE VDD15)

SHEET 14

1. R936 (INPUT TO U40 PIN2) CHANGE FROM 36.5K TO 182(OHM)

NOTE : FOR POWER SEQUENCE

SHEET 15

1. REMOVE Q54 , R390 CHANGE FROM 10K TO 0(OHM)

NOTE :SAME THE DIAMOND SYSTEM

SHEET 17

1. R229 , R230 , R291 CHANGE FROM 0(OHM) TO OPEN

NOTE: MEET THE INTEL RDDP SPEC.

SHEET 20

1. CN8 (FAN CONNECT) CHANGE FROM 5PIN TO 3 PIN

NOTE: MECHANICAL CHANGE

SHEET 29

1. ADD SERIES RESISTORS ON SB_STDS (R518) , ADSTBS_O(R519),ADSSTBS_1(R520)

2. CHANGE R894 49.9 TO 40.2(OHM)

3. AGP8X_DETb PULL HIGH POWER RAIL CHANGE FROM +V1.5ATIAGP TO +V3S

4 . ADD TEST POINT IN GPIO[4:7] GPIO[9:14]

5. VGA_GPIO[0:3] STATUS CHANGE FROM 10K PULL DOWN TO 10K PULL UP (+V3S)

6. ADD 1K PULL DOWN ON GPIO8

7. ADD 1K PULL DOWN RESISTOR TO PREVENT LEAKAGE FOR SOME ZV_LCDDATA , ZV_LCDCNTL PIN (ZV_LCDDATA[5:15] , [18:19], ZV_LCDCNTL[0:3])

8. ADD 10K PULL DOWN RESISTOR TO PREVENT LEAKAGE FOR ZV_LCDDATA[16:17]

NOTE: ABOVE ITEMS FOR ATI RECOMMED

9. R879 , R880 CHANGE FROM 1K TO 3K

NOTE: FOR +V3A POWER RAIL(ATI-VREFG)

SHEET 30

1. ADD 0 OHM SERIES RESISTOR ON THE PATH OF OSC OUTPUT TO XTALIN AND XTALOUT

NOTE : SELECT FREQUENCY ENTER CHANNEL

2. ADD 10K(R531) PULL UP TO +V3S

NOTE: FOR ATI RECOMMED

SHEET 32

1. L36 CHANGE FROM BLM11A121S TO BLM21A121S

NOTE: FOR ATI RECOMMED

SHEET 33

1. ADD VGA DAMPING PESISTOR

NOTE: FOR ATI RECOMMED

SHEET 39

1. U22-V19(PM_VGATE/VRMPWRGD) CHANGE FROM PM_VGATE TO SB_VGATE

2. (VMEM_CFG3)ADD OPEN(R513) PULL-UP TO +V3S AND 8.2K(R512) PULL-DOWN

3. CREATE RUBY VIDEO MEMORY CALL-BACK DEFINITION TABLE

SHEET 43

1. ROTATE CN16(THE KEYBOARD CONNECT) : 180 POINT OF VIEW

2. ROTATE CN18(THE TOUCH-PAD CONNECT) : 180 POINT OF VIEW

3. CHANGE CN17(STICK POINT) GEOMETRIC(LAYOUT PATTERN)

SHEET 48

1. CHANGE JACK801(MIC JACK) GEOMETRIC(LAYOUT PATTERN)

SHEET 49

1. CHANGE JACK802(EAR-PHONE JACK) GEOMETRIC(LAYOUT PATTERN)

SHEET 51 '53

1. IRQ14_3: CN808(PAGE53) PIN29 CONNECT TO CN814-PIN31(PAGE51)

2. PDCS1#: CN808(PAGE53) PI35 CONNECT TO CN814 -PIN37(PAGE51)

3. HDDASP#_5: CN808(PAGE53) PIN37 CONNECT TO U35-PIN1(PAGE51)

4. PDIAG#: CN808-PIN32(PAGE53) CONNECT TO CN814-PIN34(PAGE51)

5. IDERESET#: R139-PIN1(PAGE53) CONNECT TO U36-PIN4(PAGE51)

NOTE : FOR OPTICAL DRIVE

SHEET 55

1. SWAPPED BELOW SIGNAL : PCI_AD(7)&PCI_AD(8), B_CAD(10)&B_CAD(11), B_CAD(14)&B_CAD(15)

SHEET 65

1. C126 CHANGE VALUE FROM 0.01UF TO 0.1UF

NOTE : REFERENCE TI 1394 CIRCUIT

SHEET 66

1. ADD BELOW SCREW (S21 , S22 , S24 , S26)

2. REMOVE BELOW SCREW (S15)

NOTE: MECHANICAL CHANGE

02 11 CHANGE LIST

SHEET 11

1. R348 TO OPEN

SHEET 29

1. ADD (R521,R522,R523,R524,R525, R527 , R528,R529,R530,R534) 0 (OHM) SERIES RESISTOR WOULD BE USEFUL IN TUNING AGP

SHEET 53

1. OPTICAL DRIVE(CN808) CHANGE CONNECT TO AMP_P_012203_50P

SHEET 65

1. U57 ,R526, R535 RESERVE FOR GUID

02 12 CHANGE LIST

SHEET 20

1. CHANGE CN8 PIN2 CONNECTION FROM GND TO Q43 PIN3

CN8 PIN3 CHANGE TO OPEN

SHEET 39/44

1. ADD INVERTER BETWEEN , PIN H22(GPIO39) OF U22 AND NPCI RESET (PIN26) OF U10. PCI_RESET#_3 WILL NOT LONGER BE CONNECTED TO PIN 26 OF U10

02 14 CHANGE LIST

SHEET 10

1. ADD SCHMITT BUFFER BETWEEN R322 PIN2 AND PIN10(ON1) OF U38

SHEET 26

1. ADD DDR-THERMAL SENSE PARTS(U57, R512,R513)

SHEET 29

1. ADD TEST POINT TO PINS AK19, AH19, AH20,AG20

SHEET 30

1. ADD TEST POINT TO PINS AE25

2. REMOVE C247,C248,R542,R543

3. CHANGE U17 FROM ICS_MK1707S TO SM560

SHEET 39

1. R512 , R513(REFERENCE) CHANGE TO R562 , R563

SHEET 49

1. ADD 0.1UF CAPACITOR BETWEEN ANALOG AND DIGITAL GROUND ON PIN8 OF JACK802

SHEET 53

1. ADD 1K RESISTOR PULL-DOWN TO PIN47 OF CN808

SHEET 65

1. ADD 1K RESISTOR PULL-DOWN TO PIN7 OF U57

2. CN1 PINOUTS ARE REVERSED

3. L9(BLM11A121S) CHANGE TO POWER_PAD2

4. U57(REFERENCE) CHANGE TO U61

SHEET 66

1. ADD SCREW (S15))

SHEET 39/53

1. U22 PIN G23(GPIO40) CONNECT TO CN808 PIN47

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CHANGE by

MORRIS CHANG

23-Jul-2003

SHEET

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OF

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INVENTEC

TITLE

MODULES, RUBY1.0

CHANGE LIST

SIZE

A3

CODE

CS

DOC. NUMBER

131MBD2600-0-0

REV

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RUBY SI BUILD CHANGE LIST

1. ADD OPC CIRCUIT ON PAGE5.
2. R2169 CHANGE FROM 10K TO OPEN ---PAGE6
3. REMOVE D22 ---PAGE6
4. U28-PIN8 CONNECTION STATUS : CHANGE IT FROM R2169-PIN1 TO Q802-PIN1.2.3 ---PAGE6
5. Q22-PIN1.2.3 AND Q26-PIN1.2.3 POWER NAME, CHANGE IT FORM +VBATR TO +VADP2 ---PAGE6
6. REMOVE PAD9 ---PAGE11
7. REMOVE PAD11 AND PAD12 ---PAGE12
8. CHANGE MOSFET TO REDUCE RDS ON Q809 Q39 ---PAGE13
9. CHANGE THERMAL IC PART, FROM ADM1032 TO ADM 1031 FOR CPU&VAG ---PAGE20
10. ADD TEST-POINT (TP557) ---PAGE21
11. ADD CAP (220PF) 3 PCS BETWEEN THE MCH_GTLREF AND GND ---PAGE22
12. REMOVE C60 (150UF) ---PAGE26
13. DELETE THERMAL SENSOR CIRCUIT ---PAGE30
14. R468~R489, R490~R492, R494~R511 : CHANGE THESE RESISTOR FROM 0(OHM) TO 10(OHM) ---PAGE33
15. ADD CAP (150UF)BETWEEN THE +VRAM_VCC AND GND ---PAGE34
16. PIN1 OF D2,D3,D800,D801,D802,D803,D804 ARE CHANGE FROM +V3 TO USBCC1 ---PAGE36
17. A_CSTOP# , B_CSTOP# OF U2228 SIGNAL(PAGE55) CONNECT TO CN21(PAGE56)
18. CHANGE CN10 SYMBOL : PIN11 IS REF_P_D AND PIN12 IS WP ---PAGE57
19. REMOVE C230, C395, C1674, C1675. CHAISY_GND CHANGE TO DIGITAL_GND ---PAGE60
20. UPDATE CN807 FROM JAE_WD_154S4V_VF78_ML_154P TO JAE_WD_154S4VH_VF85_N_154P
- AND ADD D+, D-, C+, C- SIGNALS FROM U2(PAGE60) ---PAGE61
21. BREAKING PIN1 AND PIN3 CONNECTION FOR SW2, SW3, SW4 THEN ALL OF PIN3 CONNECT TO GND ---PAGE64
22. UPDATE CN1 SYMBOL, ADD GND SIGNAL OF PIN7, PIN8 THEN CONNECT TO GND ---PAGE65
23. ADD NAME PORT(MAX_LX5) IN L44-PIN1 ...PAGE7
24. REMOVE NONE-USE SIGNAL-PORT(SLP_S5#_5R) ...PAGE13
25. Q48 CHANGE FROM FDC638P TO FDR840P ...PAGE13
26. R293 CHANGE FROM 10K TO OPEN ...PAGE17
27. Q806 CHANGE FROM FDC638P TO FDR840P(Q825) ...PAGE37
28. R848-PIN1 AND Q825-PIN5,PIN8 POWER RAIL FROM +V3S TO +V3 ...PAGE37
29. R67 CHANGE VALUE FROM 180K TO 51K ...PAGE39
30. REMOVE D39 ...PAGE41
31. ADD DELAY CIRCUIT FOR THE PWR_GOOD3 ...PAGE41
32. ADD RNET FOR KAHUNA PROGRAMMING(RS850,RS860) ...PAGE43
33. REMOVE D17 ...PAGE52
34. U7 AND U804 PIN5,PIN7 POWER RAIL CHANGE FROM +V5 TO +V5A ; OC# SIGNAL OF THE PIN2 IS REMOVE EN SIGNAL OF THE PIN1 IS CONNECT TO +V5 ...PAGE54
35. REMOVE R934 R946 OF THE PULL-HIGH CIRCUIT ...PAGE56
36. CHANGE TURN ON CIRCUIT OF THE H.D.D-LED, USING A MOS-FET(Q286) TO CONTROL H.D.D-LED ...PAGE64
37. R1679 CHANGE VALUE FROM 20K TO 1.3K ; R2139 CHANGE VALUE FROM 150K TO 10K ...PAGE5
38. DELETE R514 ...PAGE26
39. FOLLOWIG RESISTORS ARE CHANGE VALUE FROM 10 OHM TO 24 OHM : RS12-RS20 , RS22-RS24 ; RS27-RS30 RS27-RS30 ; RS32-RS35 ; RS38-RS44 ; RS46-RS47 ; RS57-RS59 ; R481-R486 ; R488 , R489 ; R505-R511 ; R502 ...PAGE33
40. ADD CAP(22UF) BETWEEN THE +V2.5S AND GND IN U23 , U27 OF THE VRAM ...PAGE34
41. ADD CAP(22UF) BETWEEN THE +V2.5S AND GND IN U14 , U15 OF THE VRAM ...PAGE35
42. CHANGE CRT CIRCUIT, REFER TO THE DIAMOND CRT CIRCUIT ...PAGE36
43. R67 CHANGE VALUE 51K TO 180K ...PAGE39
44. POWER RAIL OF THE R223-PIN1, CHANGE VALUE FROM +V5A TO +V5 ...PAGE46
45. POWER RAIL OF THE U32-PIN5, CHANGE VALUE FROM +V5 TO +V3 ...PAGE57
46. C1620 , C1621 , C1623 CHANGE VALUE FROM 0.01UF TO 0.1UF ...PAGE59
47. C1651 , C1656 CHANGE VALUE FROM 22PF TO 27PF ...PAGE60
48. ADD 200 OHM SERIES RESISTOR BETWEEN XTALO AND PIN2 OF X800(CRYSTAL) ...PAGE60
49. D41 CHANGE FROM SML_210MT TO SML010BAT(BLUE-LED) ; D48 CHANGE FROM SML_210MT TO 12-215VRC_TR8(RED-LED) ...PAGE64
50. DELETE U8 , R526 , R535 , R538 ...PAGE65
51. CN1 CHANGE FROM AMP_JACK_440148 TO AMP_JACK_1470613 ...PAGE65
52. CN4 CHANGE FROM MLX_53398_0490 TO JST_BM4B_SRSS ...PAGE50

INVENTEC

TITLE **MODULES, RUBY1.0
CHANGE LIST**

SIZE A3	CODE CS	DOC. NUMBER I31MBD2600-0-0	REV D
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CHANGE by **MORRIS CHANG** 23-Jul-2003

SHEET **69** OF **69**