

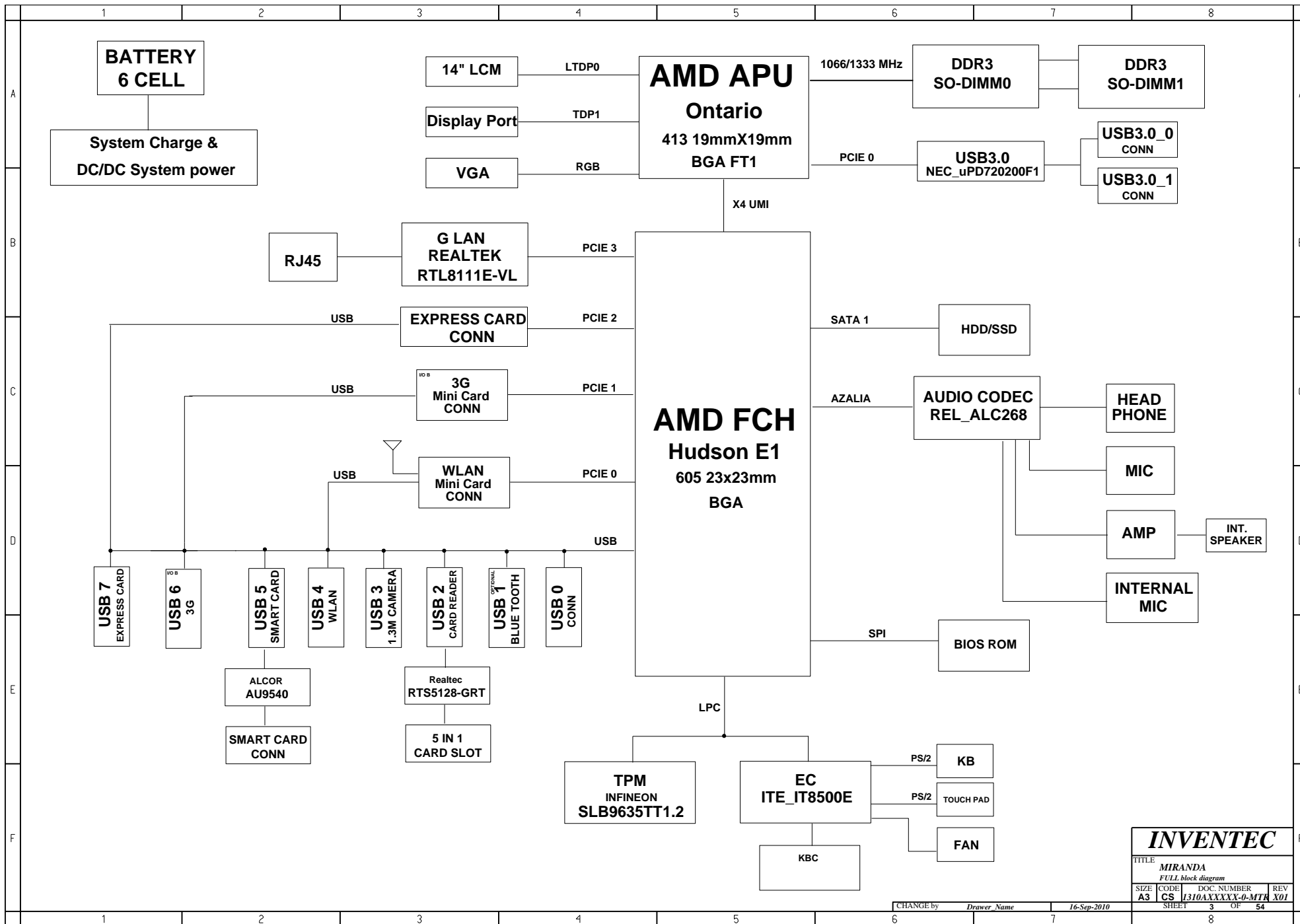
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|--|-----------------|-------|------|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|------|------------|-----|--|--|----|------|-------|------|--------|--|--|--|--|--------|--|--|--|--|-------|--|--|--|--|-------------|--|--|--|--|----------------|--|--|--|--|----------------------------|--|--|--|--|-----|--------------|--|--|--|--|-------|--|--|--|---------|--|--|--|------------|--|--|--|------|------|-------------|-----|----|----|-----------------|-----|-------|--|---|-------|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A | <div>THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF INVENTEC CORPORATION AND SHALL NOT BE REPRODUCED, COPIED, OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION, INVENTEC CORPORATION 2010 ALL RIGHT RESERVED</div> <div>HSF Property : RoHS</div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | <div><div>MOBILE THREE</div><div>WS BUID</div><div>2010.09.17</div></div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F | <table><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td>DATE</td><td>CHANGE NO.</td><td>REV</td></tr></table> | | | | | | | | | | | | | | | | | | | DATE | CHANGE NO. | REV | <table><tr><td></td><td>EE</td><td>DATE</td><td>POWER</td><td>DATE</td></tr><tr><td>DRAWER</td><td></td><td></td><td></td><td></td></tr><tr><td>DESIGN</td><td></td><td></td><td></td><td></td></tr><tr><td>CHECK</td><td></td><td></td><td></td><td></td></tr><tr><td>RESPONSIBLE</td><td></td><td></td><td></td><td></td></tr><tr><td colspan="5">SIZE = 3 VER :</td></tr><tr><td colspan="5">FILE NAME : XXXX-XXXXXX-XX</td></tr><tr><td>P/N</td><td colspan="4">XXXXXXXXXXXX</td></tr></table> | | EE | DATE | POWER | DATE | DRAWER | | | | | DESIGN | | | | | CHECK | | | | | RESPONSIBLE | | | | | SIZE = 3 VER : | | | | | FILE NAME : XXXX-XXXXXX-XX | | | | | P/N | XXXXXXXXXXXX | | | | <table><tr><td colspan="4">TITLE</td></tr><tr><td colspan="4">MIRANDA</td></tr><tr><td colspan="4">COVER PAGE</td></tr><tr><td>SIZE</td><td>CODE</td><td>DOC. NUMBER</td><td>REV</td></tr><tr><td>A3</td><td>CS</td><td>1310AXXXX-0-MTH</td><td>X01</td></tr><tr><td colspan="2">SHEET</td><td>1</td><td>OF 54</td></tr></table> | TITLE | | | | MIRANDA | | | | COVER PAGE | | | | SIZE | CODE | DOC. NUMBER | REV | A3 | CS | 1310AXXXX-0-MTH | X01 | SHEET | | 1 | OF 54 | 8 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DATE | CHANGE NO. | REV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | EE | DATE | POWER | DATE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DRAWER | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DESIGN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CHECK | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RESPONSIBLE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SIZE = 3 VER : | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FILE NAME : XXXX-XXXXXX-XX | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| P/N | XXXXXXXXXXXX | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TITLE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MIRANDA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COVER PAGE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SIZE | CODE | DOC. NUMBER | REV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A3 | CS | 1310AXXXX-0-MTH | X01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SHEET | | 1 | OF 54 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

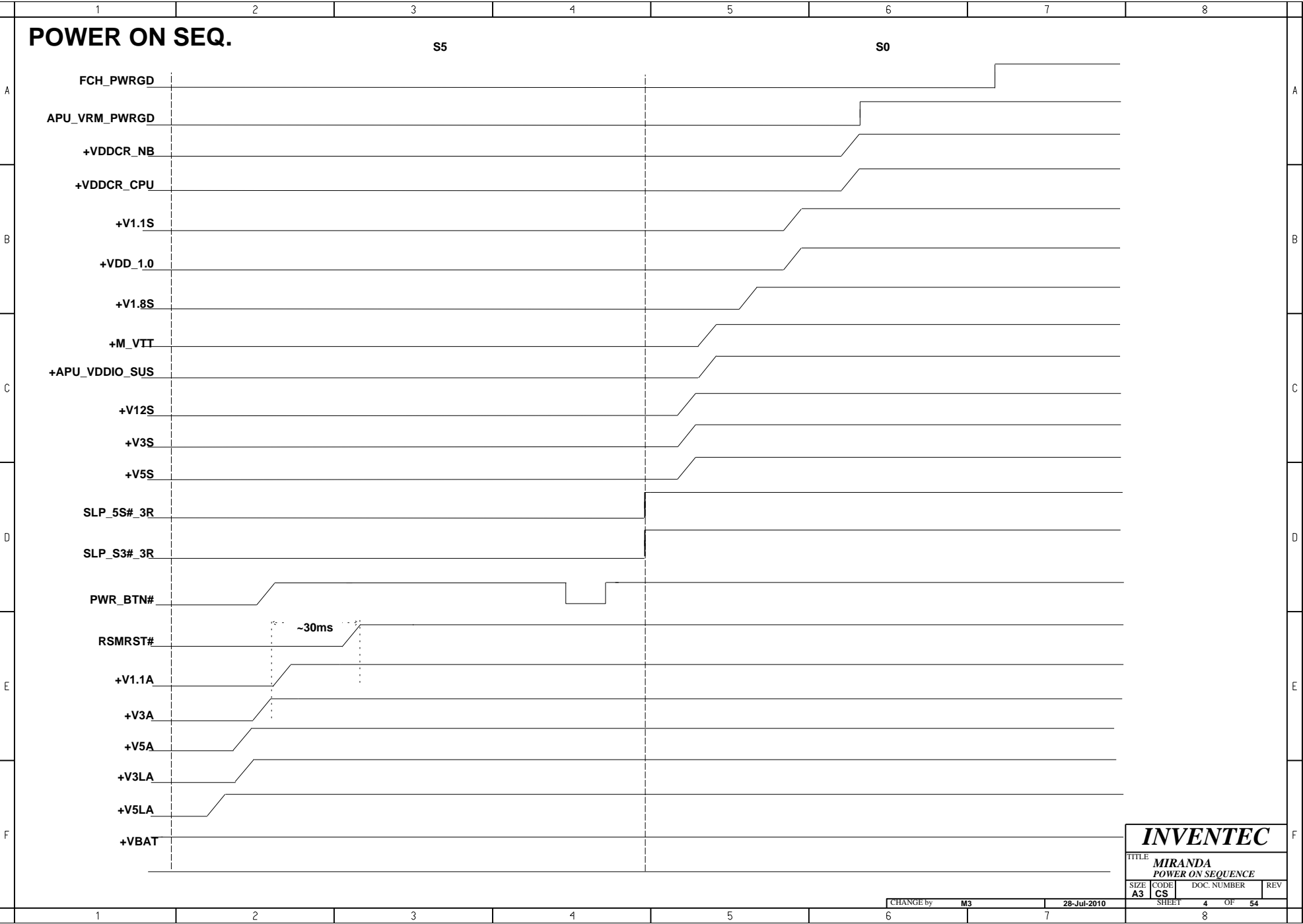
TABLE OF CONTENTS

| PAGE | PAGE |
|----------------------------------|-------------------------------------|
| 1. COVER PAGE | 32. KB/TP CONN |
| 2. INDEX | 33. USB3.0 CONTROLLER |
| 3. BLOCK DIAGRAM | 34. USB3.0 CONN |
| 4. POWER ON SEQUENCE | 35. SIM CARD |
| 5-13. RESERVE FOR SYSTEM POWER | 36. EXPRESS CARD |
| 14. APU FT1 1 | 37. FAN CONN |
| 15. APU FT1 2 | 38. WIRE to BOARD CONN (MB SIDE) |
| 16. APU FT1 3 | I/O BOARD |
| 17. APU FT1 4 | 39. CODEC REL_ALC268 |
| 18. DDR3-1 | 40. AUDIO JACK |
| 19. DDR3-2 | 41. AMP / INT. SPEAKER |
| 20. FCH1 | 42. WWAN |
| 21. FCH2 | 43. SMART CARD AU9540 |
| 22. FCH3 | 44. CARD READER |
| 23. FCH4 | 45. GIGA LAN |
| 24. STRAP OPTION / THERMAL / RTC | 46. RJ45 |
| 25. LCM | 47. USB CONN |
| 26. CRT | 48. WIRE to BOARD CONN (I/O/B SIDE) |
| 27. DP | TP BOARD |
| 28. WLAN / BT | 49. TP / HALL-SENSOR |
| 29. TPM | POWER BOARD |
| 30. SSD / HDD | 50. POWER SW |
| 31. IT8500E | |

| | | | |
|----------------------|-------------------|--|------------------|
| INVENTEC | | | |
| TITLE <i>MIRANDA</i> | | | |
| index | | | |
| SIZE A3 | CODE CS | DOC. NUMBER <i>1310AXXXX-0-MTRX01</i> | REV 54 |
| SHEET | | 2 | OF |
| | | 8 | |

CHANGE by *Drawer Name* 17-Sep-2010





INVENTEC

TITLE
MIRANDA
POWER ON SEQUENCE

| | | | |
|-------|------|-------------|-------|
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | | |
| SHEET | | 4 | OF 54 |

| | | | | | | | | | |
|---|--------------------------------|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| A | <div>Power Block Diagram</div> | | | | | | | | A |
| B | | | | | | | | | B |
| C | | | | | | | | | C |
| D | | | | | | | | | D |
| E | | | | | | | | | E |
| F | | | | | | | | | F |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |

INVENTEC

TITLE

MIRANDA
POWER

SIZE

A3

CODE

CS

DOC. NUMBER

REV

CHANGE by

M3

3-Aug-2010

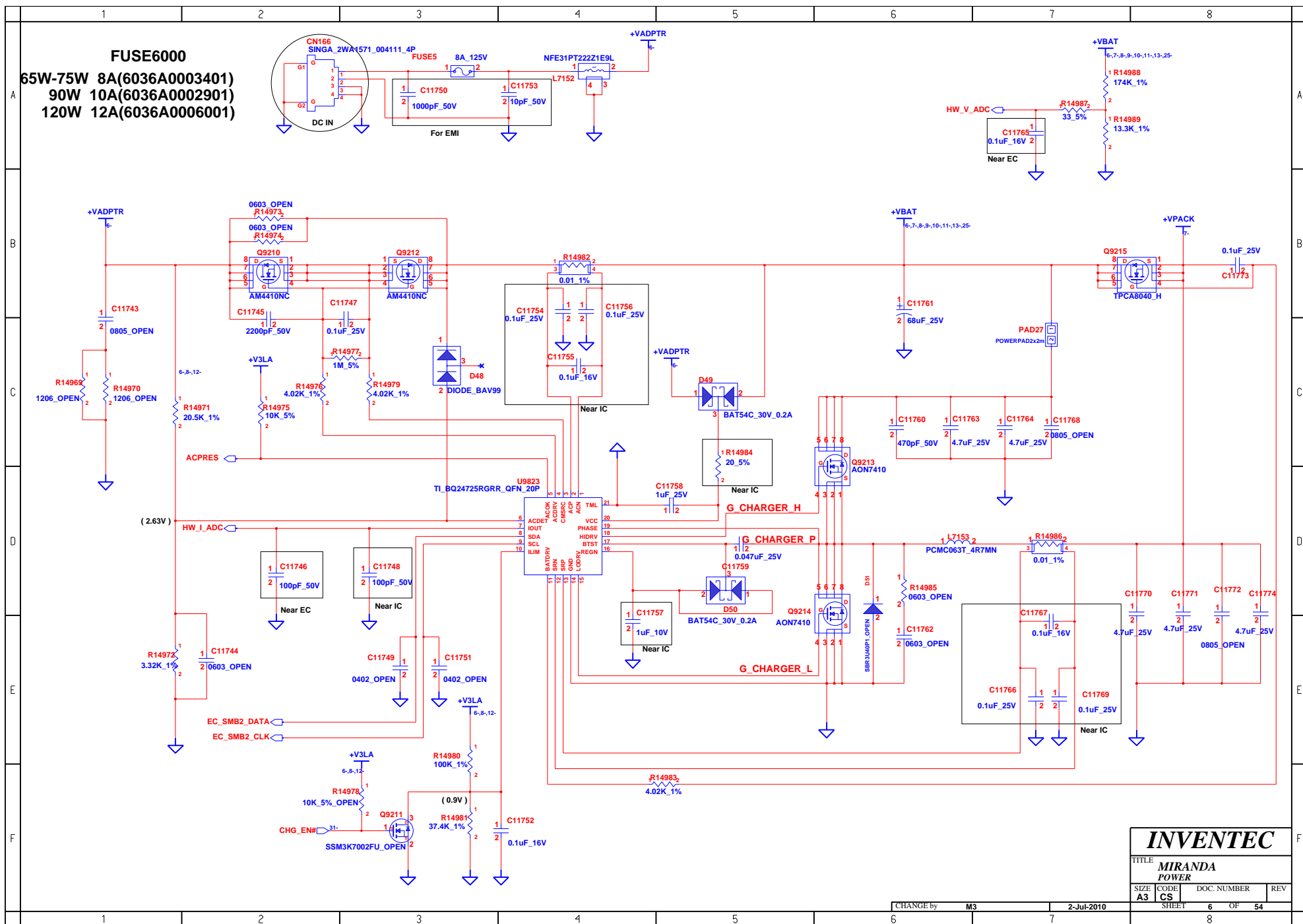
SHEET

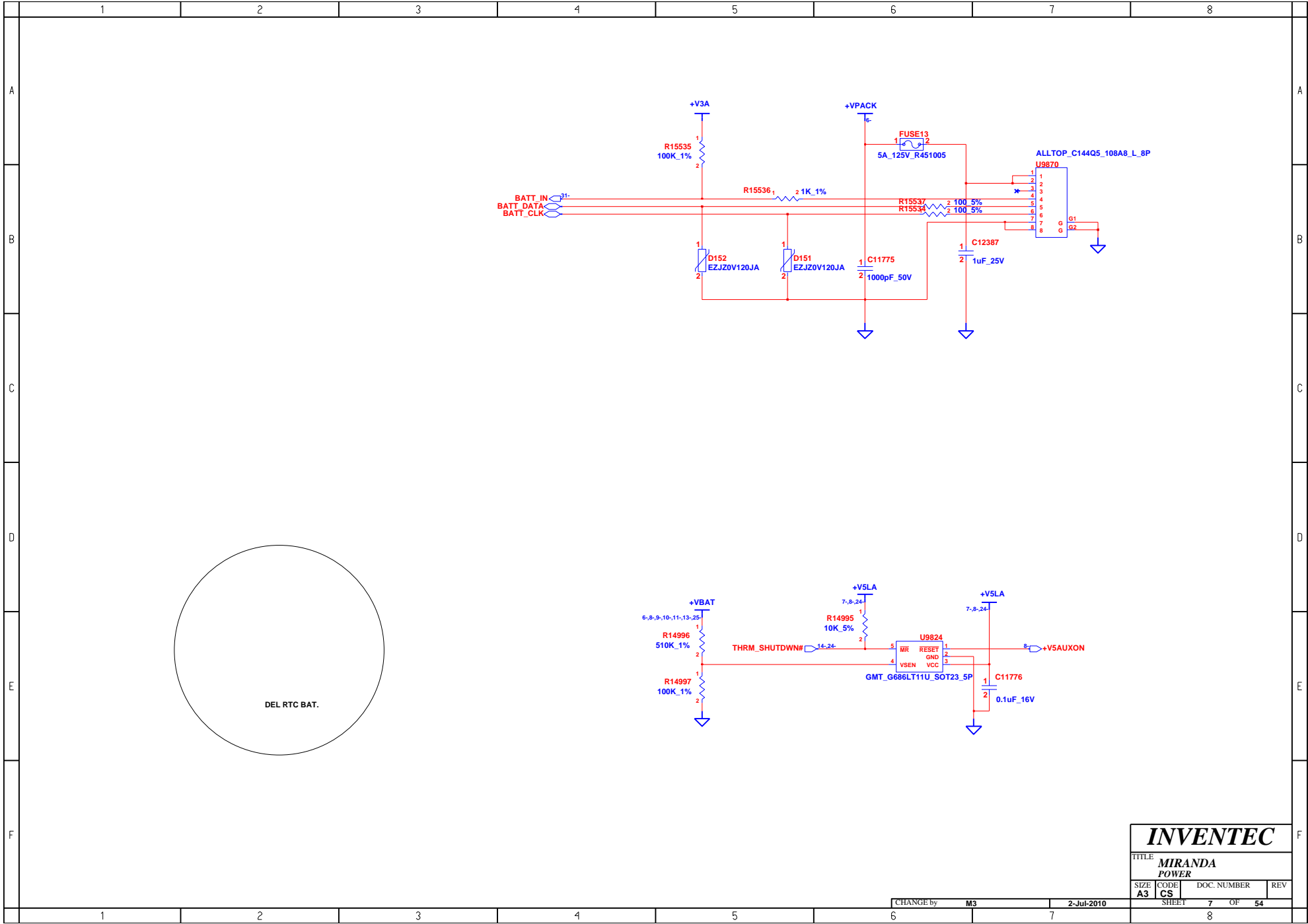
5

OF

54

8



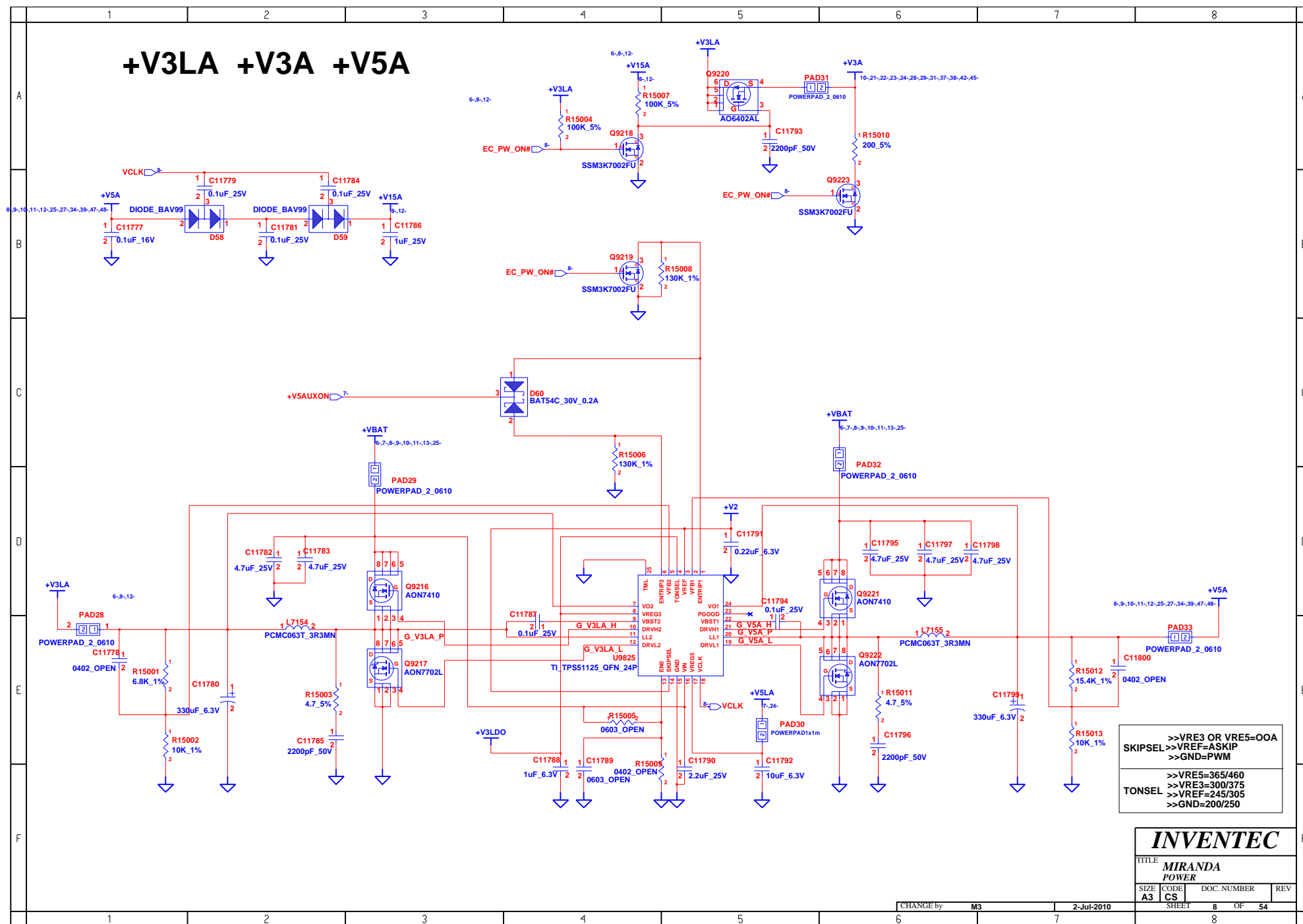


INVENTEC

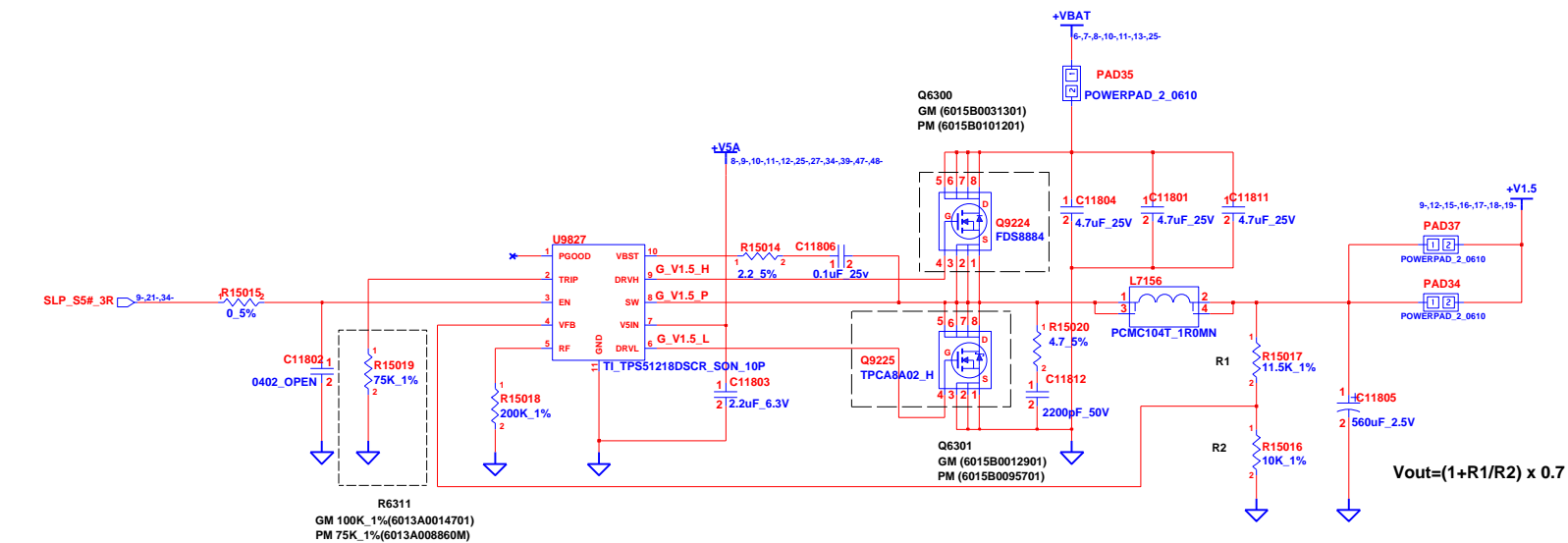
| | | | |
|---------|------|-------------|-----|
| TITLE | | | |
| MIRANDA | | | |
| POWER | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | | |
| SHEET | | 7 OF | 54 |

CHANGE by M3 2-Jul-2010

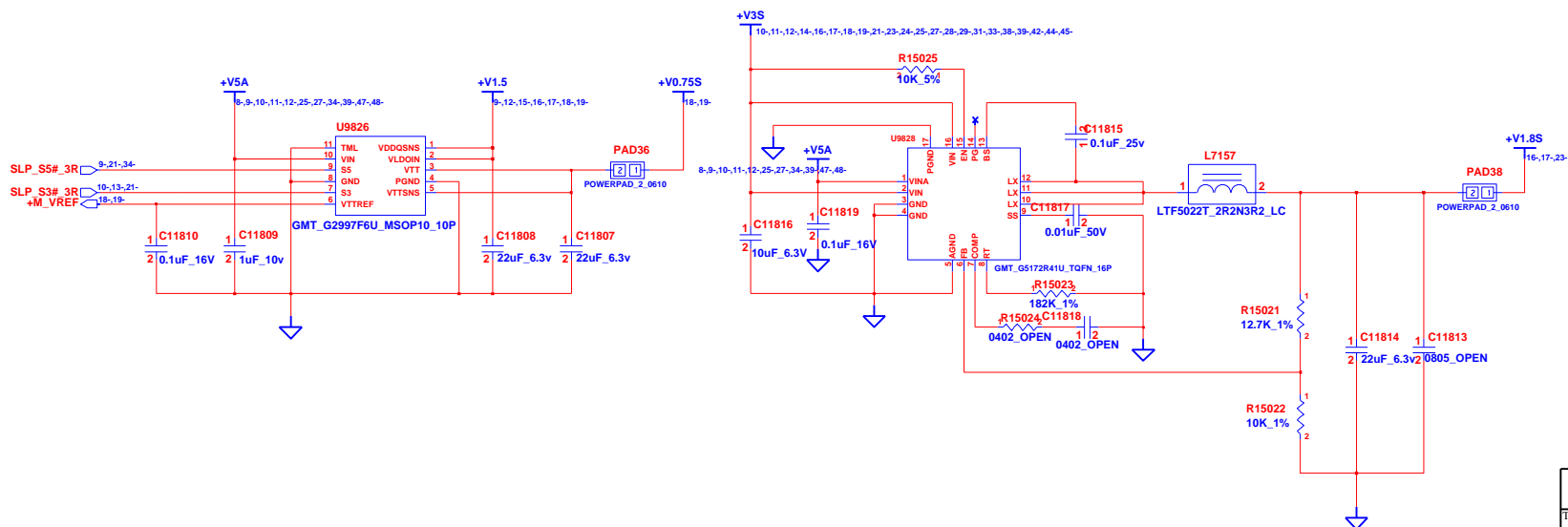
8



+V1.8S +V0.75S +V1.5



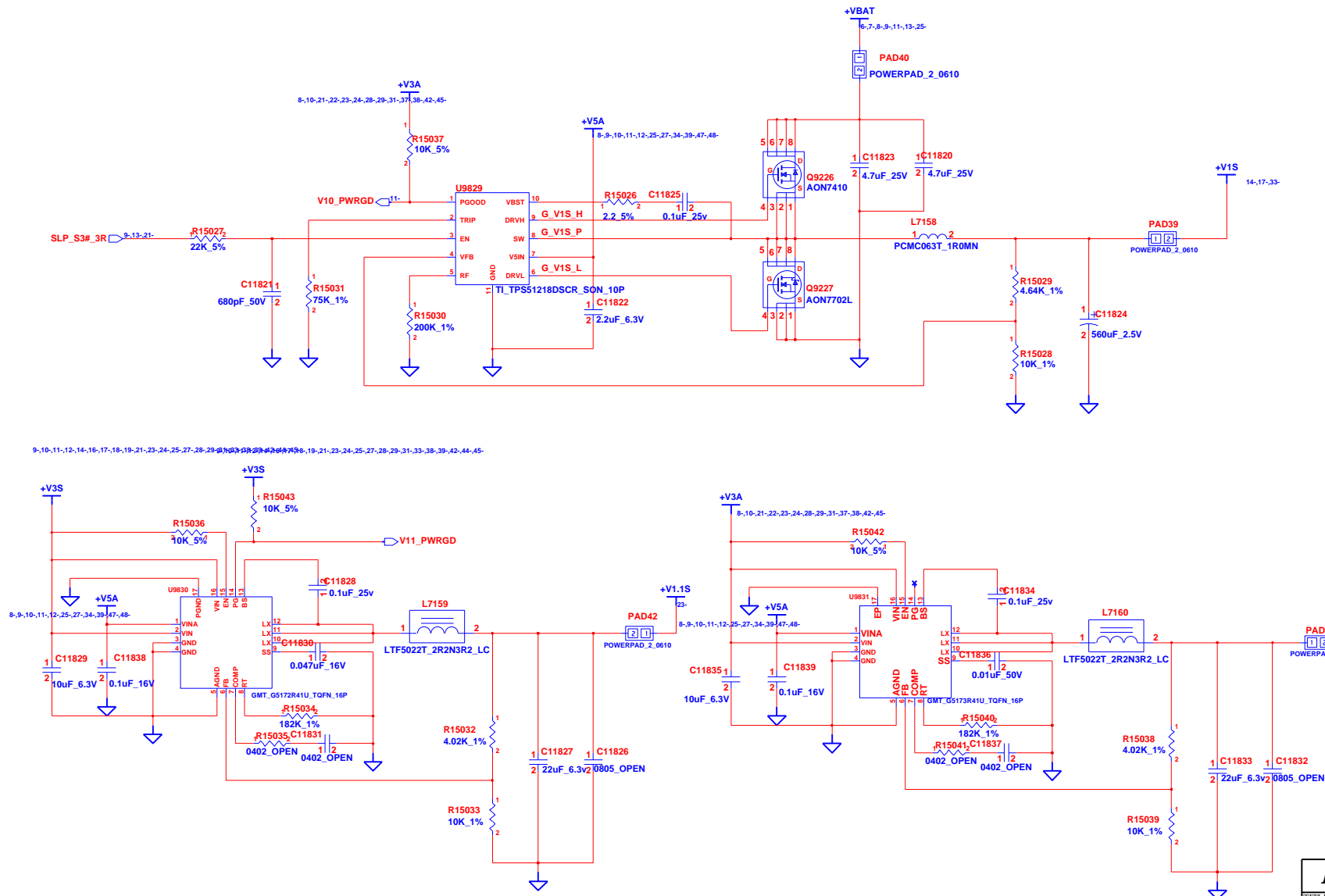
$$V_{out} = (1 + R_1/R_2) \times 0.7$$



INVENTEC

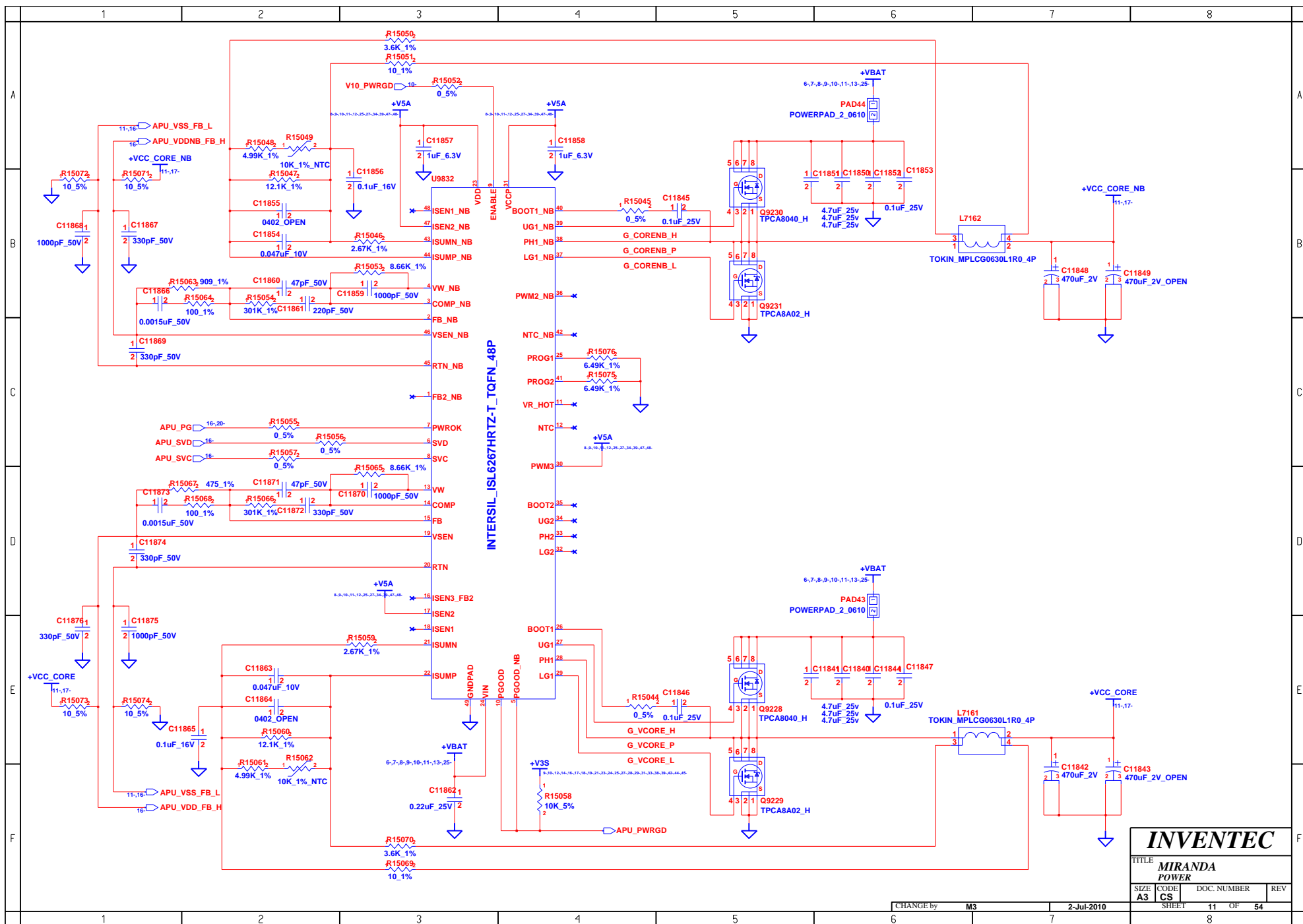
| | | | |
|--------------------------|-----------|-------------|-----|
| TITLE | | | |
| MIRANDA POWER | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | | |
| SHEET 9 OF 54 | | | |

+V1.1A +V1S +V1.1S

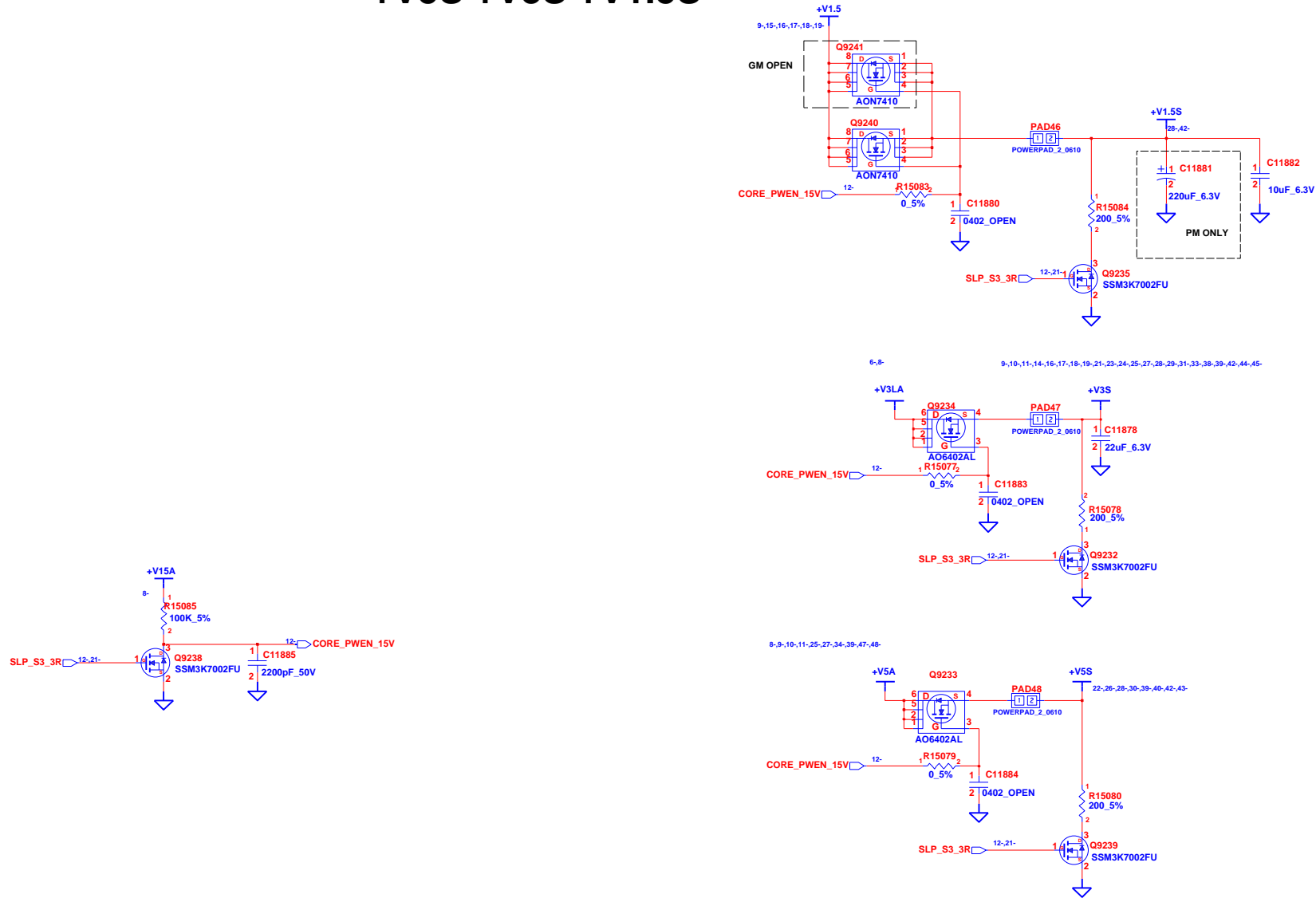


| INVENTEC | | | |
|----------------------|----------|--------------|------|
| TITLE: MIRANDA POWER | | | |
| SIZE: A3 | CODE: CS | DOC. NUMBER: | REV: |
| SHEET: 10 | | OF: 54 | |

CHANGE by: M3 2-Jul-2010



+V5S +V3S +V1.5S



INVENTEC

| | | | |
|---------------|------|----------------|-----|
| TITLE | | | |
| MIRANDA POWER | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | SHEET 12 OF 54 | |

CHANGE by M3 2-Jul-2010

+V12

COMPONENTS:

- Resistors: R15354 (0.5%), R15355 (10K_5%), R15356 (10K_5%), R15357 (33K_5%), R15358 (10K_1%), R15359 (0.5%_OPEN), R15361 (43K_1%), R15362 (34K_1%), R15363 (3.01K_1%), R15364 (3.01K_1%).
- Capacitors: C12198 (0402_OPEN), C12199 (0.1uF_10v), C12200 (0.033uF_10v), C12201 (0402_OPEN), C12202 (330pF_50v), C12203 (0.33uF_25v), C12204 (10uF_25V), C12205 (10uF_25V), C12206 (220uF_25v), C12207 (10uF_16v).
- Diodes: D114 (CHENMKO_BAT54_3P), D116 (SBR3U40P1), Q9251 (SSM3K7002F), Q9252 (SSM3K7002F), Q9253 (SSM3K7002F).
- ICs: U9838 (SEMTECH_SC4525ASET RT SOIC_8P), L7183 (PLC0755P_10uH_3.9A).
- Other: SLP_S3#_3R, SLP_S3_5R, PAD49 (POWERPAD_2_0610).

POWER SUPPLY:

- +V12S
- +VBAT

CHANGE LOG:

| CHANGE | by | DATE |
|--------|----|------------|
| 1 | M3 | 2-Jul-2010 |

INVENTEC

MIRANDA POWER

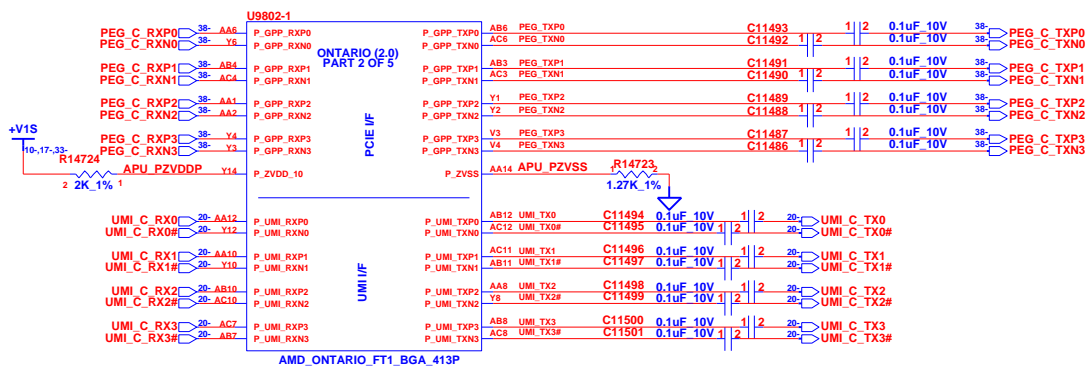
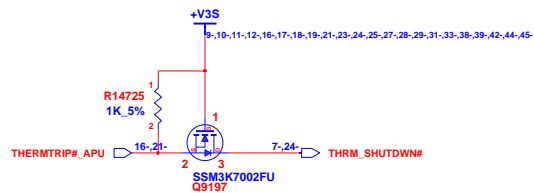
SIZE A3 CS

DOC. NUMBER 13 OF 54

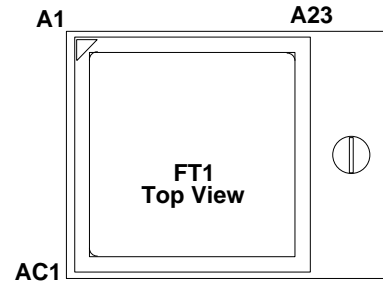
SHEET 13 OF 54

| | | | | | | | |
|-----------|--|-----------|--|--------------------------|--|-------|--|
| TITLE | | | | MIRANDA POWER | | | |
| SIZE | | CODE | | DOC. NUMBER | | R | |
| A3 | | CS | | | | | |
| SHEET | | | | 13 | | OF 54 | |

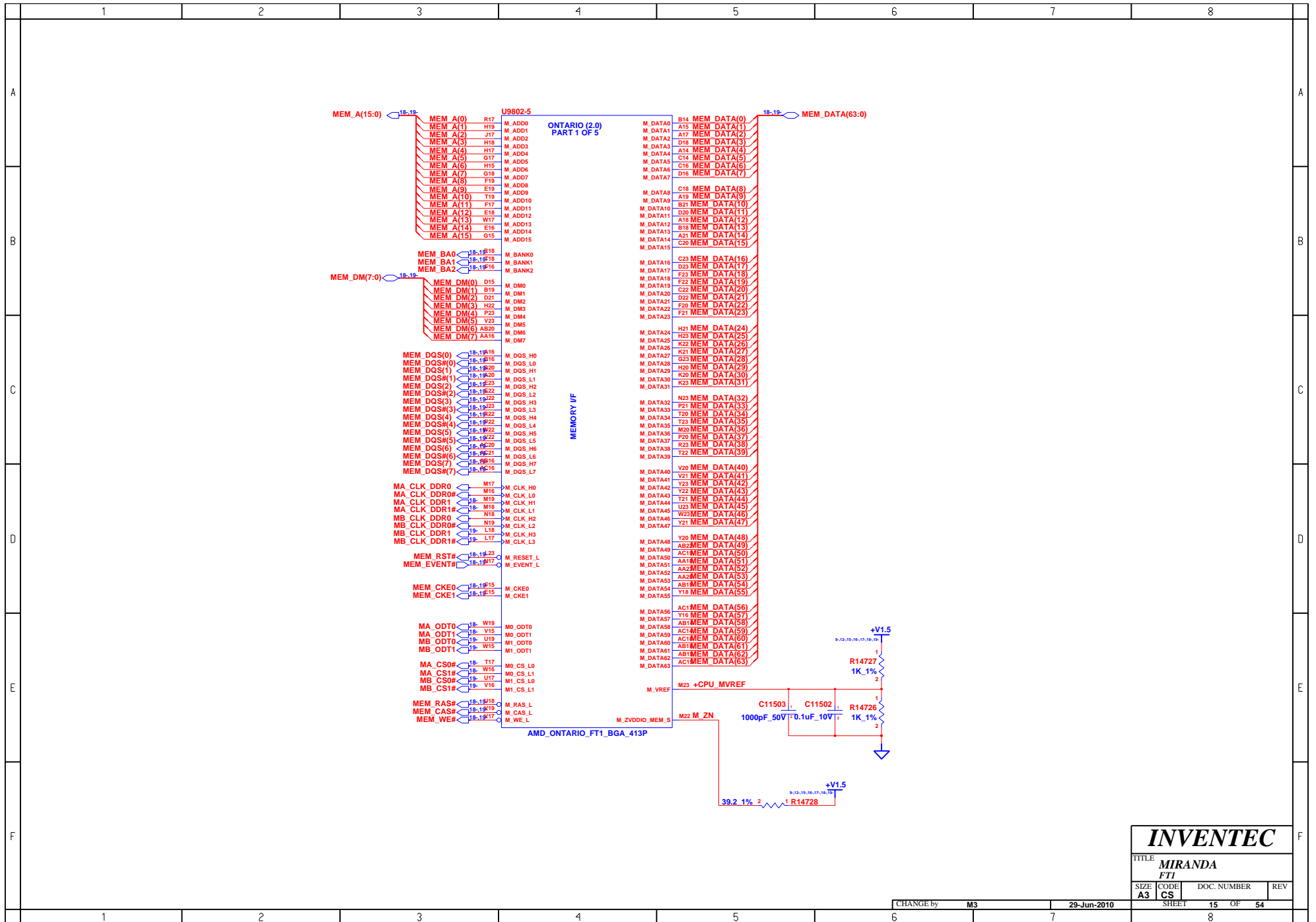
CS
SHEET 13 OF 54

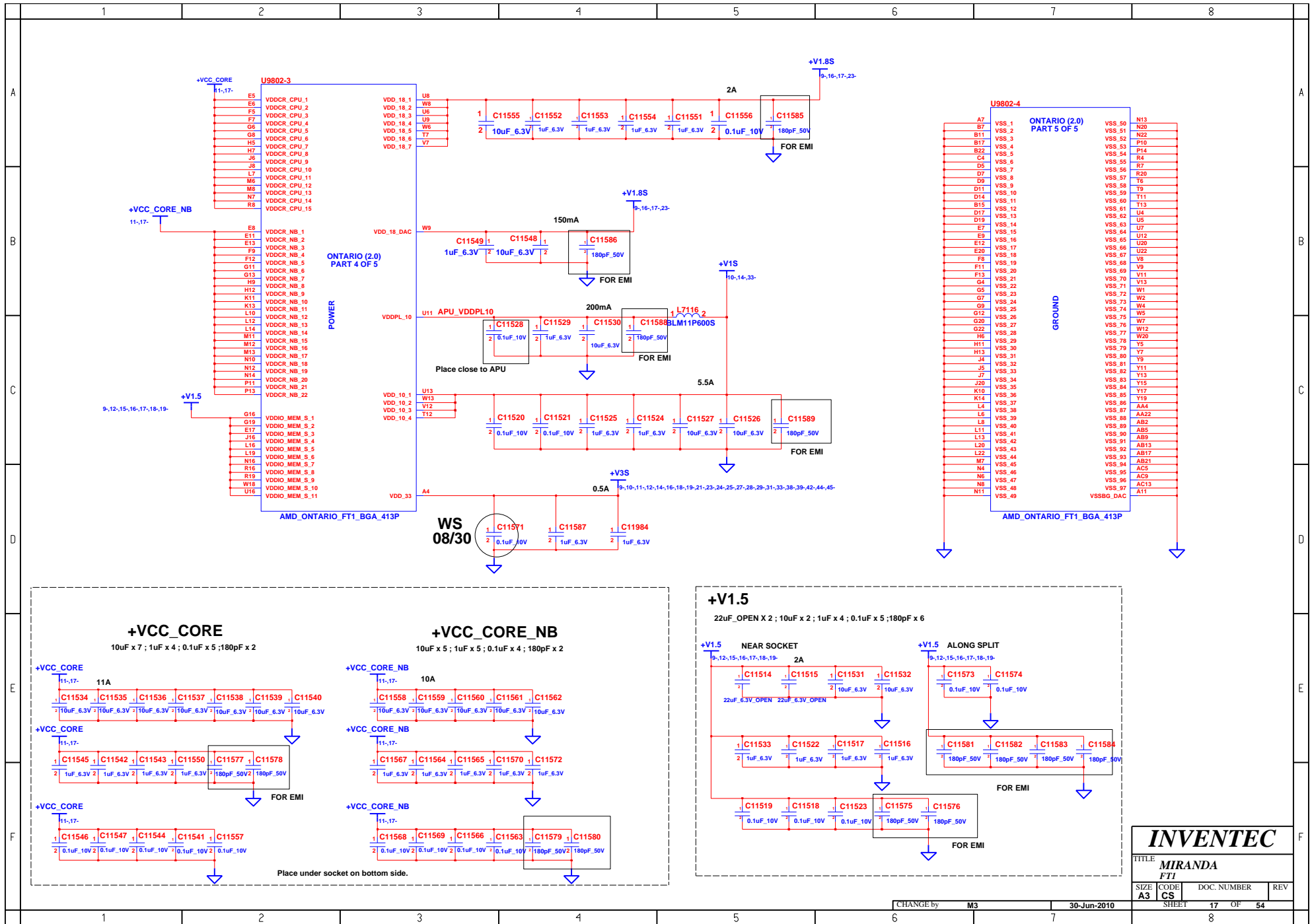


Layout: Add stitching caps if crossing plane split.



| INVENTEC | | | |
|-------------------------|------------|-------------|-----|
| TITLE MIRANDA FT1 | | | |
| SIZE A3 | CODE CS | DOC. NUMBER | REV |
| CHANGE by M3 | | 2-Jul-2010 | |
| SHEET 14 | | OF 54 | |





DDR3

SO DIMM0

SLOT A

INVENTEC

MIRANDA

DDR3-1

SIZE A3

CODE CS

DOC. NUMBER

REV

CHANGIO by MIRANDA

2-Sep-2010

SHEET 18 OF 54

8

DDR3

SO DIMM0
SLOT A

INVENTEC

TITLE
MIRANDA
DDR3-1

SIZE
A3

CODE
CS

DOC. NUMBER

REV

CHANGE by
MIRANDA

2-Sep-2010

SHEET
18

OF
54

DDR3

SO DIMM0

SLOT A

INVENTEC

MIRANDA

DDR3-1

SIZE A3

CODE CS

DOC. NUMBER

REV

CHANGIO by MIRANDA

2-Sep-2010

SHEET 18 OF 54

8

DDR3

SO DIMM0
SLOT A

INVENTEC

TITLE
MIRANDA
DDR3-1

SIZE
A3

CODE
CS

DOC. NUMBER

REV

CHANGE by
MIRANDA

2-Sep-2010

SHEET
18

OF
54

8

DDR3

SO DIMM0
SLOT A

INVENTEC

TITLE
MIRANDA
DDR3-1

SIZE
A3

CODE
CS

DOC. NUMBER

REV

CHANGE by
MIRANDA

2-Sep-2010

SHEET
18

OF
54

8

DDR3

SO DIMM0
SLOT A

INVENTEC

TITLE
MIRANDA
DDR3-1

SIZE
A3

CODE
CS

DOC. NUMBER

REV

CHANGE by
MIRANDA

2-Sep-2010

SHEET
18

OF
54

8

DDR3

SO DIMM0
SLOT A

INVENTEC

TITLE
MIRANDA
DDR3-1

SIZE
A3

CODE
CS

DOC. NUMBER

REV

CHANGE by
MIRANDA

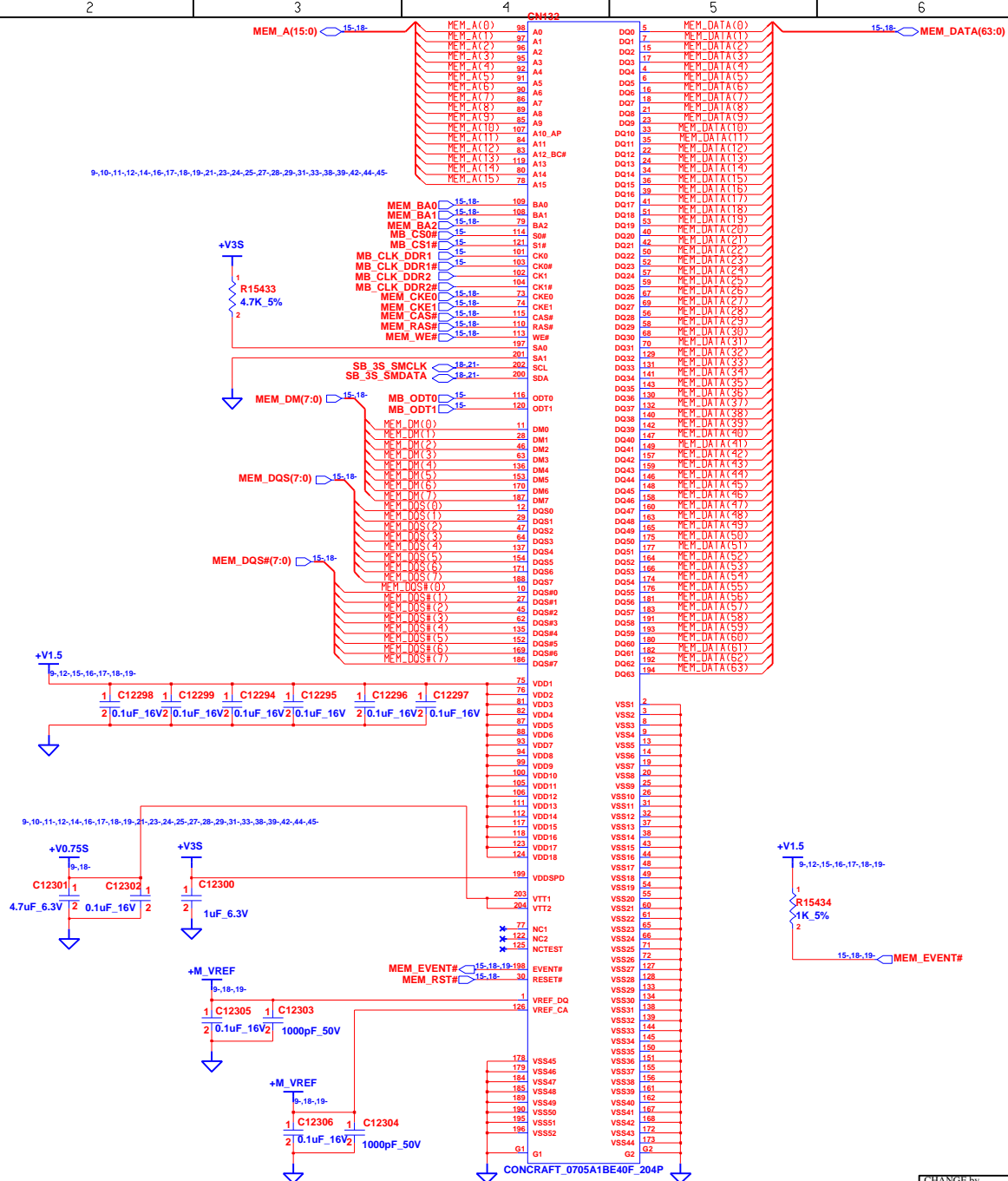
2-Sep-2010

SHEET
18

OF
54

8

DDR3

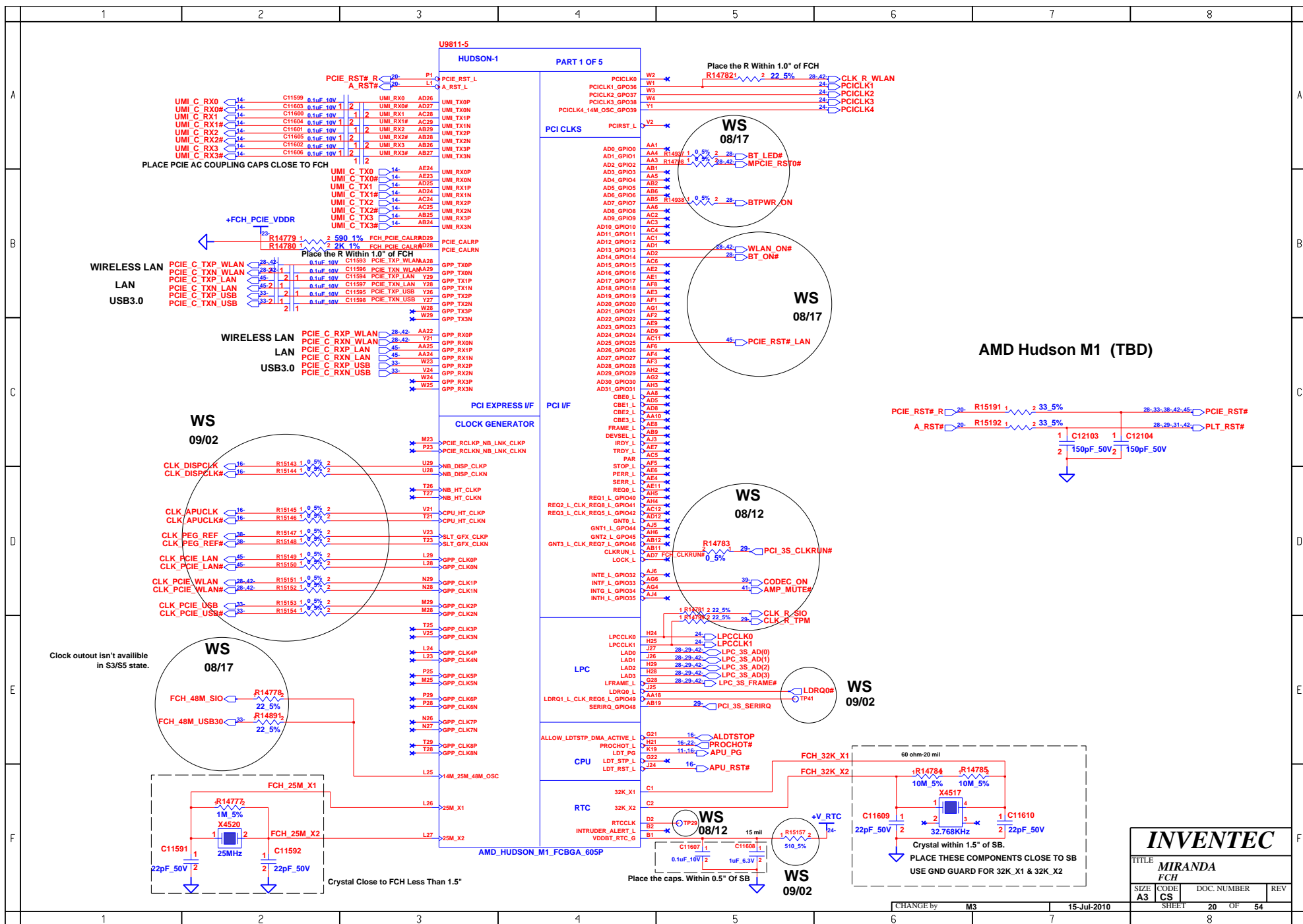


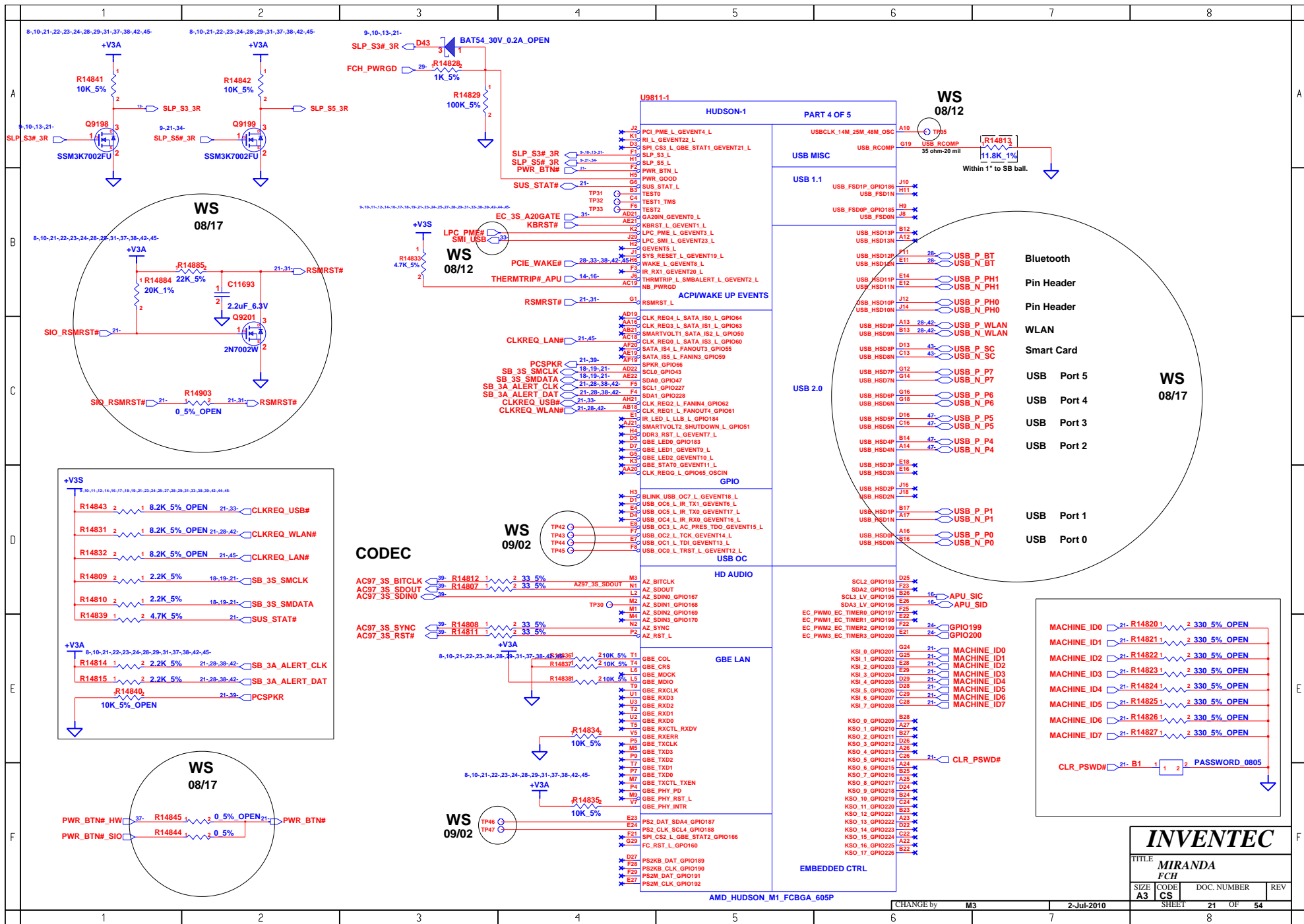
**SO DIMM1
SLOT B**

INVENTEC

| | | | |
|----------------------------|------------|----------------------|-----------------|
| TITLE MIRANDA DDR3-2 | | | |
| SIZE A3 | CODE CS | DOC. NUMBER SHEET | REV 19 OF 54 |

CHANGE by MIRANDA 26-Aug-2010

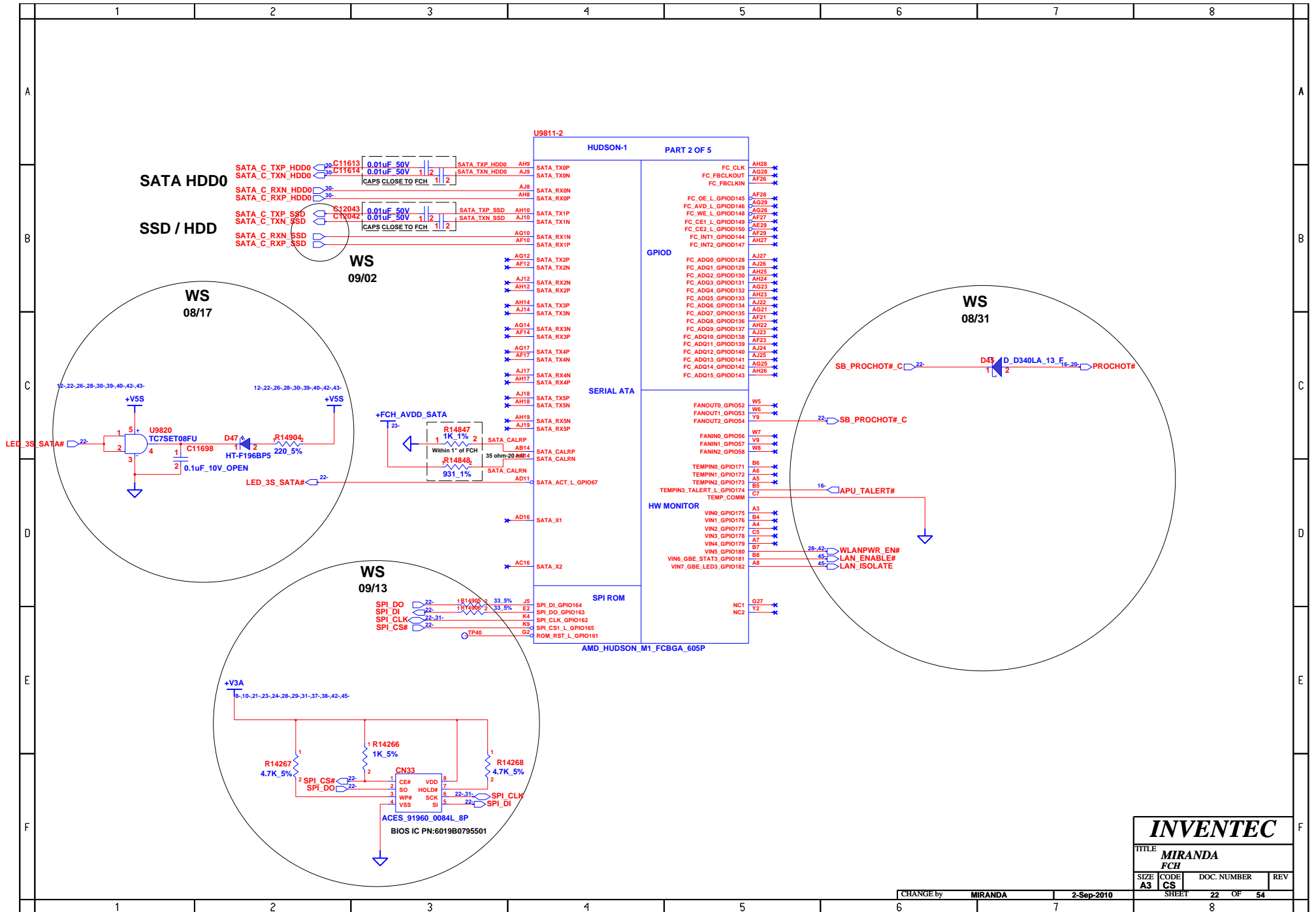




INVENTEC

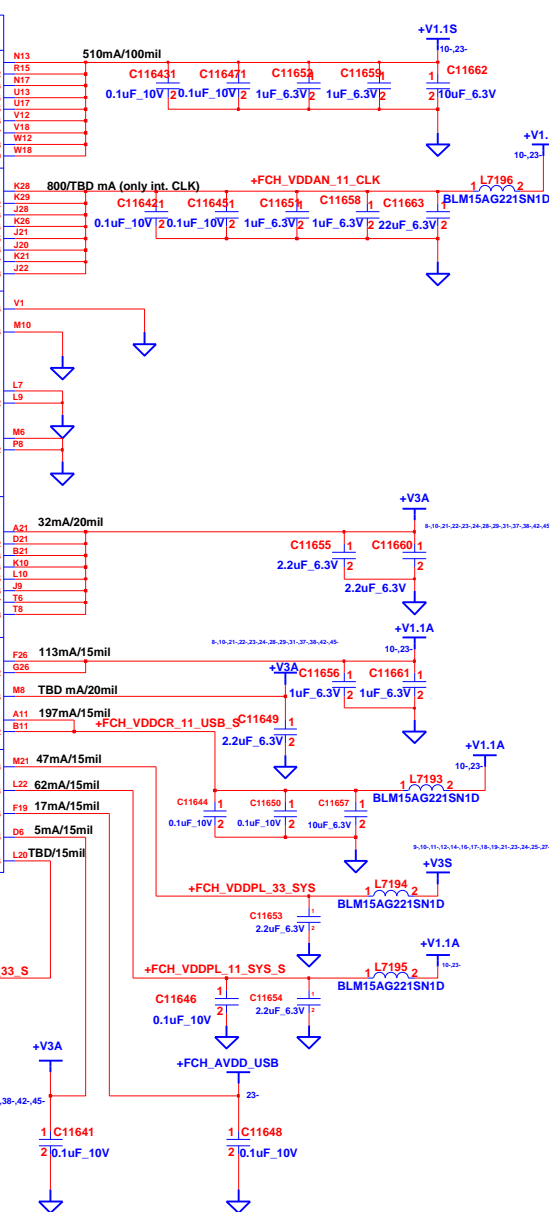
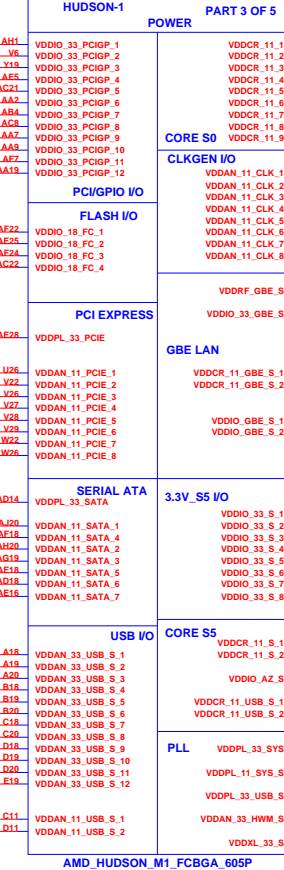
TITLE: **MIRANDA**
FCH

SIZE: **A3** CODE: **CS** DOC. NUMBER: **21** OF **54** REV: **8**



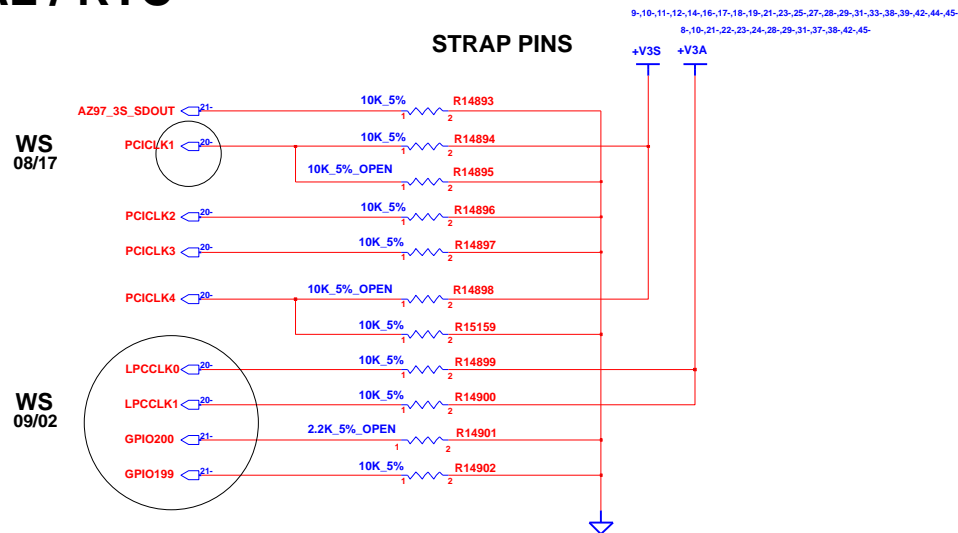
PLACE ALL THE DECOUPLING CAPS ON
THIS SHEET CLOSE TO SB AS POSSIBLE

U9811-3



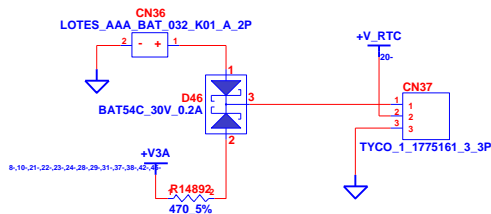
| INVENTEC | | | |
|--------------------------|------|-------------|-----|
| TITLE: MIRANDA FCH | | | |
| SHEET | CODE | DOC. NUMBER | REV |
| A3 | CS | | |
| CHANGE by M3 15-Jul-2010 | | | |
| SHEET 23 OF 54 | | | |

STRAP OPTION / THERMAL / RTC

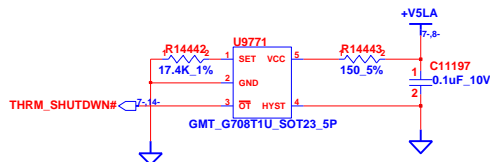


| | AZ97_3S_SDOUT | PCI_CLK1 | PCI_CLK2 | PCI_CLK3 | PCI_CLK4 | LPCCLK0 | LPCCLK1 | GPIO200 EC_PWM3 | GPIO199 EC_PWM2 |
|-----------|-----------------------------------|------------------------------|--|--------------------------------------|-----------------------------------|--|---|-------------------------------|--------------------|
| PULL HIGH | Low Power Mode (Not Supported) | Allow PCIE Gen2 (Default) | Watchdog Timer Enabled (Not Supported) | Debug STRAP Enabled | Non-FUSION CLOCK Mode | Integrated Micro-Controller Enabled (Default) | Internal Clock Generator Enabled (Default) | H,H= Reserved H,L= SPI ROM | (Default) |
| PULL LOW | Performance Mode (Default) | Force PCIE Gen1 | Watchdog Timer Disabled (Default) | Debug STRAP Disabled (Default) | FUSION CLOCK Mode (Default) | Integrated Micro-Controller Disabled | Internal Clock Generator Disabled | L,H= LPC ROM L,L= Reserved | |

RTC



Thermal Sensor



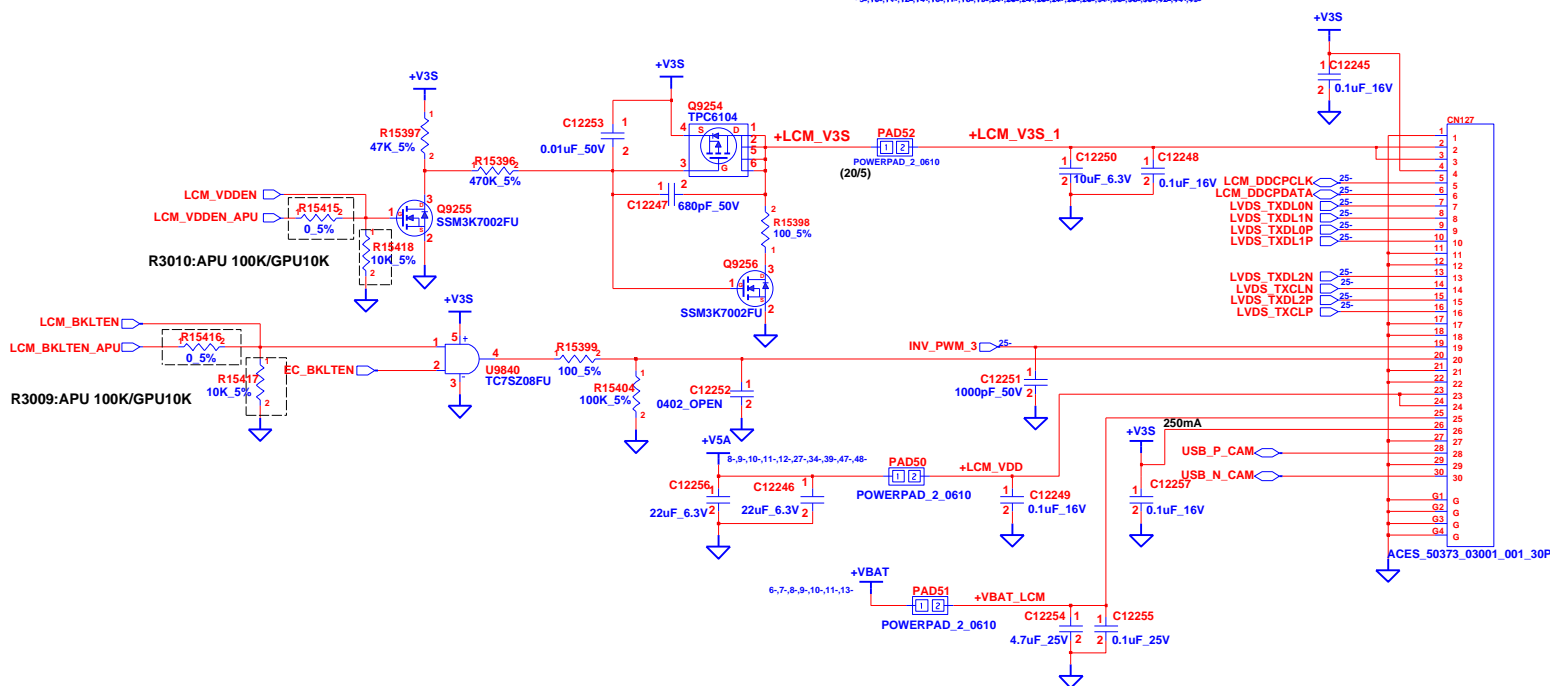
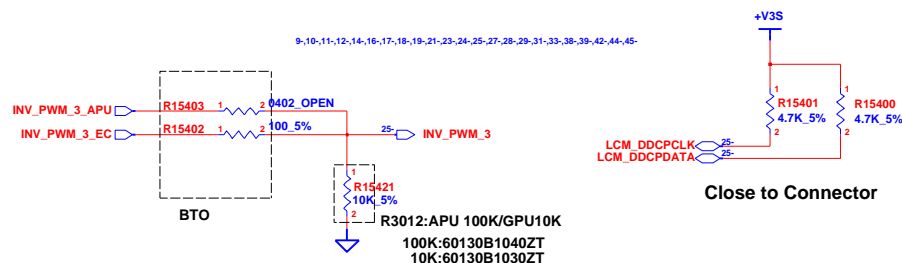
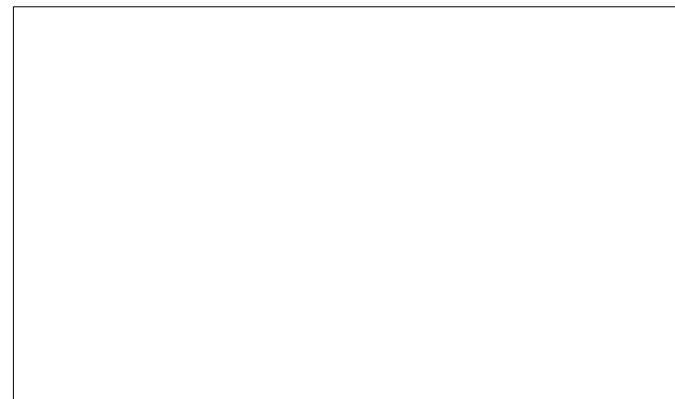
INVENTEC

| | | | |
|--|-------------------|-------------|-----|
| TITLE MIRANDA STRAP OPTION / THERMAL / RTC | | | |
| SIZE A3 | CODE CS | DOC. NUMBER | REV |
| SHEET | | 24 OF | 54 |

CHANGE by **MIRANDA** 2-Sep-2010

LCM

LCM DDC PU values



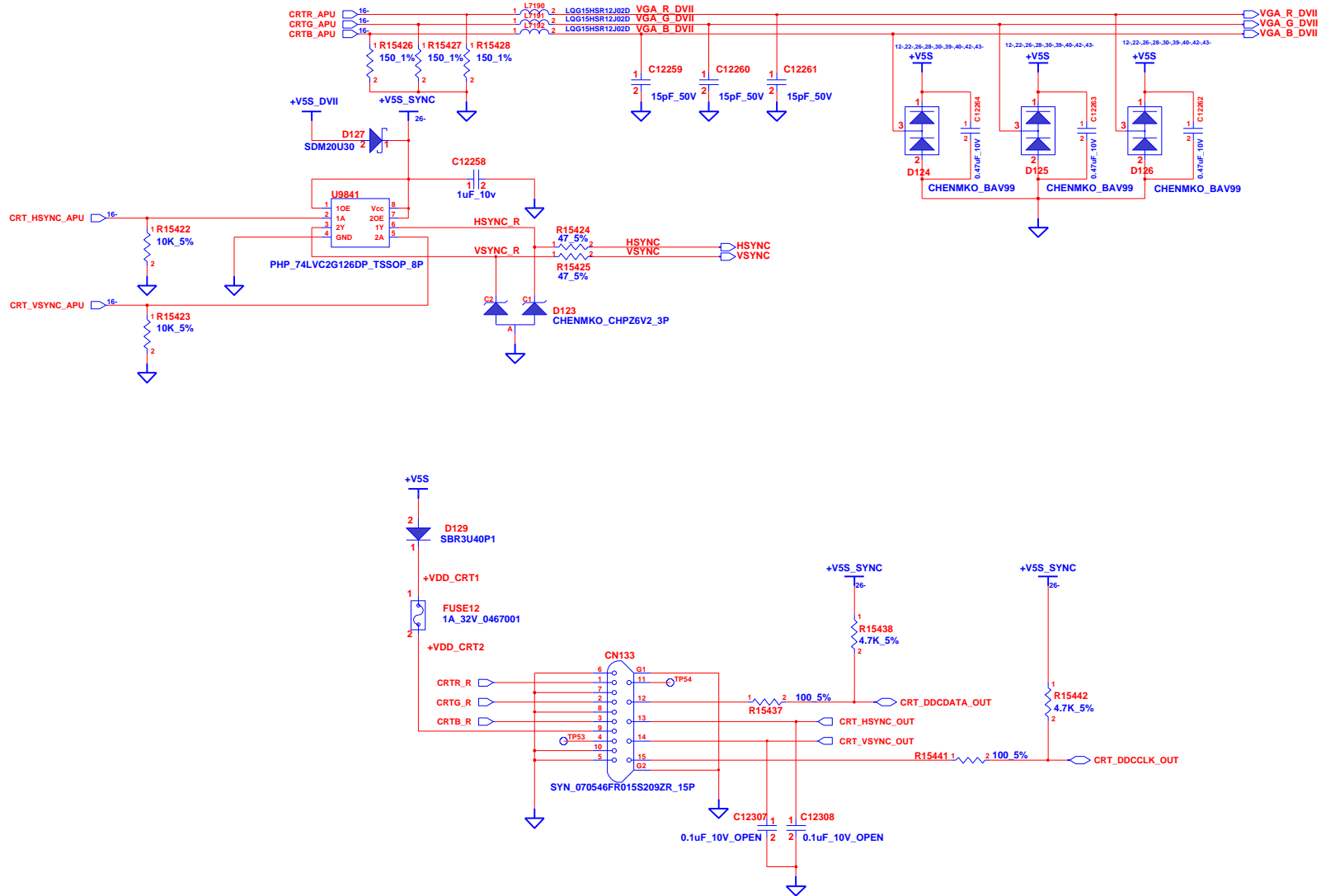
INVENTEC

| | | | |
|---------|------|-------------|-----|
| TITLE | | | |
| MIRANDA | | | |
| DVI-I | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | | |
| SHEET | | 25 OF | 54 |

CHANGE by M3 8-Jul-2010

8

CRT

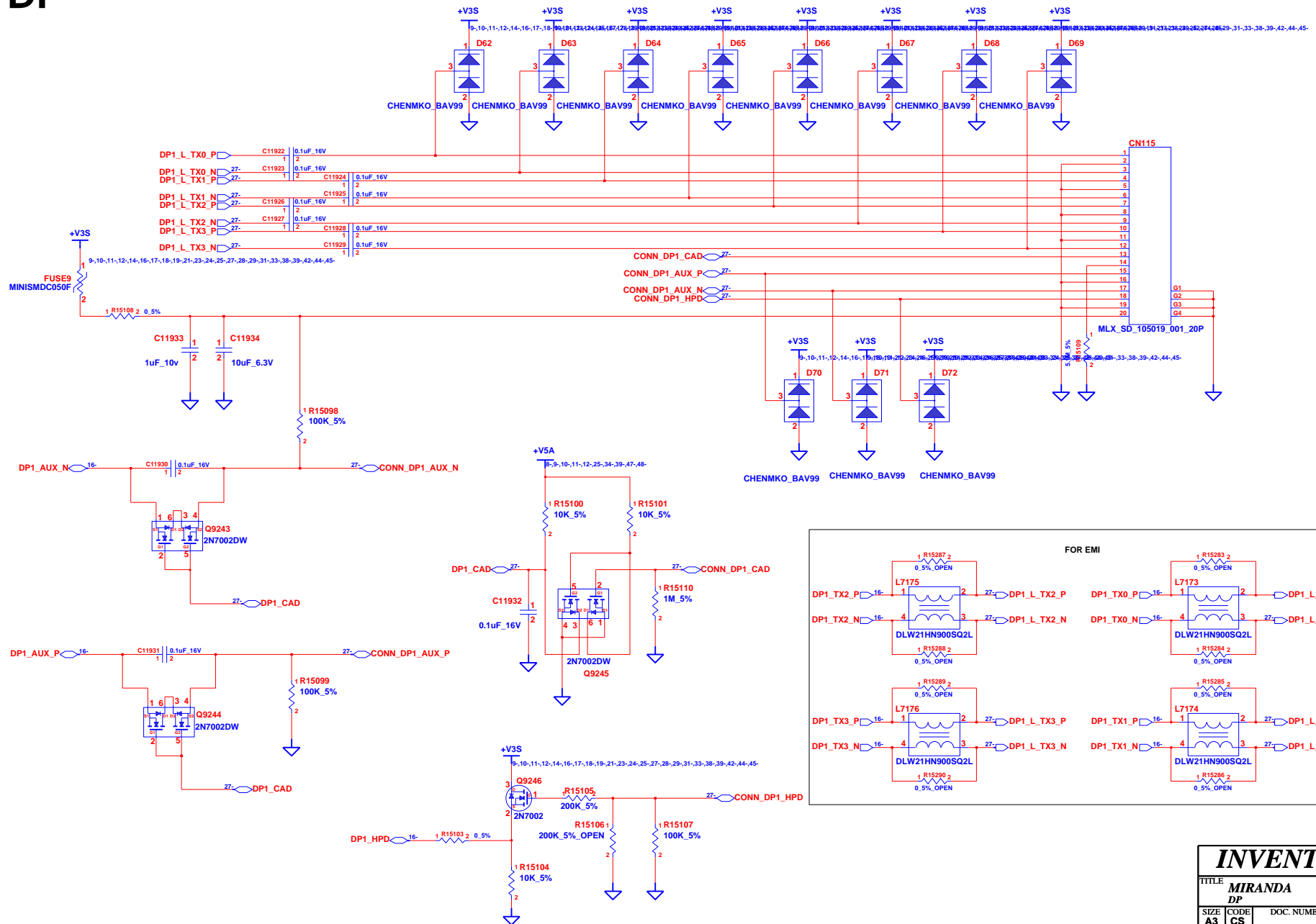


INVENTEC

| | | | |
|-------|------|----------------|-----|
| TITLE | | | |
| M3 | | | |
| VGA | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | SHEET 26 OF 54 | |

CHANGE by MIRANDA 13-Sep-2010

DP



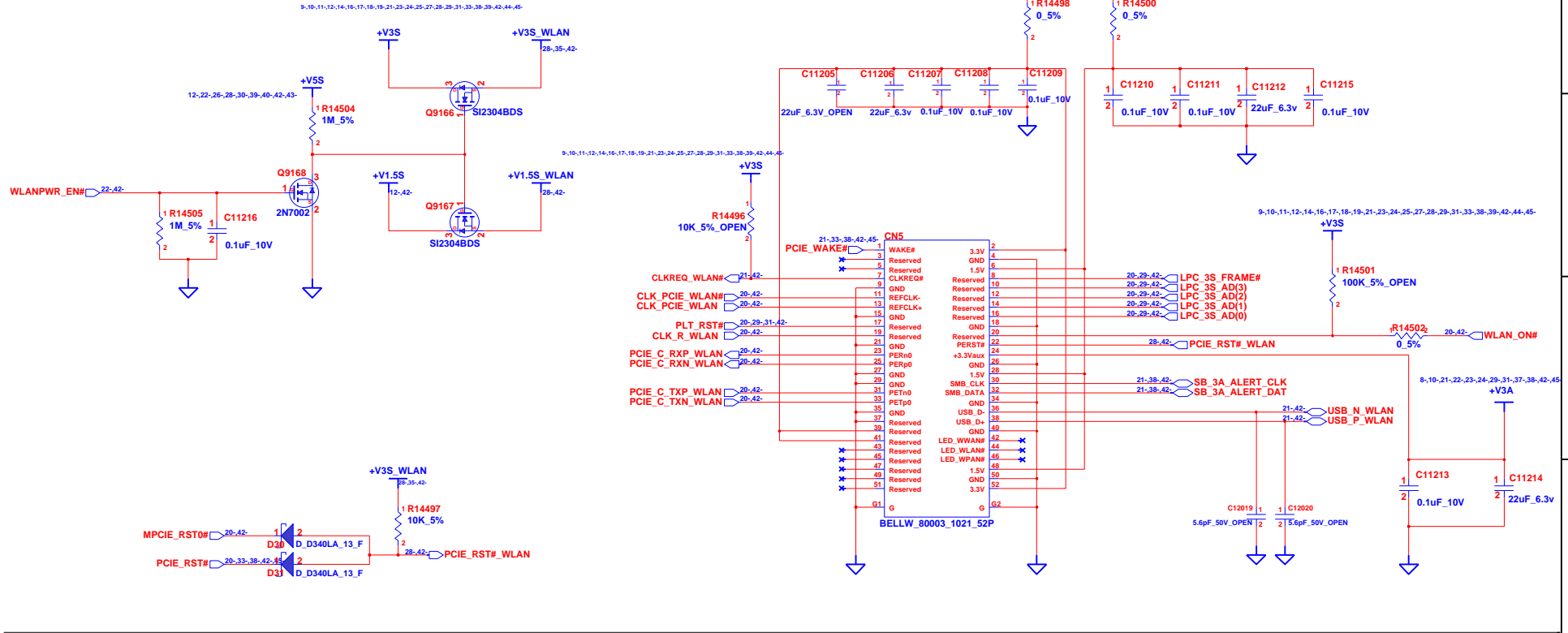
INVENTEC

| | | | |
|--------------------------------|-------------------|-------------|-------|
| TITLE MIRANDA DP | | | |
| SIZE A3 | CODE CS | DOC. NUMBER | REV |
| SHEET | | 27 | OF 54 |

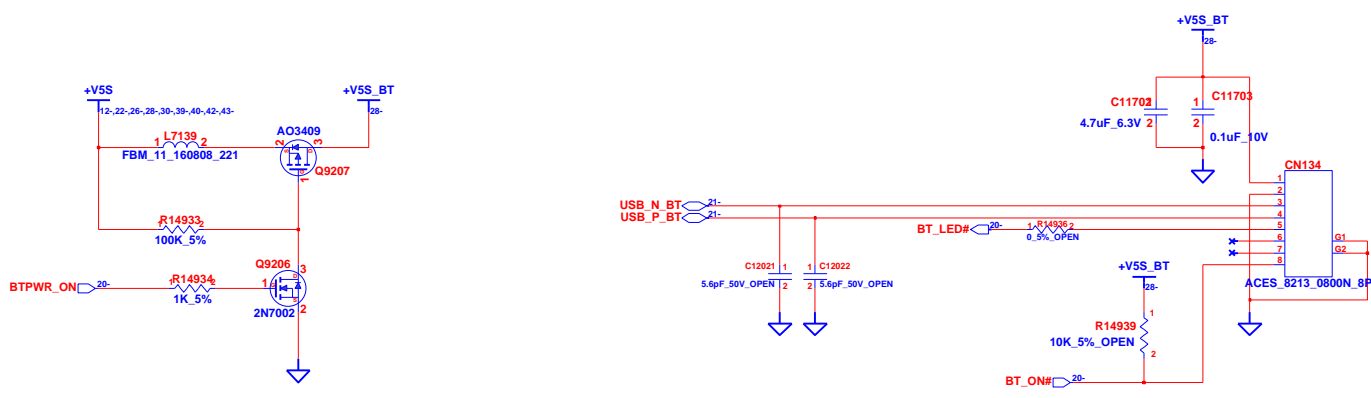
CHANGE by **MIRANDA** **2-Sep-2010**

WLAN

MINI CARD CONN (WLAN)



BT

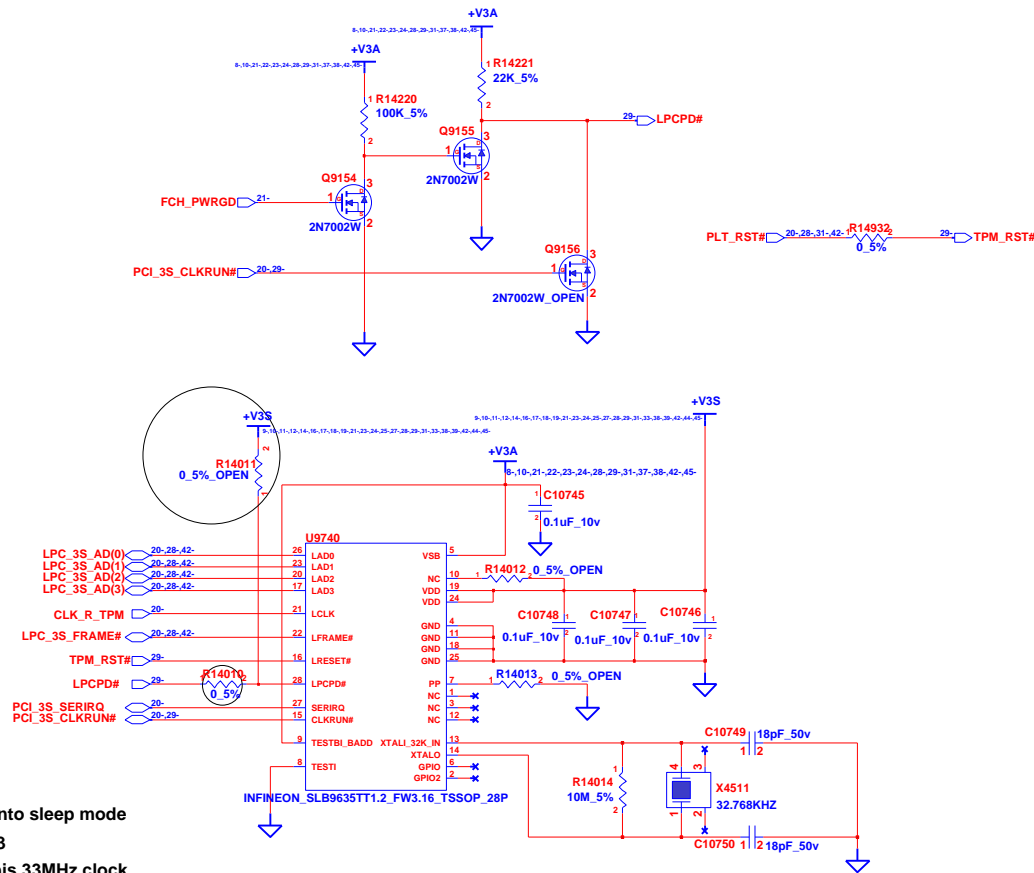


INVENTEC

| | | | |
|---------|------|-------------|-------|
| TITLE | | | |
| MIRANDA | | | |
| WLAN/BT | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | | |
| SHEET | | 28 | OF 54 |

CHANGE by M3 23-Jun-2010

TPM



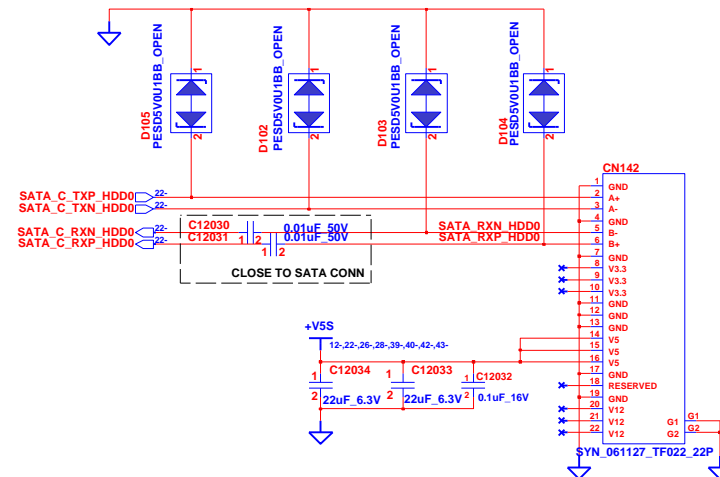
LPC_PWRDWN_L is used to force LPC peripherals to go into sleep mode
 Device may require that this be asserted before enteing S3
 Device may require that this be asserted before stoping this 33MHz clock

INVENTEC

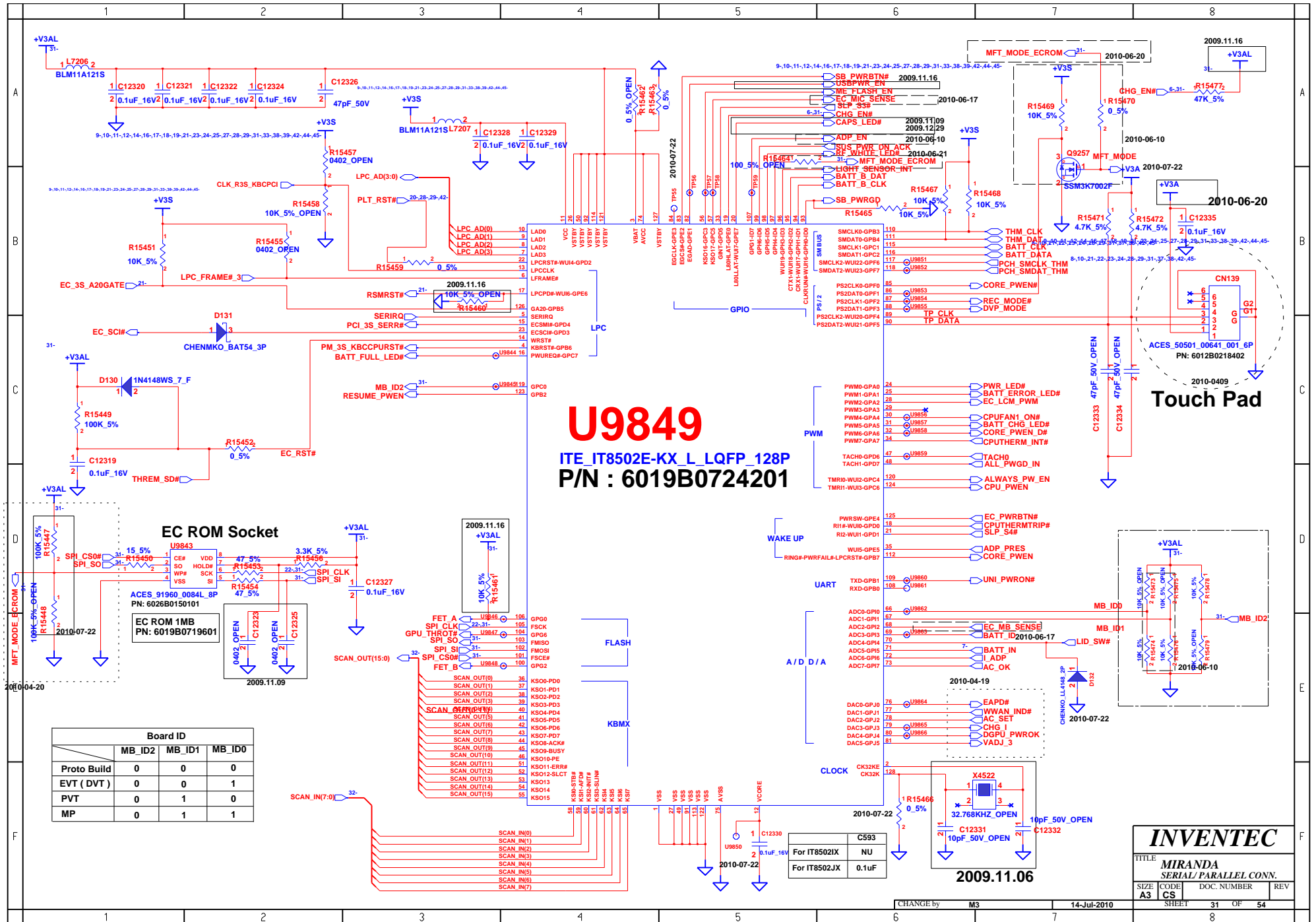
| | | | |
|---------|------|-------------|-------|
| TITLE | | | |
| MIRANDA | | | |
| TPM | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | | |
| SHEET | | 29 | OF 54 |

CHANGE by M3 2-Jul-2010

SSD / HDD

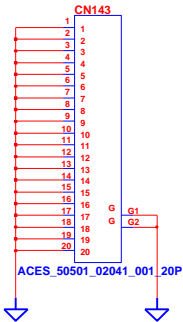
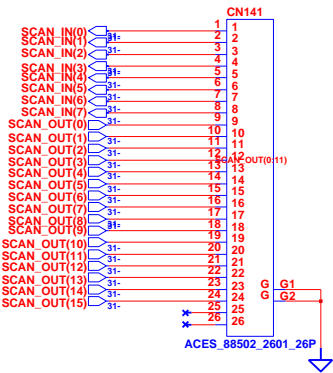


| INVENTEC | | | |
|------------------------|------|-------------|-------|
| TITLE | | | |
| MIRANDA | | | |
| SATA FLASH / SSD / HDD | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | | |
| CHANGE by | | 2-Sep-2010 | |
| MIRANDA | | | |
| SHEET | | 30 | OF 54 |
| | | 8 | |



KB / TP / LED

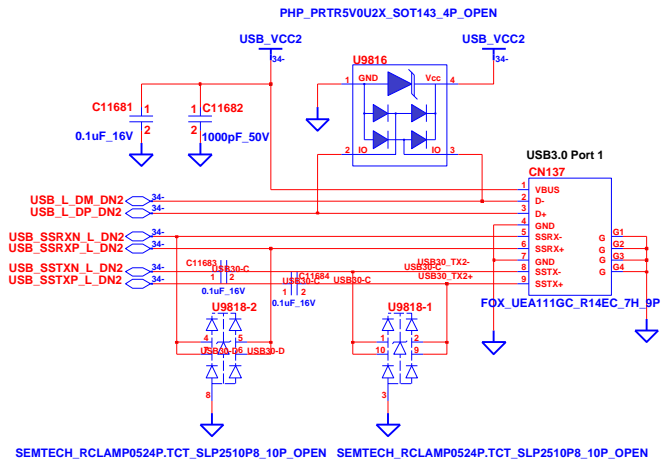
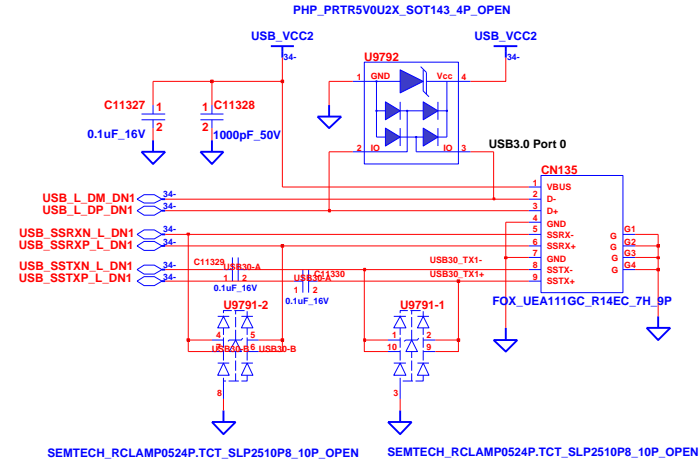
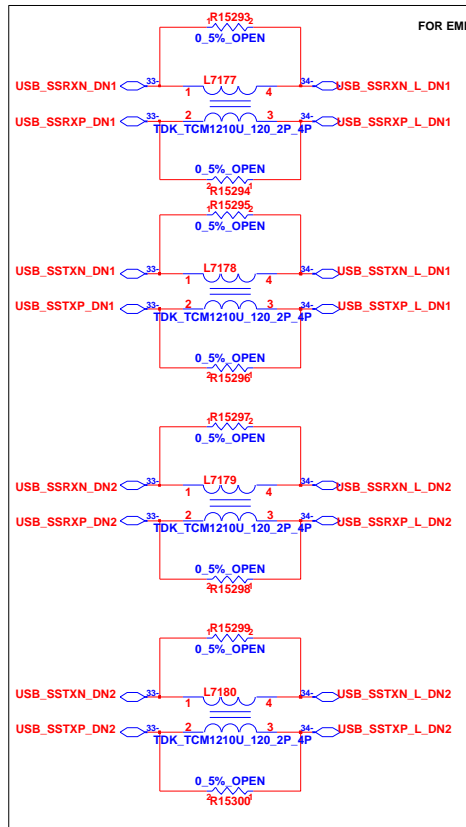
Keyboard Conn.



[illegible]

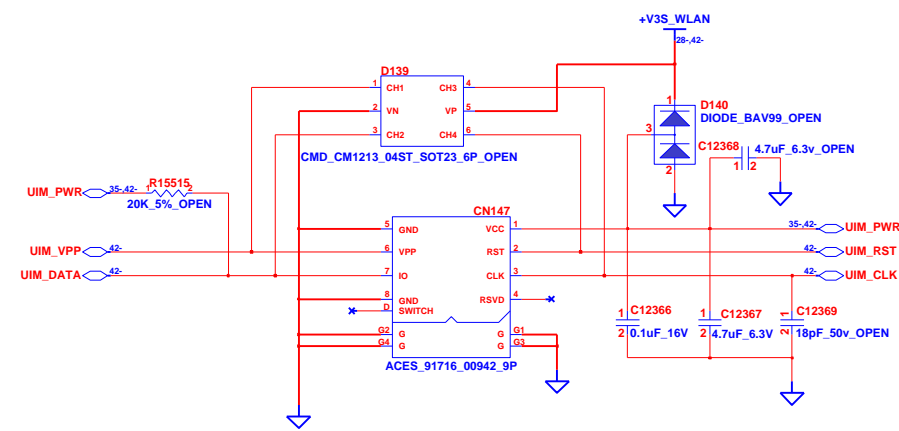
33 OF 54

The schematic diagram illustrates the USB-to-serial converter circuit. It includes a U9751 IC, a +V5A supply, and a USB VCC2 supply. The circuit is populated with capacitors C11325 (1uF, 6.3V), C12090 (100uF, 6.3V), and C12089 (0.1uF, 16V). Resistors R14614 (0.5% OPEN) and R14199 (0.5%) are used for signal conditioning. The output is connected to a USB30_Oc#_1 signal.



| | | | |
|--------------------------------------|-----------|-------------|-----|
| TITLE | | | |
| MIRANDA | | | |
| DUAL USB3.0 CONN./ USB HEADER | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | | |

SIM CARD



INVENTEC

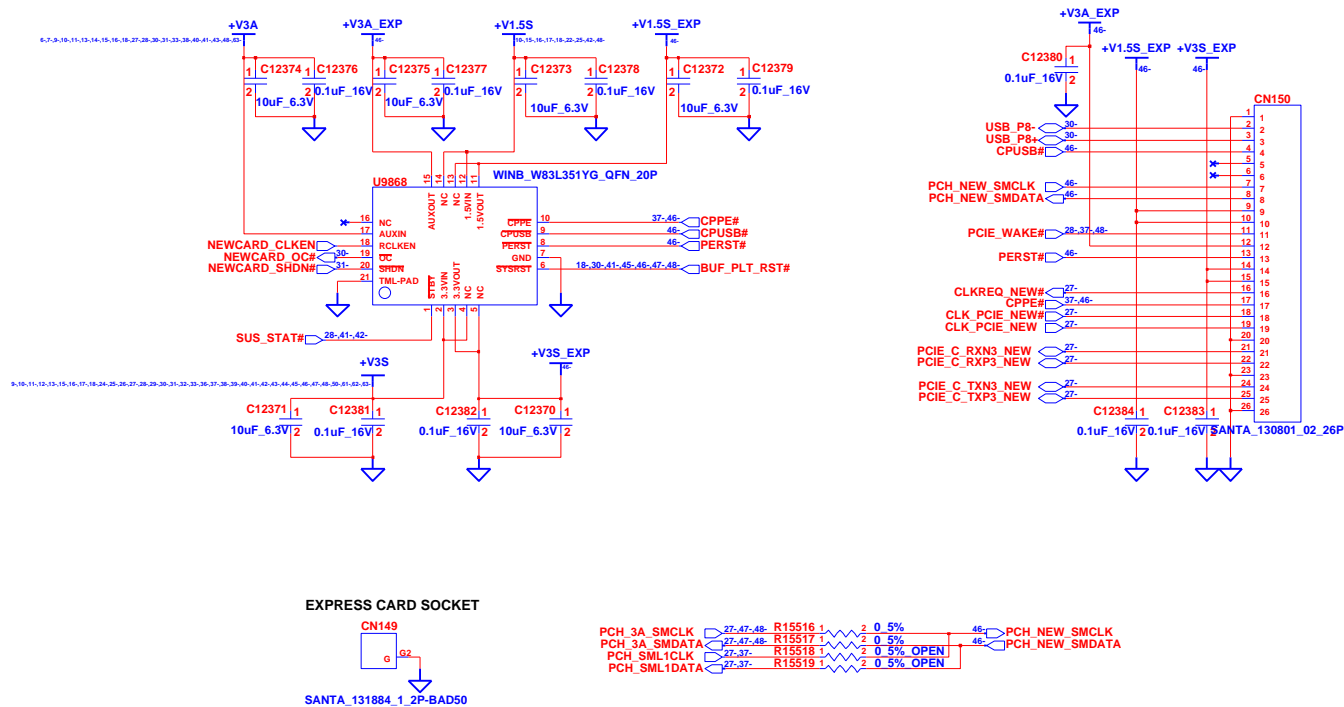
TITLE **MIRANDA**

SIZE **A3** CODE **CS** DOC. NUMBER REV

SHEET **35** OF **54**

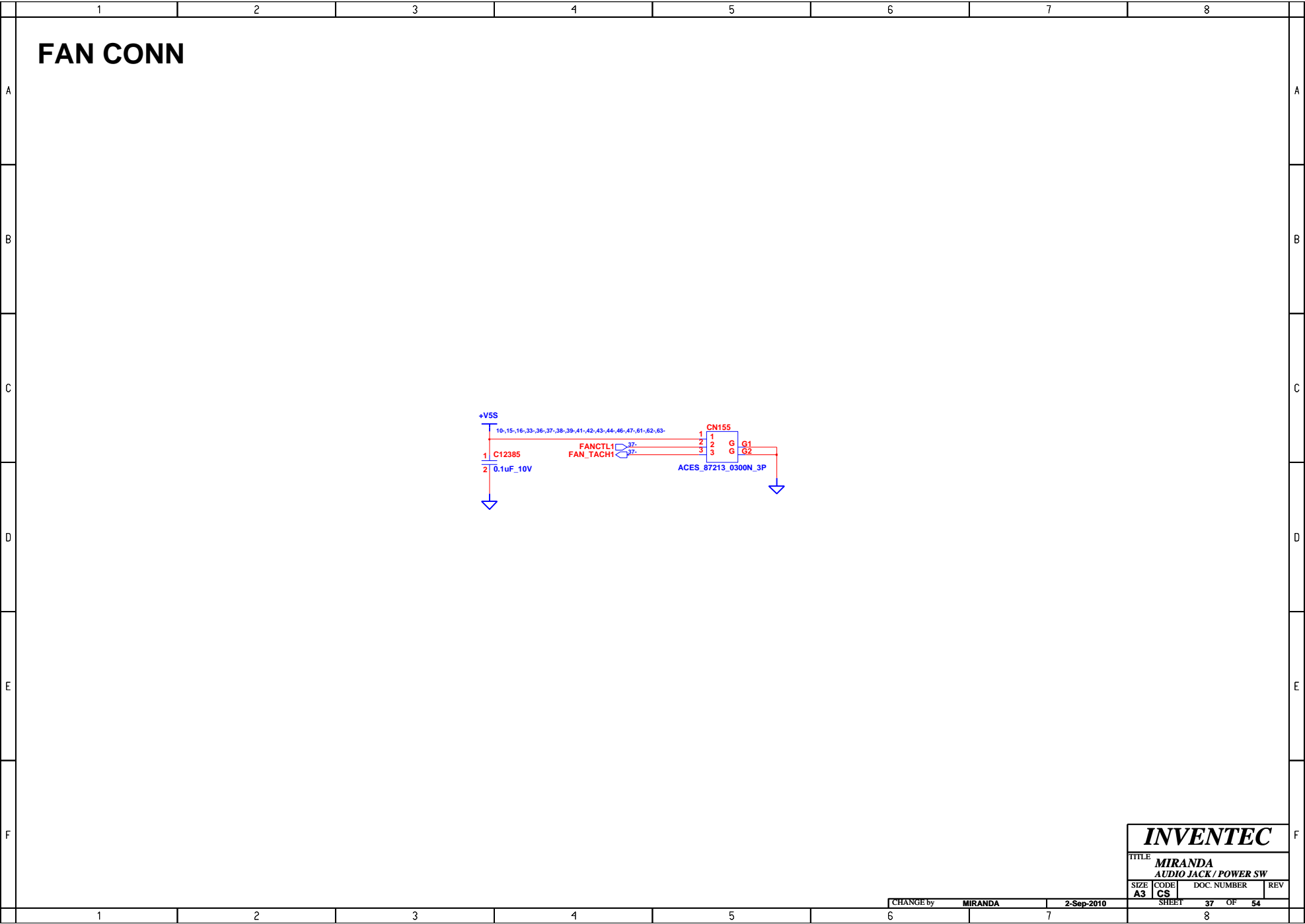
CHANGE by **MIRANDA** 11-Sep-2010

EXPRESS CARD



| INVENTEC | | | |
|----------------|------|-------------|-----|
| TITLE | | | |
| MIRANDA | | | |
| USB CONN | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | | |
| SHEET 36 OF 54 | | | |

CHANGE by MIRANDA 2-Sep-2010



1 2 3 4 5 6 7 8

A

B

C

D

E

F

WIRE to BOARD CONN (MB SIDE)

MB to PWR/B

Connector Pinouts:

- CN167:** 40 pins (1-40). Grounds: G1, G2.
- CN168:** 40 pins (1-40). Grounds: G1, G2.
- CN161:** 6 pins (1-6). Grounds: G1, G2.

Board Connections:

- ACES_88442_4001_40P:** Connected to CN167 and CN168.
- ENTERY_69T6K_Q06M_00L_6P:** Connected to CN161.

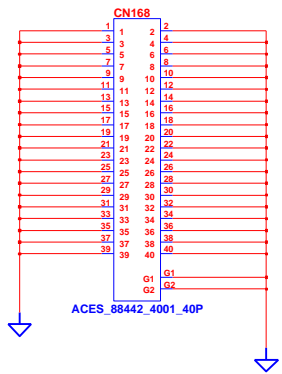
| CHANGE by | | 16-Sep-2010 | |
|-----------|--|----------------|--|
| MIRANDA | | SHEET 38 OF 54 | |

INVENTEC

TITLE: **MIRANDA**
RISER CARD

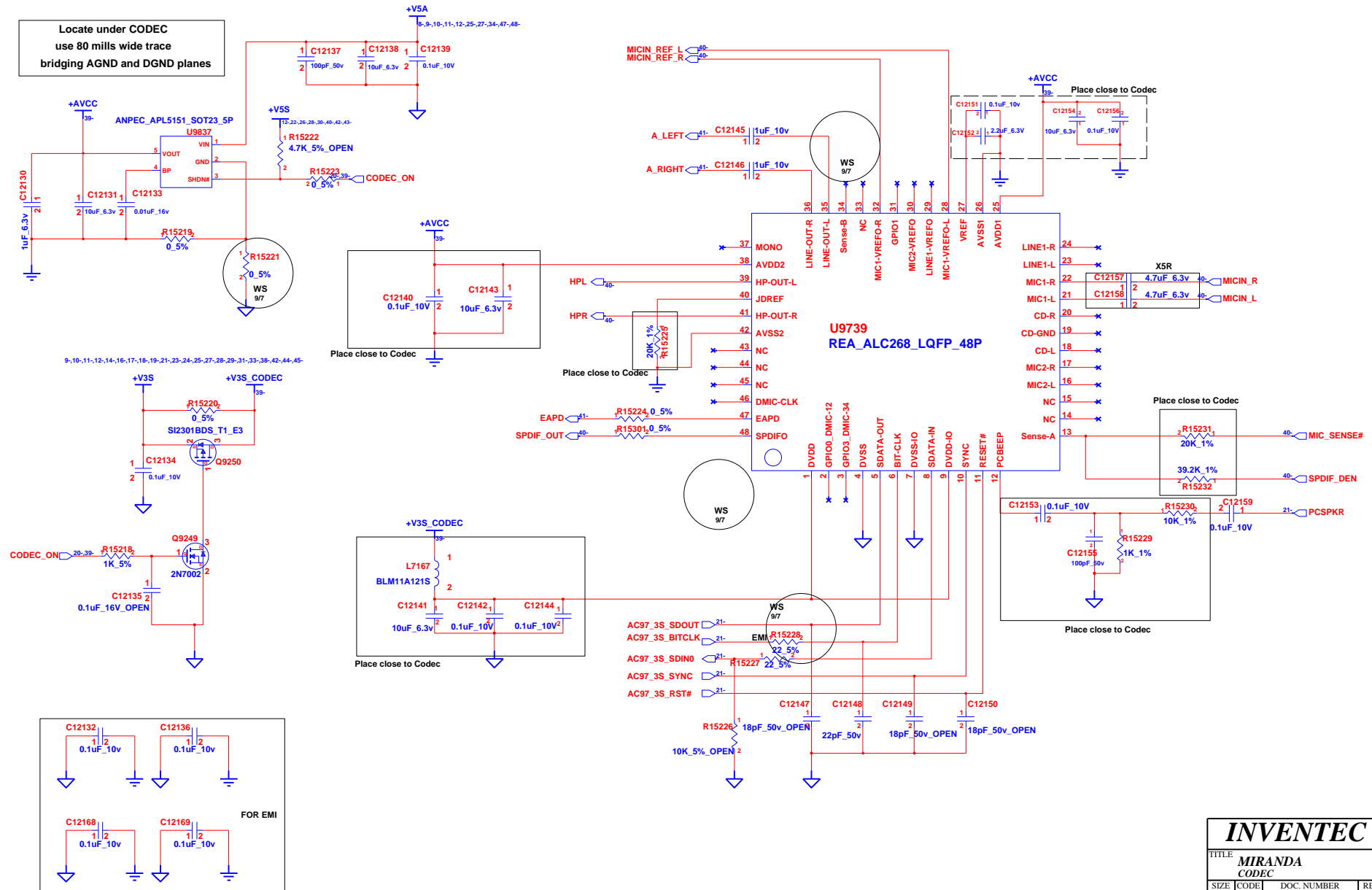
| | | | |
|------|------|-------------|-----|
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | | |

The diagram shows a 6-to-2 decoder component labeled 'CN161'. It has six inputs on the left, numbered 1 through 6. On the right, it has two outputs labeled 'G1' and 'G2'. Both 'G1' and 'G2' are connected to a common ground symbol at the bottom right. The label 'ENTERY_6916K_Q06M_00L_6P' is located below the input lines.



| | | | |
|-------------------------------------|-------------------|-------------|-------|
| INVENTEC | | | |
| TITLE MIRANDA RISER CARD | | | |
| SIZE A3 | CODE CS | DOC. NUMBER | RE |
| SHEET | | 38 | OF 54 |

CODEC



INVENTEC

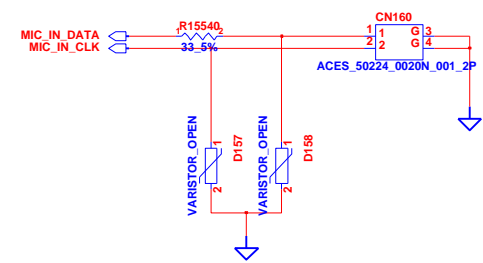
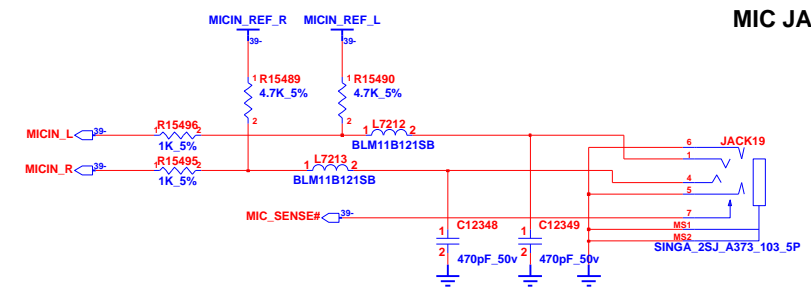
| | | | |
|--------------------------|------|-------------|-----|
| TITLE | | | |
| MIRANDA CODEC | | | |
| SIZE | CODE | DOC. NUMBER | REV |

| | | |
|-----------|----|-------------|
| CHANGE by | M3 | 23-Jun-2010 |
|-----------|----|-------------|

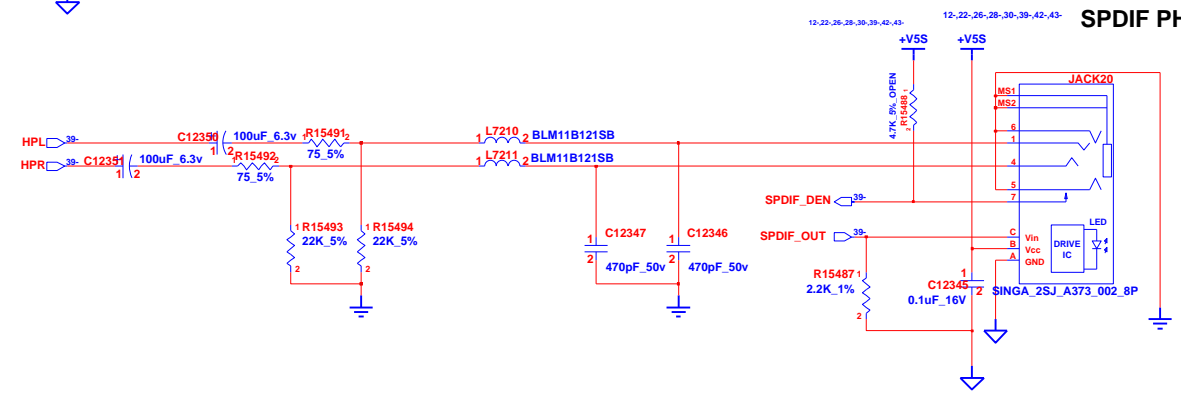
CS
SHEET 39 OF 54
8

AUDIO JACK

MIC JACK



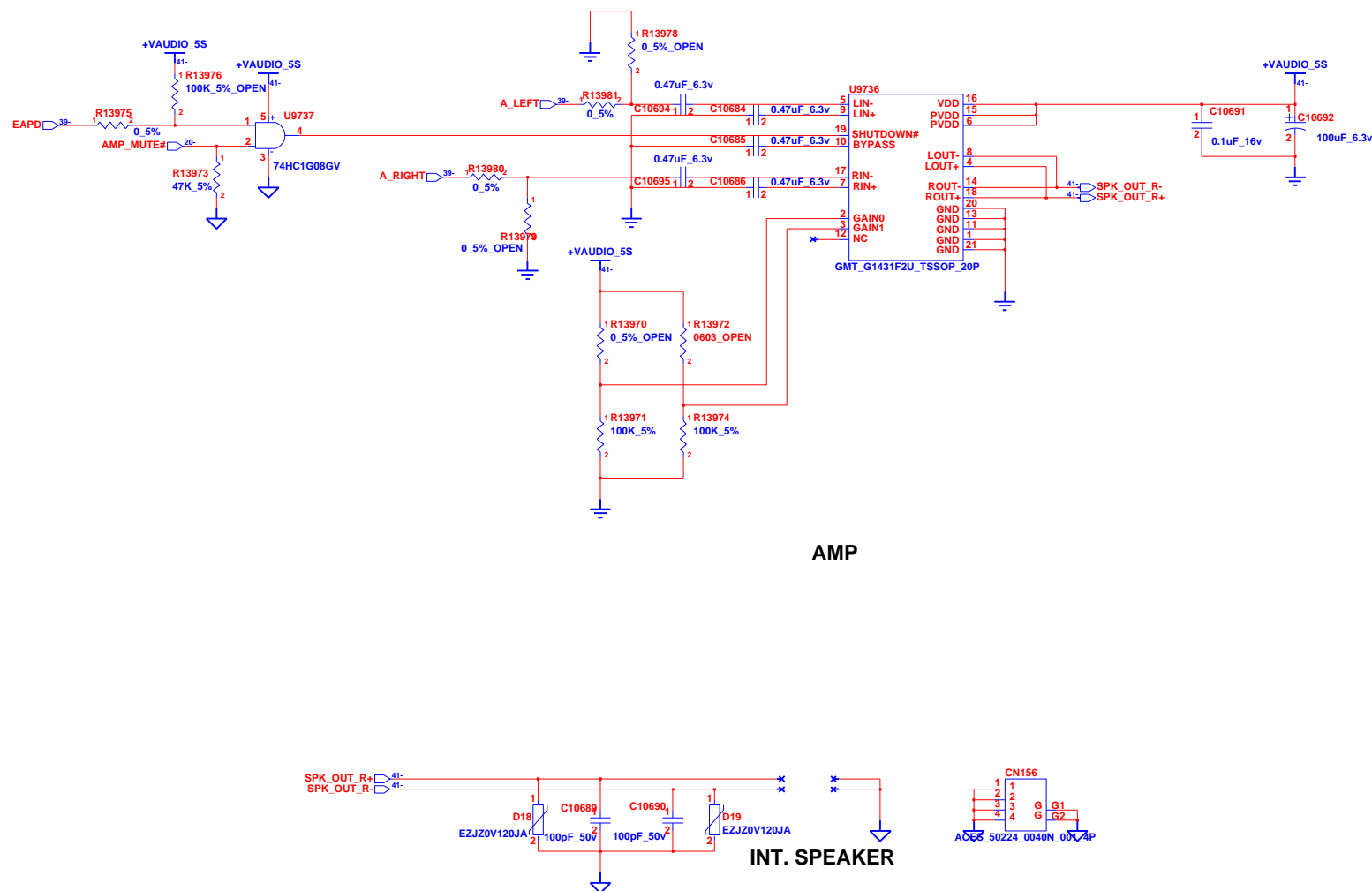
SPDIF PHONE JACK



| INVENTEC | | | |
|------------|------|-------------|-------|
| TITLE | | | |
| M3 | | | |
| AUDIO JACK | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | | |
| CHANGE by | | 16-Sep-2010 | |
| MIRANDA | | | |
| SHEET | | 40 | OF 54 |

AMP / SPEAKER

EAPD when output high, turn on OP
EAPD when output low, turn off OP



AMP

INT. SPEAKER

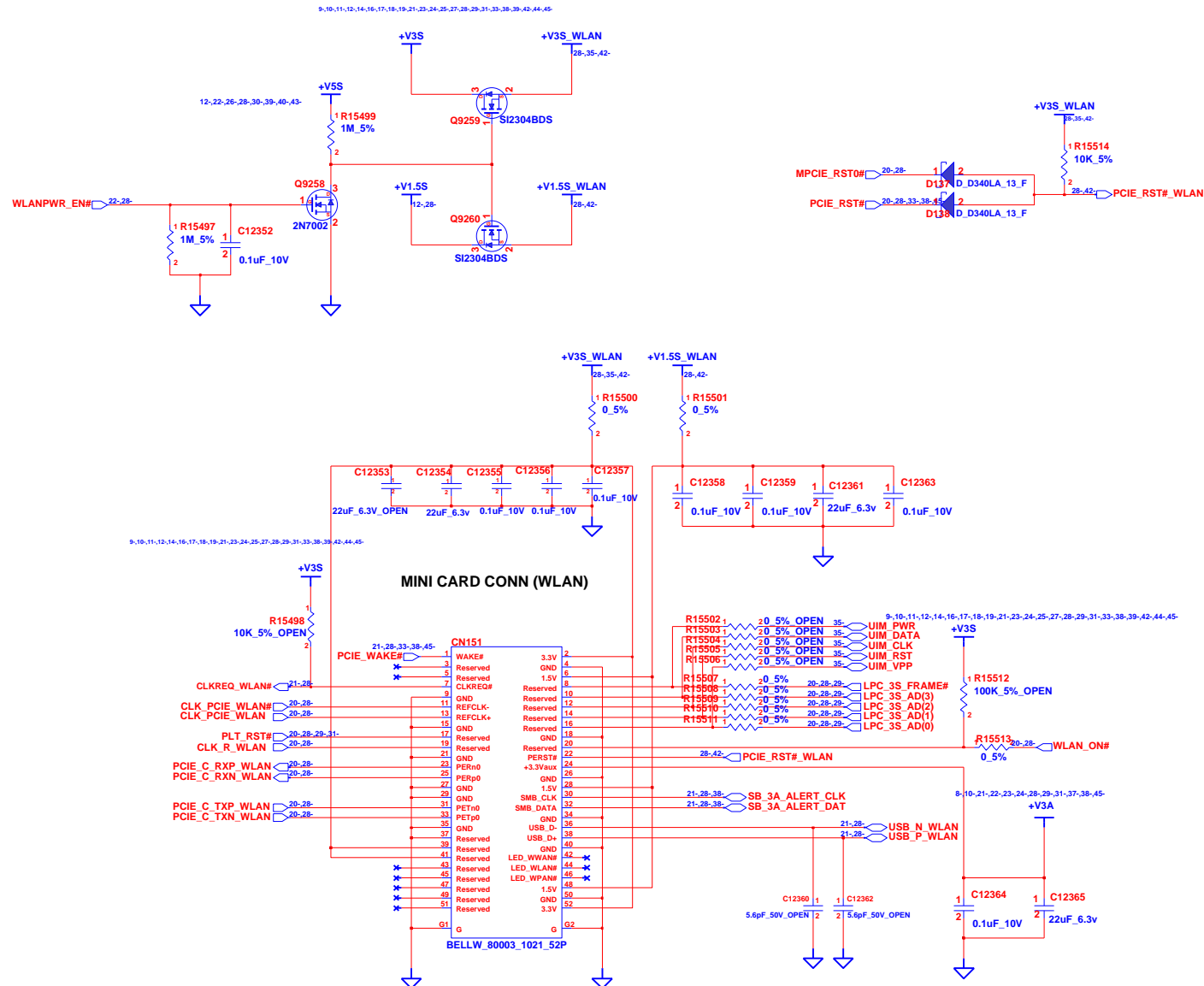
INVENTEC

| | | | |
|-------------|------|-------------|-----|
| TITLE | | | |
| MIRANDA | | | |
| AMP/SPEAKER | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | | |

CHANGE by M3 23-Jun-2010

SHEET 41 OF 54

WWAN

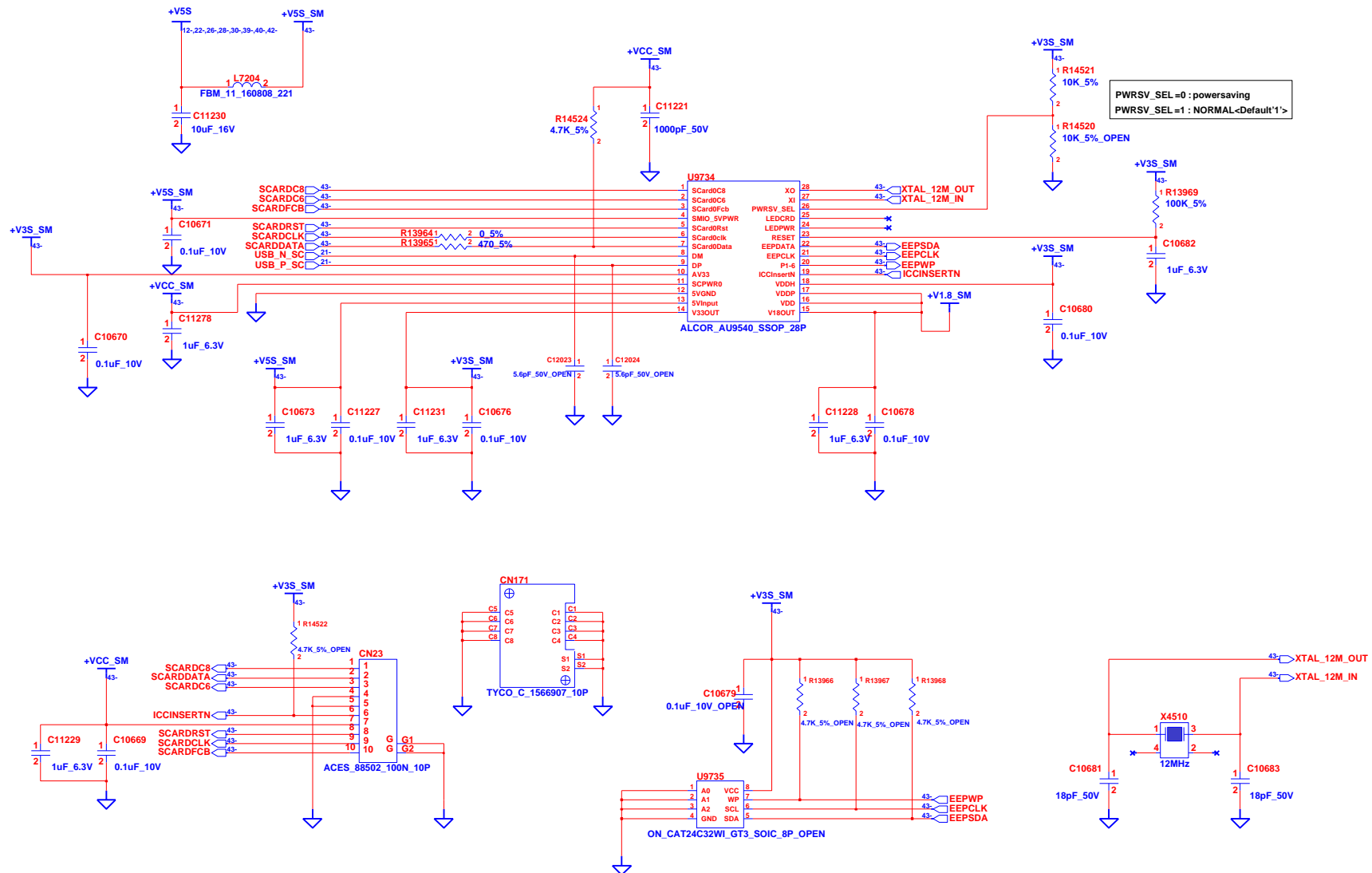


INVENTEC

| | | | |
|-------|------|----------------|-----|
| TITLE | | | |
| M3 | | | |
| WWAN | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | SHEET 42 OF 54 | |

CHANGE by MIRANDA 16-Sep-2010

SMART CARD

***INVENTEC***

| | |
|-------|--|
| TITLE | MIRANDA SMART CARD AU9540 |
|-------|--|

| | | | |
|-------------------|-------------------|-------------|-----|
| SIZE A3 | CODE CS | DOC. NUMBER | REV |
|-------------------|-------------------|-------------|-----|

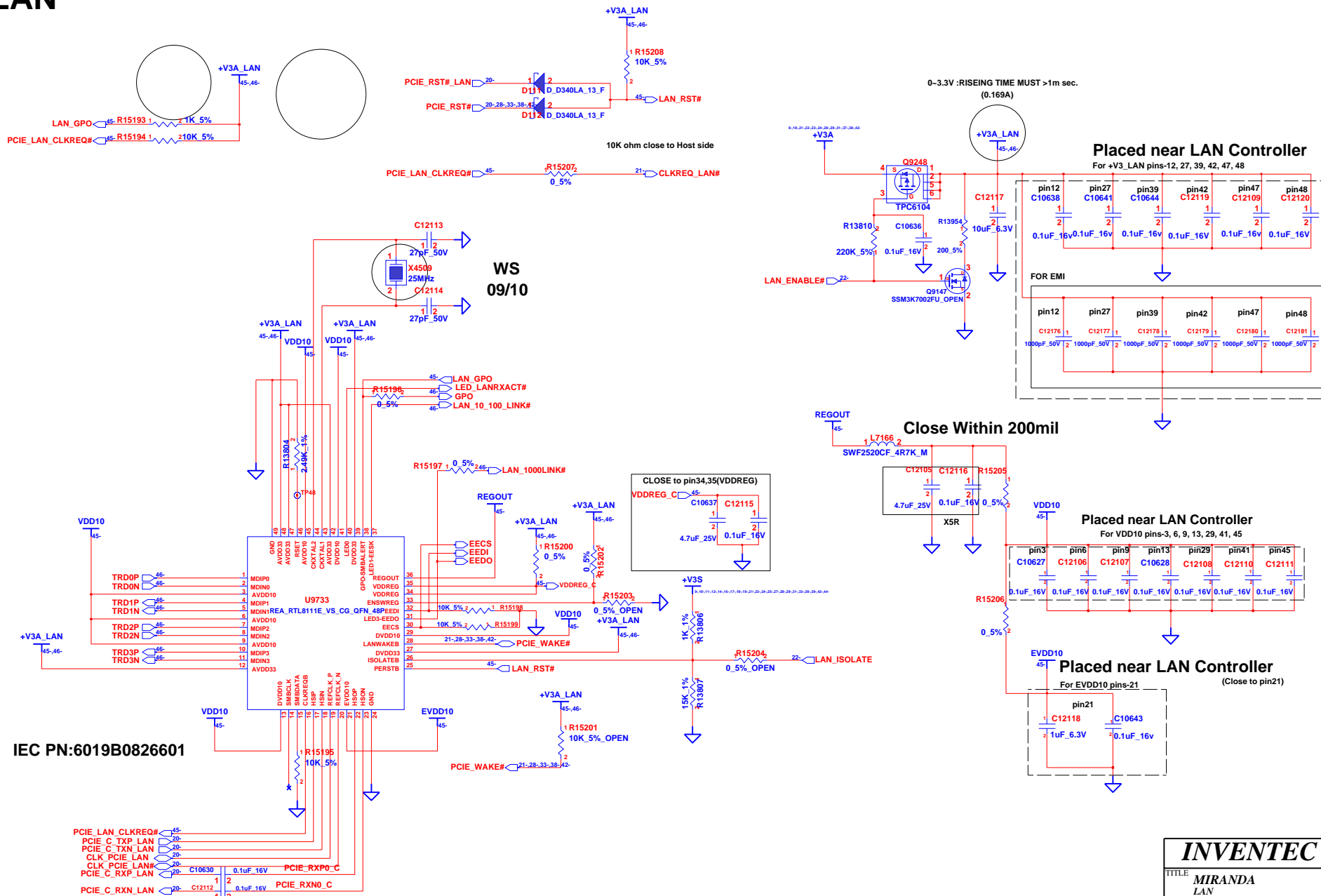
| | | |
|-----------|----|-------------|
| CHANGE by | M3 | 23-Jun-2010 |
|-----------|----|-------------|

SHEET 43 OF 54

F

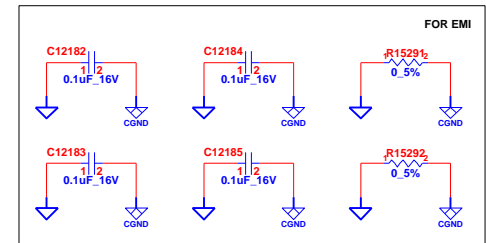
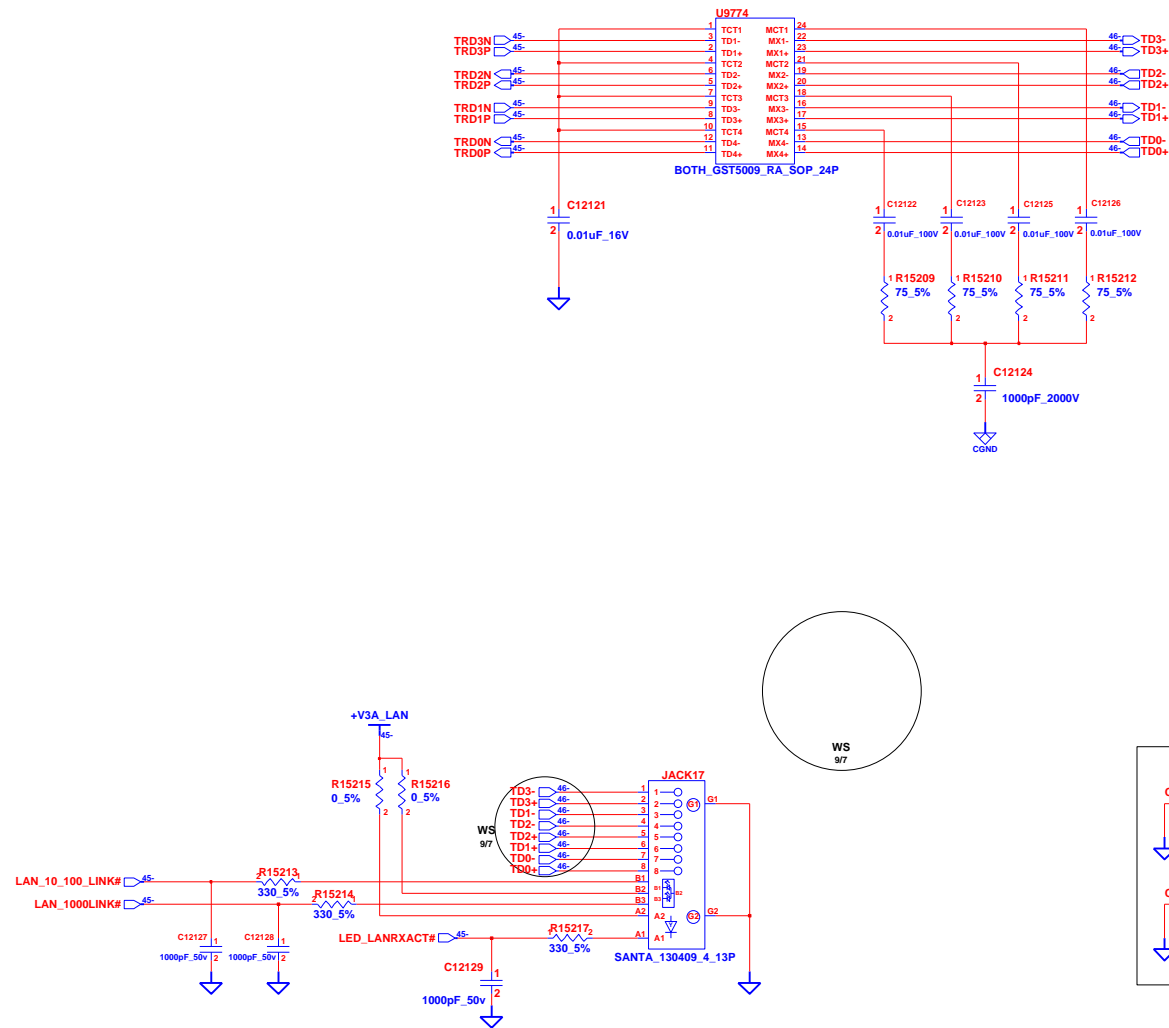
| | | | |
|-------------------|------|-------------|-----|
| TITLE | | | |
| M3 CARD READER | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | | |
| SHEET 44 OF 54 | | | |

LAN

**INVENTEC**

| | | | |
|------------------------------|-----------|-------------|-----|
| TITLE | | | |
| MIRANDA LAN | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | | |

RJ45



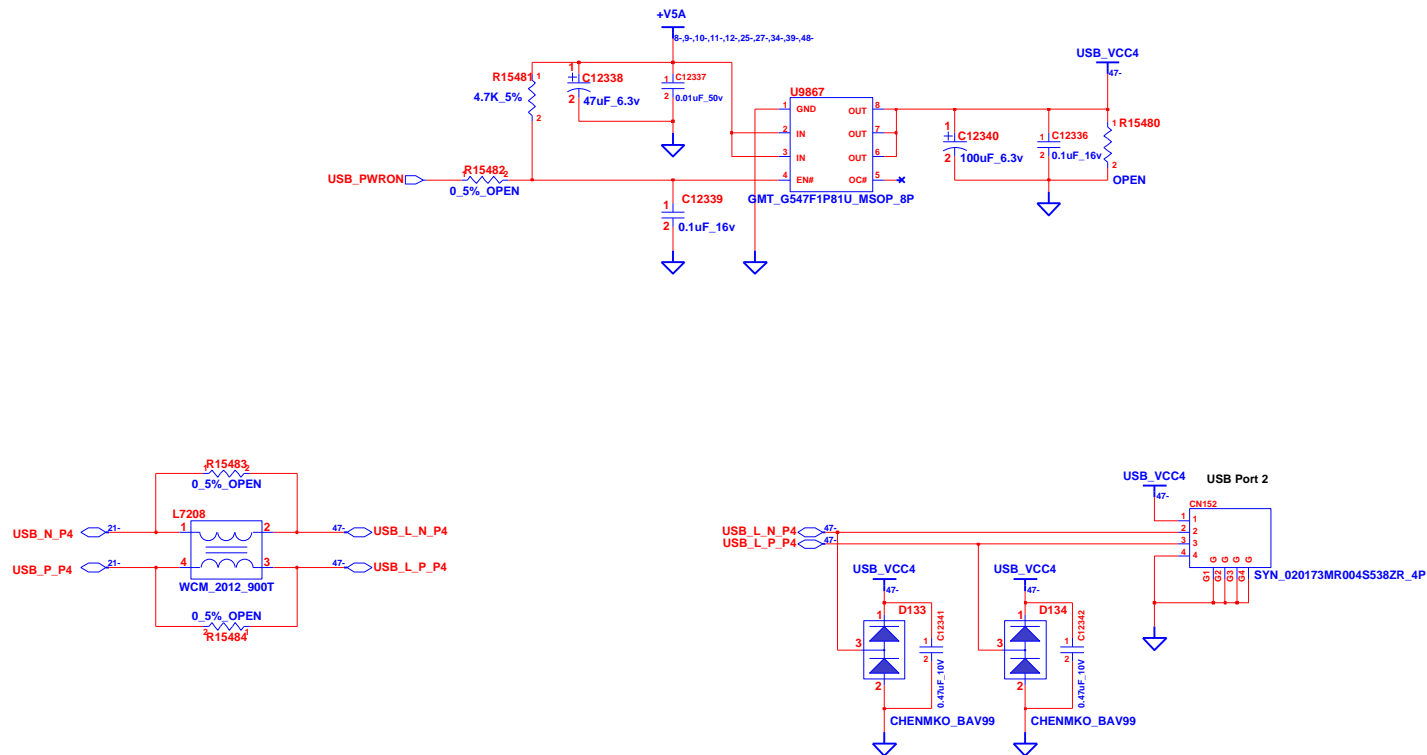
| INVENTEC | | | |
|----------------|------|-------------|-----|
| TITLE | | | |
| MIRANDA | | | |
| RJ45/ DUAL USB | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | | |

CHANGE by M3 20-Jul-2010

SHEET 46 OF 54

8

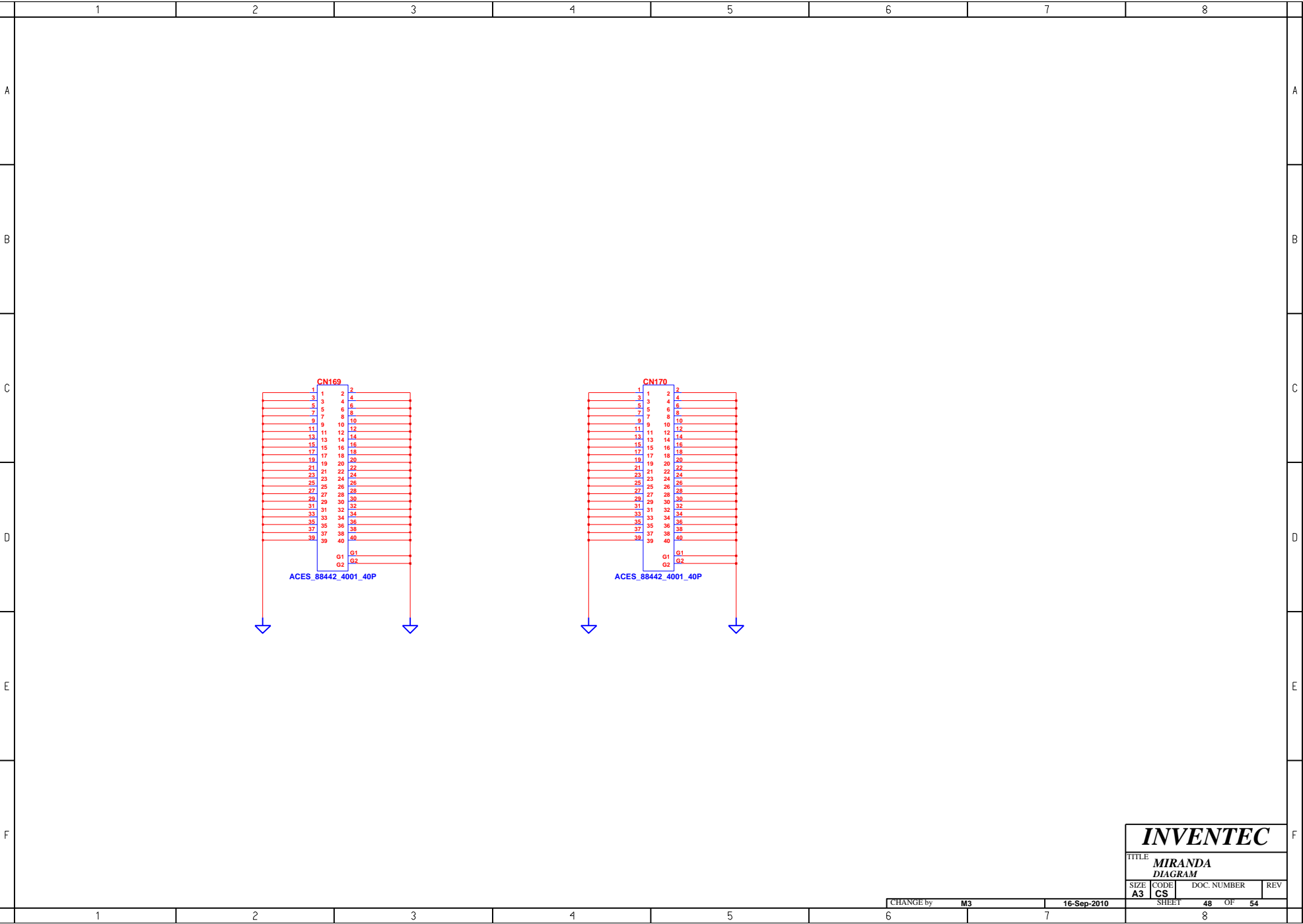
USB CONN

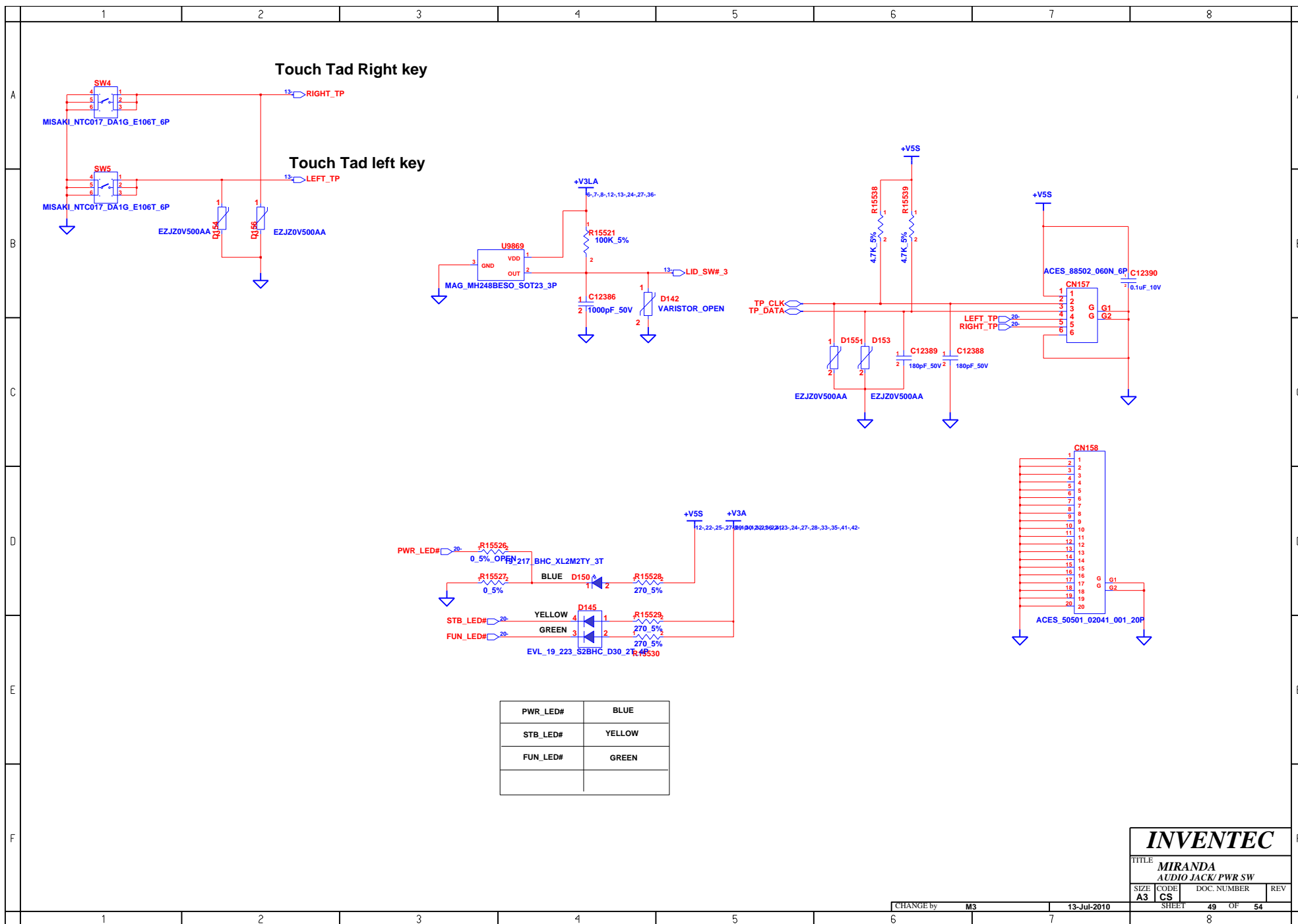


INVENTEC

| | | | |
|--------------------|------|-----------------|-------|
| TITLE | | | |
| MIRANDA | | | |
| LITE Block Diagram | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | 1310AXXXX-0-MTR | 01 |
| SHEET | | 47 | OF 54 |

CHANGE by *Drawer Name* 10-Sep-2010

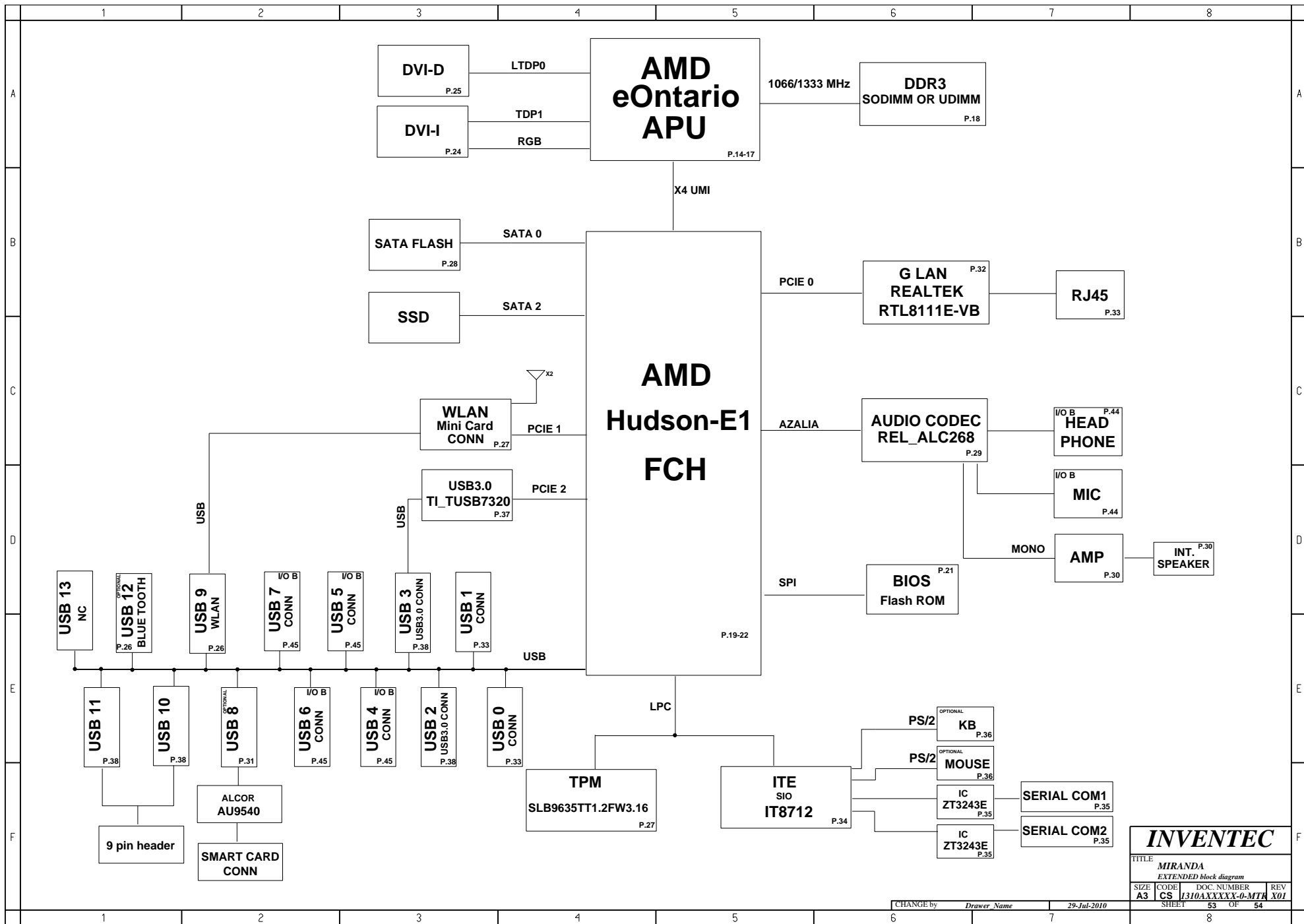


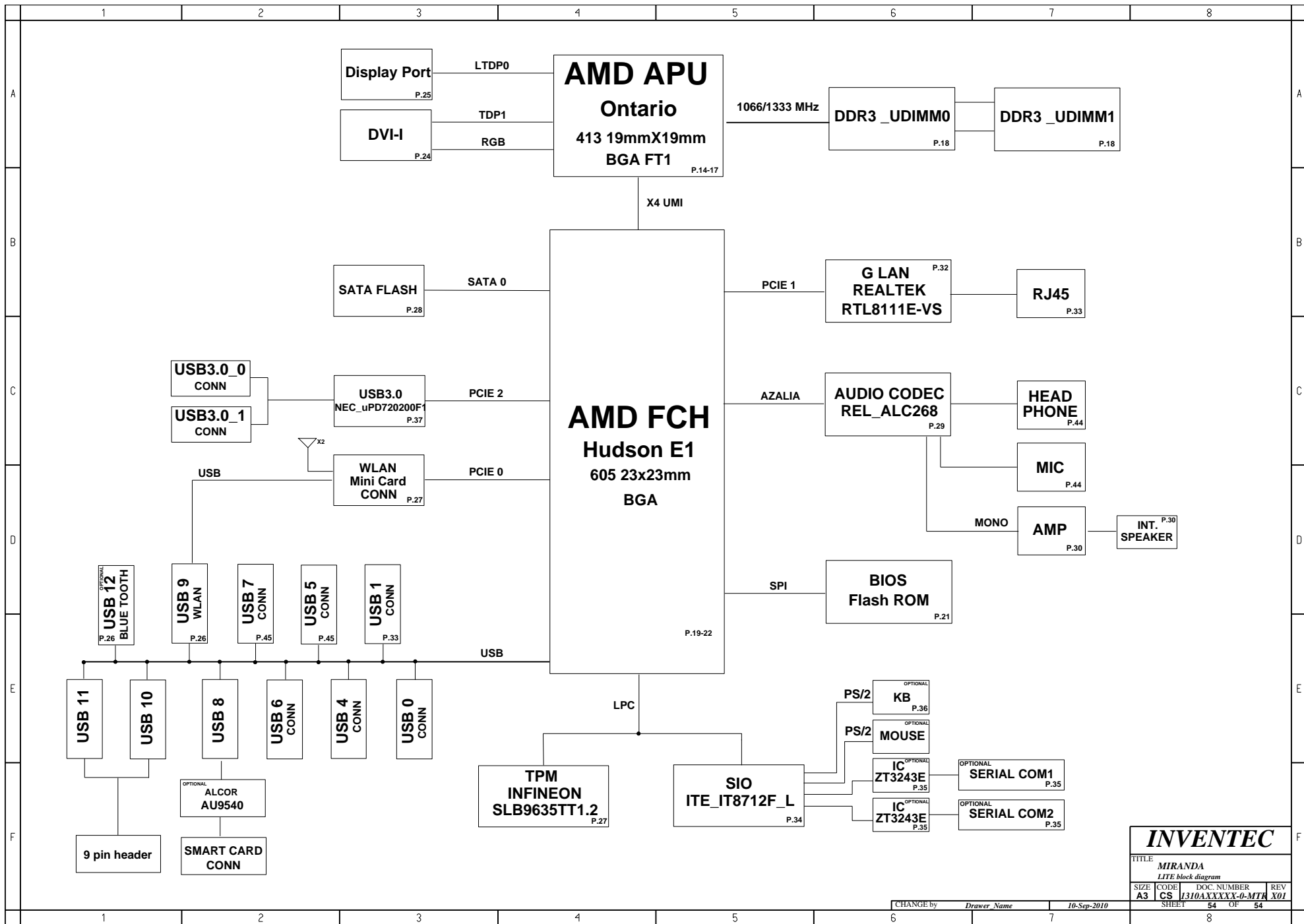


| | | | | | | | | | |
|---|---|---|---|---|---|-----------|---|------------|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| A | | | | | | | | | A |
| B | | | | | | | | | B |
| C | | | | | | | | | C |
| D | | | | | | | | | D |
| E | | | | | | | | | E |
| F | | | | | | | | | F |
| | | | | | | CHANGE by | | 3-Jun-2010 | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |

| | | | |
|--|-------------------|---------------------------------------|-------------------|
| INVENTEC | | | |
| TITLE MIRANDA <i>RTSS138</i> | | | |
| SIZE A3 | CODE CS | DOC. NUMBER 1310AXXXX-0-MIR | REV R01 |
| SHEET | | 51 | OF 54 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|-----------|---|---------|-------------|----|-------------|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| A | | | | | | | | | A | | | |
| B | | | | | | | | | B | | | |
| C | | | | | | | | | C | | | |
| D | | | | | | | | | D | | | |
| E | | | | | | | | | E | | | |
| F | | | | | | | | | F | | | |
| | | | | | | CHANGE by | | MIRANDA | 13-Aug-2010 | | | |
| | | | | | | SIZE | | A3 | CODE | CS | DOC. NUMBER | REV |
| | | | | | | SHEET | | 52 | OF | 54 | | |





INVENTEC

| | | | |
|--------------------|------|-----------------|-------|
| TITLE | | | |
| MIRANDA | | | |
| LITE block diagram | | | |
| SIZE | CODE | DOC. NUMBER | REV |
| A3 | CS | I310AXXXX-0-MTN | X01 |
| SHEET | | 54 | OF 54 |

CHANGE by *Drawer Name* 10-Sep-2010