

(2) PCIE INTERFACE SOME PCIE TEST POINTS ARE AVAILABLE THROUGH VIAS ON TRACES TP100 
 PCIE\_TX0P
 AN47
 PCIE\_TX0P

 PCIE\_TX0N
 AN46
 PCIE\_TX0N
 AR50 PCIE\_RX0P AP49 PCIE\_RX0N AP51 PCIE\_RX1P AN52 PCIE\_RX1N 
 PCIE\_TX2P
 AM47
 PCIE\_TX2P

 PCIE\_TX2N
 AM46
 PCIE\_TX2N
 AN50 PCIE\_RX2P AM49 PCIE\_RX2N IN IN AM51 PCIE\_RX3P AL52 PCIE\_RX3N AL50 PCIE\_RX4P AK49 PCIE\_RX4N AK51 PCIE\_RX5P AJ52 PCIE\_RX5N IN IN AJ50 PCIE\_RX6P AH49 PCIE\_RX6N AH51 PCIE\_RX7P AG52 PCIE\_RX7N IN IN 
 PCIE\_TX9P
 AF44
 PCIE\_TX9P

 PCIE\_TX9N
 AF43
 PCIE\_TX9N
 AF51 PCIE\_RX9P AE52 PCIE\_RX9N AD51 PCIE\_RX11P AC52 PCIE\_RX11N POE\_TX19N AC43 POE\_TX19P
POE\_TX19N AC66 POE\_TX19N
POE\_TX19N AC64 POE\_TX19N
POE\_TX19N AC63 POE\_TX19N
POE\_TX19N AC67 POE\_TX19N
POE\_TX14N
POE\_TX14N
POE\_TX14N AB51 PCIE\_RX13P AA52 PCIE\_RX13N TP130 Y51 PCIE\_RX15P PCIE\_RX15N TP131 AR47 PCIE\_REFCLKP
PCIE\_REFCLKN

AU48 PERSTB AT45 PCIE\_PVDD#1 PCIE\_PVDD#2 AG40 BIF\_VDDC#1
AH41 BIF\_VDDC#2
AK40 BIF\_VDDC#3
BIF\_VDDC#4 AR42 PCIE\_VDDC#12 GV-R938WF2-4GD

(3) MEM INTERFACE CH AB | RS2 | DOAD, 0 | PA9 | DOAD, 1 | PA9 | DOAD, 1 | PA9 | DOAD, 2 | PA9 | E34 DOB0.0 DOB0.1 F34 DOB0.1 DOB0.1 DOB0.1 DOB0.1 DOB0.2 D OUT TUO J43 MAAO\_0
H47 MAAO\_1
L47 MAAO\_2
L45 MAAO\_3
M46 MAAO\_4
L46 MAAO\_5
H43 MAAO\_6
G43 MAAO\_7
G45 MAAO\_8
P43 MAAO\_9 MAA1\_0 H39 MAA1\_1 G39 MAA1\_2 J38 MAA1\_3 G38 MAA1\_4 H36 MAA1\_6 G40 MAA1\_6 G40 MAA1\_7 J40 MAA1\_8 H40 MAA1\_9 J32 M23 MAB0\_0
L23 MAB0\_1
L26 MAB0\_2
M26 MAB0\_3
L28 MAB0\_4
M28 MAB0\_5
M21 MAB0\_6
L21 MAB0\_7
K22 MAB0\_8
M30\_9 MAB1\_0 MAB1\_1 MAB1\_2 MAB1\_3 MAB1\_4 MAB1\_5 MAB1\_6 MAB1\_7 MAB1\_8 MAB1\_9 E30 WCKB0\_0 F30 WCKB0B\_0 K51 WCKA0\_0 K53 WCKA0B\_0 OUT OUT OUT J21 CKEB0 CKEA1 G42 OUT OUT R3614 40.2/X 1% DNI R3604 40.2/X 1% DNI R3605 100/X 1% DNI C3612 R3615 1uF/X 6.3V 1% DNI C3602 1uF/X 6.3V DNI T41\_ DRAM\_RSTB MVREFSB M19 R3616 40.2/X 1% DNI R3601 5.1K/4/1 1% C3603 R3607 1uF/X 100/X 6.3V 1% DNI R3617 100/X 1% DNI C3613 1uF/X 6.3V DNI GV-R938WF2-4GD Size Document Number
Custom MEM INTERFACE CH AB Tuesday, June 23, 2015

(4) MEM INTERFACE CH CD 
 63
 5000.9

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 5000.1

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 600.3

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 600.3

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 600.2

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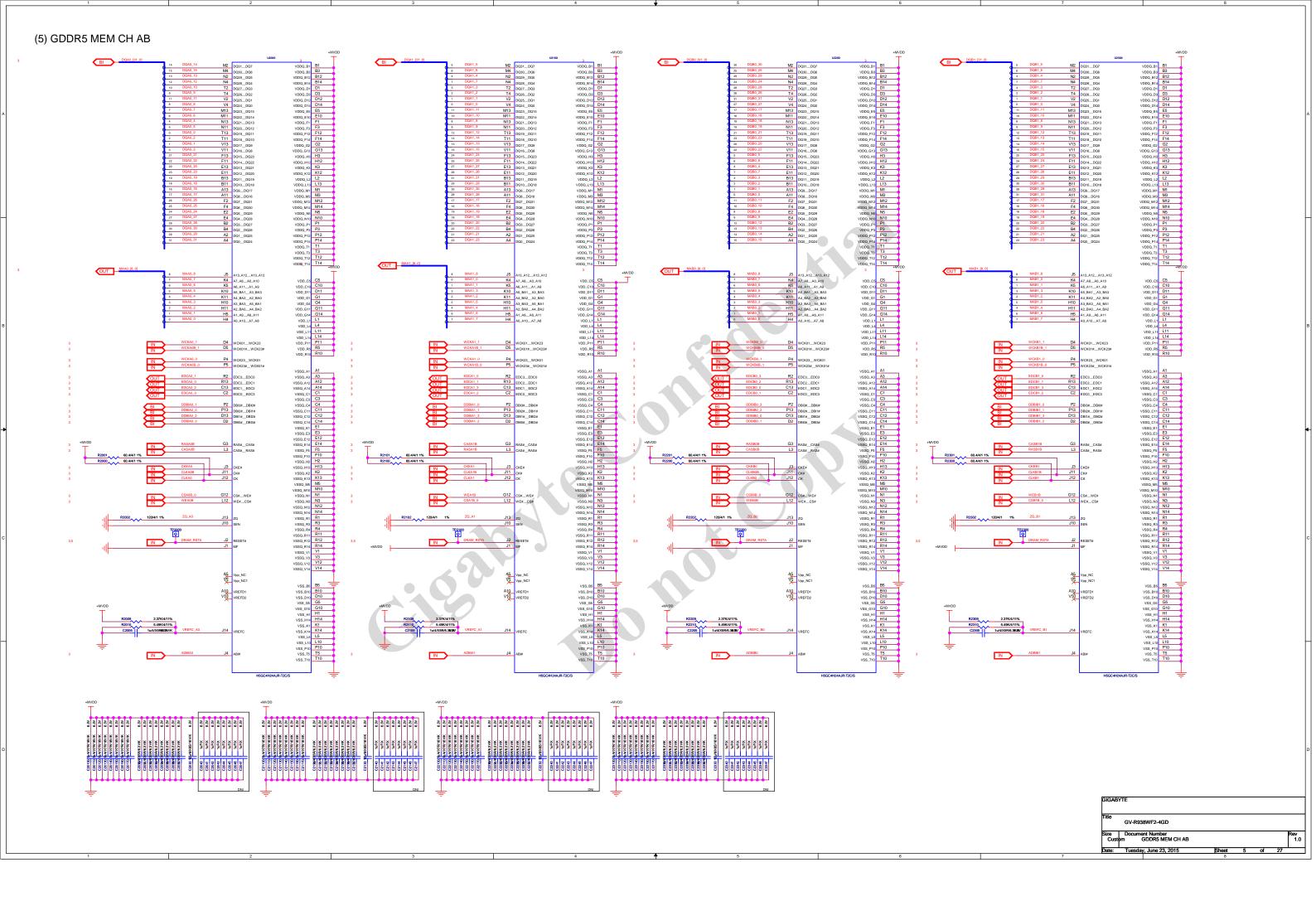
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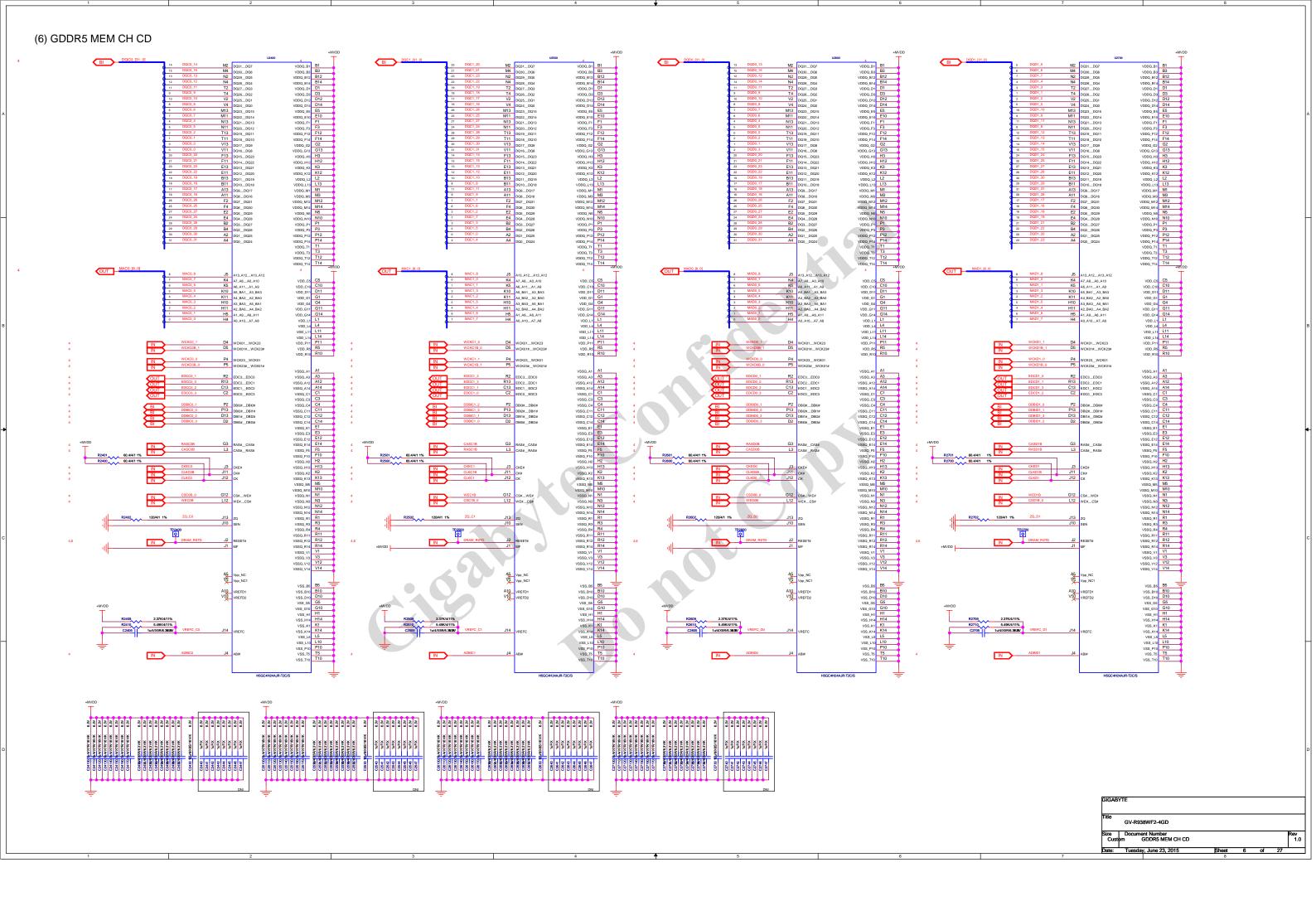
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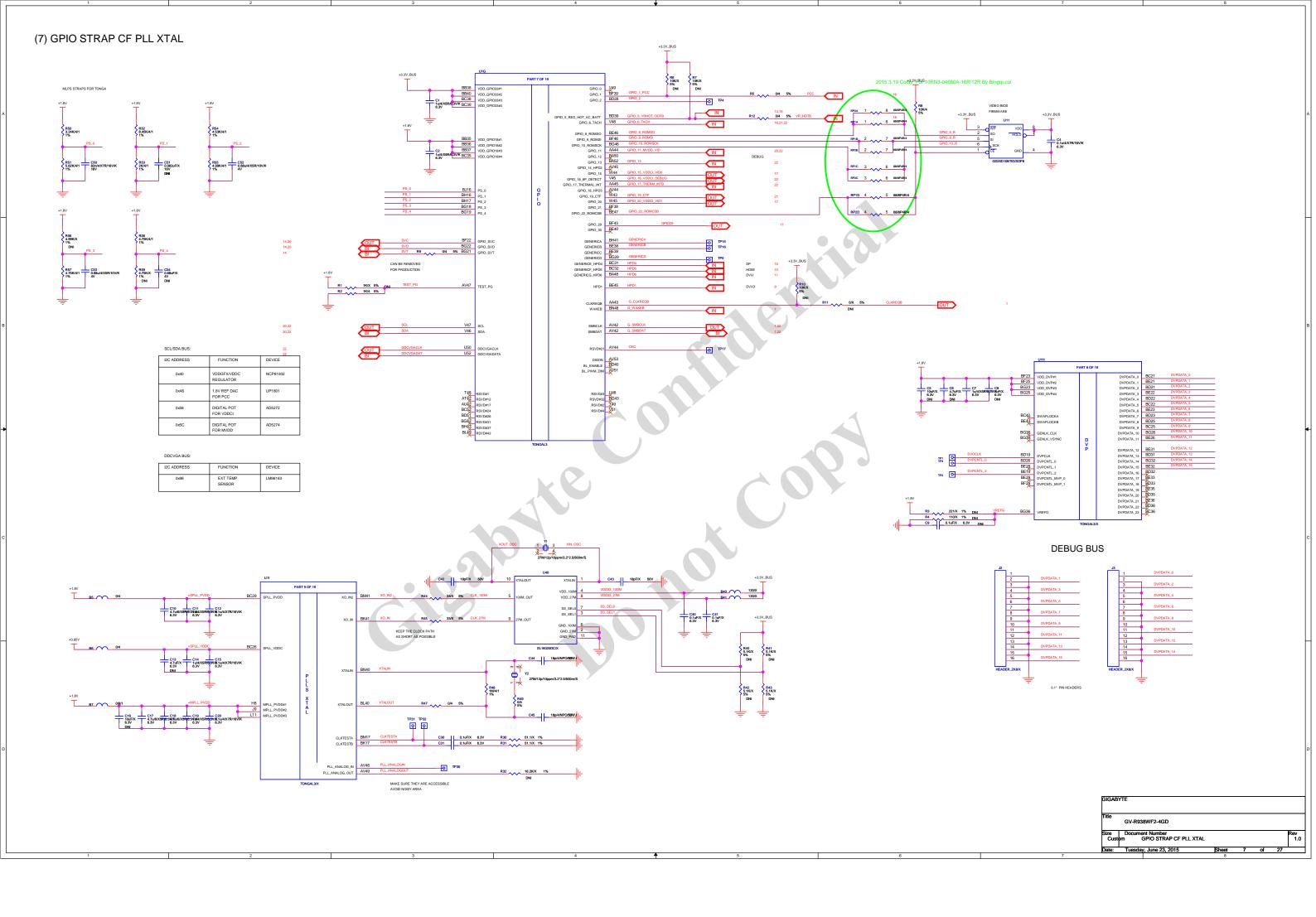
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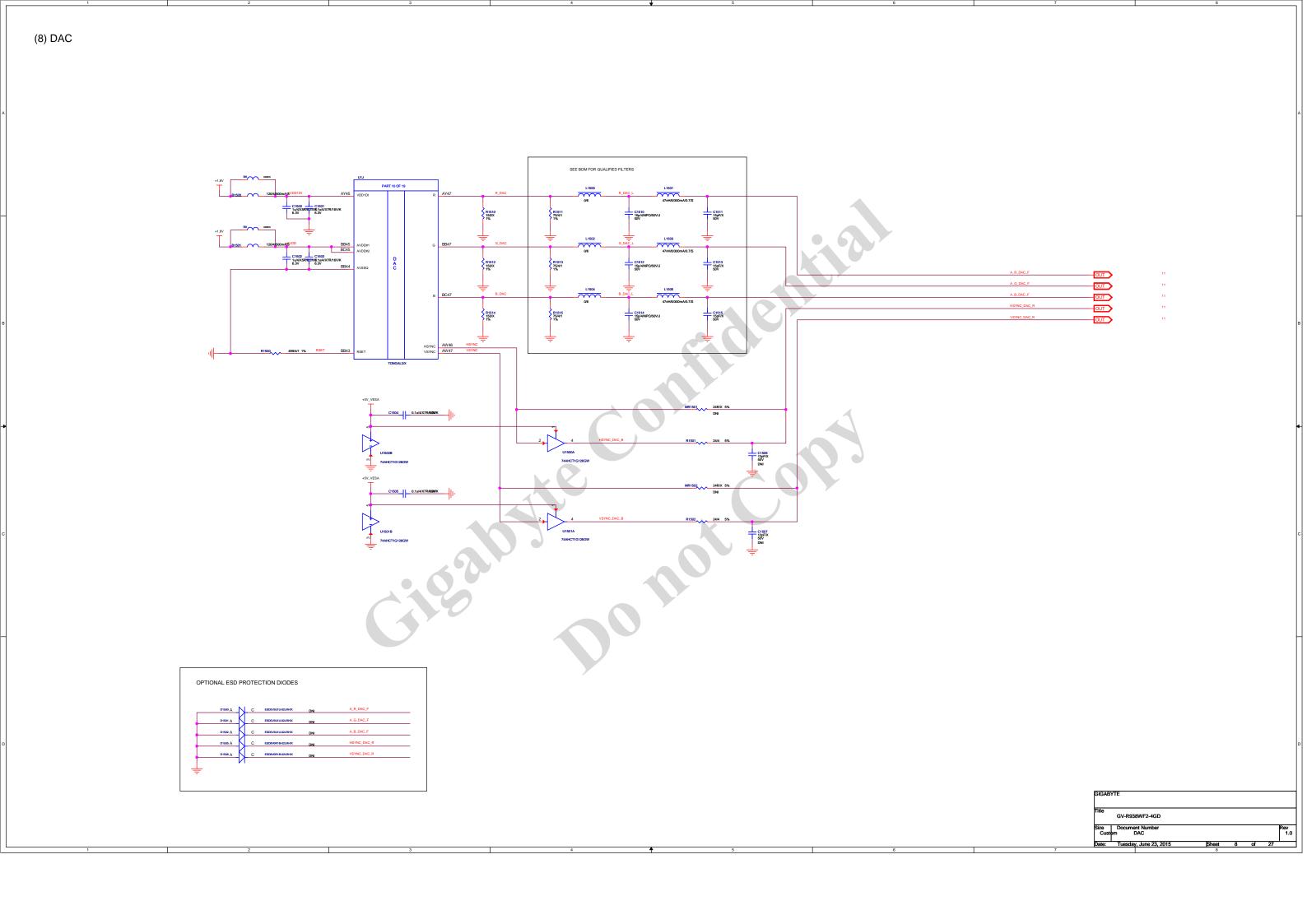
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 <t | DOC1.1 | AAA | DOC1.2 | ABS | DOC1.2 | ABS | DOC1.3 | ABS | DOC1.4 | ACA | DOC1.4 | ACA | DOC1.4 | ACA | DOC1.4 | ACA | DOC1.5 | ACA | A AF9 0000.1
AH6 0000.1
AH7 0000.1
AH8 0000.2
AH10 0000.3
AL7 0000.4
AL8 0000.4
AL8 0000.4
AL8 0000.4
AL8 0000.4
AL9 0000.4
AL9 0000.4
AH10 0000.7
AR12 0000.1
AR11 0000.1
AR1 OUT \_\_\_\_\_\_\_MAC0\_[9..0] MAC1\_0
AC12
MAC1\_1
AC11
MAC1\_2
AC11
MAC1\_2
AC11
MAC1\_A
AC12
MAC1\_4
AC11
MAC1\_A
MAC1\_B
AC1\_B
AC1\_ MAD1.0 BC9 MAD1.
MAD1.1 BG8 MAD1.
MAD1.2 BG11 MAD1.3
BE11 MAD1.3
BE11 MAD1.
MAD1.4 BF12 MAD1.
MAD1.6 BC8 MAD1.
MAD1.7 BC7 MAD1.
MAD1.7 BE7 MAD1.
MAD1.8 BE7 MAD1.
MAD1.9 BE7 MAD1. V11 MACO\_0
V10 MACO\_1
T9 MACO\_2
T10 MACO\_3
R11 MACO\_4
T7 MACO\_5
W9 MACO\_6
W8 MACO\_7
V7 MACO\_8
M11 MACO\_9 AW8 MAD0\_0
AW7 MAD0\_1
AV9 MAD0\_2
AV7 MAD0\_3
AT7 MAD0\_3
AT7 MAD0\_6
AY8 MAD0\_6
AY9 MAD0\_7
AY8 MAD0\_7
AY8 MAD0\_8
AM11 MAD0\_9 AN10 WCKD0\_0 AN11 WCKD0B\_0 K1 WCKC0\_0 K3 WCKC0B\_0 ADBIC1 AB11 ADBID1 BF7 V8 ADBICO OUT OUT -BB7 CKEDO CKED1 BB9 CKED1 OUT -CKEC1 AA9 CKEC OUT OUT -OUT MVREFD/S = 0.7 \* VDDF R3634 40.2/X 1% DNI R3624 40.2/X 1% DNI BA16 MEM\_CALC C3632 R3635 1uF/X 100/X 6.3V 1% DNI C3622 1uF/X 6.3V DNI R3625 100/X 1% DNI M12 DRAM\_RSTC MVREFSD BA13 R3636 40.2/X 1% DNI R3631 5.1K/4/1 1% C3623 1uF/X 6.3V DNI C3633 1uF/X 6.3V DNI R3637 100/X 1% DNI GV-R938WF2-4GD Size Document Number
Custom MEM INTERFACE CH CD Tuesday, June 23, 2015





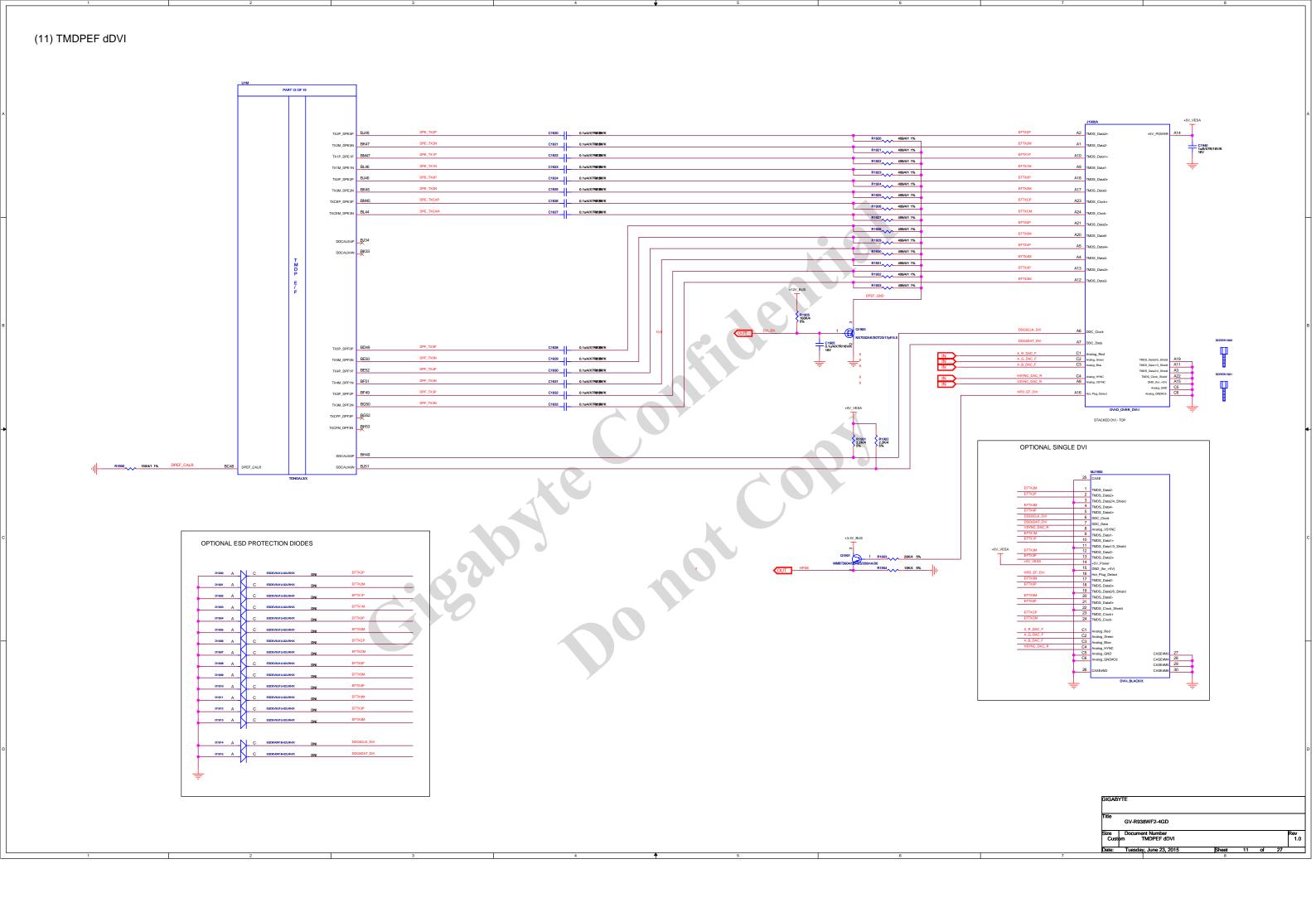




(9) TMDPAB sDVI R1720 499/4/1 1% DPA\_TX2N R1721 499/4/1 1% TX1P\_DPA1P BJ32 R1722 499/4/1 1% R1723 499/4/1 1% TX0P\_DPA2P BM31 0.1u/4/X7R/662WK R1724 499/4/1 1% TX0M\_DPA2N BL30 DPA\_TXCP R1726 499/4/1 1% C1727 0.1u/4/X7R/6/20/K R1727 499/4/1 1% R1729 499/4/1 1% R1730 499/4/1 1% OUT R1732 4994/1 1%

R1733 4994/1 1%

DPAB\_GND TX4P\_DPB1P DPB\_TX4N TX3P\_DPB2P BJ36 TX3M\_DPB2N BK35 TXCBP\_DPB3P BM35 TXCBM\_DPB3N BL34 R1700 150/4/1 1% DPAB\_CALR BF36 DPAB\_CALR OPTIONAL ESD PROTECTION DIODES D1707 A GV-R938WF2-4GD Size Document Number
Custom TMDPAB sDVI
Date: Tuesday, June 23, 2015



(12) POWER | VDDGF#191 | ANZB | VDDGF#192 | ANZB | VDDGF#193 | ANZB | VDDGF#194 | ANZB 
 VODCIDIS
 M27

 VODCIDIS
 N26

 VODCIDIS
 N28

 VODCIDIS
 P22

 VODCIDIS
 P24

 VODCIDIS
 P24

 VODCIDIS
 P24

 VODCIDIS
 P30

 VODCIDIS
 P32

 VODCIDIS
 P32

 VDDCH11
 T21

 VDDCH12
 T31

 VDDCH13
 T33

 VDDCH15
 U19

 VDDCH16
 U22

 VDDCH17
 U32

 VDDCH18
 U37

 VDDCH19
 U37

 VDDCH21
 V21

 VDDCH21
 V21

 VDDCH21
 V23

 VDDCH22
 V33

 VDDCH23
 V35

 VDDCH23
 V36

 VDDCH23
 V37

 VDDCH24
 V37

 VDDCH25
 W37

 VDDCH26
 W37

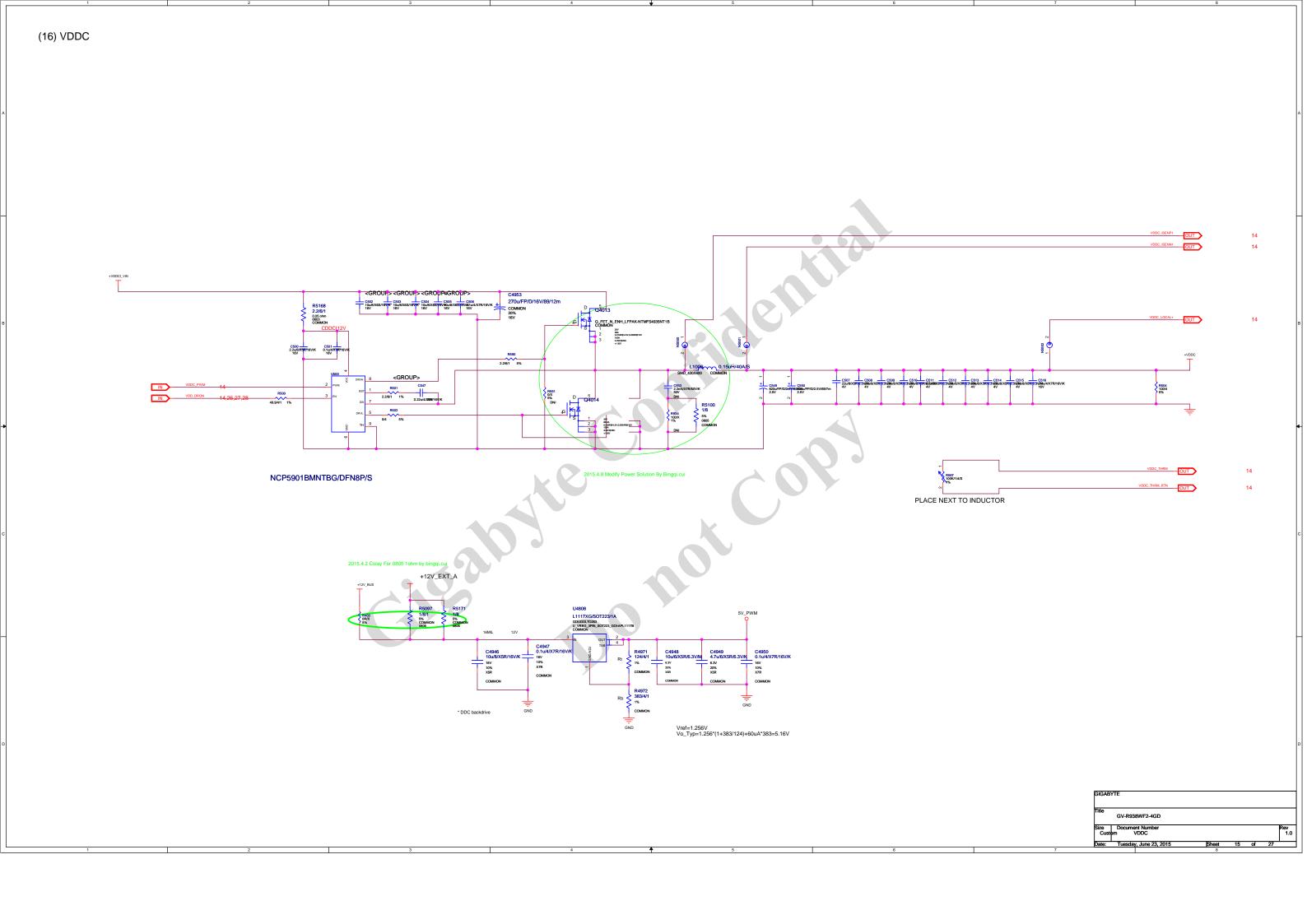
 VDDCH27
 W35

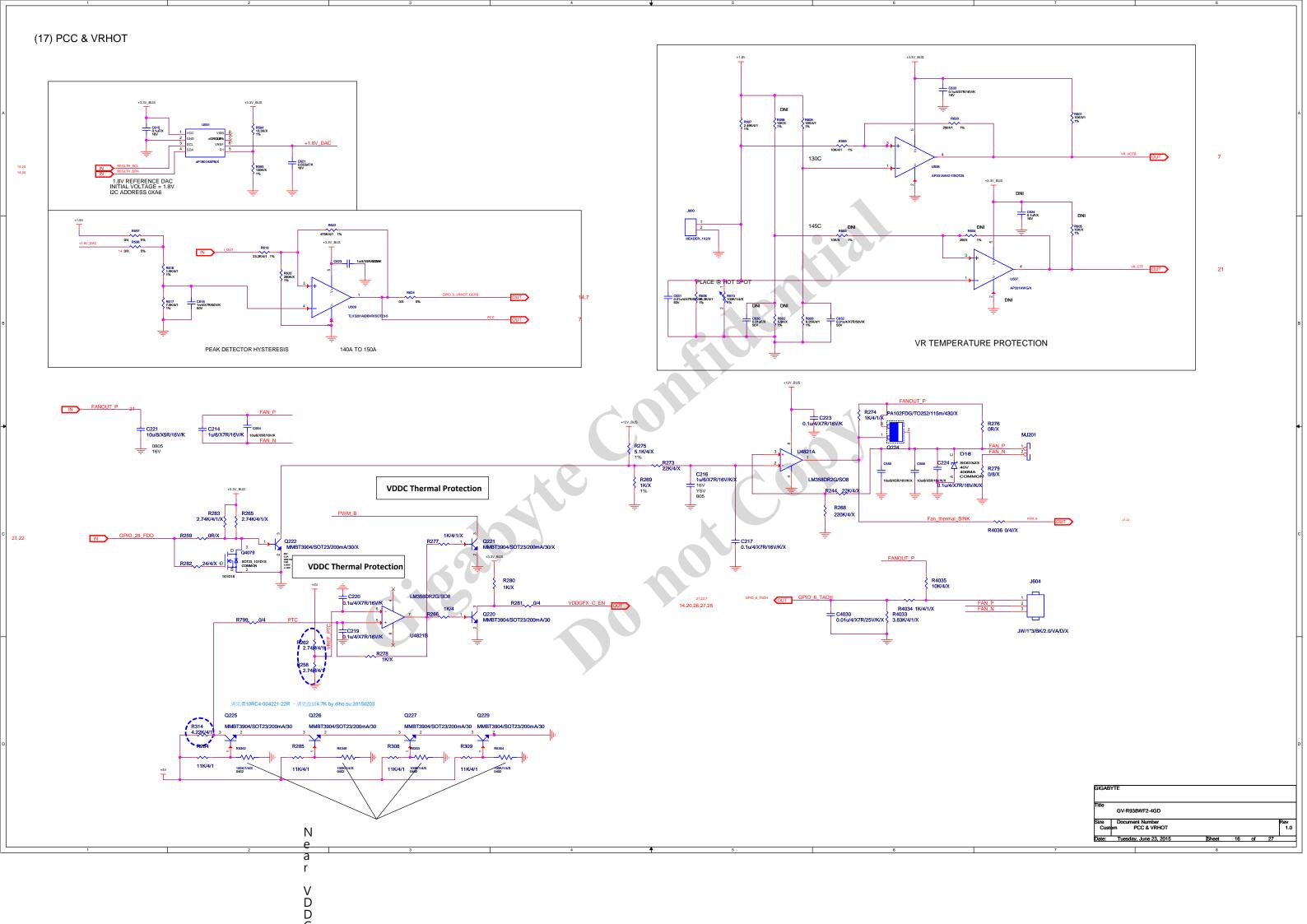
 VDDCH28
 W37

 VDDCH29
 W37

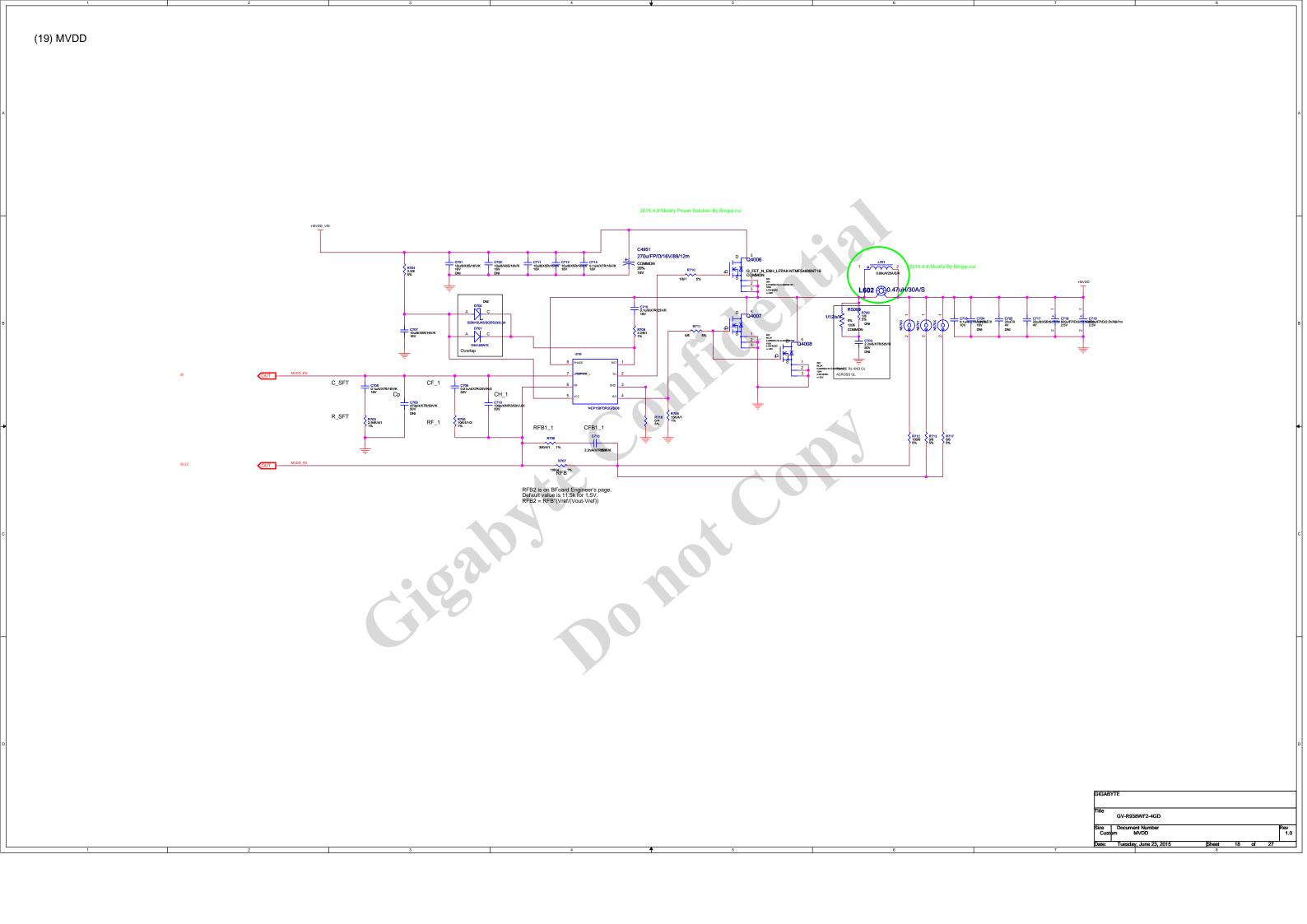
 <t VDDC11 AL38
VDDC22 AM37
VDDC24 AM36
VDDC24 AM36
VDDC24 AM36
VDDC26 AM38
VDDC26 AM37
VDC26 A GV-R938WF2-4GD Size Document Number Custom POWER 1.0 Tuesday, June 23, 2015

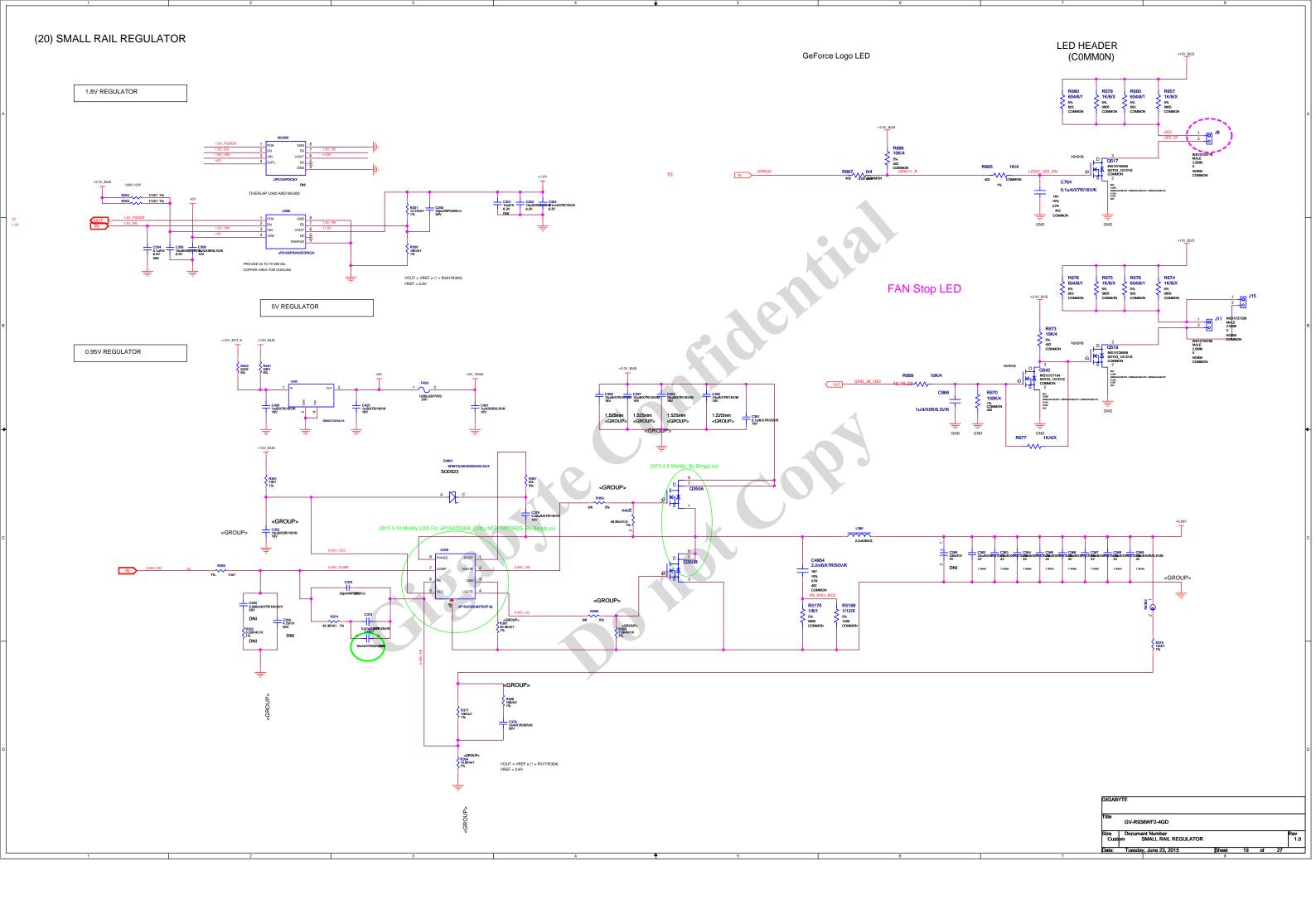
(13) GND A22 VSS201
A24 VSS201
A25 VSS201
A27 VSS201
A30 VSS202
A33 VSS202
A33 VSS202
A34 VSS202
A35 VSS202
A35 VSS202
A35 VSS202
A36 VSS202
A37 VSS202
A38 A38 VSS202
A48 VSS202 | VSSH10 | N30 | N35 | N35 | N37 | N35 | N37 | N37 | N35 | N | VSSM01 | BF14 |
VSSM00	BF16
VSSM00	BF19
VSSM00	BF21
VSSM00	BF22
VSSM00	BF23
VSSM00	BF35
VSSM00	BF35
VSSM00	BG35
VSSM01	BG35
VSSM01	BG42
VSSM11	B642
VSSM11	B643
VSSM11	B643
VSSM11	B644
VSSM11	B645
VSSM12	B645
VSSM12	B645
VSSM13	B645
VSSM20	VSS400 AH37
VSS400 AH46
VSS400 AH63
VSS400 AH63
VSS400 AH63
VSS400 AH63
VSS400 AH63
VSS401 AK16
VSS401 AK26
VSS401 AK26
VSS401 AK26
VSS401 AK26
VSS401 AK26
VSS402 AK16
VSS402 AK17
VSS403 AK16
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VSS404 AK16
VSS404 AK17
VSS404 VSS#1
VSS#2
VSS#3
VSS#3
VSS#6
VSS#6 GIGARYTE GV-R938WF2-4GD Size Document Number Custom GND Rev 1.0

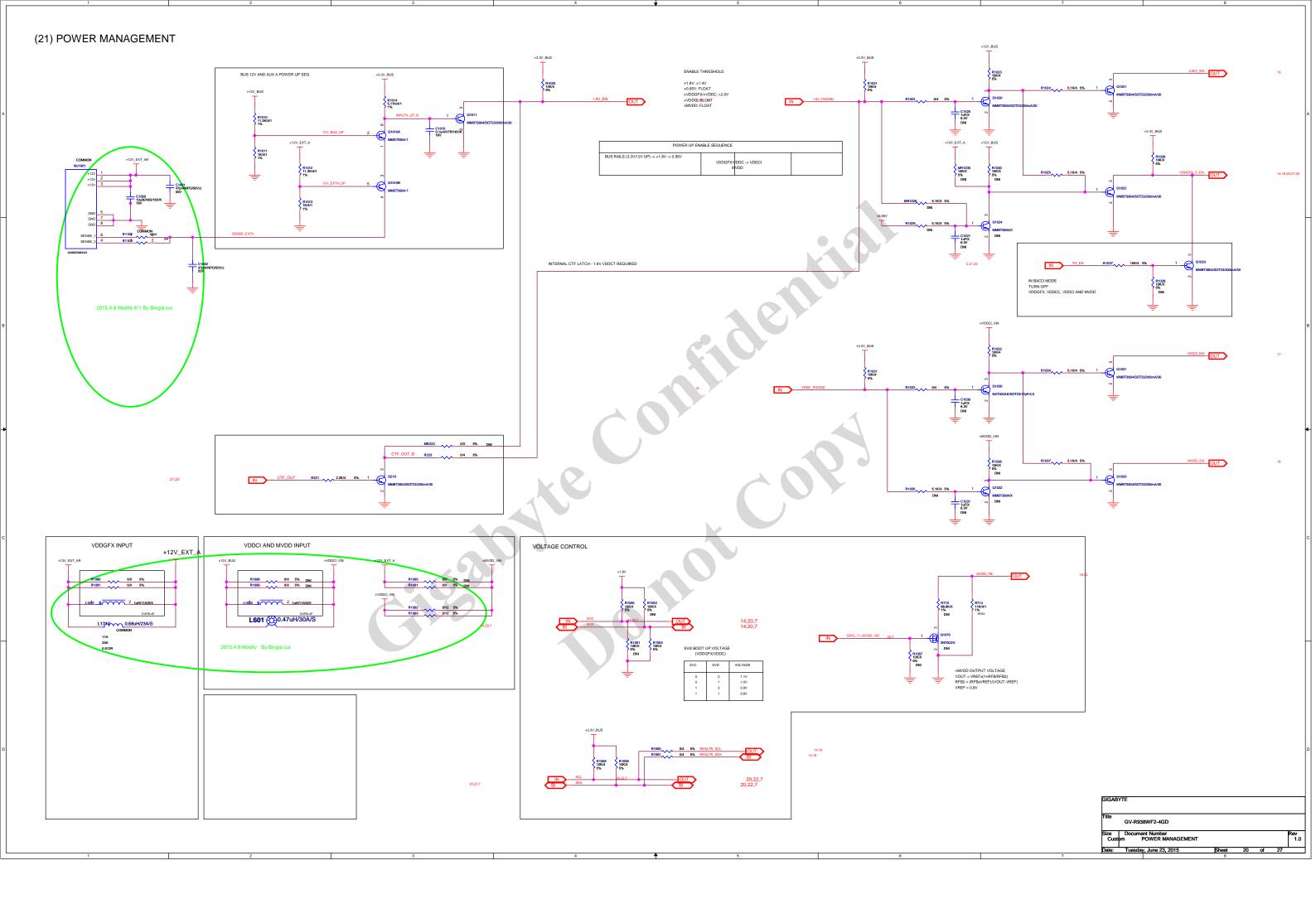




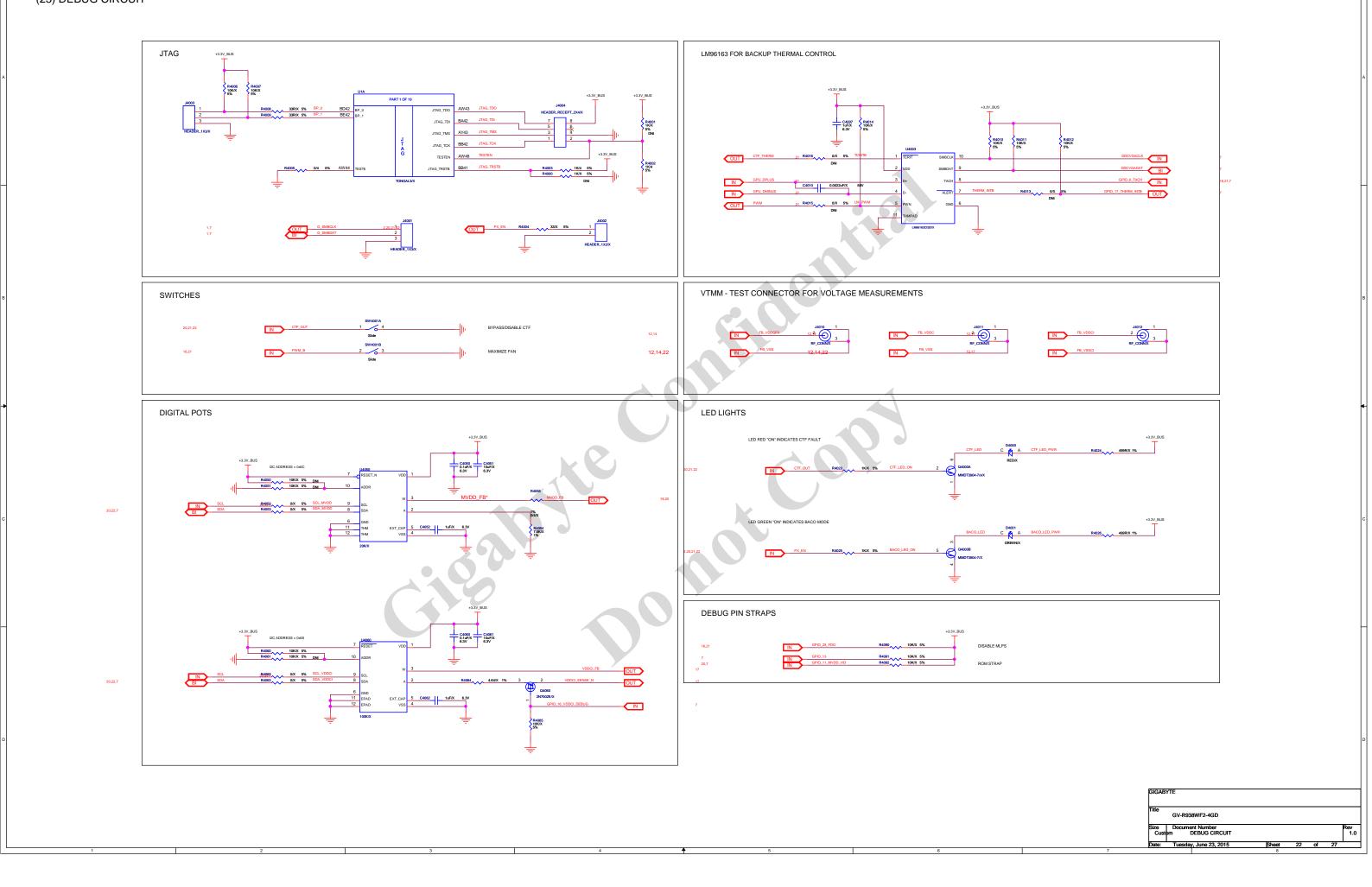
(18) VDDCI NCP5230MNTWG/QFN16

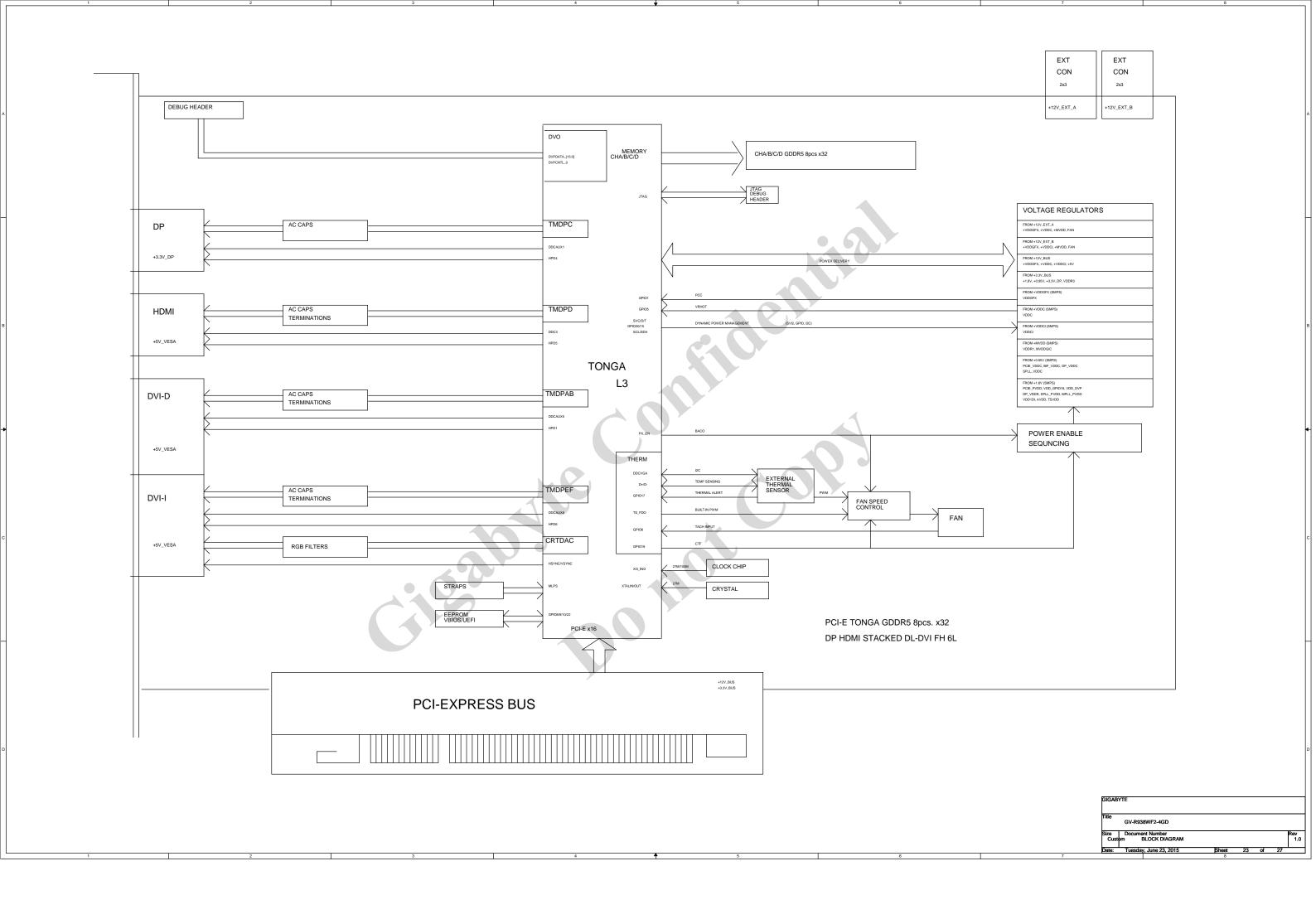






(23) DEBUG CIRCUIT





0 00A 04020044 INTIAL SCHEMATIC

1 00B 05020044 (BLAYDUT) FIX KELVIN CONNECTION FOR VIDICI RAIL
ADD-16-ATSINK SYMBOL HS1

## Gilgalnyte Confidential Gilgalnyte Confidential Goldential

GIGABYTE					
Title GV-R938WF2-4GD					
Size Document Number Custom HISTORY					Rev 1.0
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