

[illegible]

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

# DDD Discrete

## GDDR1

## PV Build

2007.06.21

| DATE | CHANGE NO. | REV |
|------|------------|-----|
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|                            |              |       |       |      |
|----------------------------|--------------|-------|-------|------|
| DRAWER                     | EE           | DATE  | POWER | DATE |
| DESIGN                     |              |       |       |      |
| CHECK                      |              |       |       |      |
| RESPONSIBLE                |              |       |       |      |
| SIZE = 3                   |              | VER : |       |      |
| FILE NAME : XXXX-XXXXXX-XX |              |       |       |      |
| P/N                        | XXXXXXXXXXXX |       |       |      |

| INVENTEC           |      |             |     |
|--------------------|------|-------------|-----|
| TITLE DDD-Discrete |      |             |     |
| SIZE               | CODE | DOC. NUMBER | REV |
| A3                 | CS   | 1310A21516  | A01 |
| SHEET 1            |      | OF 53       |     |

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

# DDD Discrete

## GDDR1

## PV Build

2007.06.21

| DATE | CHANGE NO. | REV |
|------|------------|-----|
|      |            |     |
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|----------------------------|--------------|------|-------|-------|
| DRAWER                     | EE           | DATE | POWER | DATE  |
| DESIGN                     |              |      |       |       |
| CHECK                      |              |      |       |       |
| RESPONSIBLE                |              |      |       |       |
| SIZE =                     | 3            |      |       | VER : |
| FILE NAME : XXXX-XXXXXX-XX |              |      |       |       |
| P/N                        | XXXXXXXXXXXX |      |       |       |

|                    |                   |                                  |                   |
|--------------------|-------------------|----------------------------------|-------------------|
| <b>INVENTEC</b>    |                   |                                  |                   |
| TITLE DDD-Discrete |                   |                                  |                   |
| SIZE<br><b>A3</b>  | CODE<br><b>CS</b> | DOC. NUMBER<br><b>1310A21516</b> | REV<br><b>A01</b> |
| SHEET <b>1</b>     |                   | OF <b>53</b>                     |                   |

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

# DDD Discrete

## GDDR1

## PV Build

2007.06.21

| DATE | CHANGE NO. | REV |
|------|------------|-----|
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|                            |              |      |       |      |
|----------------------------|--------------|------|-------|------|
| DRAWER                     | EE           | DATE | POWER | DATE |
| DESIGN                     |              |      |       |      |
| CHECK                      |              |      |       |      |
| RESPONSIBLE                |              |      |       |      |
| SIZE = 3 VER :             |              |      |       |      |
| FILE NAME : XXXX-XXXXXX-XX |              |      |       |      |
| P/N                        | XXXXXXXXXXXX |      |       |      |

| INVENTEC           |      |             |     |
|--------------------|------|-------------|-----|
| TITLE DDD-Discrete |      |             |     |
| SIZE               | CODE | DOC. NUMBER | REV |
| A3                 | CS   | 1310A21516  | A01 |
| SHEET 1            |      | OF 53       |     |

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

# DDD Discrete

## GDDR1

## PV Build

2007.06.21

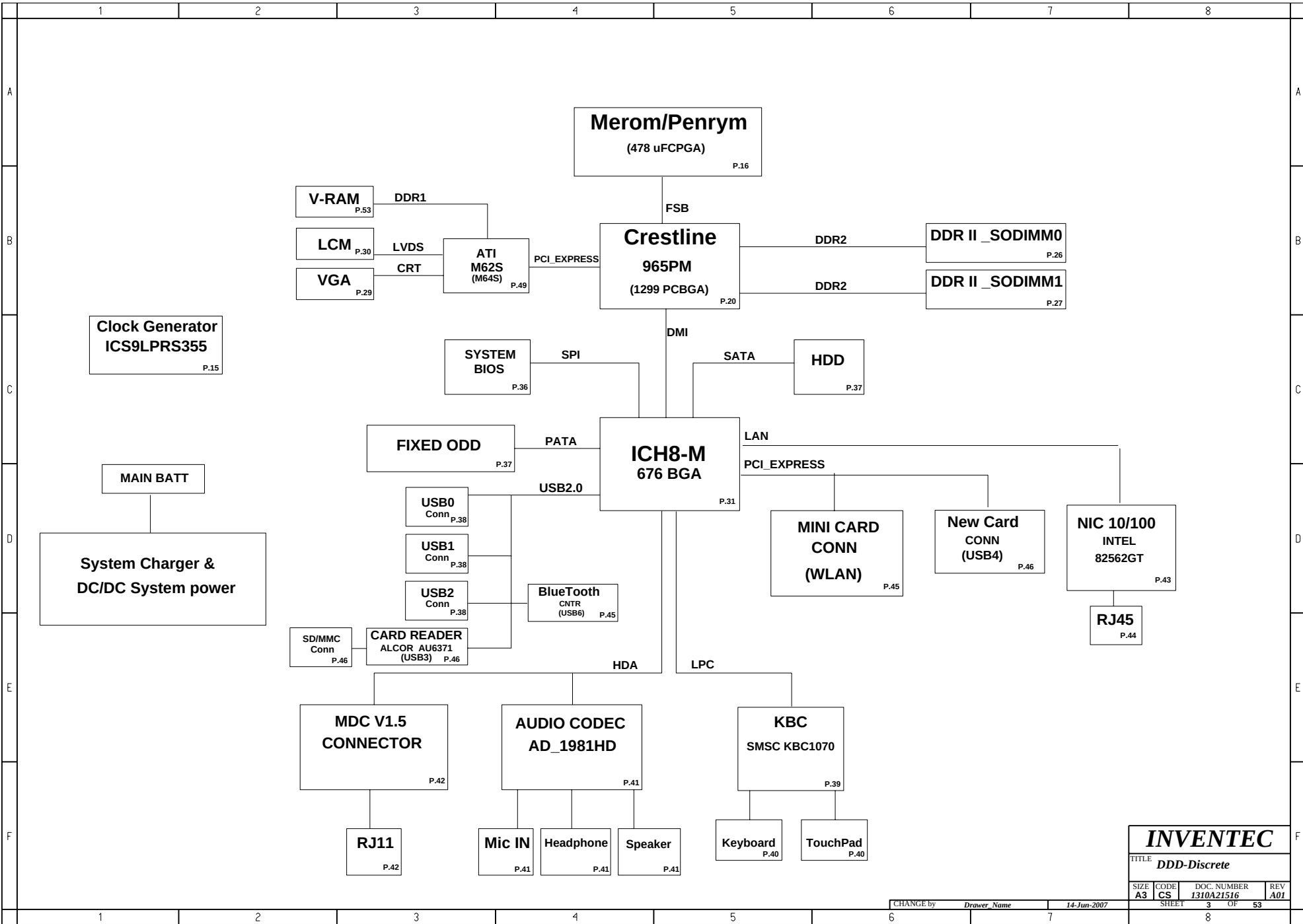
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|------|------------|-----|
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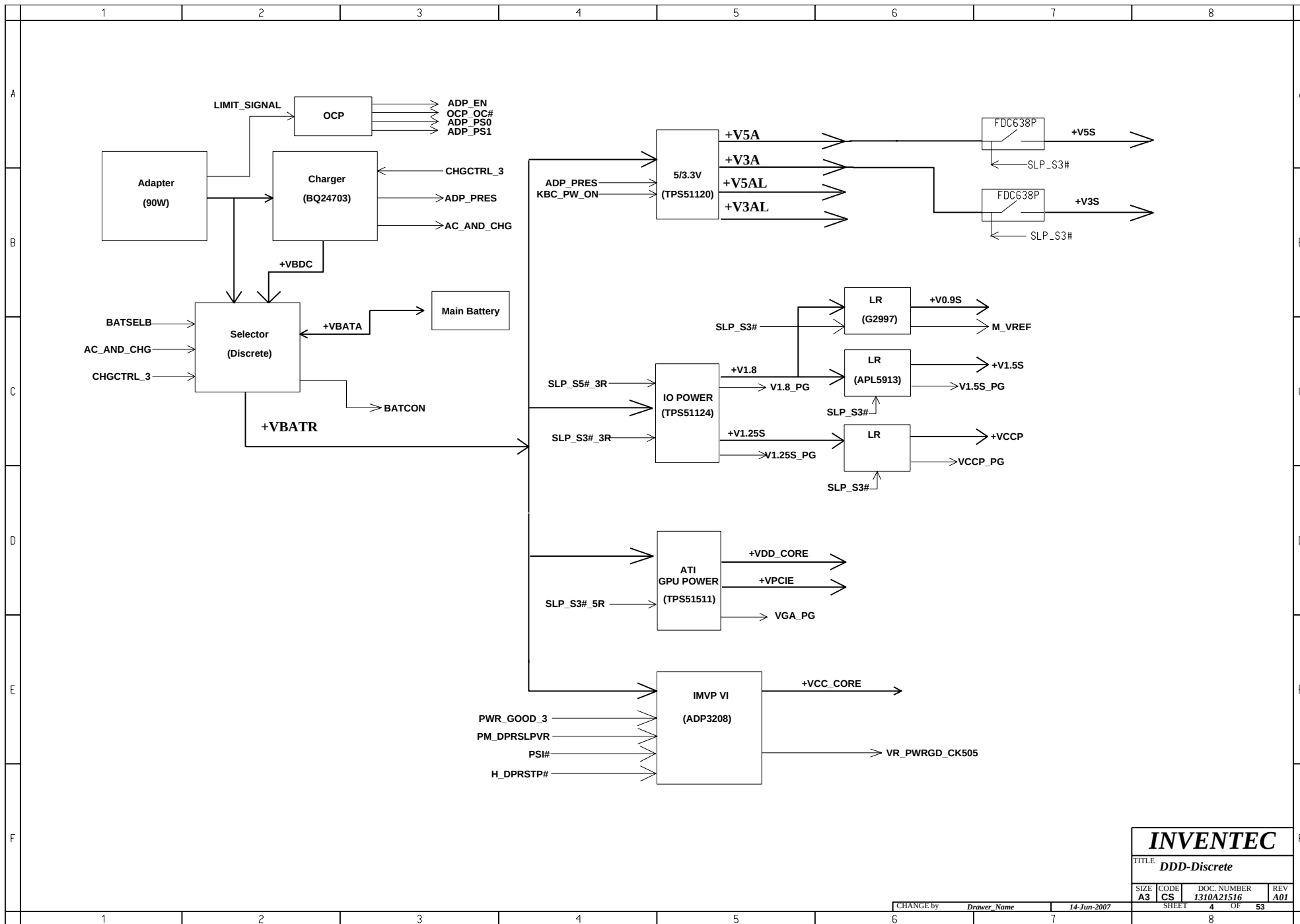
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| DRAWER                     | EE           | DATE | POWER | DATE  |
| DESIGN                     |              |      |       |       |
| CHECK                      |              |      |       |       |
| RESPONSIBLE                |              |      |       |       |
| SIZE =                     |              |      |       | VER : |
| FILE NAME : XXXX-XXXXXX-XX |              |      |       |       |
| P/N                        | XXXXXXXXXXXX |      |       |       |

| INVENTEC           |      |             |       |
|--------------------|------|-------------|-------|
| TITLE DDD-Discrete |      |             |       |
| SIZE               | CODE | DOC. NUMBER | REV   |
| A3                 | CS   | 1310A21516  | A01   |
| SHEET              |      | 1           | OF 53 |

[illegible]

|   |                                                                                                                                                                                                                                                                                                      |   |   |                                                                                                                                                                                                                                                                                                                                                                                               |   |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                    |   |   |   |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|
|   | 1                                                                                                                                                                                                                                                                                                    | 2 | 3 | 4                                                                                                                                                                                                                                                                                                                                                                                             | 5 | 6                                                                                                                                                                                                                                                                                                | 7                                                                                                                                                                                                                                                                                                                                                                                                                  | 8 |   |   |
| A | <div><div>TABLE OF CONTENTS</div></div>                                                                                                                                                                                                                                                              |   |   |                                                                                                                                                                                                                                                                                                                                                                                               |   |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                    |   | A |   |
| B | <b>PAGE</b><br>5- DC& BATTERY CHARGER<br>6- SELECT & BATTERY CONN<br>7- SYSTEM POWER(3V/5V)<br>8- SYSTEM POWER(+V1.8/+V1.25S)<br>9- GRAPHIC POWER(+VGFX_CORE)<br>10- SYSTEM POWER(+VCCP/+V1.5S)<br>11- CPU POWER(VCC_CORE)<br>12- DDR TERMINATION VOLTAGE<br>13- POWER(SLEEP)<br>14- POWER(SEQUENCE) |   |   | <b>PAGE</b><br>15- CLOCK_GENERATOR<br>16- MEROM-1<br>17- MEROM-2<br>18- MEROM-3<br>19- THERMAL&FAN CONTROLLER<br>20- Crestline-1<br>21- Crestline-2<br>22- Crestline-3<br>23- Crestline-4<br>24- Crestline-5<br>25- Crestline-6<br>26- DDR2-DIMM0<br>27- DDR2-DIMM1<br>28- DDR2-DAMPING<br>29- VGA CONN<br>30- LCM CONN<br>31- ICH8-1<br>32- ICH8-2<br>33- ICH8-3<br>34- ICH8-4<br>35- ICH8-5 |   |                                                                                                                                                                                                                                                                                                  | <b>PAGE</b><br>36- SYSTEM BIOS&ODD EXTEND/B<br>37- HDD&ODD CONN<br>38- USB CONN<br>39- KBC<br>40- KB&TP CONN<br>41- AUDIO CODEC<br>42- MDC CONN & AUDIO JACK<br>43- NIC 10/100- CONTROLLER<br>44- NIC 10/100- RJ45 CONN<br>45- MINICARD CONN & BLUETOOTH<br>46- NEW CARD & SD/MMC<br>47- LED & BUTTON<br>48- SCREW<br>49- ATI M64S-1<br>50- ATI M64S-2<br>51- ATI M64S-3<br>52- ATI M64S-4<br>53- VIDEO RAM(GDDR1) |   |   | B |
| C |                                                                                                                                                                                                                                                                                                      |   |   |                                                                                                                                                                                                                                                                                                                                                                                               |   |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                    |   | C |   |
| D |                                                                                                                                                                                                                                                                                                      |   |   |                                                                                                                                                                                                                                                                                                                                                                                               |   |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                    |   | D |   |
| E |                                                                                                                                                                                                                                                                                                      |   |   |                                                                                                                                                                                                                                                                                                                                                                                               |   |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                    |   | E |   |
| F |                                                                                                                                                                                                                                                                                                      |   |   |                                                                                                                                                                                                                                                                                                                                                                                               |   |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                    |   | F |   |
|   |                                                                                                                                                                                                                                                                                                      |   |   |                                                                                                                                                                                                                                                                                                                                                                                               |   | <div><div><div>INVENTEC</div><div>TITLE<br/>DDD-Discrete</div><div><div>SIZE<br/>A3</div><div>CODE<br/>CS</div><div>DOC. NUMBER<br/>1310A21516</div><div>REV<br/>A01</div></div></div><div>CHANGE by<br/>Draver Name</div><div>14-Jun-2007</div><div>SHEET<br/>2</div><div>OF<br/>53</div></div> |                                                                                                                                                                                                                                                                                                                                                                                                                    |   |   |   |
|   | 1                                                                                                                                                                                                                                                                                                    | 2 | 3 | 4                                                                                                                                                                                                                                                                                                                                                                                             | 5 | 6                                                                                                                                                                                                                                                                                                | 7                                                                                                                                                                                                                                                                                                                                                                                                                  | 8 |   |   |

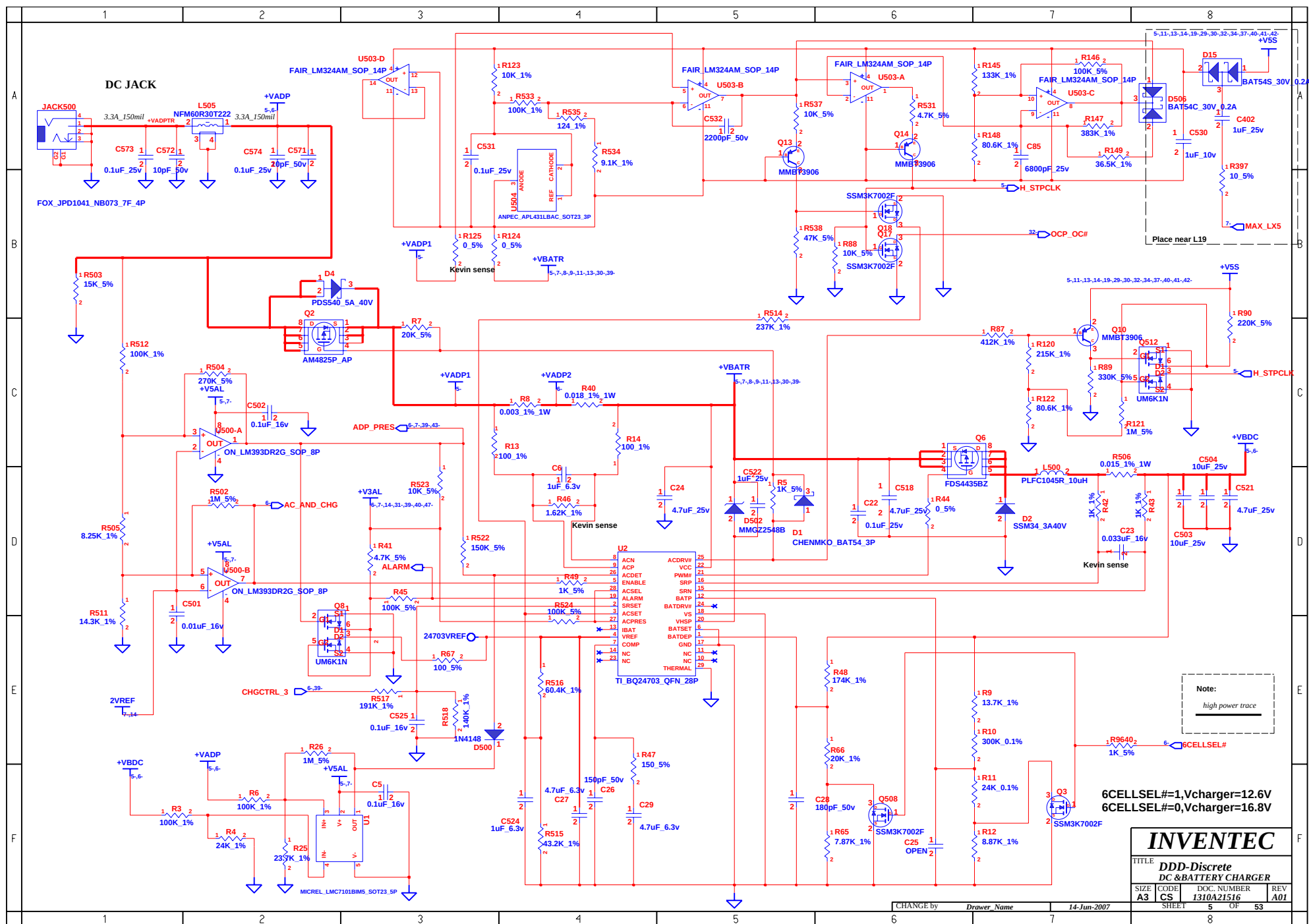




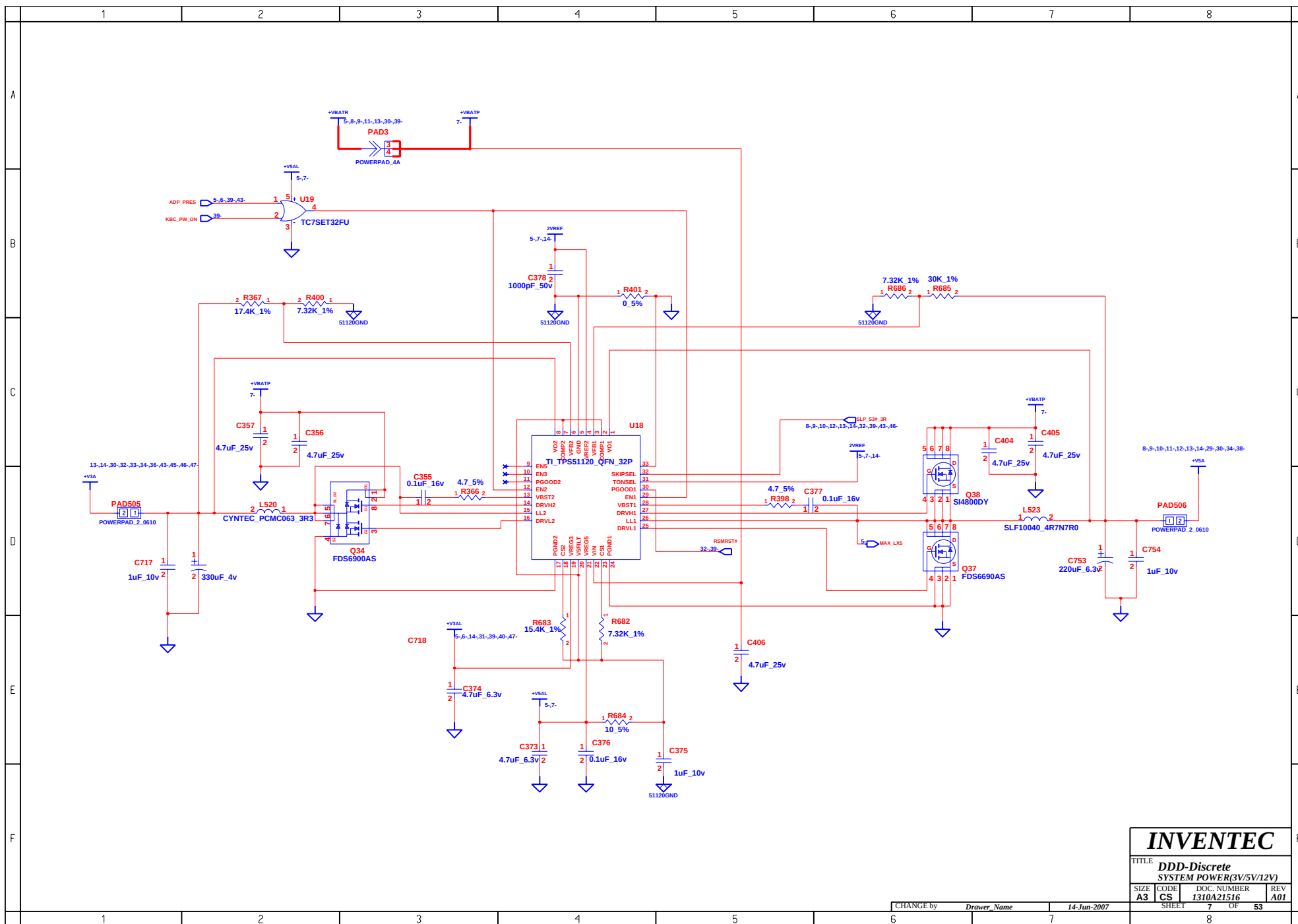
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|--------------|------|-------------|-----|
| TITLE        |      |             |     |
| DDD-Discrete |      |             |     |
| SIZE         | CODE | DOC. NUMBER | REV |
| A3           | CS   | 1310A21516  | A01 |

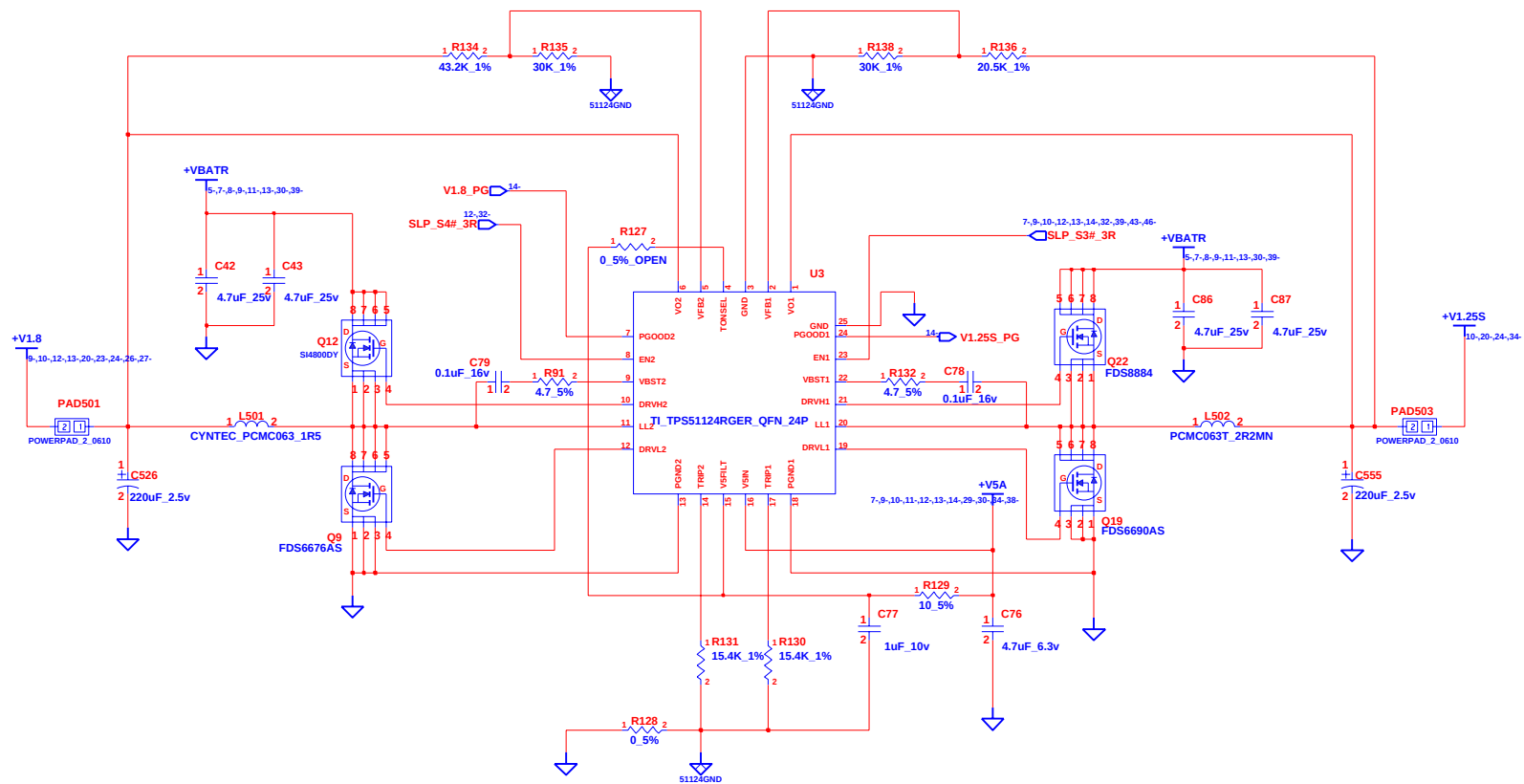
CHANGE by *Drawn Name* 14-Jun-2007

SHEET 4 OF 53









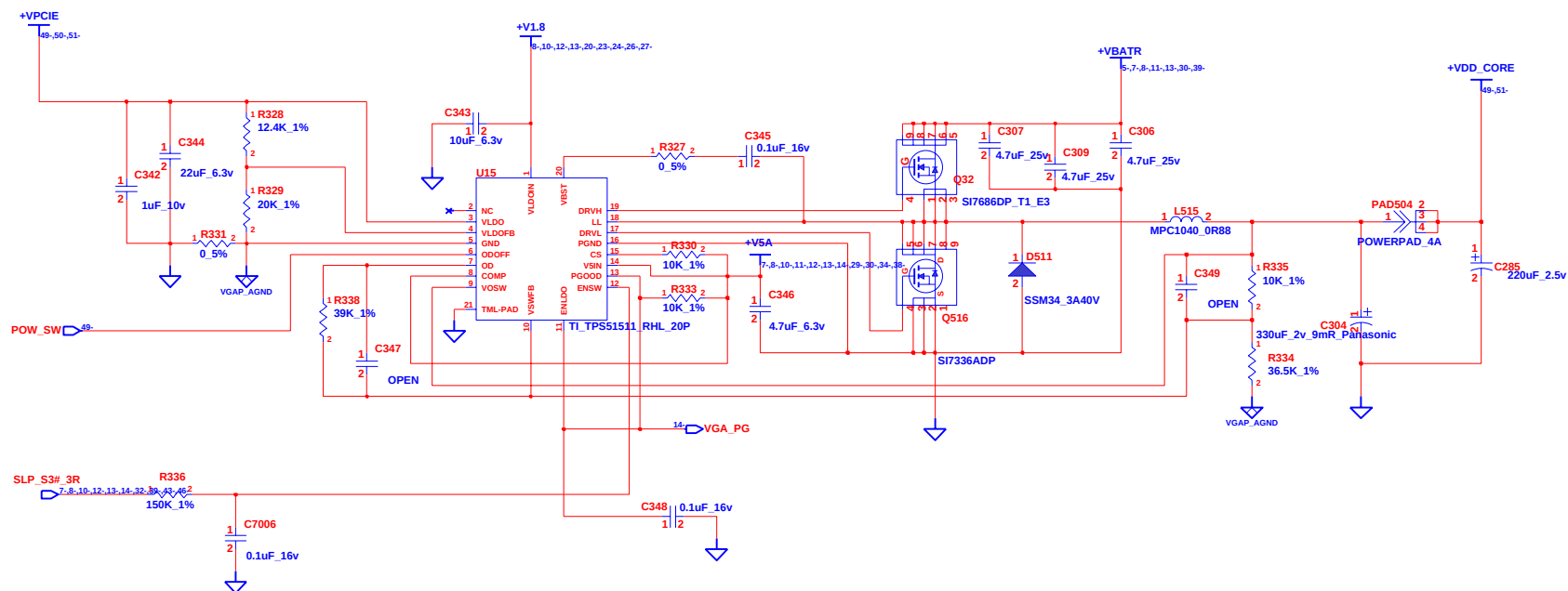
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TITLE  
**DDD-Discrete**  
**SYSTEM POWER(+V1.8/+V1.25S)**

| SIZE | CODE | DOC. NUMBER | REV |
|------|------|-------------|-----|
| A3   | CS   | 1310A21516  | A01 |

CHANGE by *Drawer Name* 14-Jun-2007

SHEET 8 OF 53



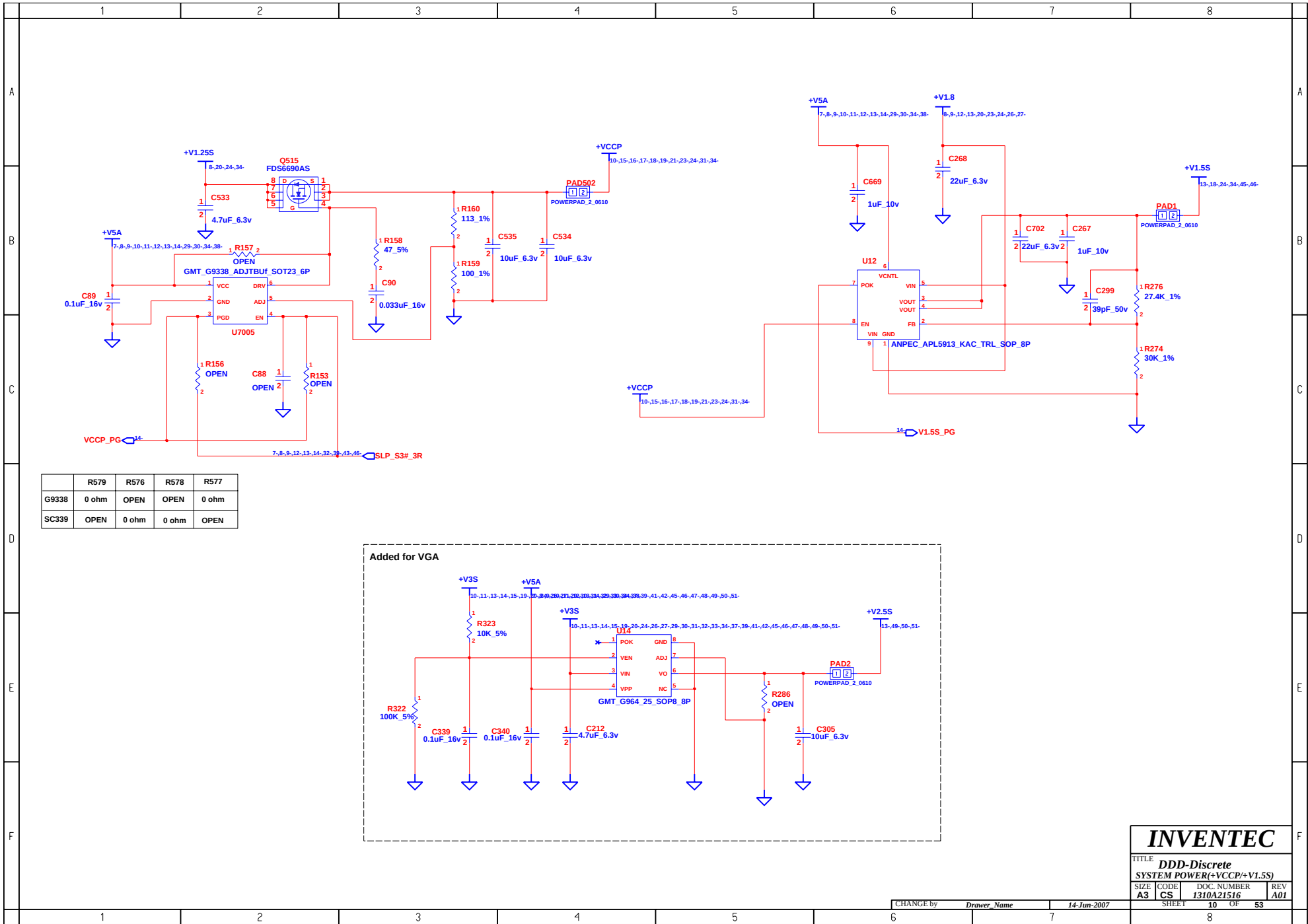
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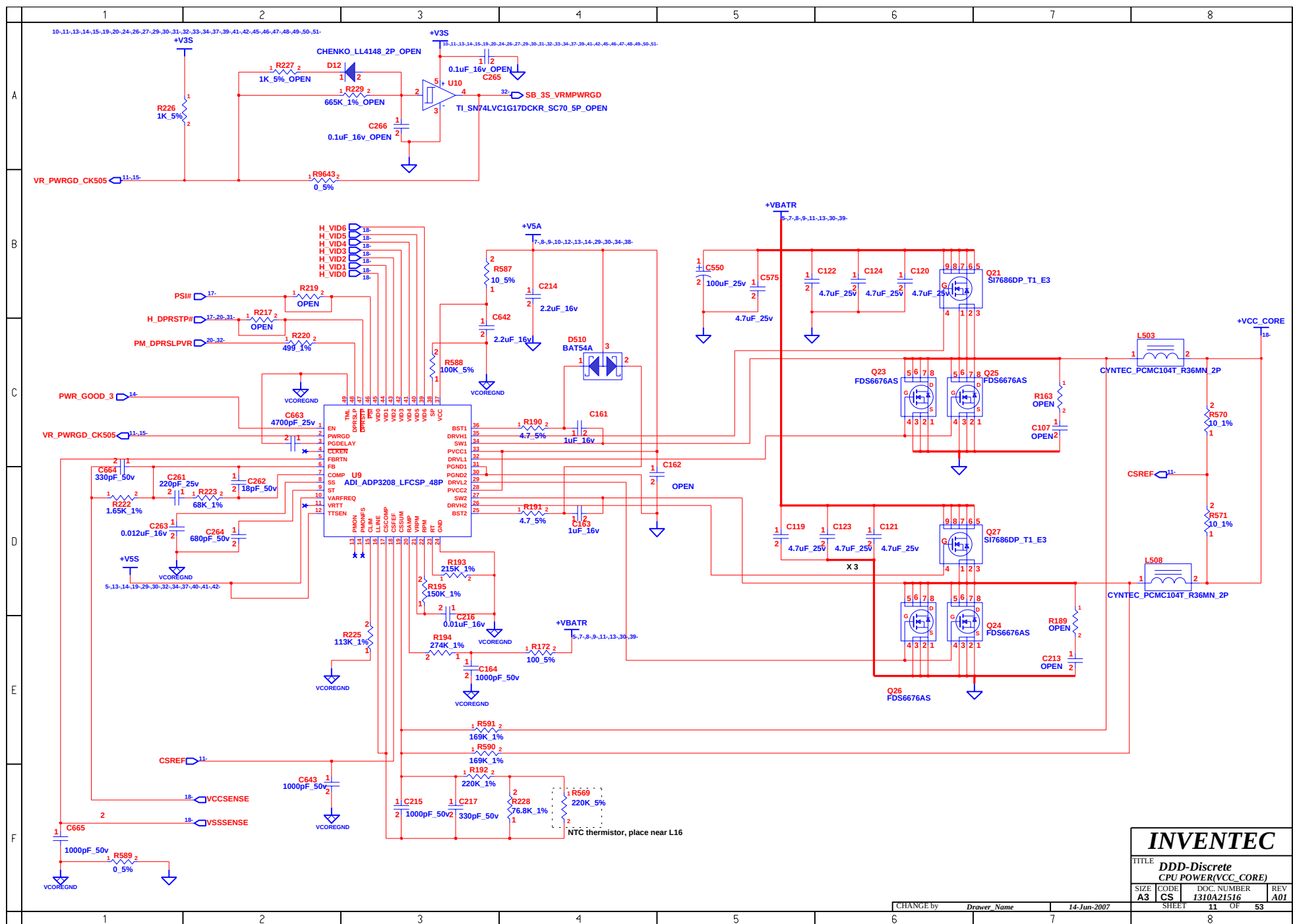
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**DDD-Discrete**  
**GRAPHIC POWER (+VGFX\_CORE)**

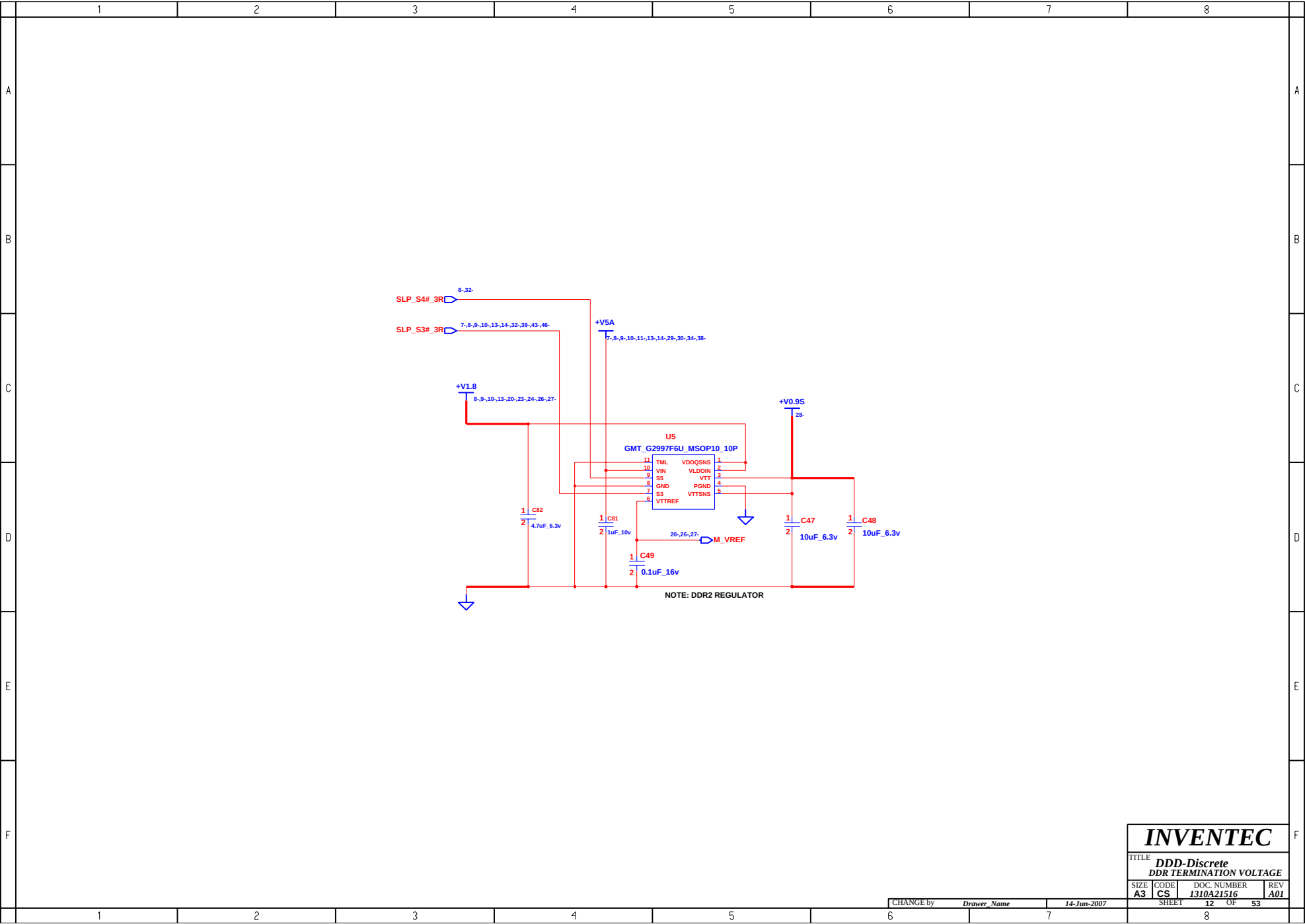
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|-------------------|-------------------|----------------------------------|-------------------|
| SIZE<br><b>A3</b> | CODE<br><b>CS</b> | DOC. NUMBER<br><b>I310A21516</b> | REV<br><b>A01</b> |
|-------------------|-------------------|----------------------------------|-------------------|

CHANGE by *Drawn Name* 14-Jun-2007

SHEET 9 OF 53



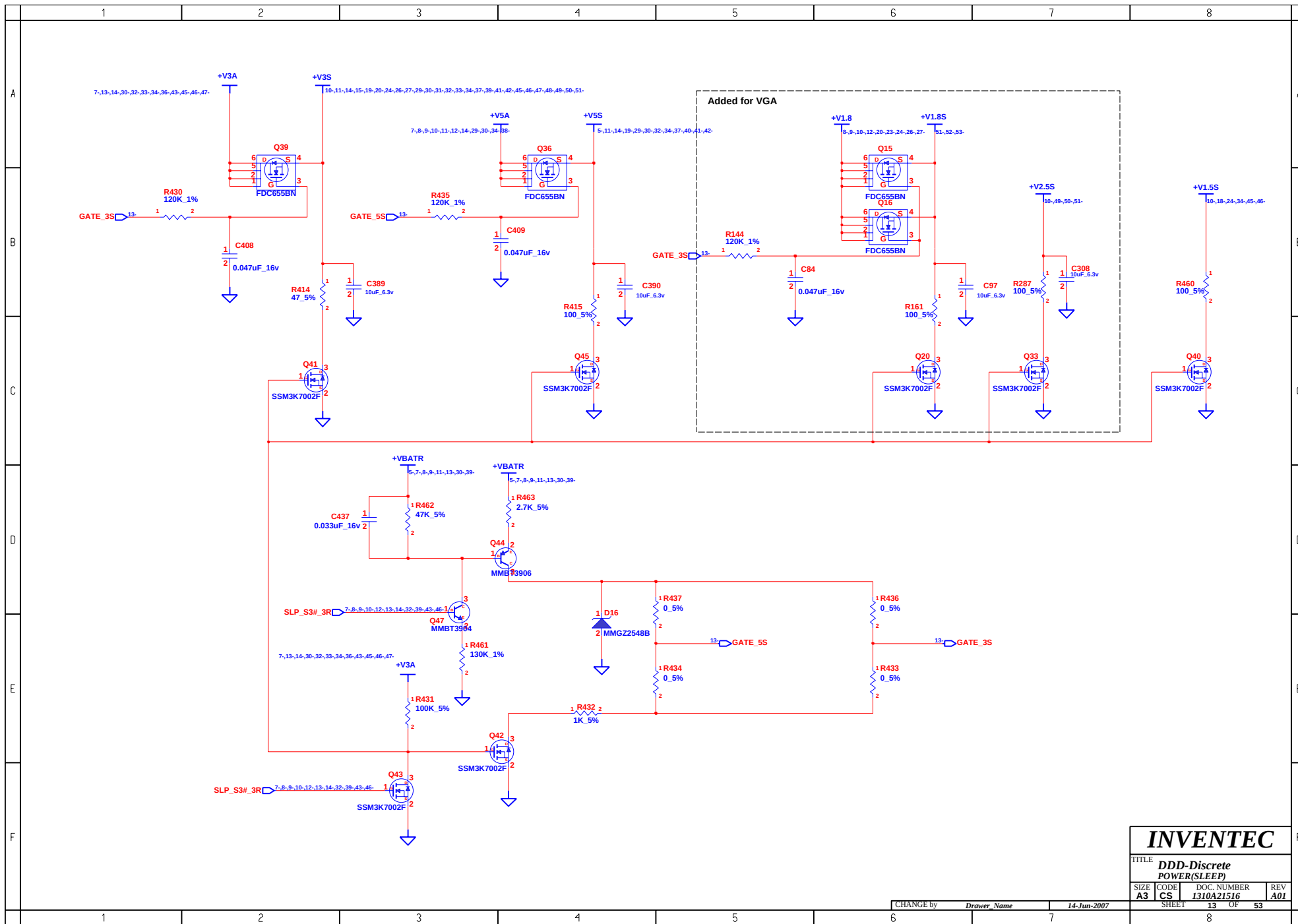




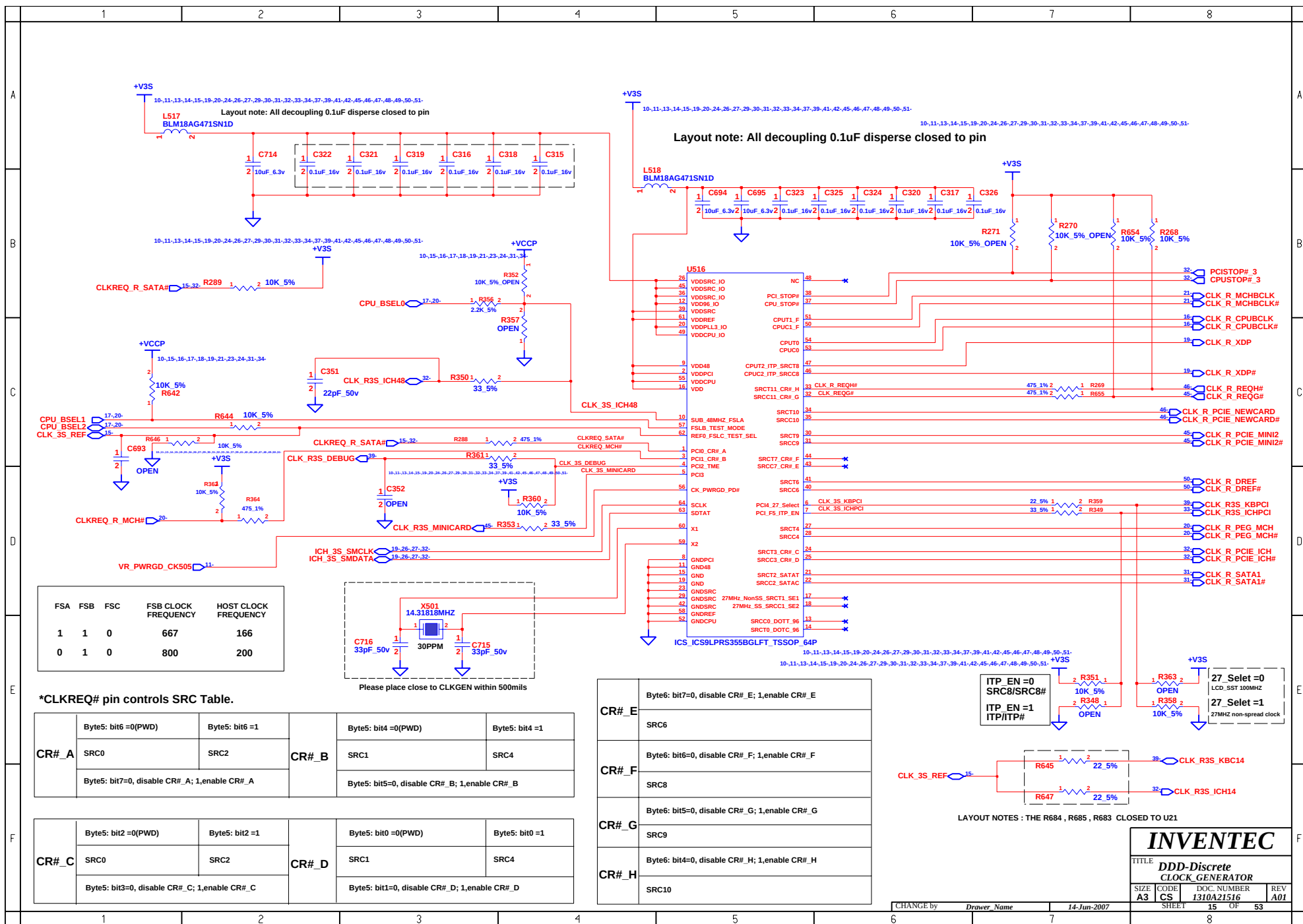
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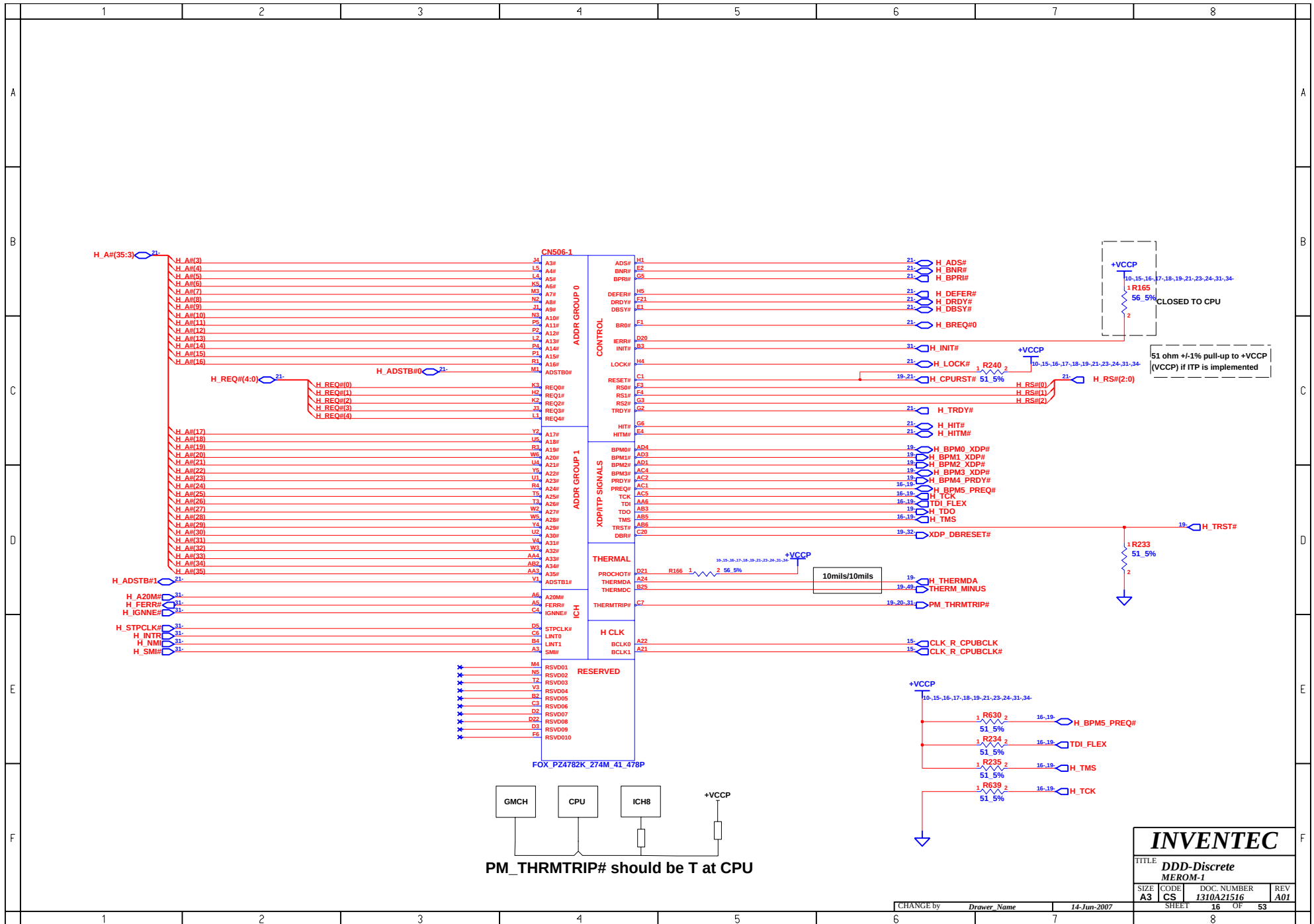
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**DDD-Discrete  
DDR TERMINATION VOLTAGE**

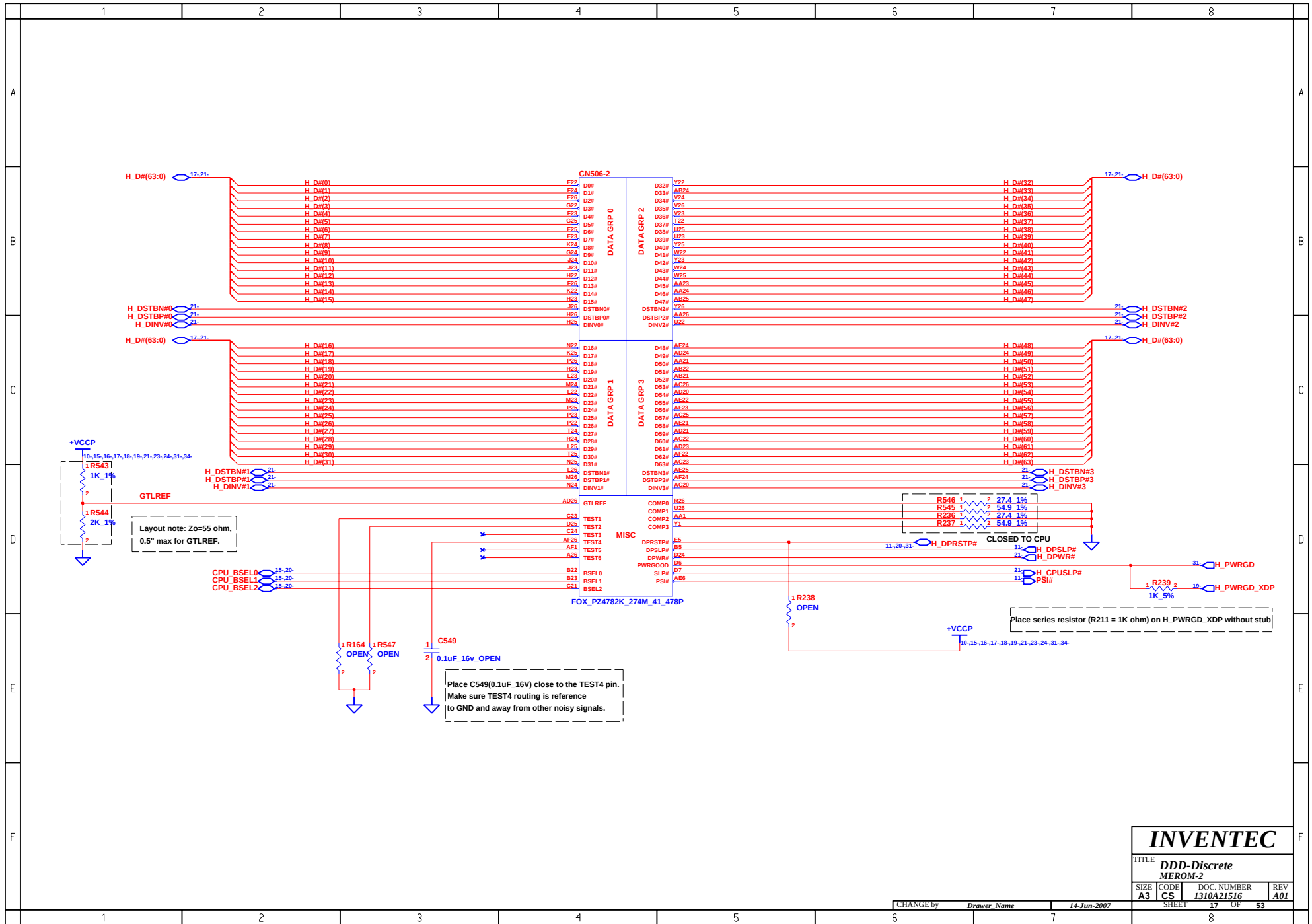
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**A3 CS 1310A21516 A01**

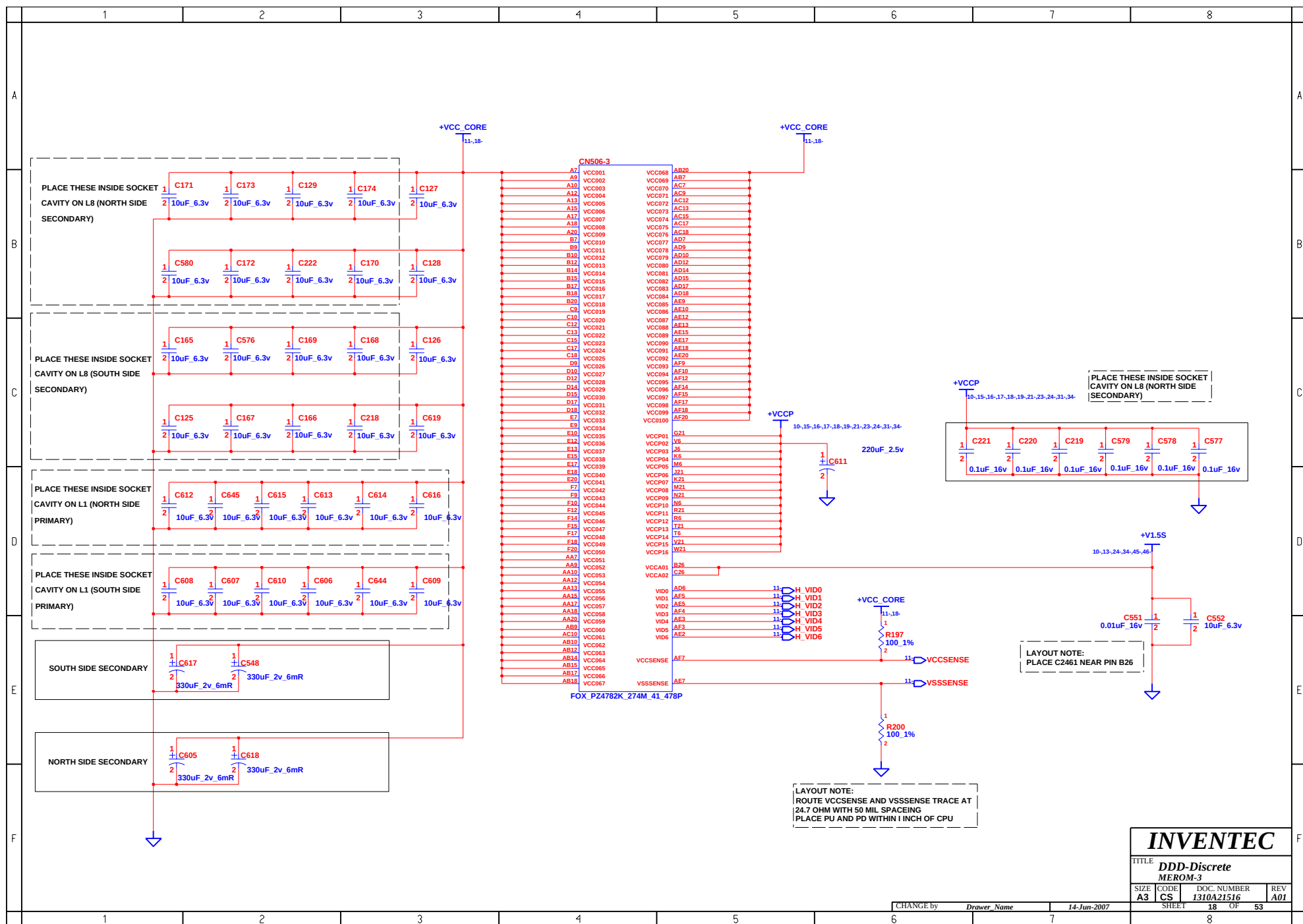


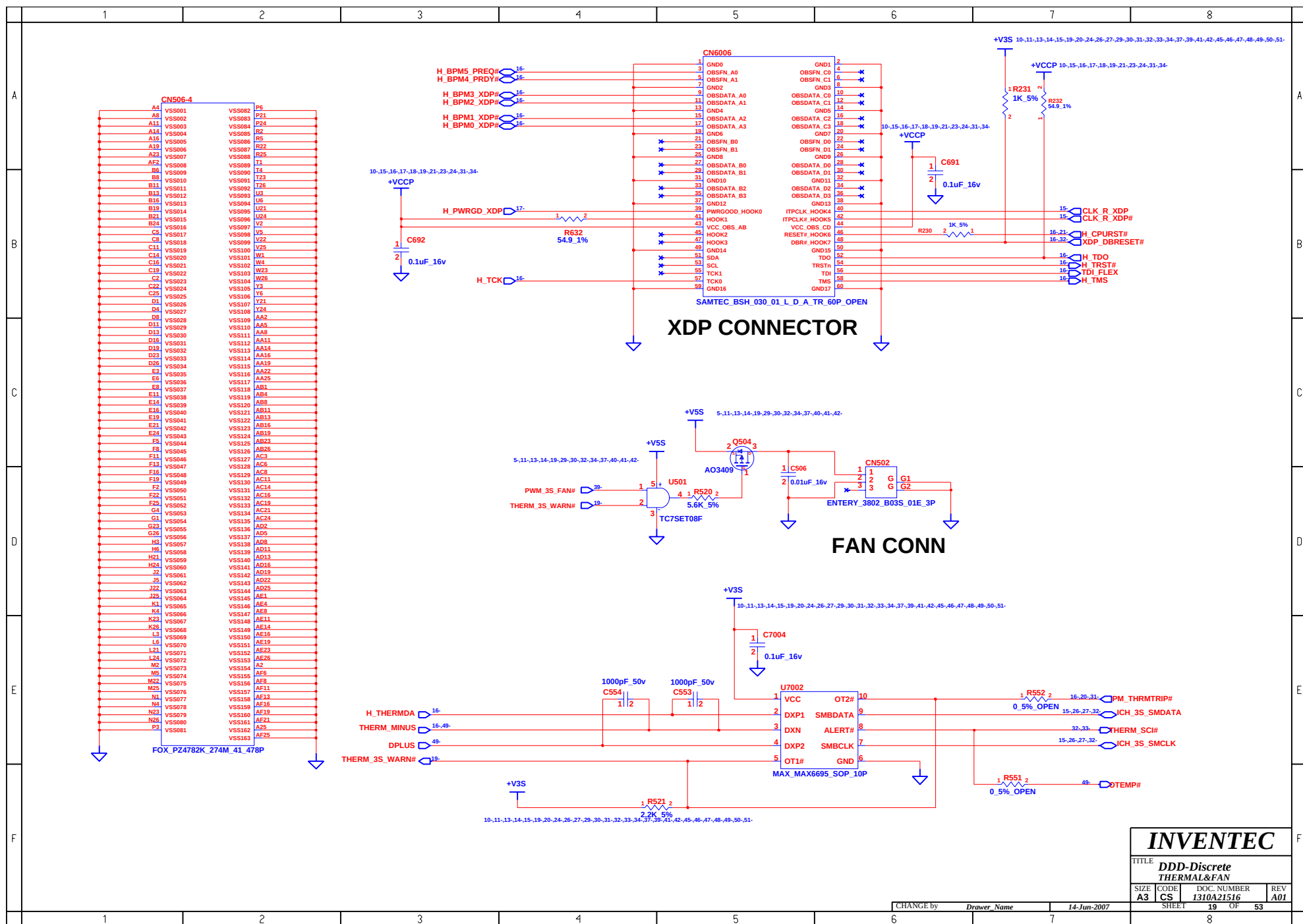


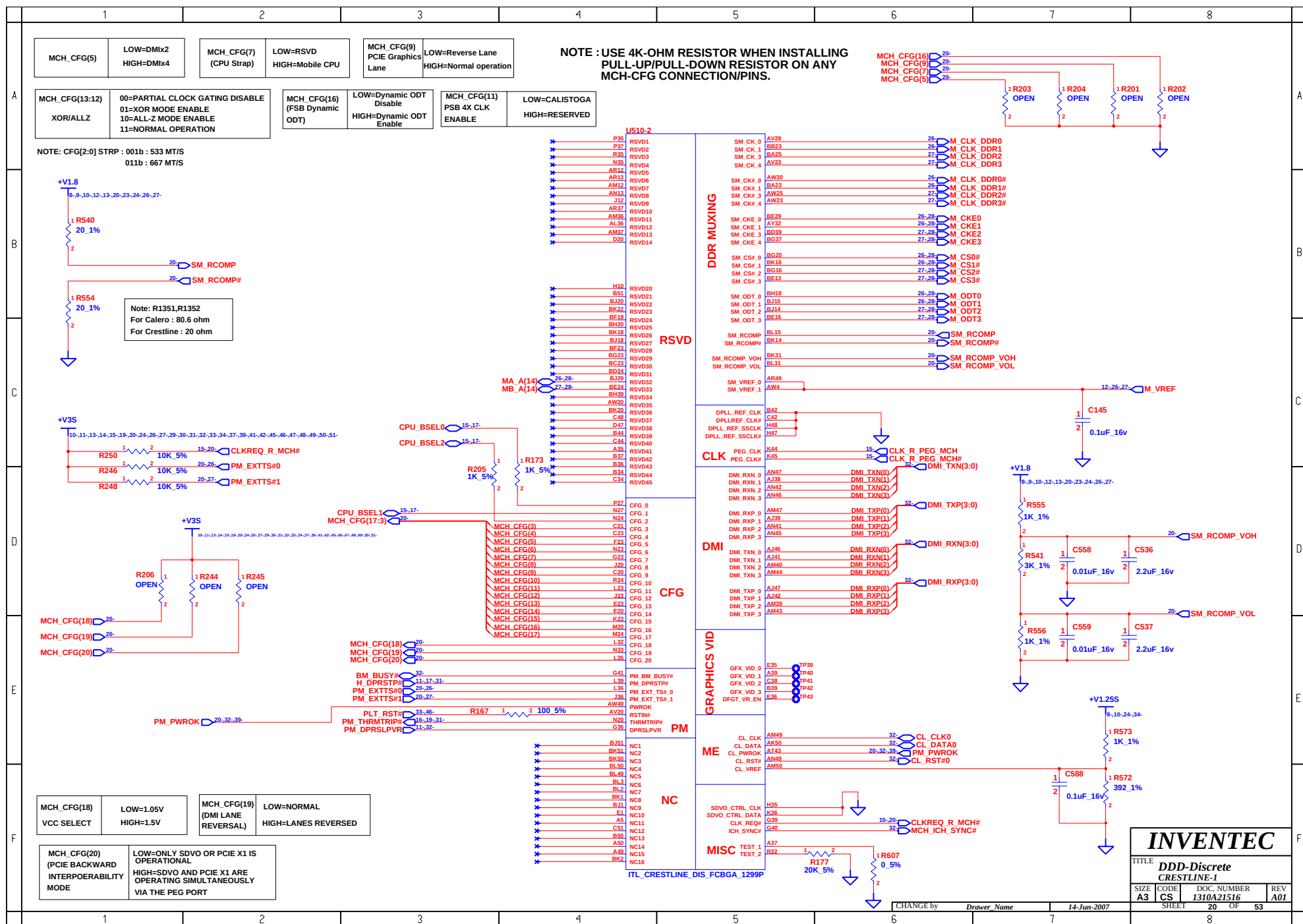


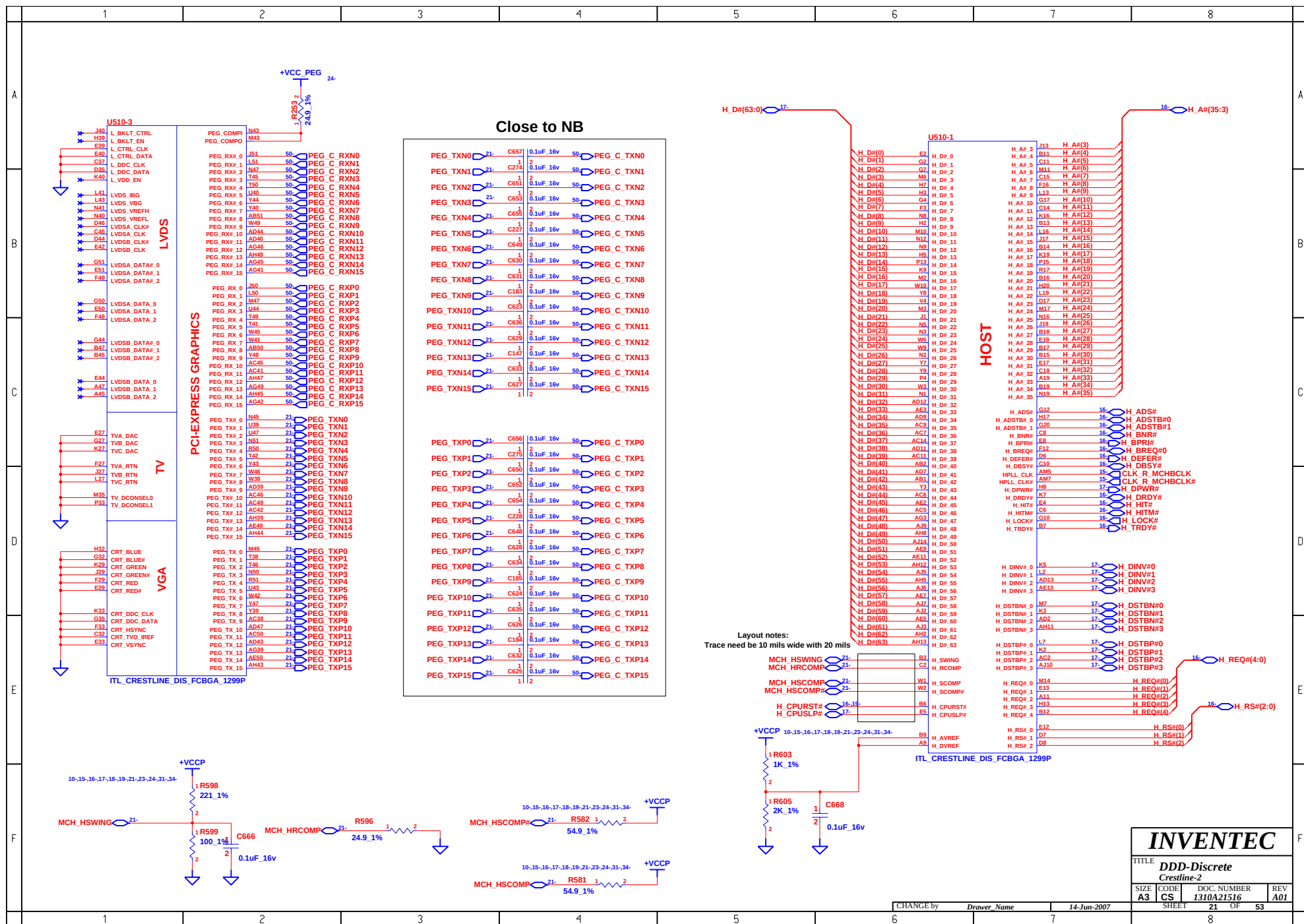


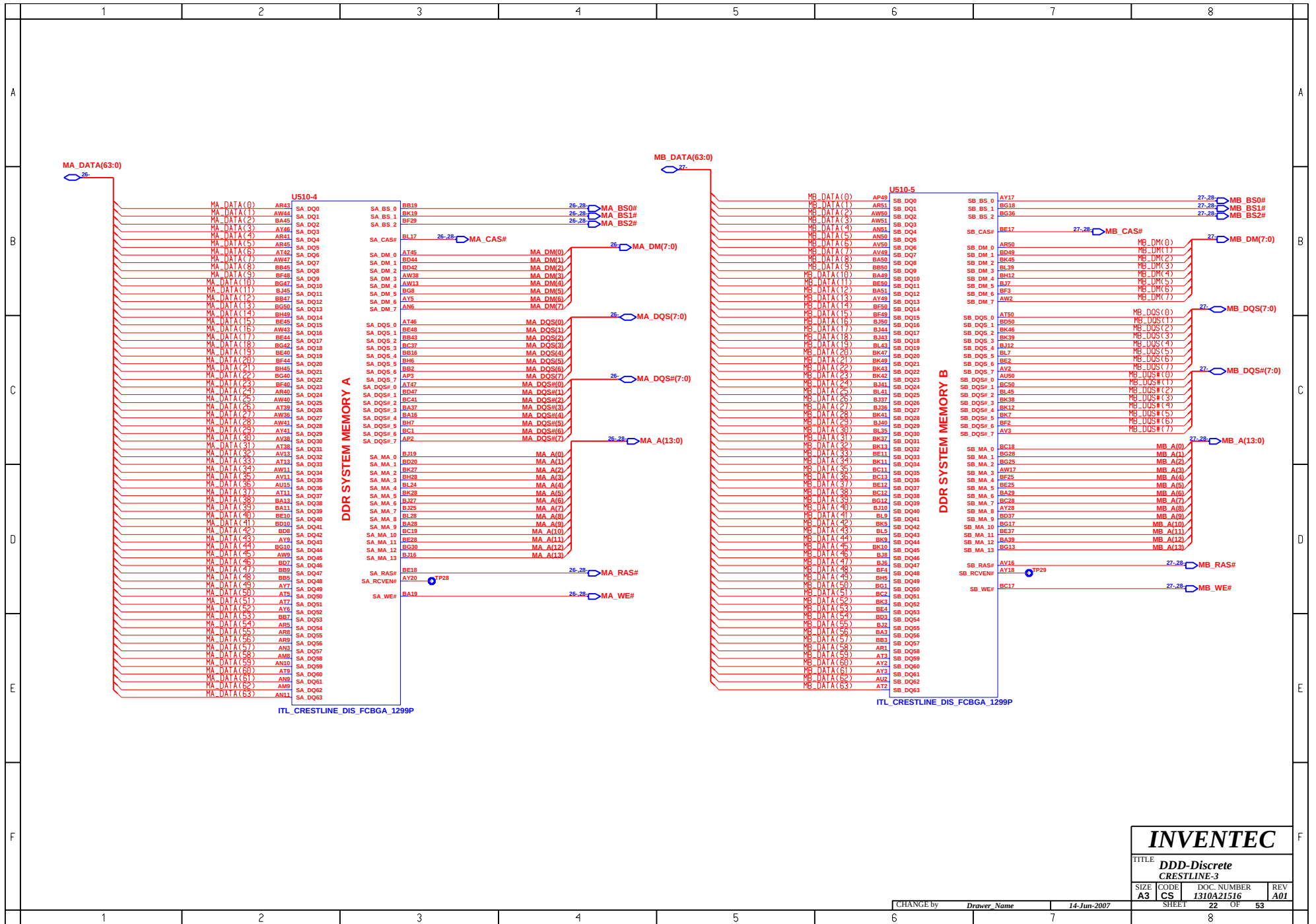












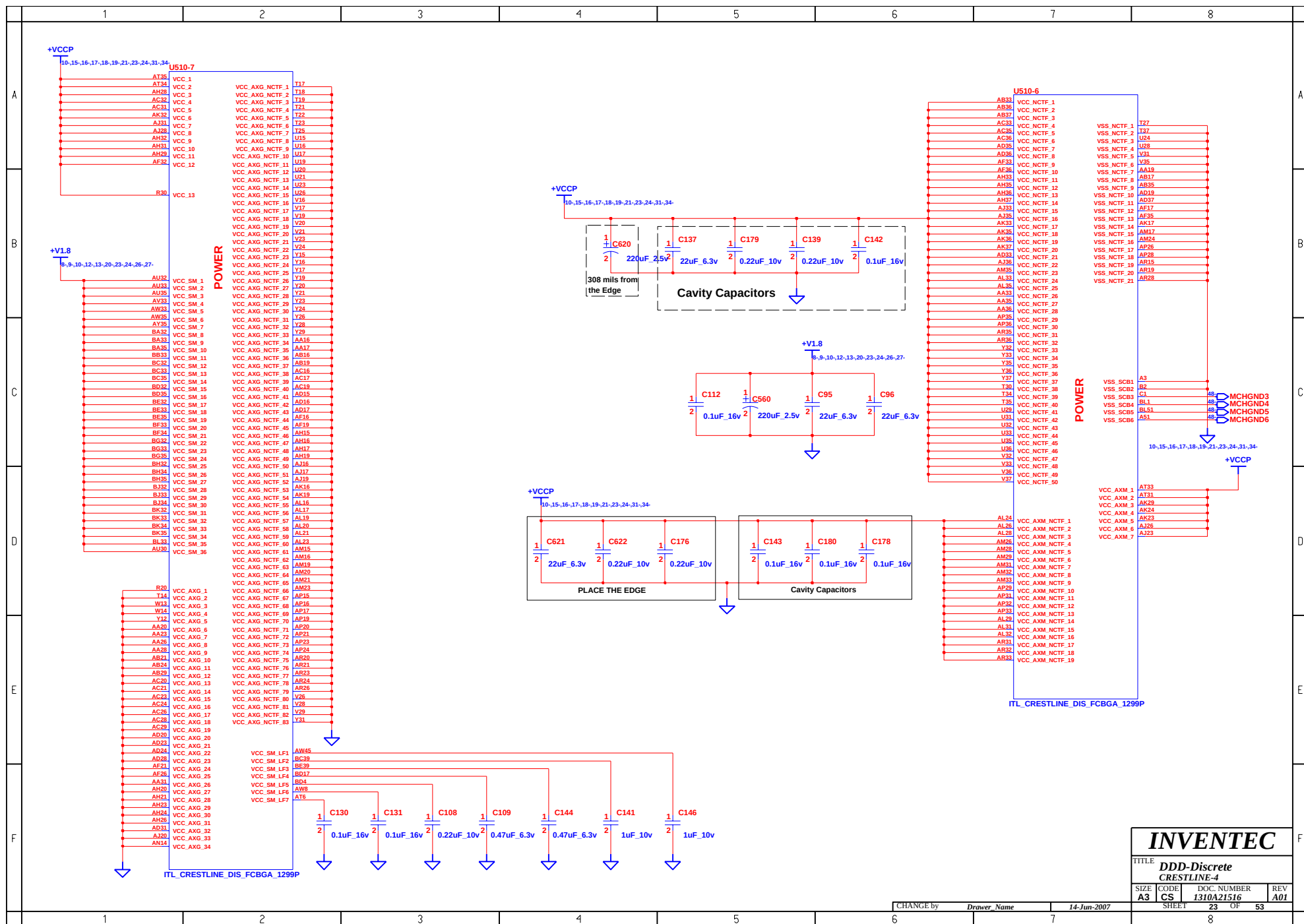
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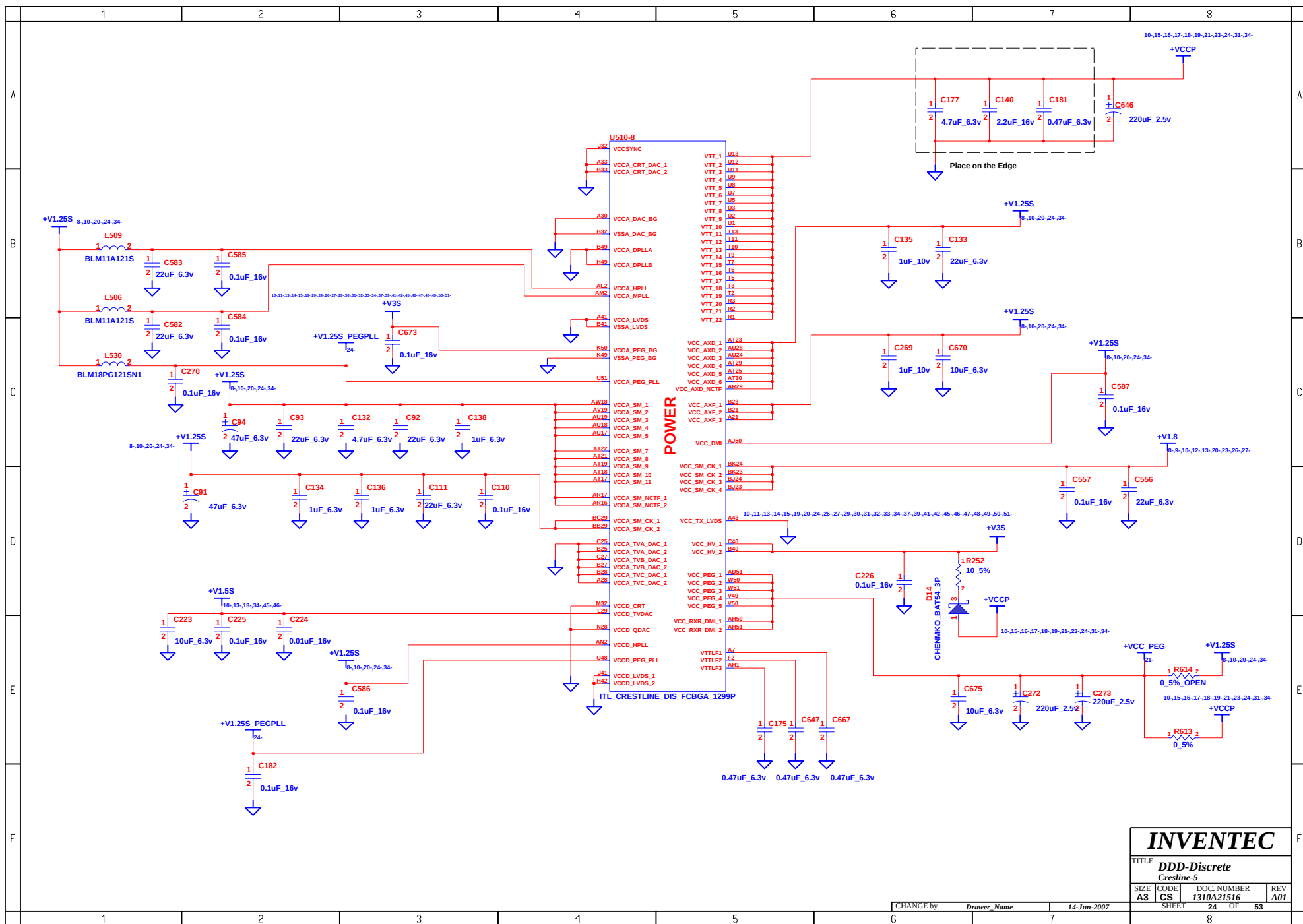
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DDD-Discrete  
CRESTRINE-3

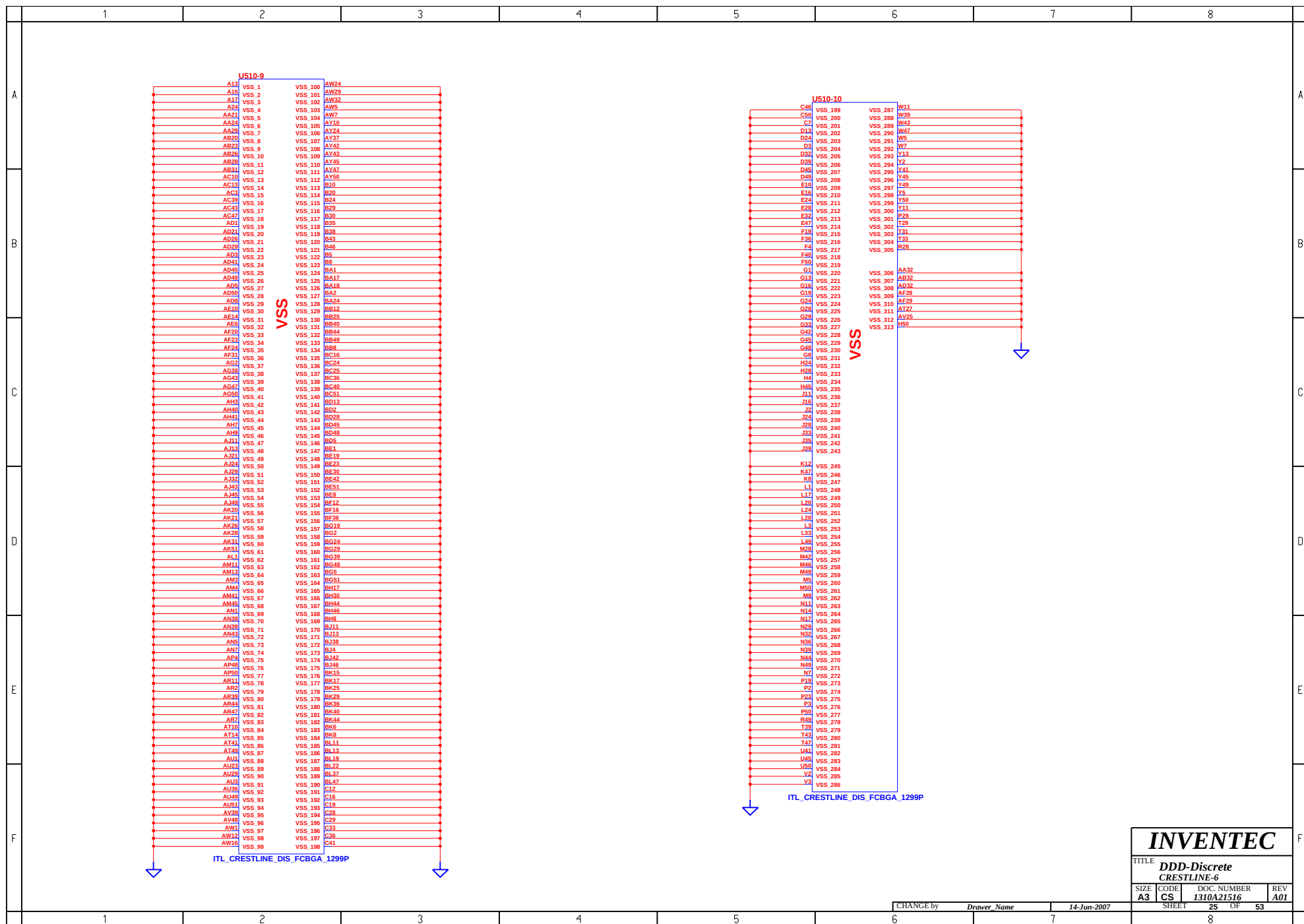
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|------------|------------|---------------------------|------------|

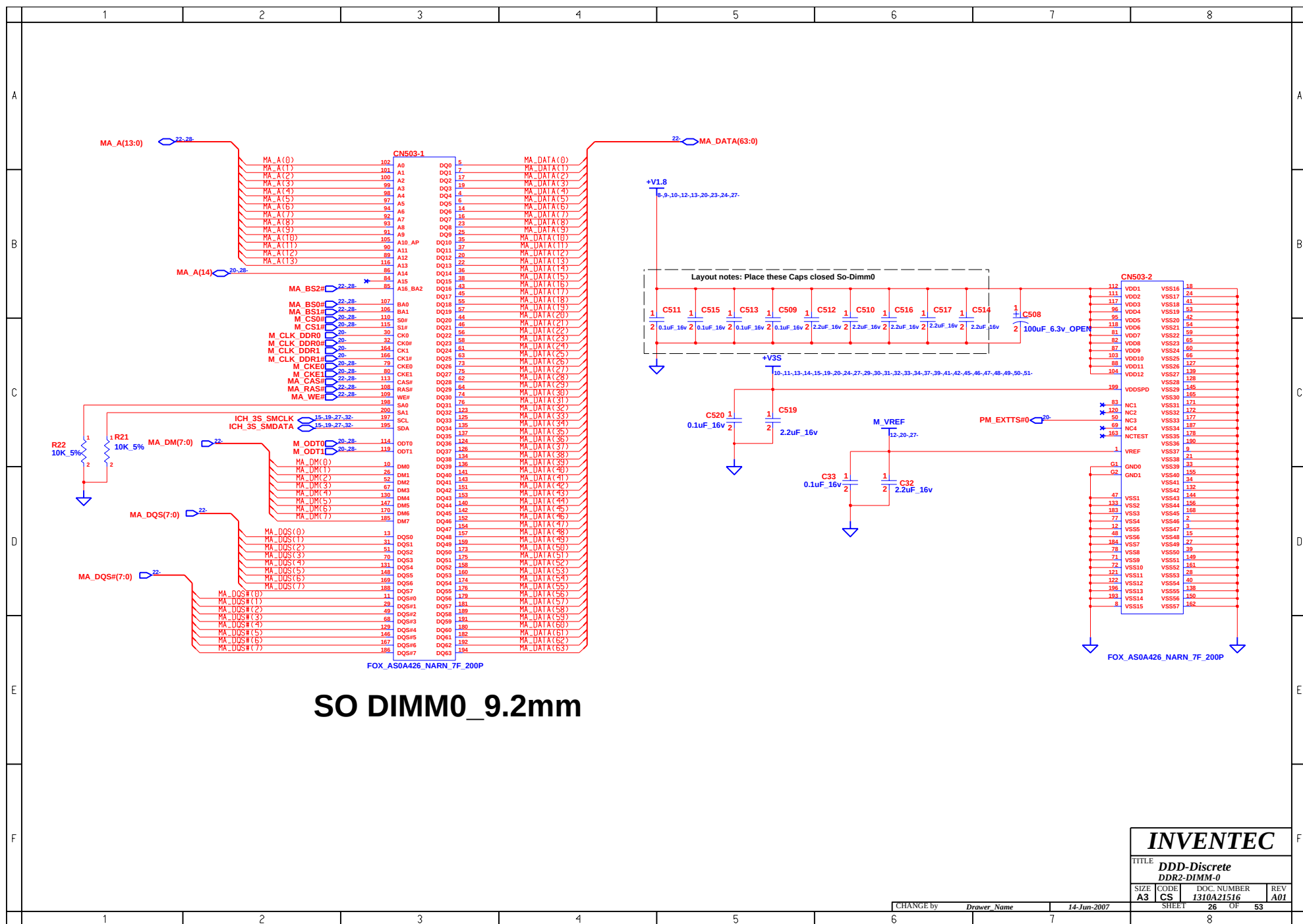
CHANGE by Drawer Name 14-Jun-2007

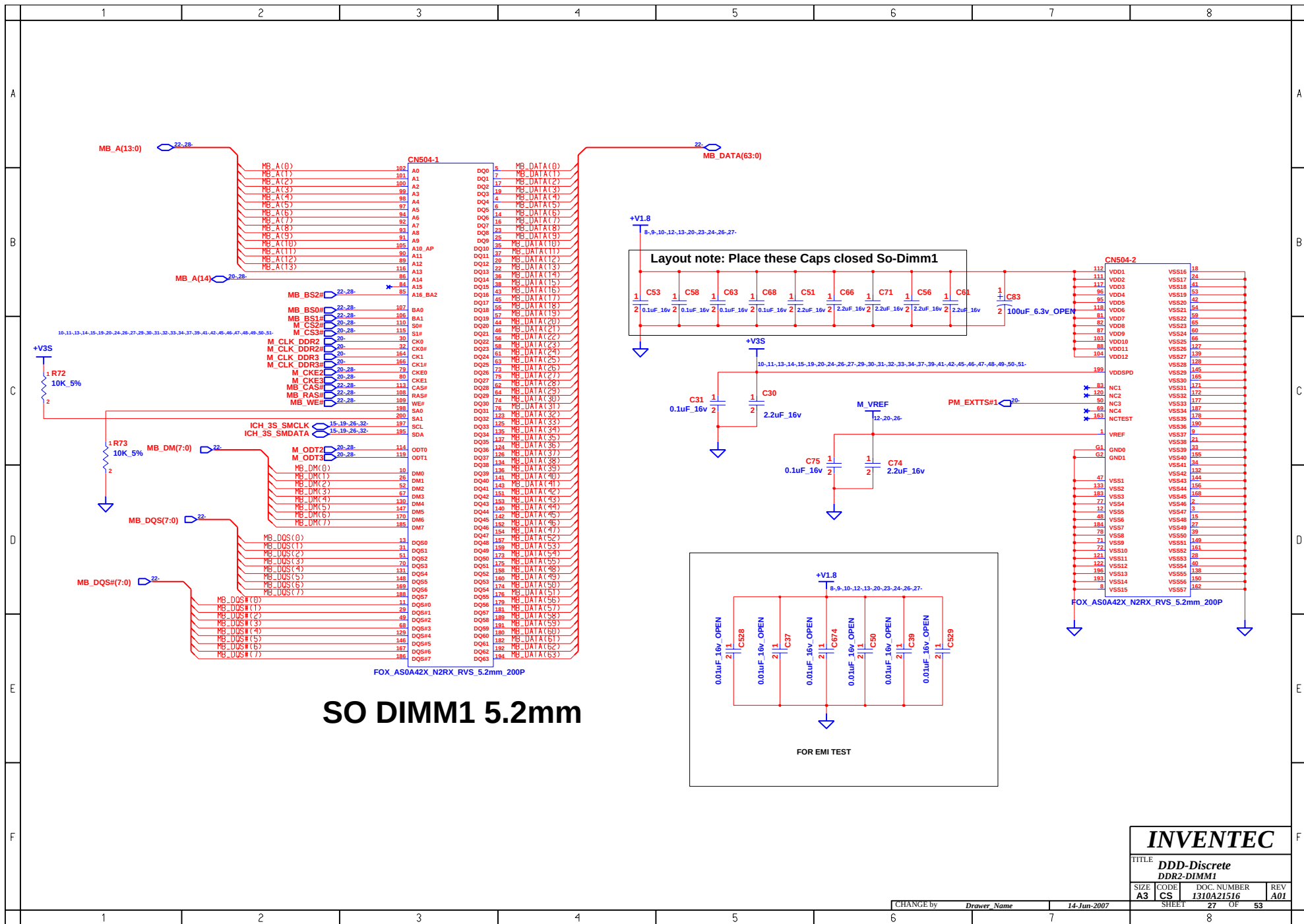
SHEET 22 OF 53









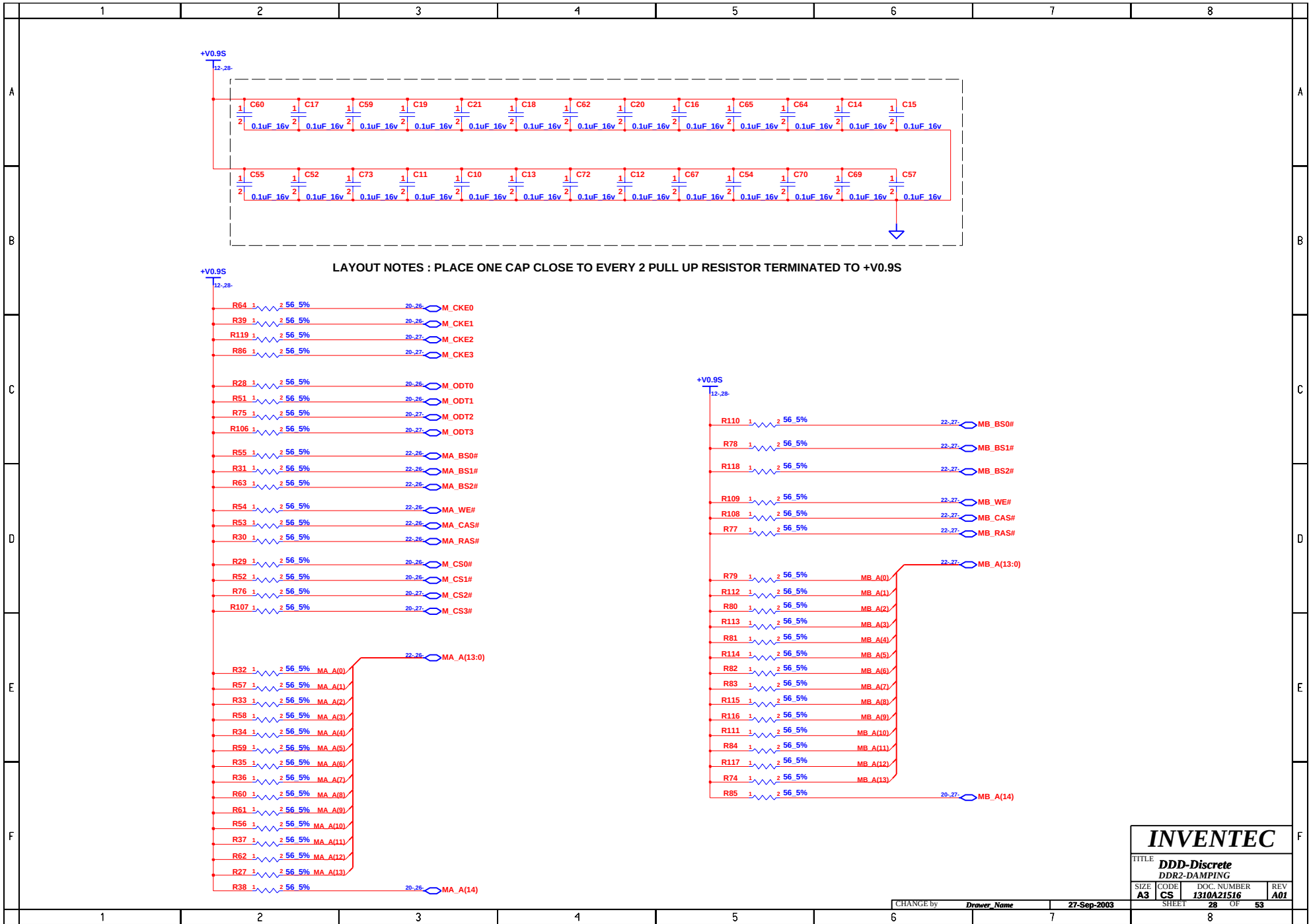


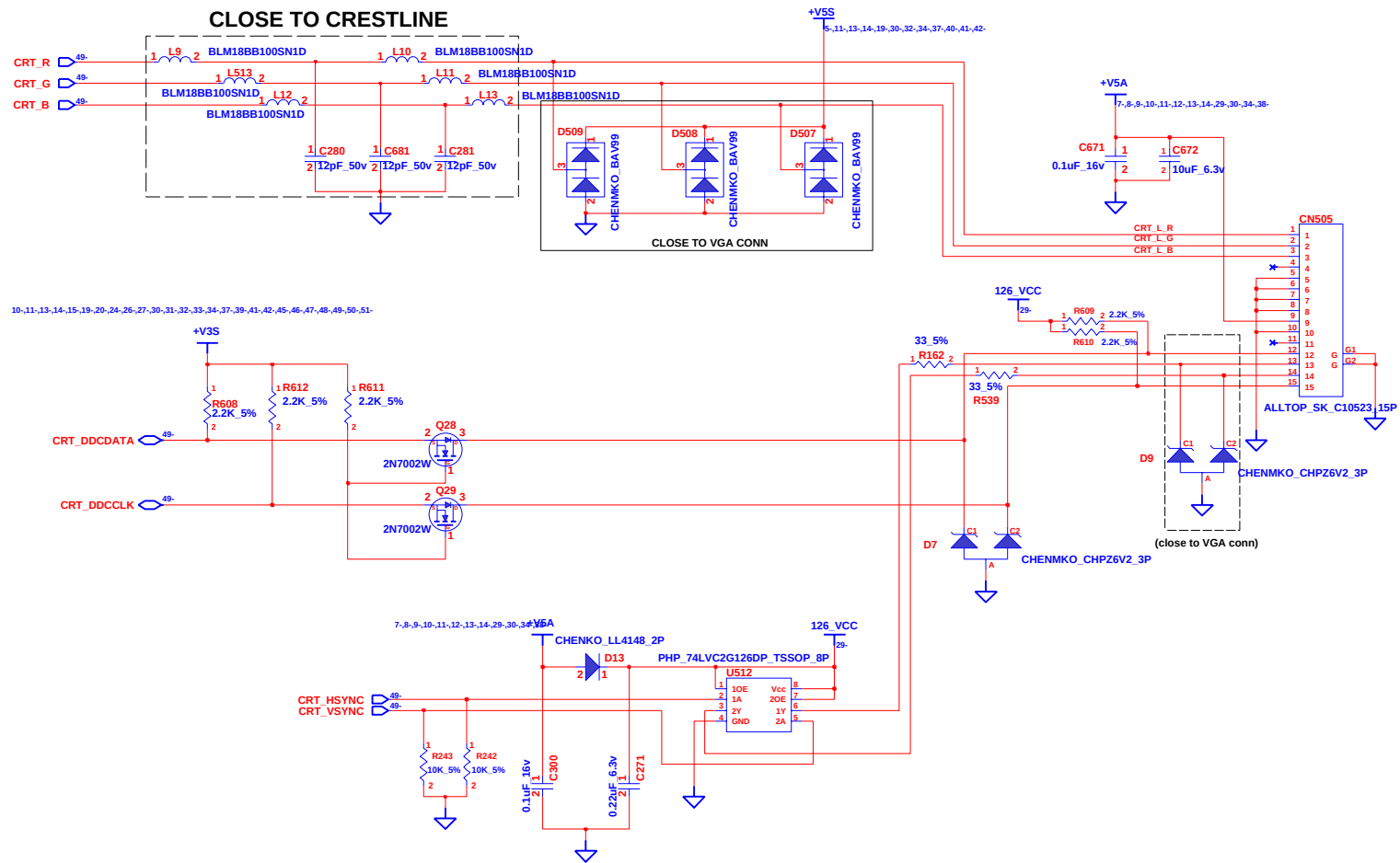
SO DIMM1 5.2mm

INVENTEC

|              |      |             |     |
|--------------|------|-------------|-----|
| TITLE        |      |             |     |
| DDD-Discrete |      |             |     |
| DDR2-DIMM1   |      |             |     |
| SIZE         | CODE | DOC. NUMBER | REV |
| A3           | CS   | 1310A21516  | A01 |

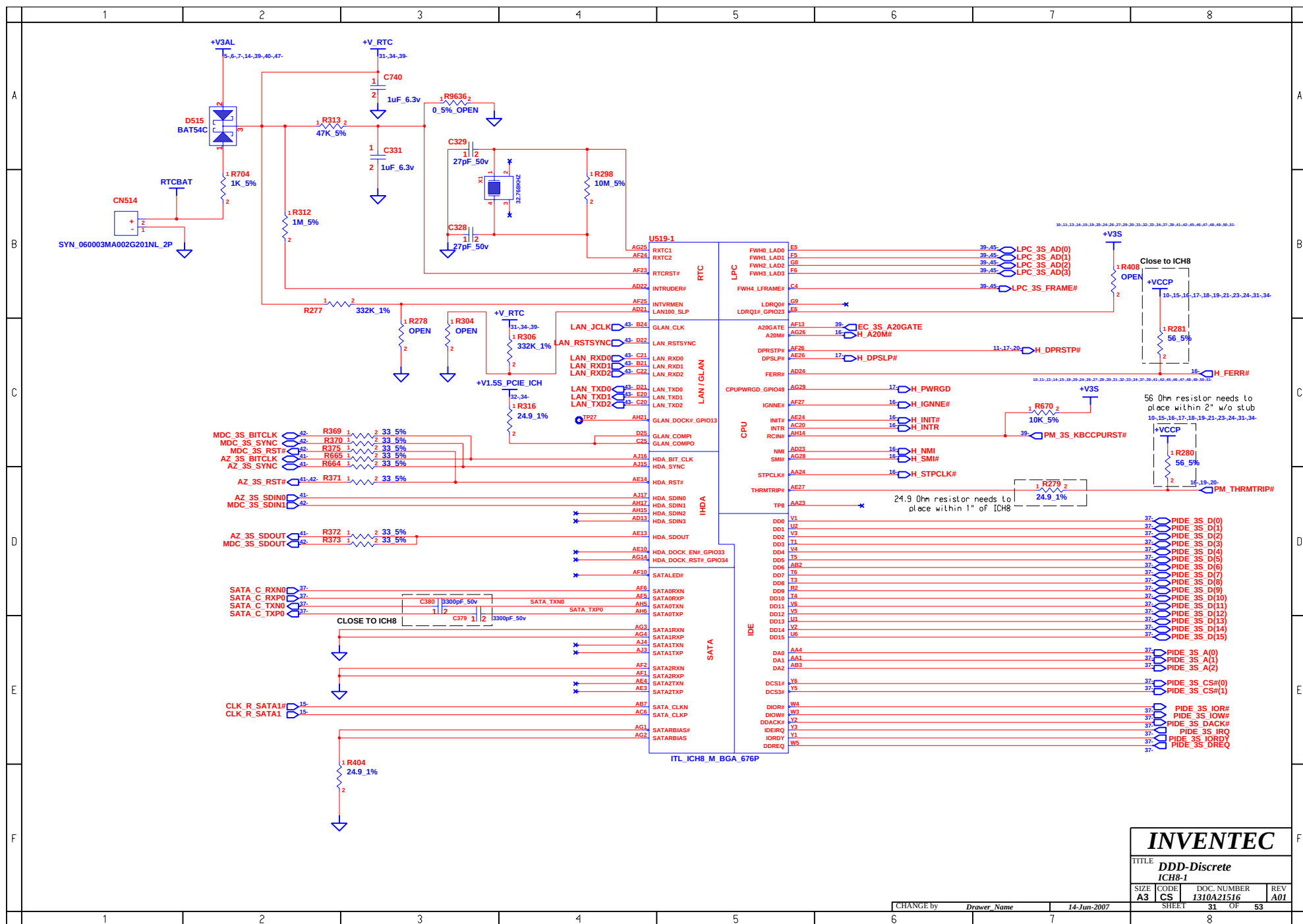
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|-----------|-------------|-------------|
| CHANGE by | Drawer Name | 14-Jun-2007 |
| SHEET     |             | 27 OF 53    |

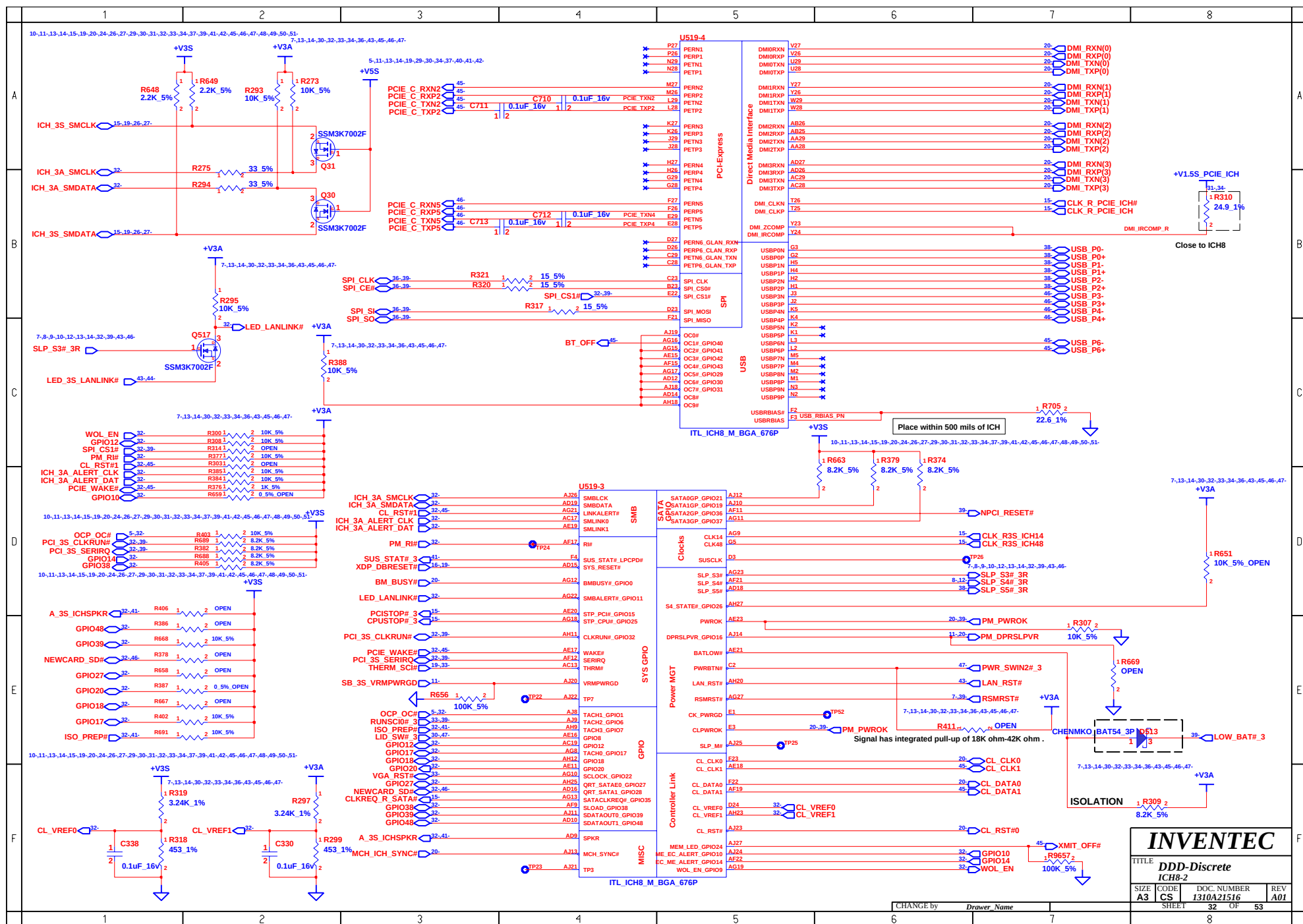


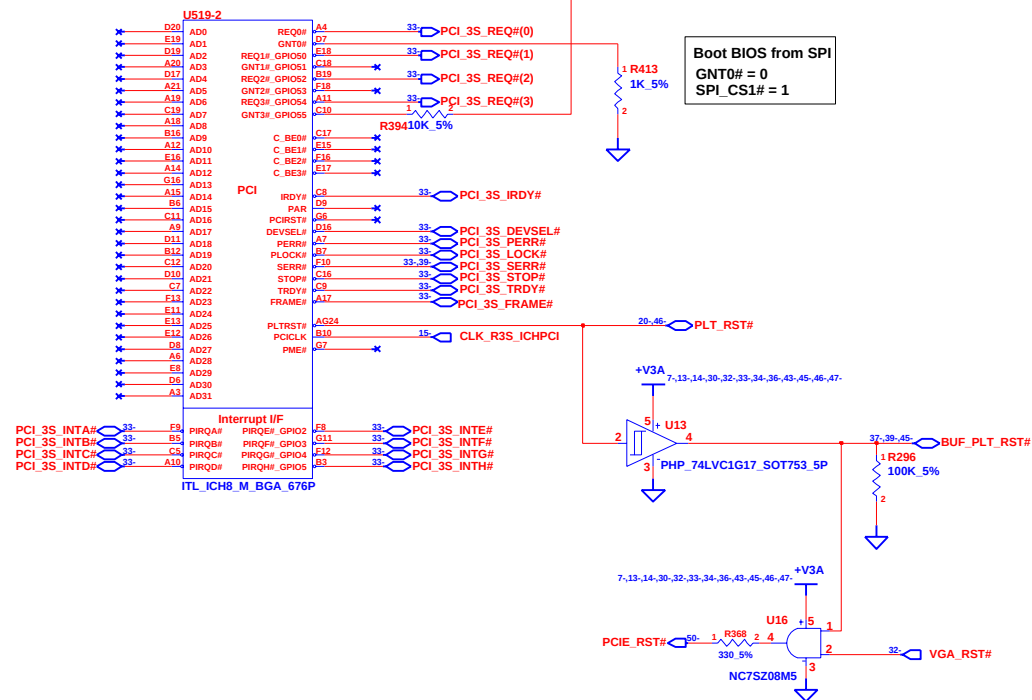


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|-----------------------------------|------------|---------------------------|------------|
| TITLE<br>DDD-Discrete<br>VGA CONN |            |                           |            |
| SIZE<br>A3                        | CODE<br>CS | DOC. NUMBER<br>I310A21516 | REV<br>A01 |
| CHANGE by<br>Drawer Name          |            | 14-Jun-2007               |            |
| SHEET                             |            | 29 OF 53                  |            |









```

Boot BIOS from SPI
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SPI_CS1# = 1

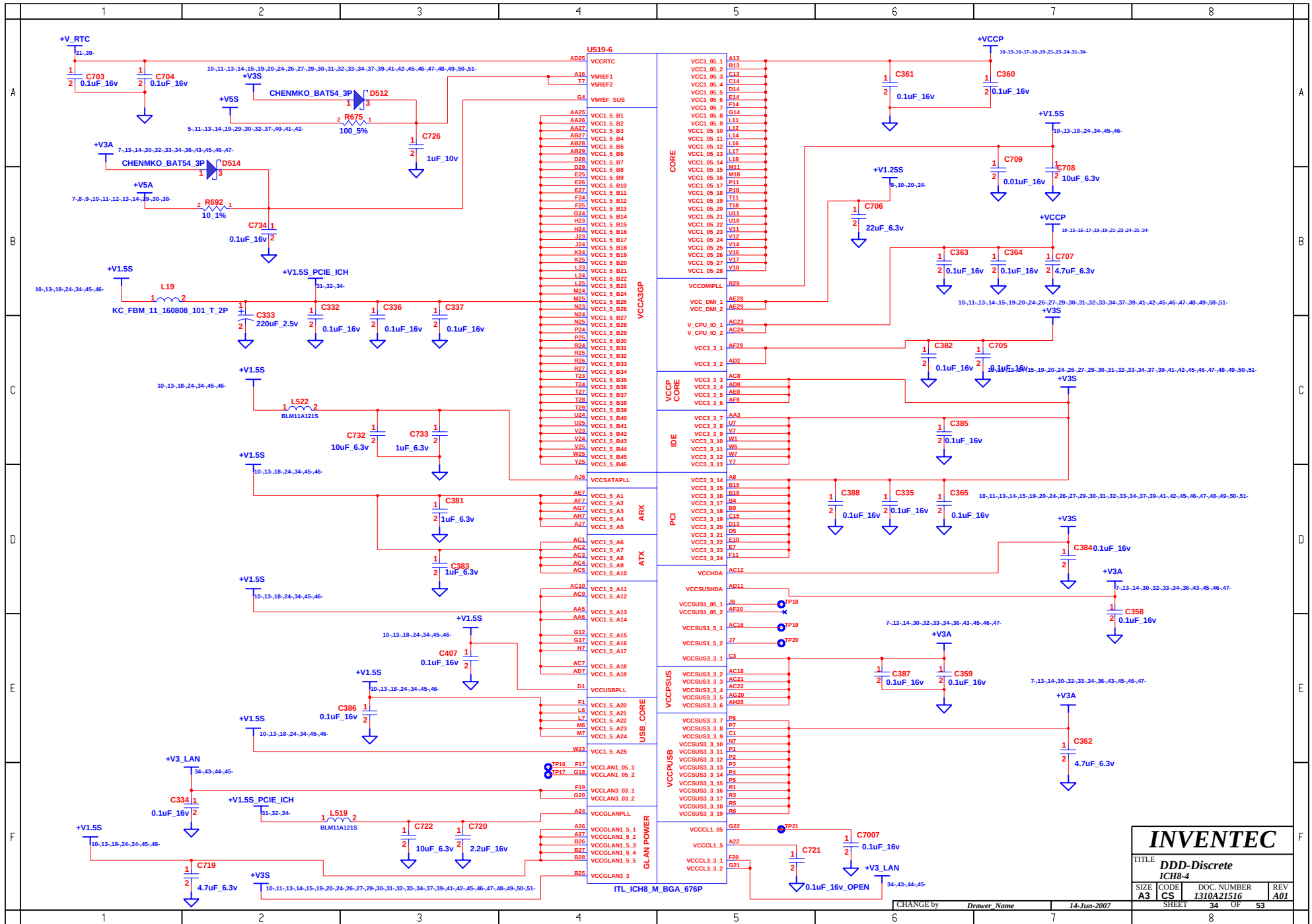
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7-13-14-30-32-33-34-36-43-45-46-47-**+V3A**

|                        |      |             |     |
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| TITLE                  |      |             |     |
| DDD-Discrete<br>ICH8-3 |      |             |     |
| SIZE                   | CODE | DOC. NUMBER | REV |
| A3                     | CS   | 1310A21516  | A01 |
| SHEET 33 OF 53         |      |             |     |

|           |                    |             |
|-----------|--------------------|-------------|
| CHANGE by | <i>Drawer Name</i> | 14-Jun-2007 |
|-----------|--------------------|-------------|

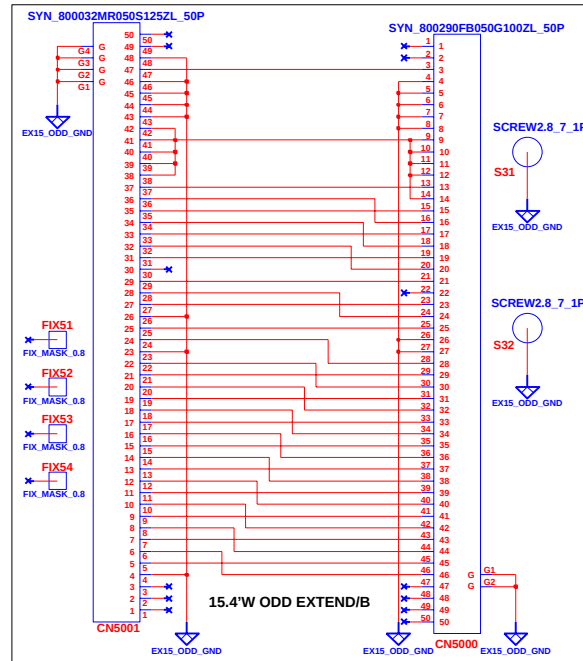
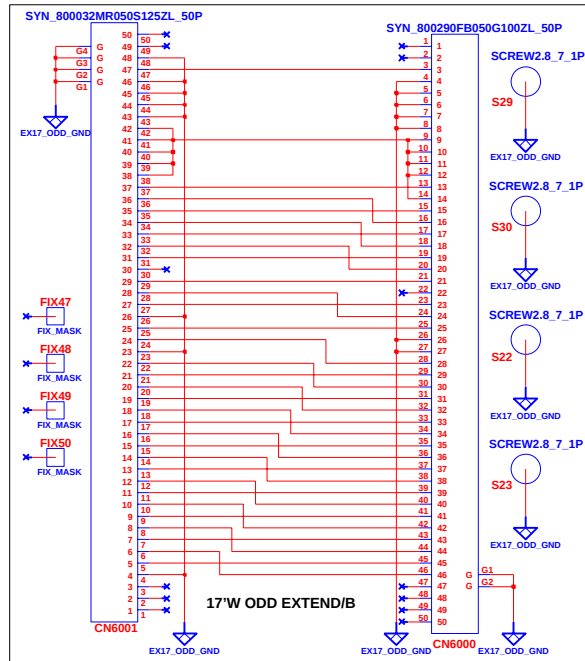
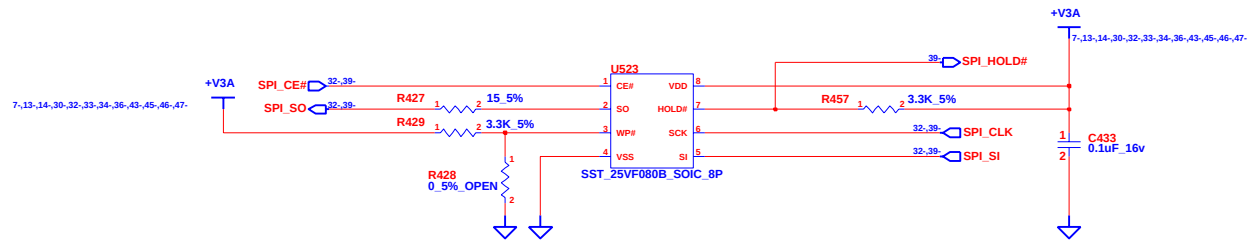
SHEET 33 OF 53



| INVENTEC                        |            |                           |            |
|---------------------------------|------------|---------------------------|------------|
| TITLE<br>DDD-Discrete<br>ICH8-4 |            |                           |            |
| SIZE<br>A3                      | CODE<br>CS | DOC. NUMBER<br>1310A21516 | REV<br>A01 |
| SHEET<br>34                     |            | OF<br>53                  |            |

CHANGE by *Drawn Name* 14-Jun-2007





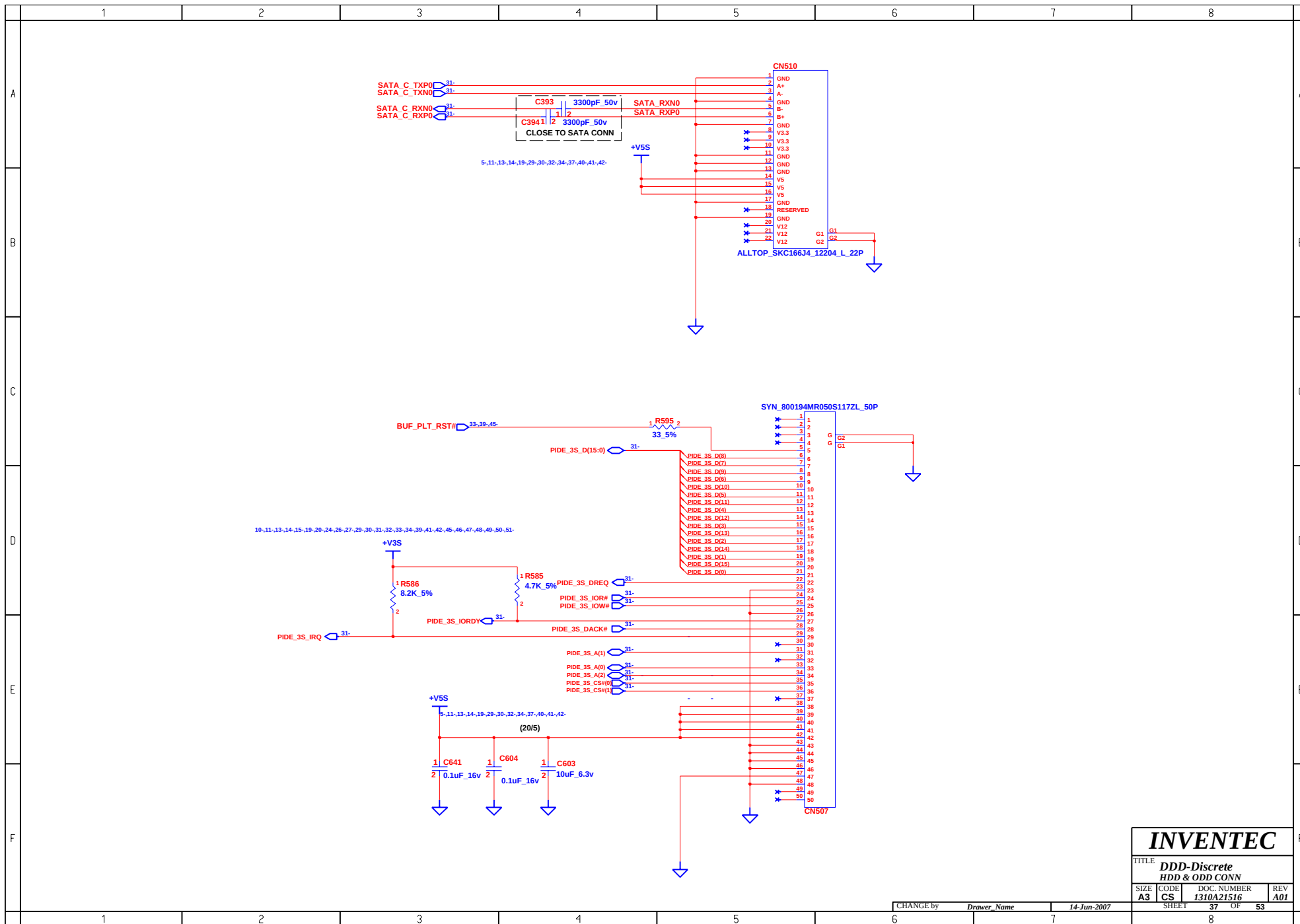
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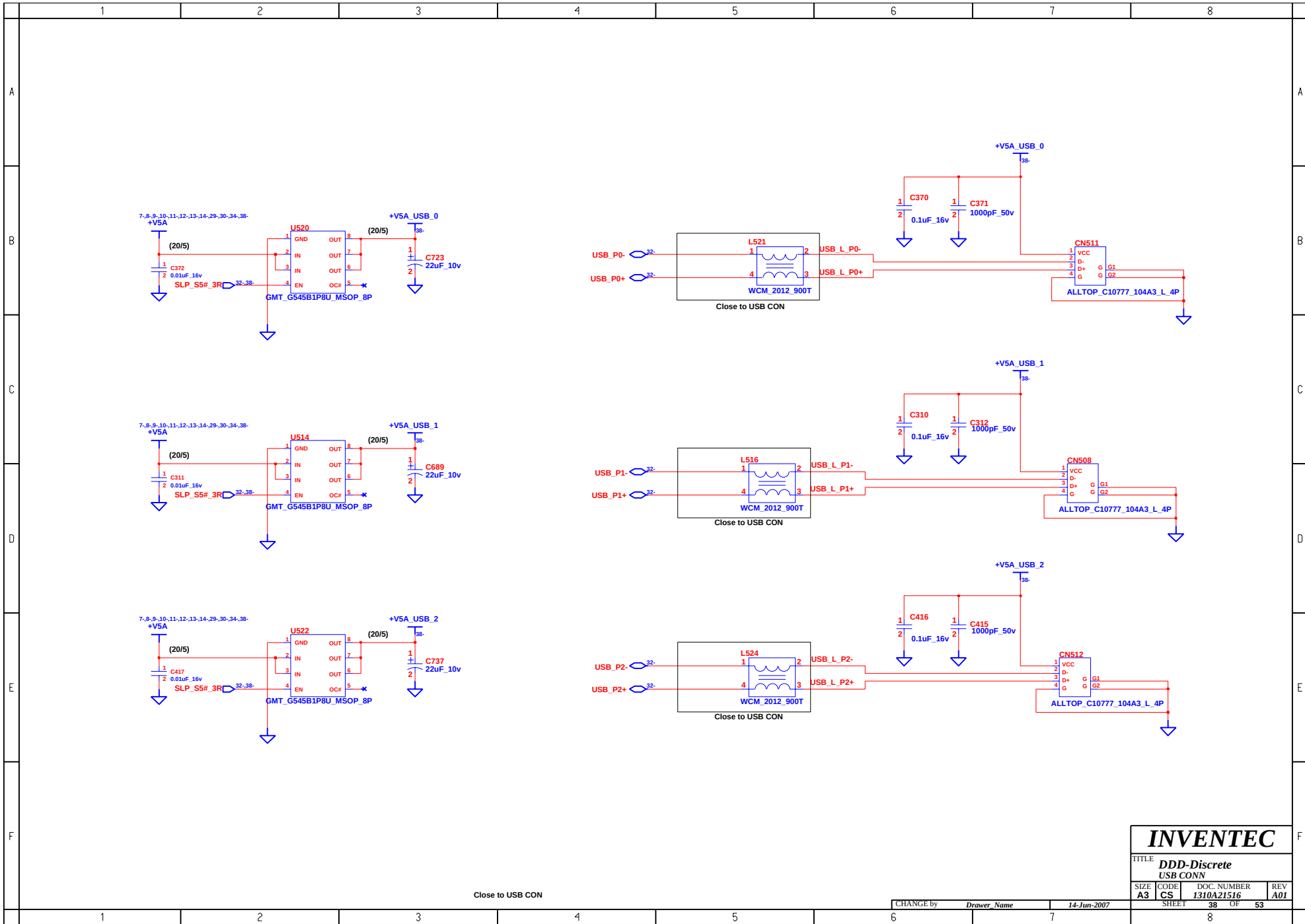
TITLE **DDD-Discrete**  
SYSTEM BIOS&ODD EXT/B

|      |      |             |     |
|------|------|-------------|-----|
| SIZE | CODE | DOC. NUMBER | REV |
| A3   | CS   | I310A21516  | A01 |

CHANGE by *Draver Name* 14-Jun-2007

SHEET 36 OF 53

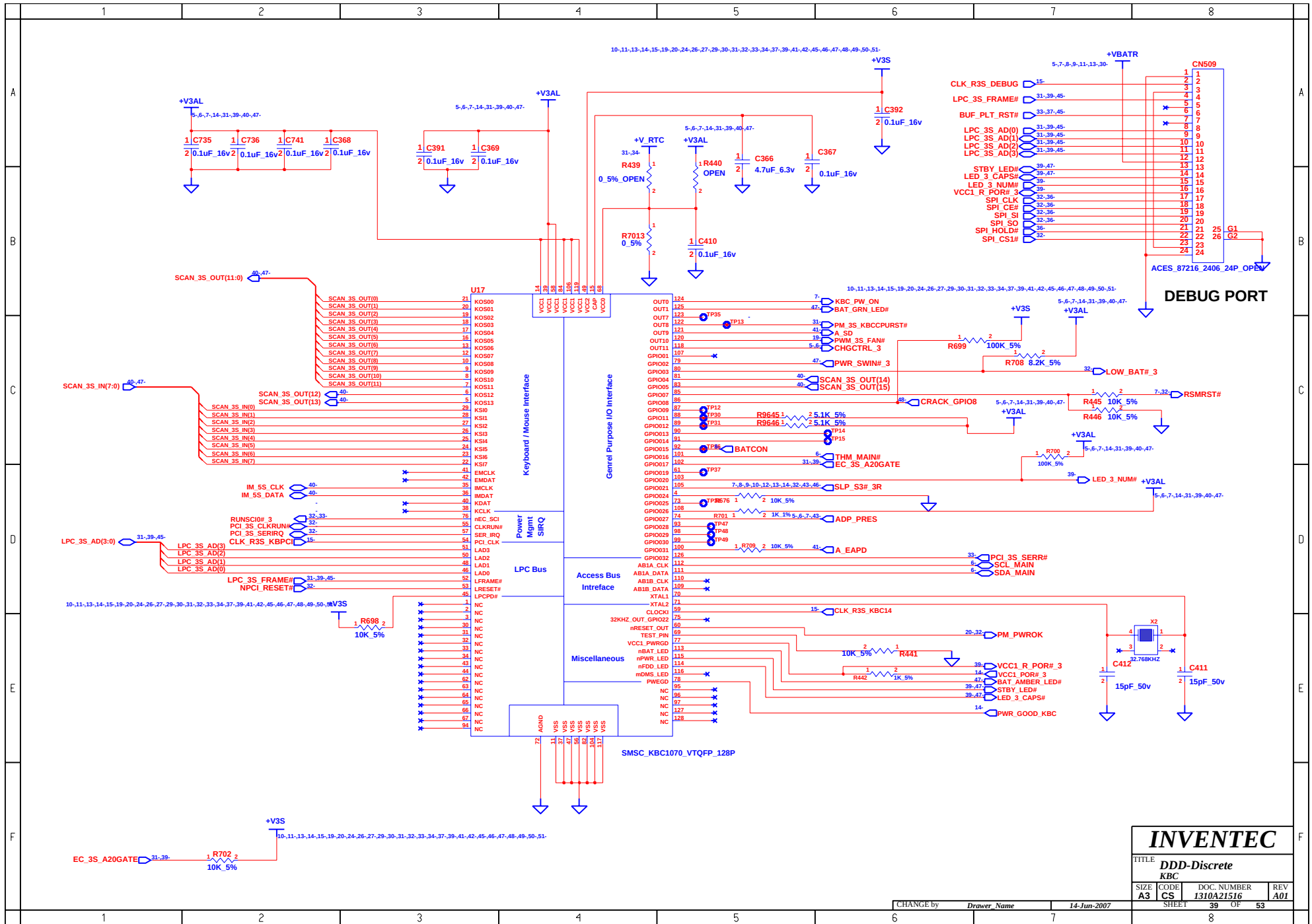


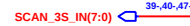


**INVENTEC**

|                                   |            |                           |            |
|-----------------------------------|------------|---------------------------|------------|
| TITLE<br>DDD-Discrete<br>USB CONN |            |                           |            |
| SIZE<br>A3                        | CODE<br>CS | DOC. NUMBER<br>I310AZ1516 | REV<br>A01 |
| SHEET                             |            | 38                        | OF 53      |

CHANGE by *Drawer Name* 14-Jun-2007

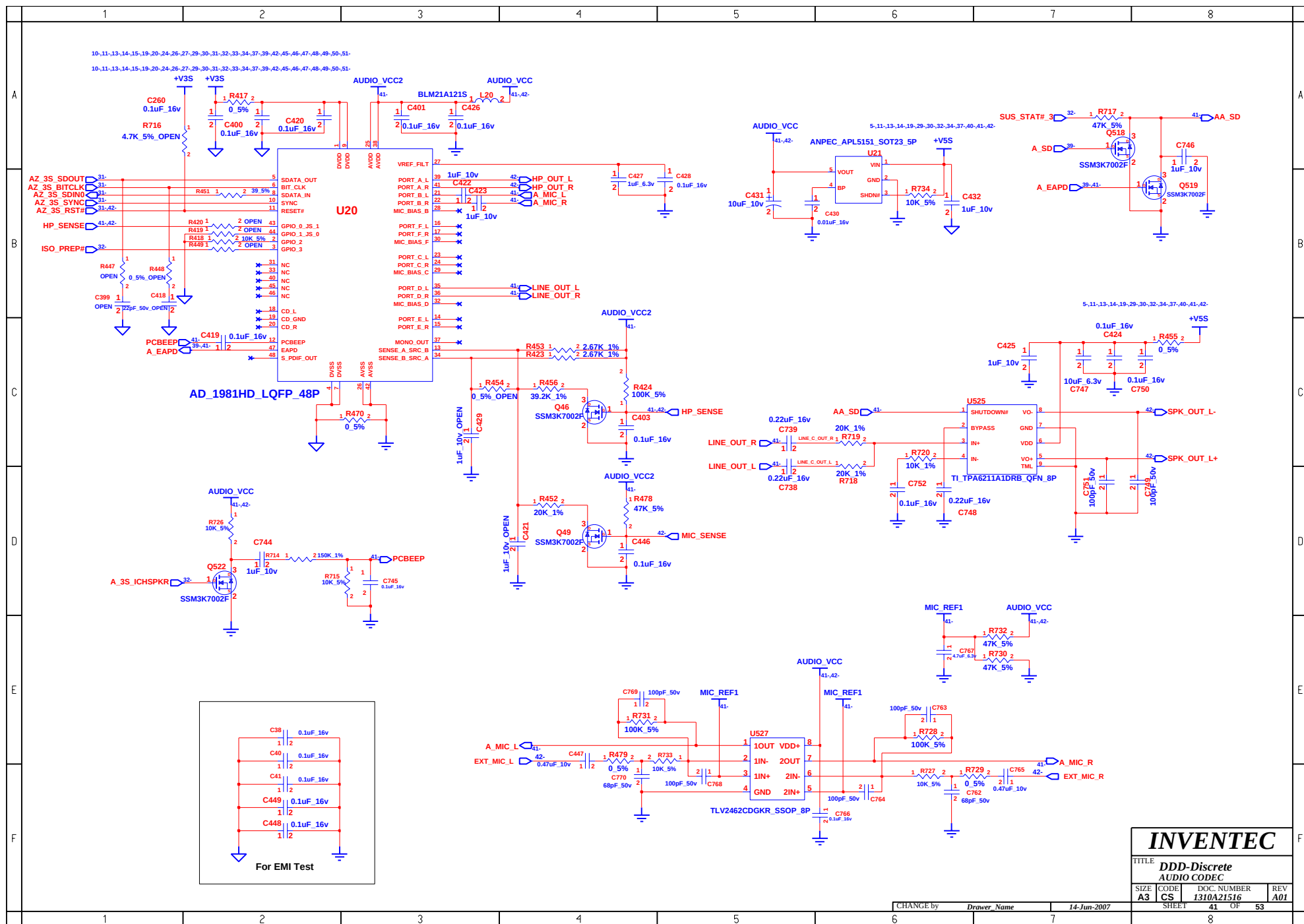




|                                                |           |                   |            |
|------------------------------------------------|-----------|-------------------|------------|
| TITLE                                          |           |                   |            |
| <b>DDD-Discrete</b><br><b>KB &amp; TP CONN</b> |           |                   |            |
| SIZE                                           | CODE      | DOC. NUMBER       | REV        |
| <b>A3</b>                                      | <b>CS</b> | <b>1310A21516</b> | <b>A01</b> |
| SHEET                                          |           | 40                | OF 53      |

|           |                    |             |
|-----------|--------------------|-------------|
| CHANGE by | <i>Drawer Name</i> | 14-Jun-2007 |
|-----------|--------------------|-------------|

|       |            |    |    |
|-------|------------|----|----|
| CS    | 1310A21316 |    |    |
| SHEET | 40         | OF | 53 |



1 2 3 4 5 6 7 8

A

B

C

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E

F

A

B

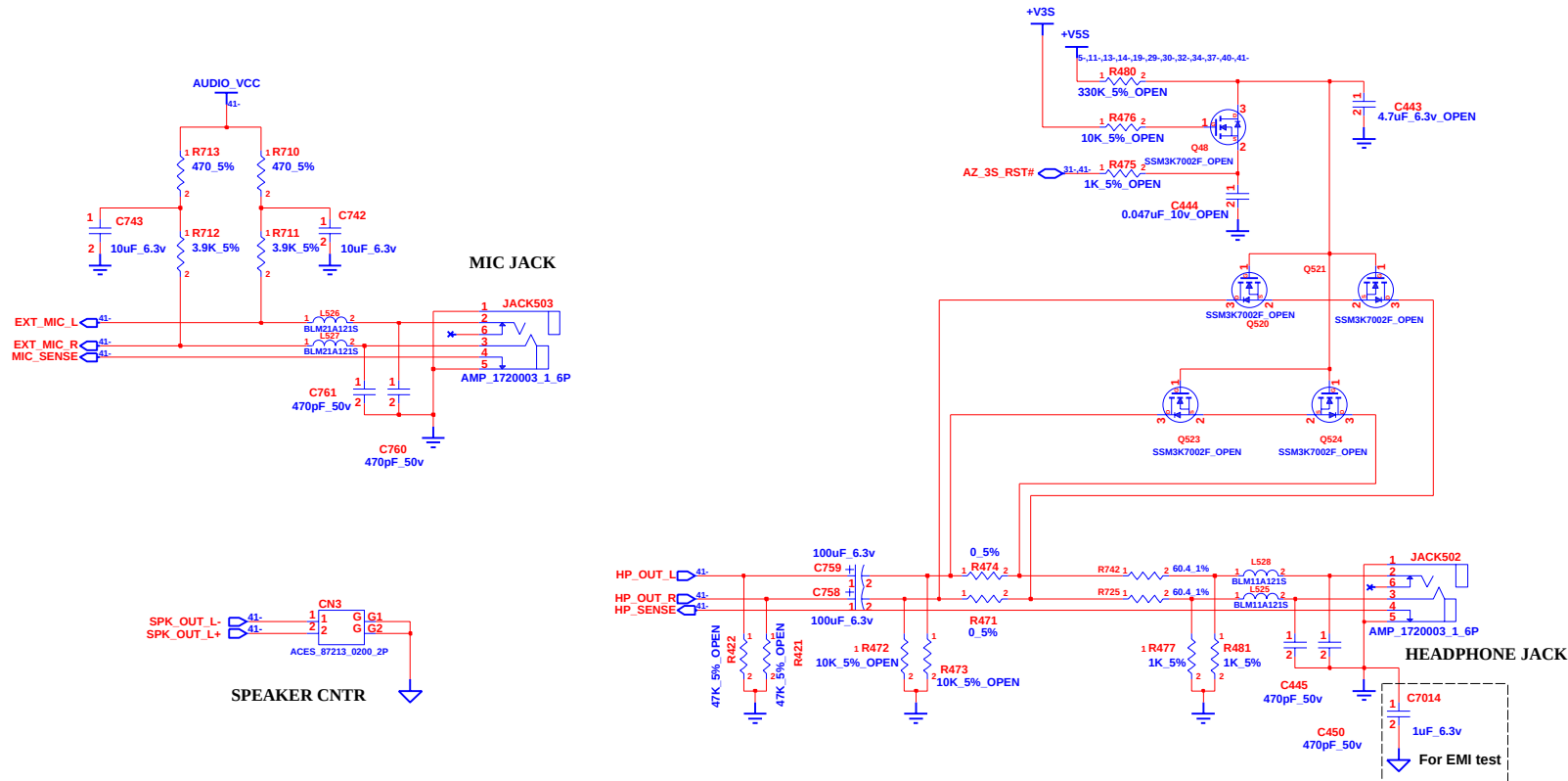
C

D

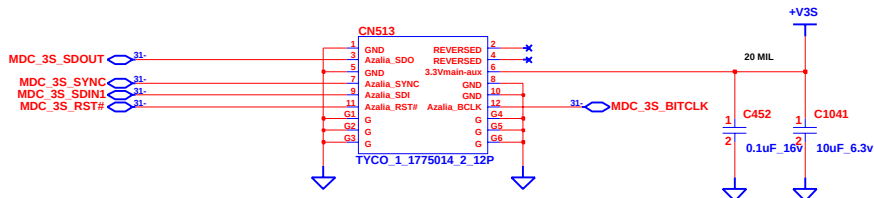
E

F

10-11-13-14-15-19-20-24-26-27-29-30-31-32-33-34-37-39-41-42-45-46-47-48-49-50-51-



10-11-13-14-15-19-20-24-26-27-29-30-31-32-33-34-37-39-41-42-45-46-47-48-49-50-51-



**INVENTEC**

TITLE  
**DDD-Discrete  
MDC CNTR**

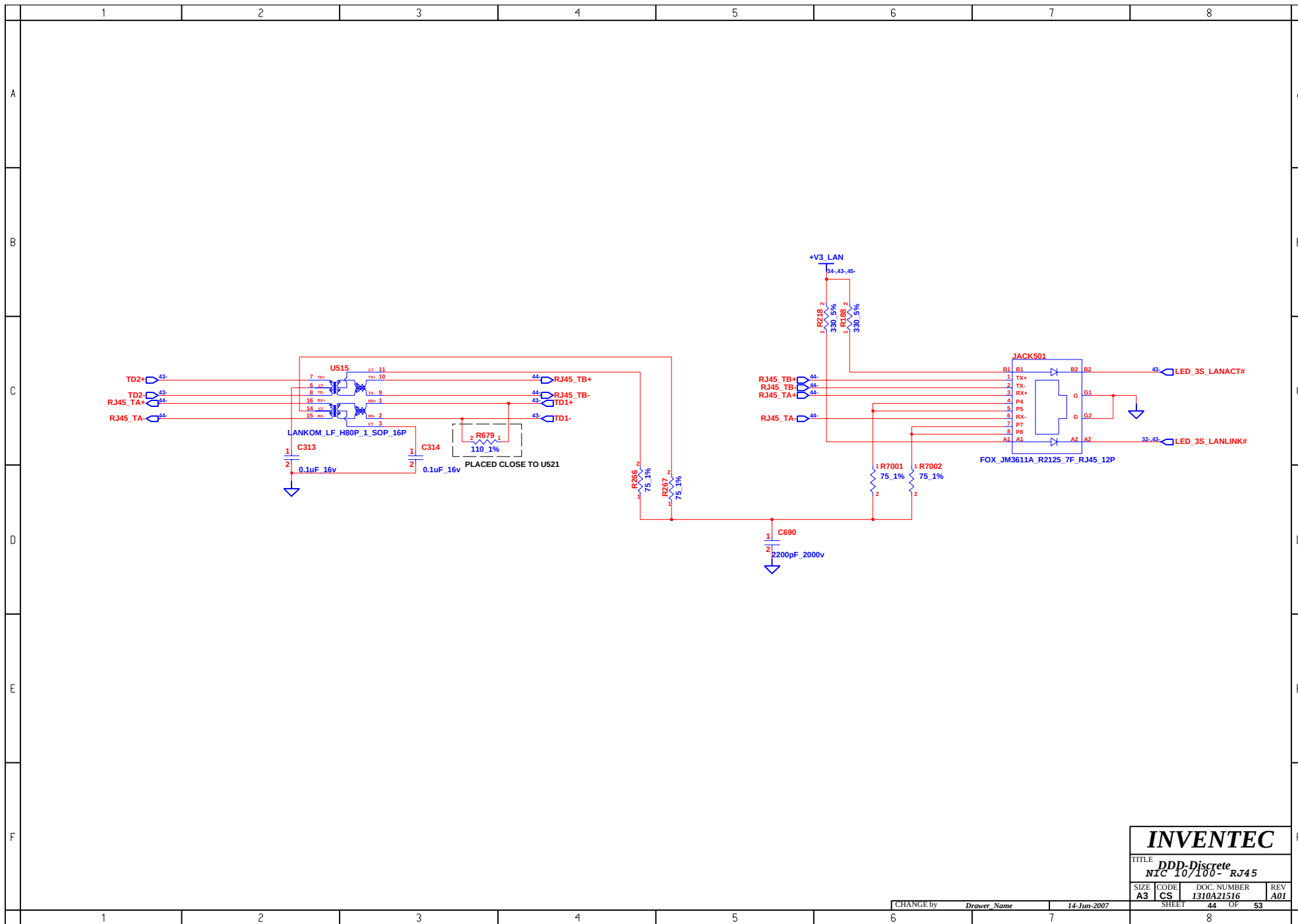
| SIZE | CODE | DOC. NUMBER | REV |
|------|------|-------------|-----|
| A3   | CS   | I310A21516  | A01 |

CHANGE by *Drawer Name* 14-Jun-2007

SHEET 42 OF 53

1 2 3 4 5 6 7 8

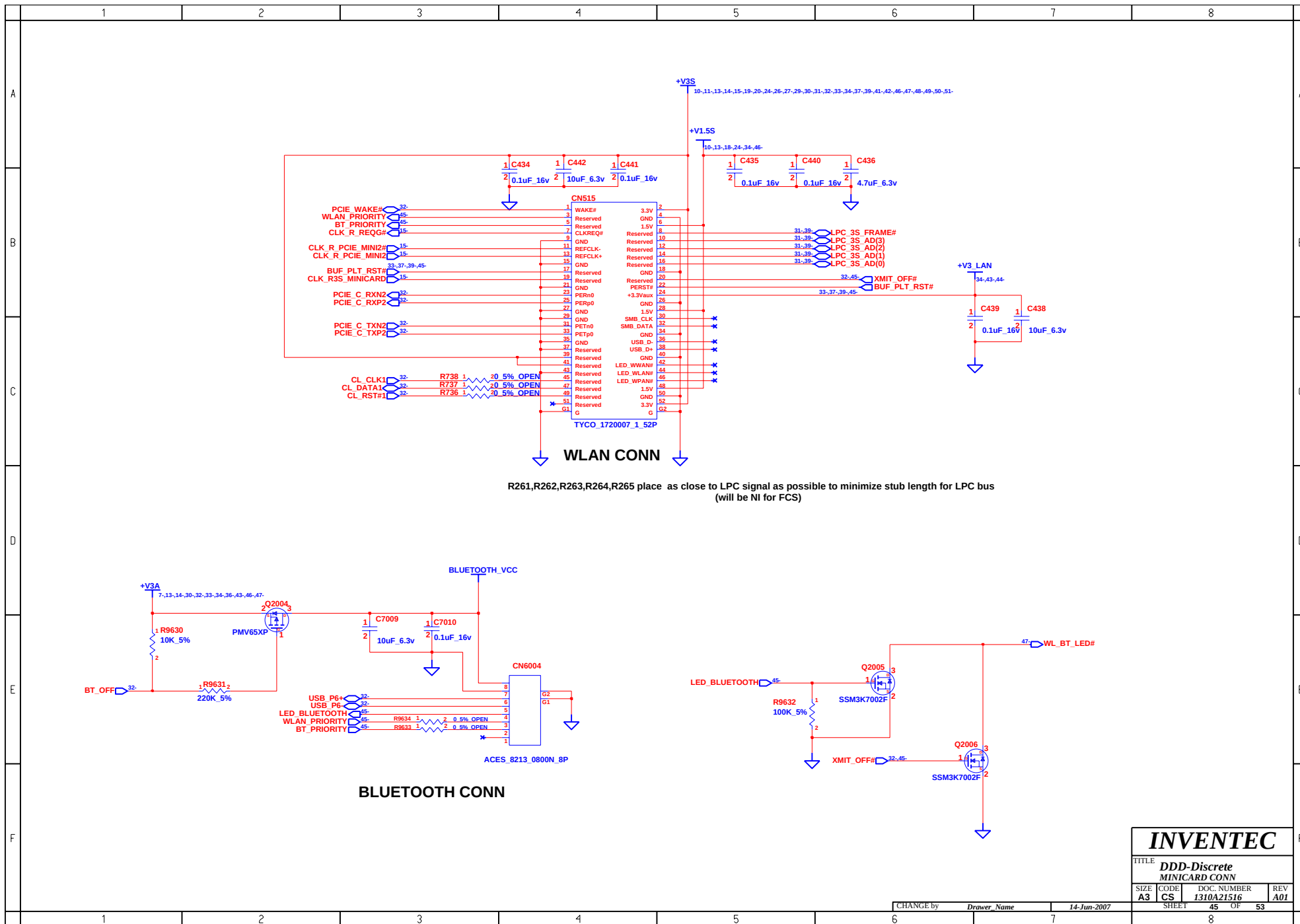




| INVENTEC                  |      |             |     |
|---------------------------|------|-------------|-----|
| TITLE <i>DDP-Discrete</i> |      |             |     |
| NIC 10/100 - RJ45         |      |             |     |
| SIZE                      | CODE | DOC. NUMBER | REV |
| A3                        | CS   | I310A21516  | A01 |

CHANGE by *Drawer Name* 14-Jun-2007

SHEET 44 OF 53



**INVENTEC**

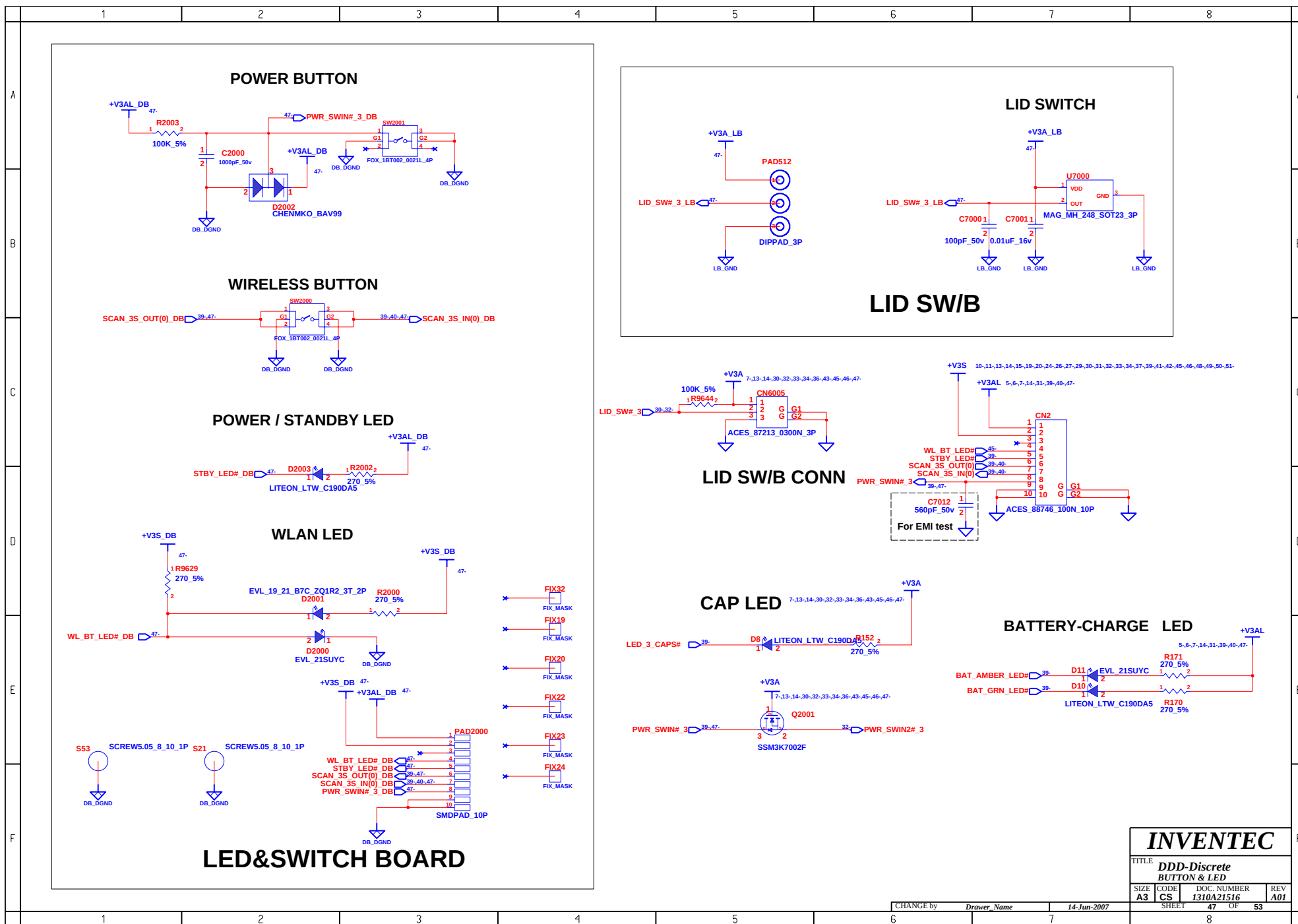
TITLE  
**DDD-Discrete  
MINICARD CONN**

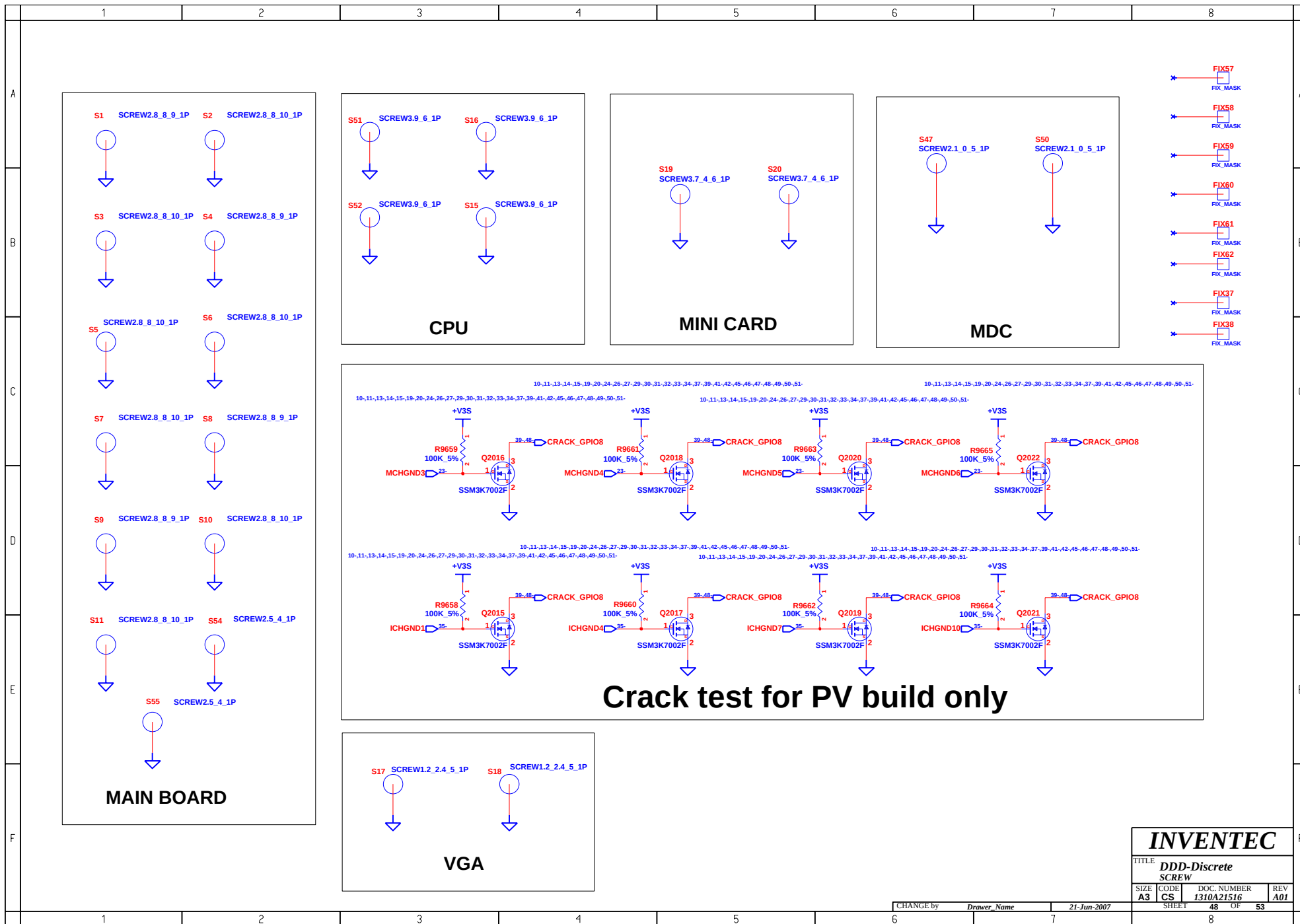
|                   |                   |                                  |                   |
|-------------------|-------------------|----------------------------------|-------------------|
| SIZE<br><b>A3</b> | CODE<br><b>CS</b> | DOC. NUMBER<br><b>I310A21516</b> | REV<br><b>A01</b> |
|-------------------|-------------------|----------------------------------|-------------------|

CHANGE by *Drawer Name* 14-Jun-2007

SHEET 45 OF 53







S47 SCREW2.1\_0\_5\_1P

S50 SCREW2.1\_0\_5\_1P

MDC

S17 SCREW1.2\_2.4\_5\_1P

S18 SCREW1.2\_2.4\_5\_1P

VGA

10-11-13-14-15-19-20-24-26-27-29-30-31-32-33-34-37-39-41-42-45-46-47-48-49-50-51-

10-11-13-14-15-19-20-24-26-27-29-30-31-32-33-34-37-39-41-42-45-46-47-48-49-50-51-

10-11-13-14-15-19-20-24-26-27-29-30-31-32-33-34-37-39-41-42-45-46-47-48-49-50-51-

10-11-13-14-15-19-20-24-26-27-29-30-31-32-33-34-37-39-41-42-45-46-47-48-49-50-51-

+V3S

R9659 100K 5%

Q2016

SSM3K7002F

39-48 CRACK\_GPIO8

MCHGND3

23-

1

2

+V3S

R9661 100K 5%

Q2018

SSM3K7002F

39-48 CRACK\_GPIO8

MCHGND4

23-

1

2

+V3S

R9663 100K 5%

Q2020

SSM3K7002F

39-48 CRACK\_GPIO8

MCHGND5

23-

1

2

+V3S

R9665 100K 5%

Q2022

SSM3K7002F

39-48 CRACK\_GPIO8

MCHGND6

23-

1

2

10-11-13-14-15-19-20-24-26-27-29-30-31-32-33-34-37-39-41-42-45-46-47-48-49-50-51-

10-11-13-14-15-19-20-24-26-27-29-30-31-32-33-34-37-39-41-42-45-46-47-48-49-50-51-

10-11-13-14-15-19-20-24-26-27-29-30-31-32-33-34-37-39-41-42-45-46-47-48-49-50-51-

10-11-13-14-15-19-20-24-26-27-29-30-31-32-33-34-37-39-41-42-45-46-47-48-49-50-51-

+V3S

R9658 100K 5%

Q2015

SSM3K7002F

39-48 CRACK\_GPIO8

ICHGND1

35-

1

2

+V3S

R9660 100K 5%

Q2017

SSM3K7002F

39-48 CRACK\_GPIO8

ICHGND4

35-

1

2

+V3S

R9662 100K 5%

Q2019

SSM3K7002F

39-48 CRACK\_GPIO8

ICHGND7

35-

1

2

+V3S

R9664 100K 5%

Q2021

SSM3K7002F

39-48 CRACK\_GPIO8

ICHGND10

35-

1

2

Crack test for PV build only

S17 SCREW1.2\_2.4\_5\_1P

S18 SCREW1.2\_2.4\_5\_1P

VGA

FIX57

FIX\_MASK

FIX58

FIX\_MASK

FIX59

FIX\_MASK

FIX60

FIX\_MASK

FIX61

FIX\_MASK

FIX62

FIX\_MASK

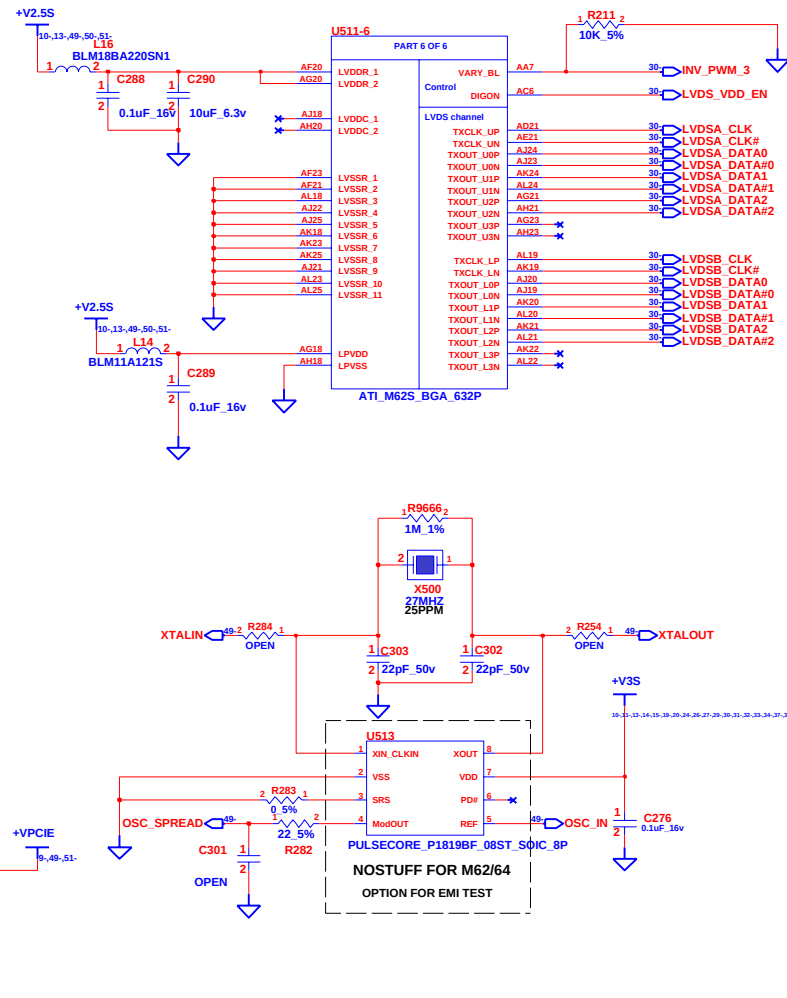
FIX37

FIX\_MASK

FIX38

FIX\_MASK





|  |   |
|--|---|
|  | 8 |
|--|---|

1 2 3 4 5 6 7 8

A

B

C

D

E

F

A

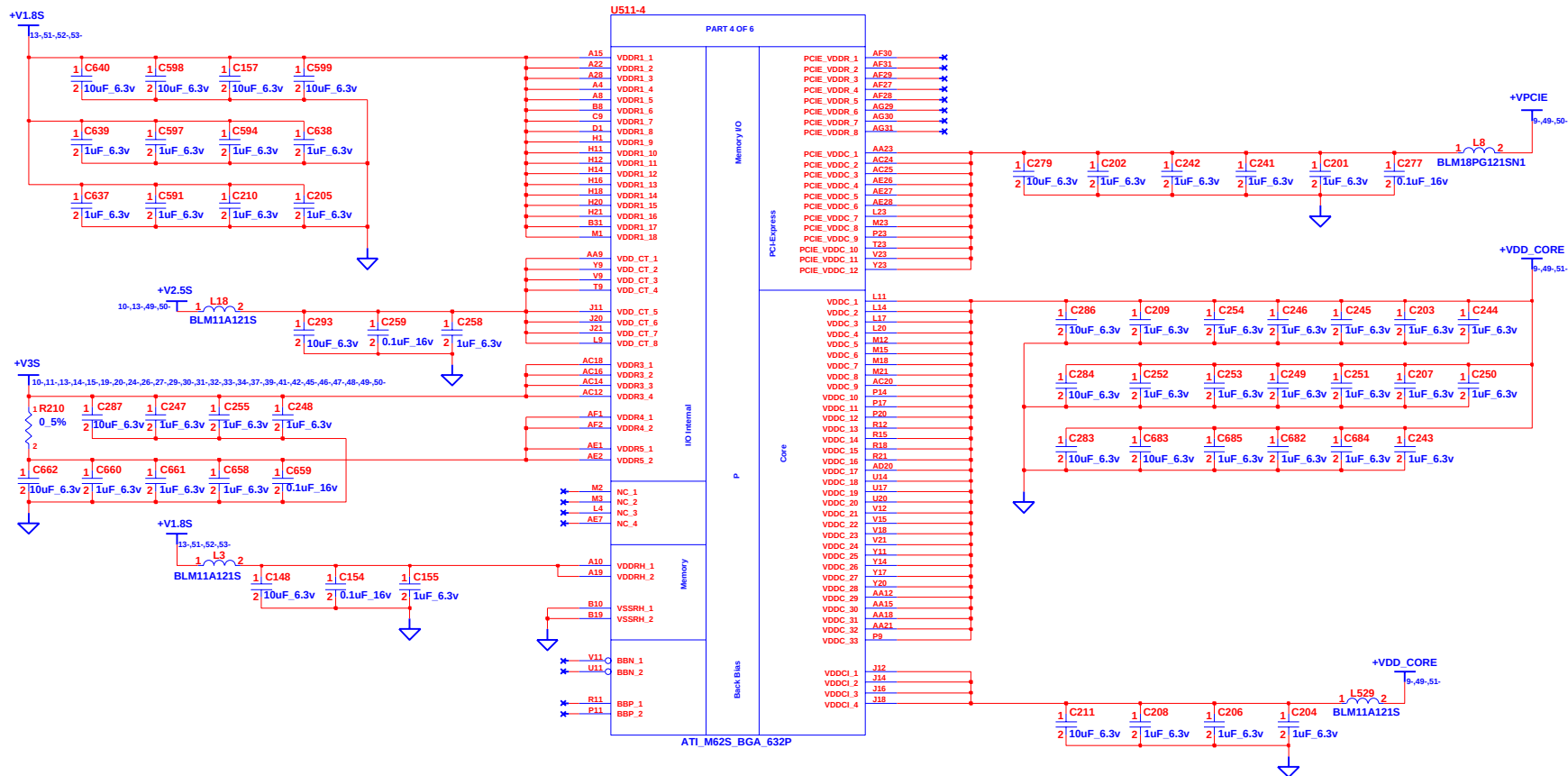
B

C

D

E

F



**INVENTEC**

TITLE  
DDD-Discrete

| SIZE | CODE | DOC. NUMBER | REV |
|------|------|-------------|-----|
| A3   | CS   | I310A21516  | A01 |

CHANGE by *Drawn Name* 14-Jun-2007

SHEET 51 OF 53

1 2 3 4 5 6 7 8

