

NOZOMI-1 EXT PRE-DV LOGIC SCHEMATICS

1. TITLE PAGE
2. EC HISTORY
3. CPU(1/8):DMI/PEG/FDI
4. CPU(2/8):CLK/MISC/JTAG
5. CPU(3/8):DDR3 CH-A
6. CPU(4/8):DDR3 CH-B
7. CPU(5/8):CFG/RSVD
8. CPU(6/8):PWR
9. CPU(7/8):GFX/PWR
10. CPU(8/8):GND
11. XDP CONNECTOR
12. DDR3 SO DIMM CHANNEL-A
13. DDR3 SO DIMM CHANNEL-B
14. DDR3 DECOUPLING
15. CLOCK GEN
16. M82XT-S(1/6):PEG I/F
17. M82XT-S(2/6):DIGITAL OUT I/F
18. M82XT-S(3/6):VRAM I/F
19. M82XT-S(4/6):GPIO
20. M82XT-S(5/6):POWER
21. M82XT-S(6/6):GND
22. VRAM CHANNEL-A
23. BACK BIAS POWER
24. LVDS SWITCH
25. LCD CONNECTOR
26. RGB SWITCH
27. EXT CRT INTERFACE
28. DISPLAY PORT CONNECTOR
29. DISPLAY PORT MUX
30. PCH(1/8):HDA/JTAG/SATA
31. PCH(2/8):PCIE/SMBUS/CLK
32. PCH(3/8):DMI/FDI/PM
33. PCH(4/8):LVDS/CRT/DDI
34. PCH(5/8):PCI/USB/NVM
35. PCH(6/8):PWR
36. PCH(7/8):GPIO/NCTF/RSVD
37. PCH(8/8):GND
38. TURBO MEMORY SLOT
39. RTC BATTERY
40. SATA HDD CONN
41. SATA BAY I/F CONN
42. USB POWER/CONN
43. AUDIO CX20561
44. AUDIO MISC
45. AUDIO CONNECTOR
46. AUDIO JACK SENSE

47. AUDIO EXT MIC I/F
48. AUDIO SPEAKER
49. AUDIO HDP AMP
50. AUDIO BEEP
51. MDC CONNECTOR
52. GBE HANKSVILLE
53. GBE LAN SWITCH
54. GBE MAGNETICS
55. RJ45 CONNECTOR
56. PCIE MINI CARD SLOT(1/2)
57. PCIE MINI CARD SLOT(2/2)
58. 1394/MEDIA CARD CONTROLLER
59. MEDIA CARD INTERFACE
60. EXPRESS CARD/SMART CARD I/F
61. SLOT POWER CONTROL
62. BLANK
63. SPI FLASH
64. DOCKING CONNECTOR
65. H8S/2116B (1/2)
66. H8S/2116B (2/2)
67. KEYBOARD CONNECTOR
68. TOUCH PAD CONNECTOR
69. WIRELESS DISABLE SW
70. FAN CONNECTOR
71. G-SENSOR
72. MISC G/A (PMH7)
73. TPM
74. THERMAL SENSOR
75. EEPROM/SMBUS SW
76. DC-IN
77. BATTERY INPUT
78. BATTERY CHARGER
79. CHARGE SELECTOR
80. BATTERY MONITOR
81. POWER SEQUENCE
82. DC/DC VCC5M/VCC3M
83. DC/DC VCCCPUCORE
84. VCCCPUCORE DECOUPLING
85. DC/DC VCCGFXCORE_D
86. DC/DC VCCGFXCORE_I
87. BLANK
88. BLANK
89. BLANK
90. DC/DC VCC1R8VIDEO
91. MEPWRG
92. DC/DC RINKAN
93. LOAD SW LAN & LANPWRG
94. DC/DC VCC1R1VIDEO & LOAD SW VIDEO
95. LOAD SW AMT

DATE	EC NO.	PART NO.
		VER.0.56
		DEVELOPMENT NO. Q/M
		1 / 108

NZM1H-0
VER 0.56
SEP/29/2008

BASE LOGIC:COR5D SOVP
VER 6.01
APR/07/2008

96. LOAD SW B
97. DC/DC VCC1R8B
98. LOAD SW UBAY & WWAN
99. BLANK
100. BLANK
101. PTH FOR SCREW HOLES
102. WPCE787K(1/2)
103. WPCE787K(2/2)
104. THINKER-1
105. DC/DC VCC1R05B_VTT
106. DC/DC VCC1R05LAN
107. DC/DC VCC1R5A
108. DC/DC VCC0R75B

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE	NOZOMI EXT Pre-DV
APPROVED	H.K	09/29/08	TITLE PAGE	
CLASS	H.K	09/29/08	<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>	
LENOVO CONFIDENTIAL				

EC HISTORY

NOZOMI-1 PRE-DV :BASE LOGIC COR5 EXT SOVP VER.6.01 04/07/2008

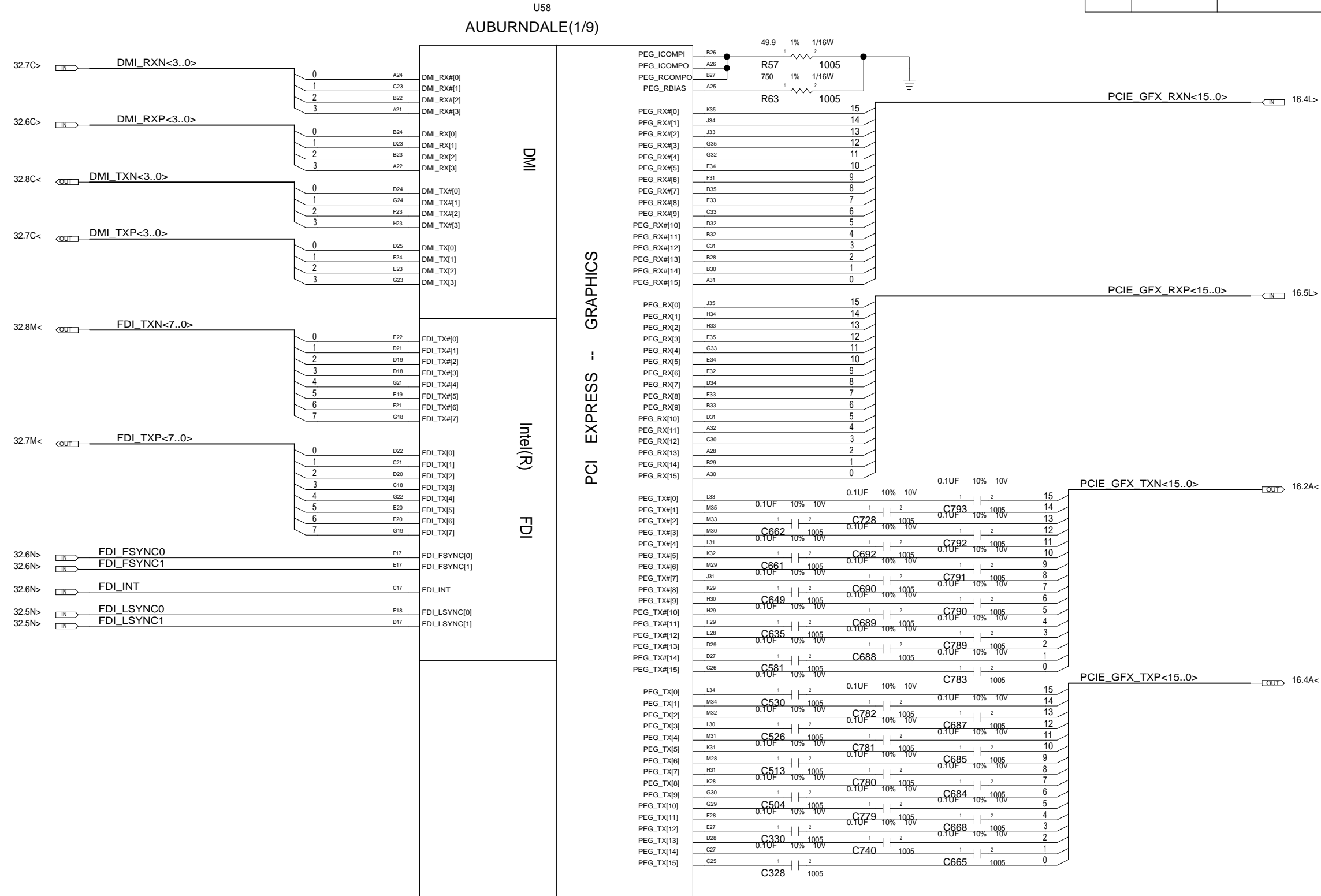
VER.0.01	07/01/2008	APPLIED	PDV_EC001-009	VER.0.47	09/04/2008	APPLIED	PDV_EC320-334
VER.0.02	07/02/2008	APPLIED	PDV_EC010-019	VER.0.48	09/05/2008	APPLIED	PDV_EC335-344
VER.0.03	07/03/2008	APPLIED	PDV_EC020-031	VER.0.49	09/08/2008	APPLIED	PDV_EC345,346
VER.0.04	07/04/2008	APPLIED	PDV_EC032-040	VER.0.50	09/09/2008	APPLIED	PDV_EC347-350
VER.0.05	07/07/2008	APPLIED	PDV_EC041-049	VER.0.51	09/10/2008	APPLIED	PDV_EC351-357
VER.0.06	07/08/2008	APPLIED	PDV_EC050-060	VER.0.52	09/11/2008	APPLIED	PDV_EC358,359,361
VER.0.07	07/09/2008	APPLIED	PDV_EC061-071	VER.0.53	09/12/2008	APPLIED	PDV_EC362-370
VER.0.08	07/10/2008	APPLIED	PDV_EC072-079	VER.0.54	09/16/2008	APPLIED	PDV_EC371,372
VER.0.09	07/11/2008	APPLIED	PDV_EC080-087	VER.0.55	09/26/2008	APPLIED	PDV_EC373
VER.0.10	07/14/2008	APPLIED	PDV_EC088-099	VER.0.56	09/29/2008	APPLIED	PDV_EC374
VER.0.11	07/15/2008	APPLIED	PDV_EC100-103				
VER.0.12	07/16/2008	APPLIED	PDV_EC104-109				
VER.0.13	07/17/2008	APPLIED	PDV_EC110-113				
VER.0.14	07/18/2008	APPLIED	PDV_EC114-118				
VER.0.15	07/22/2008	APPLIED	PDV_EC119				
VER.0.16	07/23/2008	APPLIED	PDV_EC120,121				
VER.0.17	07/24/2008	APPLIED	PDV_EC122-124				
VER.0.18	07/25/2008	APPLIED	PDV_EC125,126				
VER.0.19	07/28/2008	APPLIED	PDV_EC127				
VER.0.20	07/29/2008	APPLIED	PDV_EC128,129				
VER.0.21	07/30/2008	APPLIED	PDV_EC131-133,135,136				
VER.0.22	07/31/2008	APPLIED	PDV_EC137-143				
VER.0.23	08/01/2008	APPLIED	PDV_EC144-155,157,158,160,161				
VER.0.24	08/04/2008	APPLIED	PDV_EC159,162-173				
VER.0.25	08/05/2008	APPLIED	PDV_EC174-182				
VER.0.26	08/06/2008	APPLIED	PDV_EC173-186				
VER.0.27	08/07/2008	APPLIED	PDV_EC187,188,190-193				
VER.0.28	08/08/2008	APPLIED	PDV_EC194-210				
VER.0.29	08/11/2008	APPLIED	PDV_EC212-215,218,219				
VER.0.30	08/12/2008	APPLIED	PDV_EC216,217,220,221				
VER.0.31	08/13/2008	APPLIED	PDV_EC222-225				
VER.0.32	08/14/2008	APPLIED	PDV_EC226-231				
VER.0.33	08/15/2008	APPLIED	PDV_EC232-244				
VER.0.34	08/18/2008	APPLIED	PDV_EC246,247,249,250				
VER.0.35	08/19/2008	APPLIED	PDV_EC245,251-255				
VER.0.36	08/20/2008	APPLIED	PDV_EC256-259				
VER.0.37	08/21/2008	APPLIED	PDV_EC260-263				
VER.0.38	08/22/2008	APPLIED	PDV_EC264-268				
VER.0.39	08/25/2008	APPLIED	PDV_EC269-271				
VER.0.40	08/26/2008	APPLIED	PDV_EC272-275				
VER.0.41	08/27/2008	APPLIED	PDV_EC276-283				
VER.0.42	08/28/2008	APPLIED	PDV_EC284-291				
VER.0.43	08/29/2008	APPLIED	PDV_EC292-295				
VER.0.44	09/01/2008	APPLIED	PDV_EC296,298-300,302-304				
VER.0.45	09/02/2008	APPLIED	PDV_EC305-314				
VER.0.46	09/03/2008	APPLIED	PDV_EC315-319				

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			2 / 108

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE	NOZOMI EXT Pre-DV
APPROVED	H.K	09/29/08	EC HISTORY	
CLASS	H.K	09/29/08	LENovo CONFIDENTIAL	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>				

VER.0.56

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			3 / 108

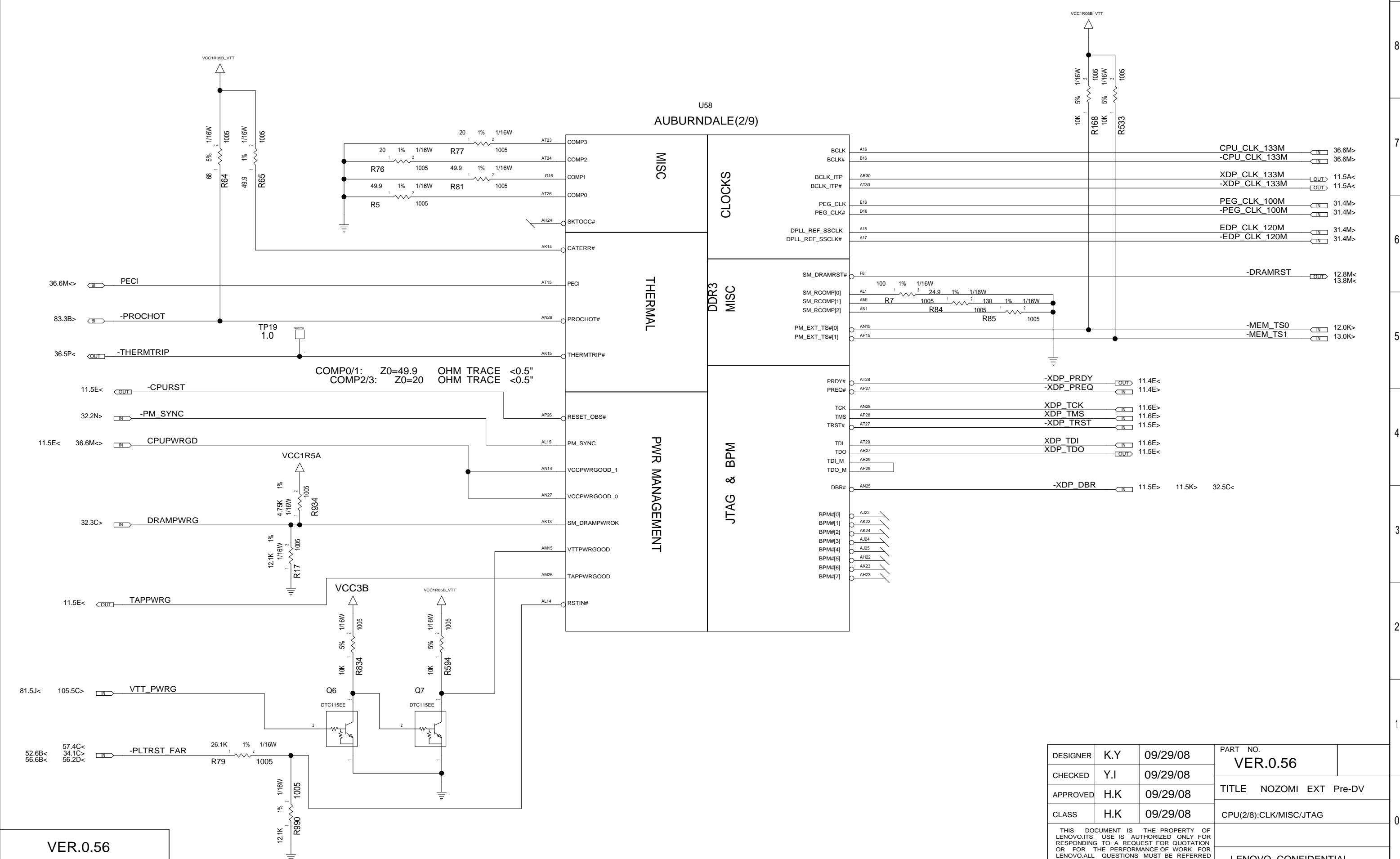


VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	CPU(1/8):DMI/PEG/FDI	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			4 / 108



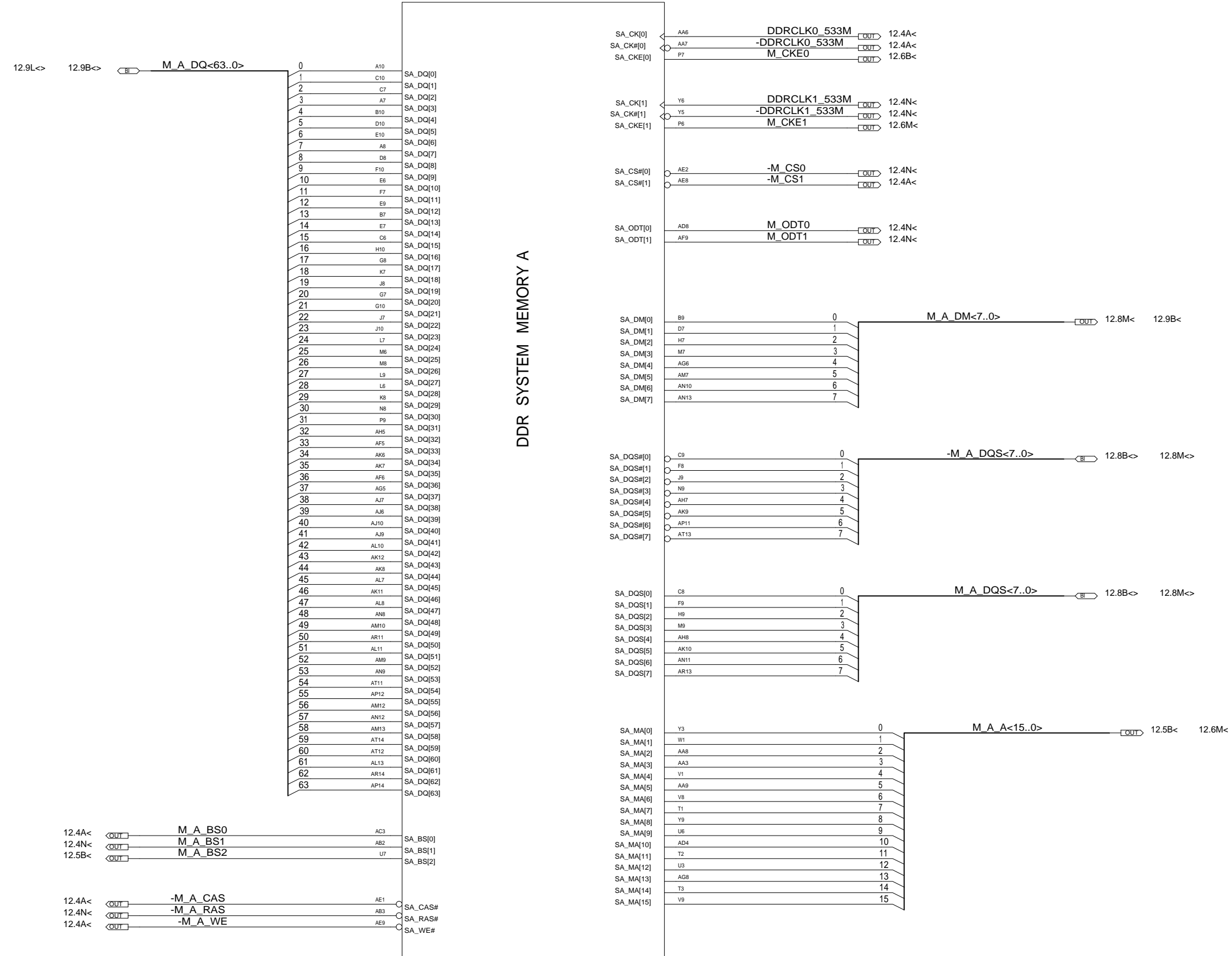
VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	CPU(2/8):CLK/MISC/JTAG	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			5 / 108

U58
AUBURNDALE(3/9)



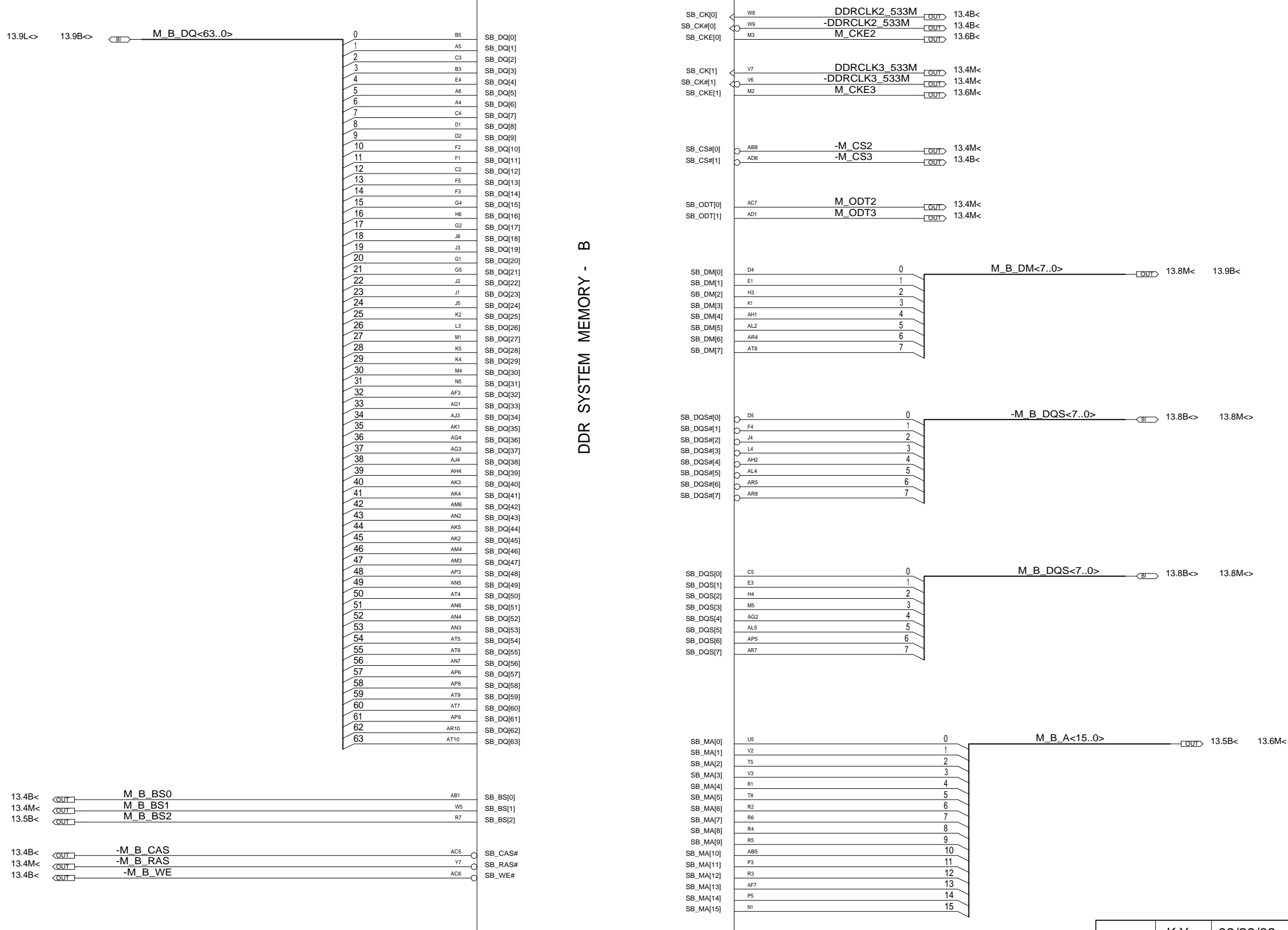
DDR SYSTEM MEMORY A

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	CPU(3/8):DDR3	CH-A
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.				
LENOVO CONFIDENTIAL				

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			6 / 108

U58
AUBURNDALE(4/9)



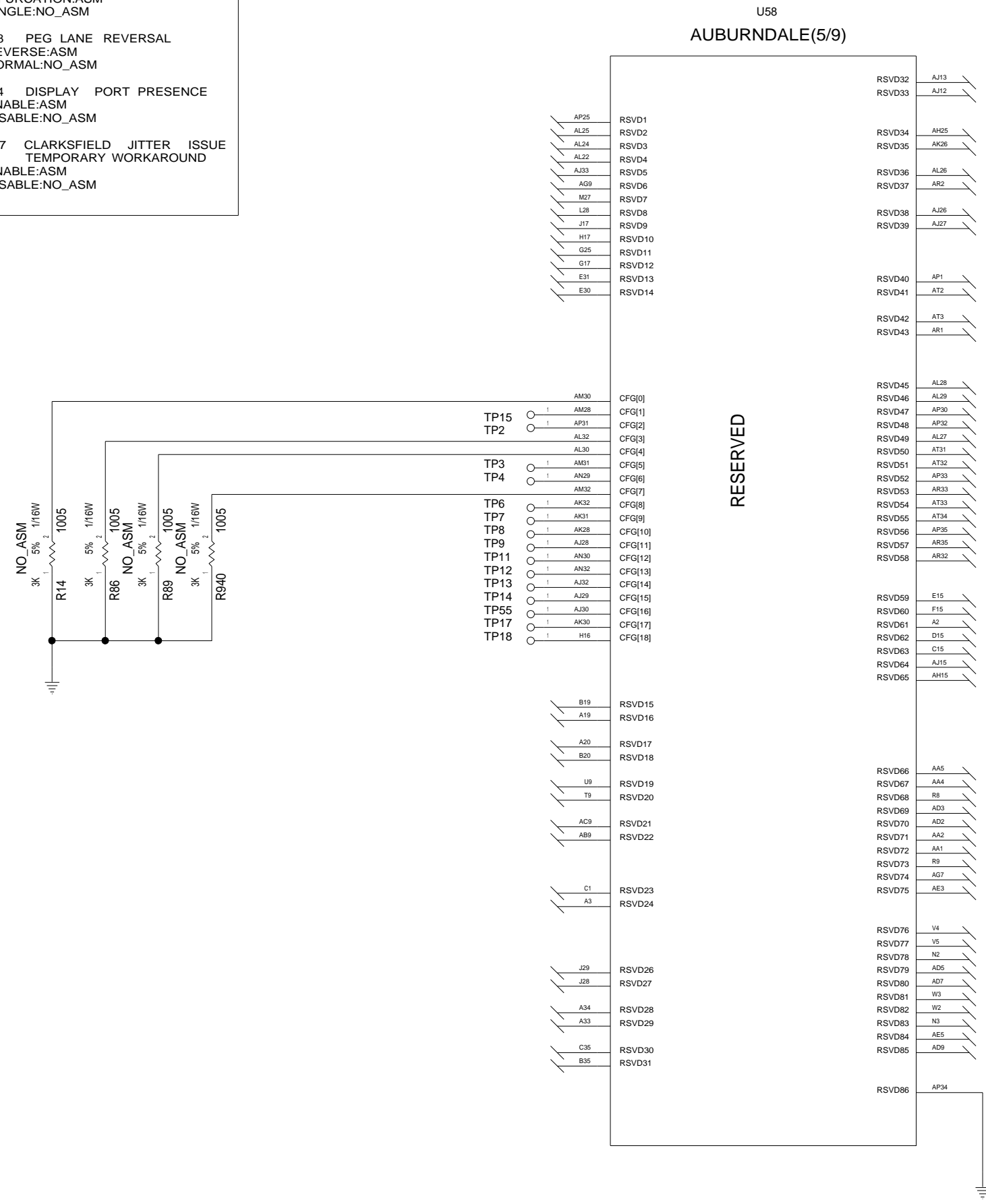
VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	CPU(4/8):DDR3	CH-B
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.				
LENOVO CONFIDENTIAL				

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				7 / 108

TABLE

CFG0	PEG CONFIG	BIFURCATION:ASM	SINGLE:NO_ASM
CFG3	PEG LANE REVERSAL	REVERSE:ASM	NORMAL:NO_ASM
CFG4	DISPLAY PORT PRESENCE	ENABLE:ASM	DISABLE:NO_ASM
CFG7	CLARKSFIELD JITTER ISSUE	TEMPORARY WORKAROUND	ENABLE:ASM
			DISABLE:NO_ASM



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	CPU(5/8):CFG/RSVD	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

VCCCPUCORE

AUBURNDALE(6/9)

VCC1R05B_VTT

6 MILI OHM

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			8 / 108

- AG35 VCC1
- AG34 VCC2
- AG33 VCC3
- AG32 VCC4
- AG31 VCC5
- AG30 VCC6
- AG29 VCC7
- AG28 VCC8
- AG27 VCC9
- AG26 VCC10
- AF35 VCC11
- AF34 VCC12
- AF33 VCC13
- AF32 VCC14
- AF31 VCC15
- AF30 VCC16
- AF29 VCC17
- AF28 VCC18
- AF27 VCC19
- AF26 VCC20
- AD35 VCC21
- AD34 VCC22
- AD33 VCC23
- AD32 VCC24
- AD31 VCC25
- AD30 VCC26
- AD29 VCC27
- AD28 VCC28
- AD27 VCC29
- AD26 VCC30
- AC35 VCC31
- AC34 VCC32
- AC33 VCC33
- AC32 VCC34
- AC31 VCC35
- AC30 VCC36
- AC29 VCC37
- AC28 VCC38
- AC27 VCC39
- AC26 VCC40
- AA35 VCC41
- AA34 VCC42
- AA33 VCC43
- AA32 VCC44
- AA31 VCC45
- AA30 VCC46
- AA29 VCC47
- AA28 VCC48
- AA27 VCC49
- AA26 VCC50
- Y35 VCC51
- Y34 VCC52
- Y33 VCC53
- Y32 VCC54
- Y31 VCC55
- Y30 VCC56
- Y29 VCC57
- Y28 VCC58
- Y27 VCC59
- Y26 VCC60
- V35 VCC61
- V34 VCC62
- V33 VCC63
- V32 VCC64
- V31 VCC65
- V30 VCC66
- V29 VCC67
- V28 VCC68
- V27 VCC69
- V26 VCC70
- U35 VCC71
- U34 VCC72
- U33 VCC73
- U32 VCC74
- U31 VCC75
- U30 VCC76
- U29 VCC77
- U28 VCC78
- U27 VCC79
- U26 VCC80
- R35 VCC81
- R34 VCC82
- R33 VCC83
- R32 VCC84
- R31 VCC85
- R30 VCC86
- R29 VCC87
- R28 VCC88
- R27 VCC89
- R26 VCC90
- P35 VCC91
- P34 VCC92
- P33 VCC93
- P32 VCC94
- P31 VCC95
- P30 VCC96
- P29 VCC97
- P28 VCC98
- P27 VCC99
- P26 VCC100

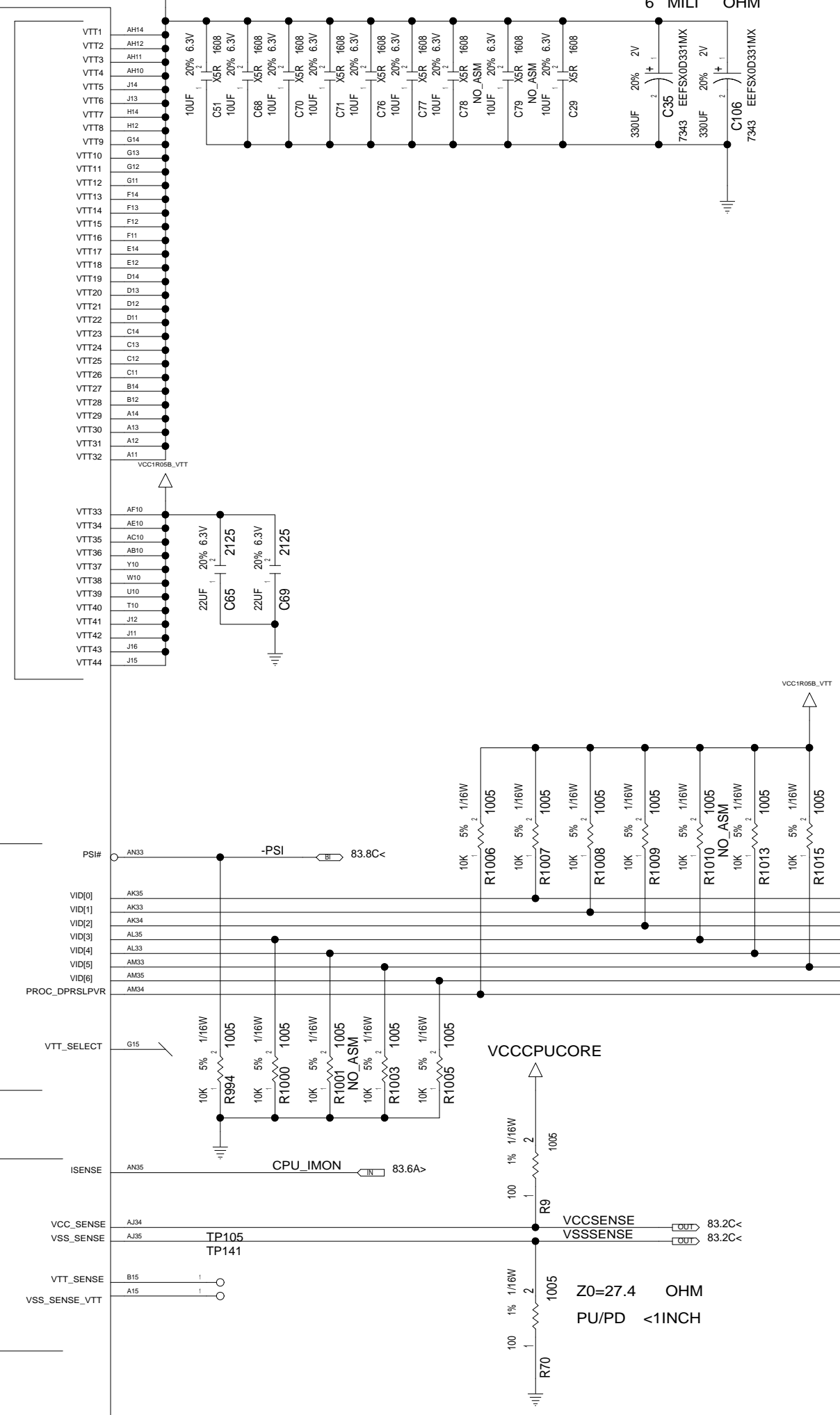
U58
POWER

1.1V RAIL POWER

CPU CORE SUPPLY

CPU VIDS

SENSE LINES



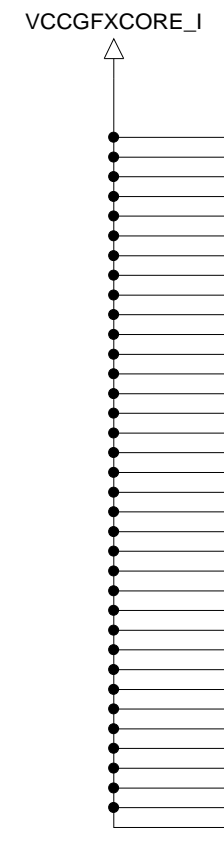
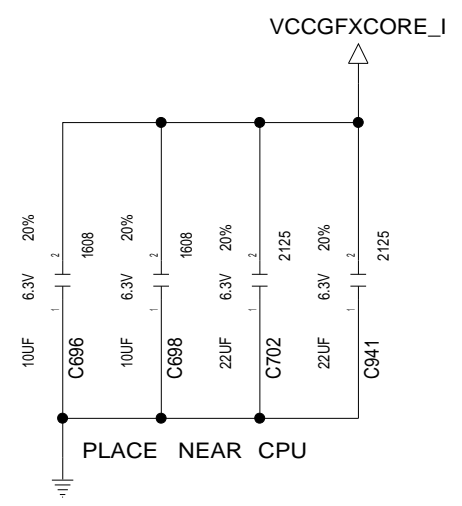
TABLE

IMAX	VID<5..3>
DISABLE	000
20A	001
30A	010
40A	011
50A	100
60A	101
70A	110
90A	111

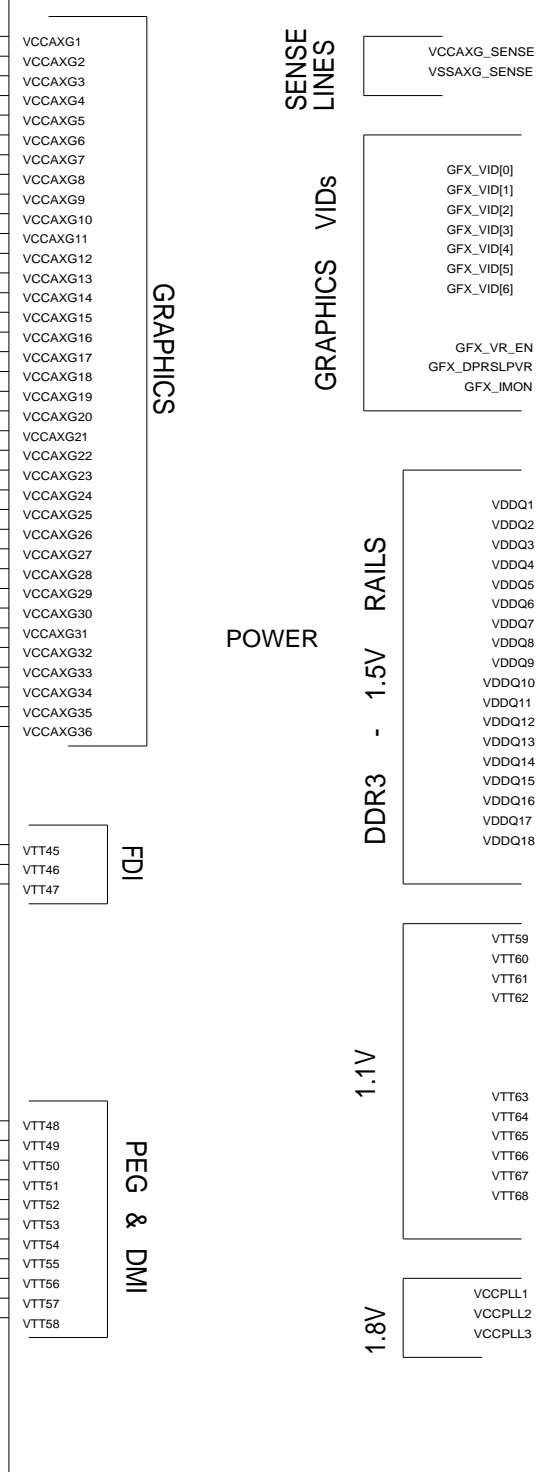
DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	CPU(6/8):PWR	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

VER.0.56

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			9 / 108



U58
AUBURNDALE(7/9)



SENSE LINES

GRAPHICS VIDS

POWER

DDR3 - 1.5V RAILS

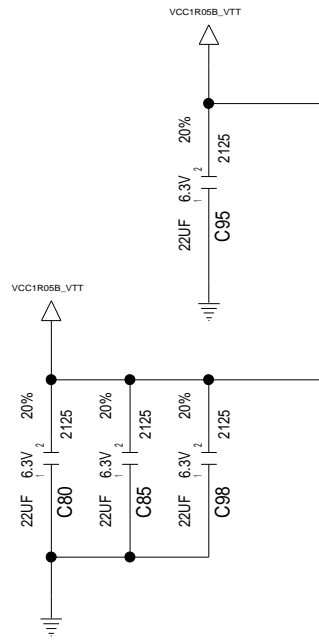
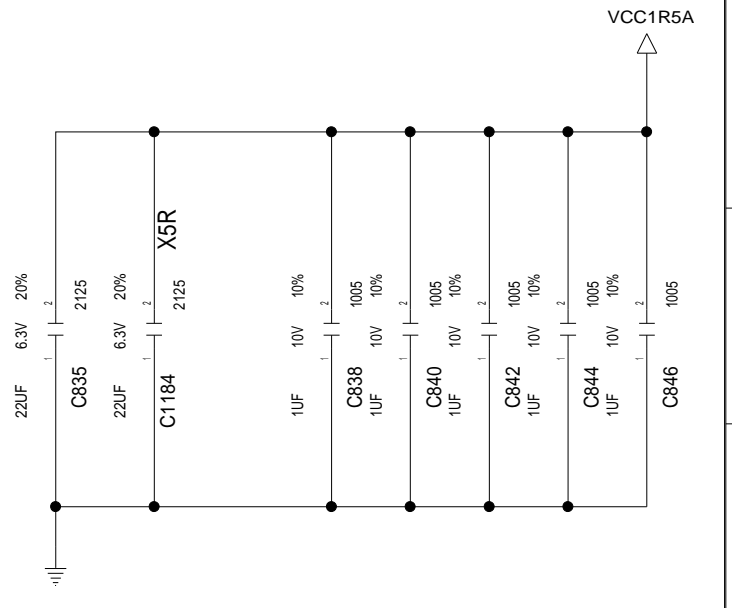
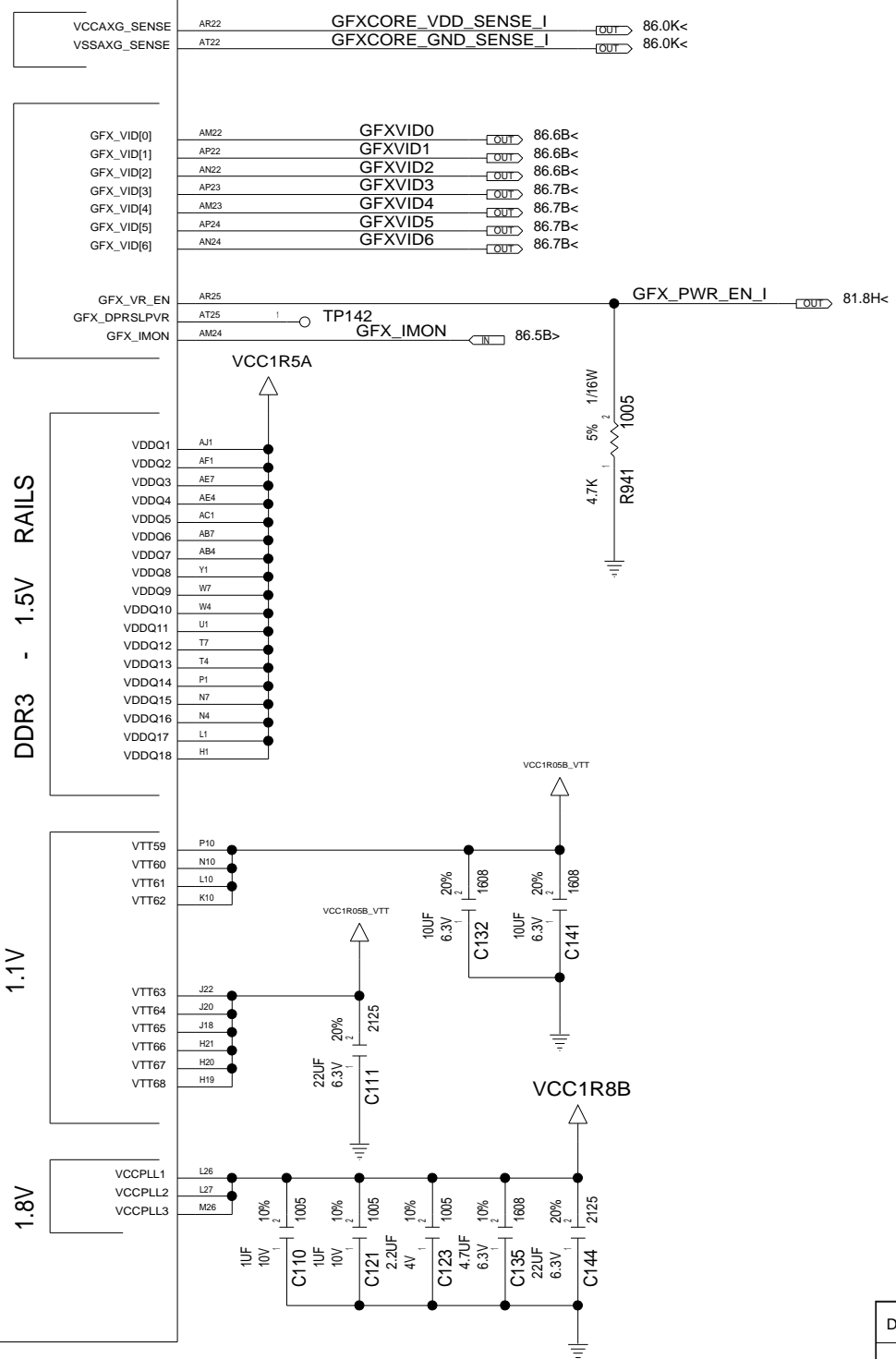
1.1V

1.8V

PEG & DMI

GRAPHICS

FDI



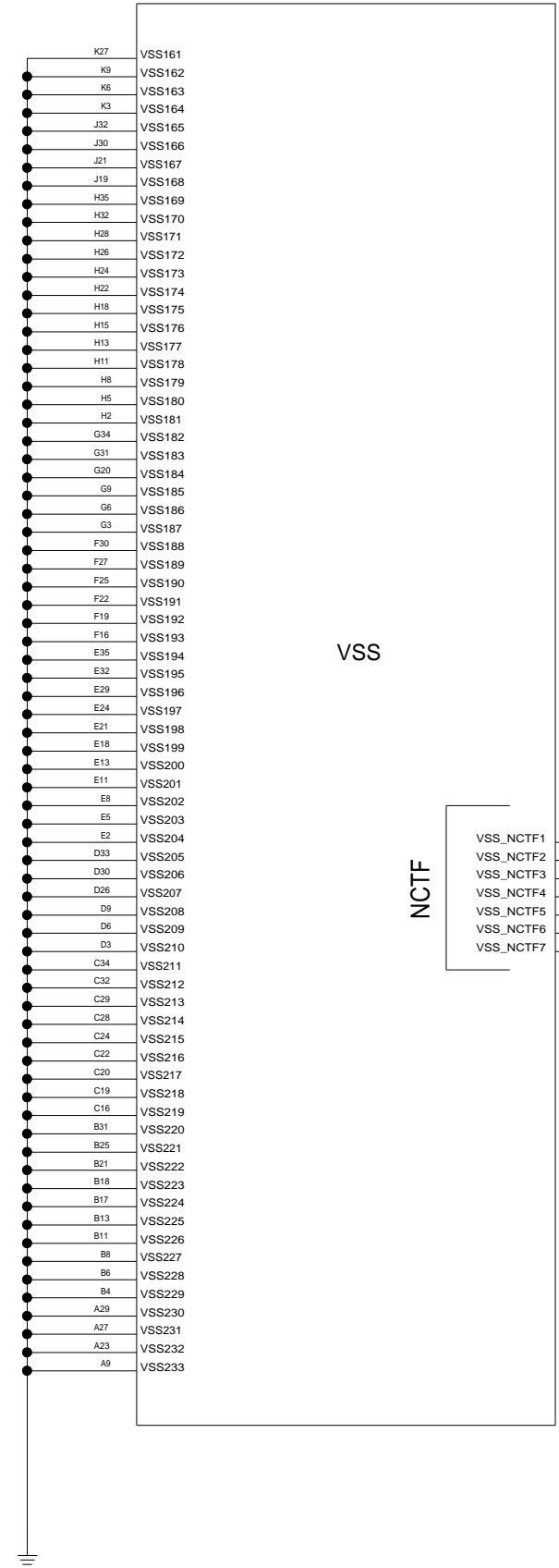
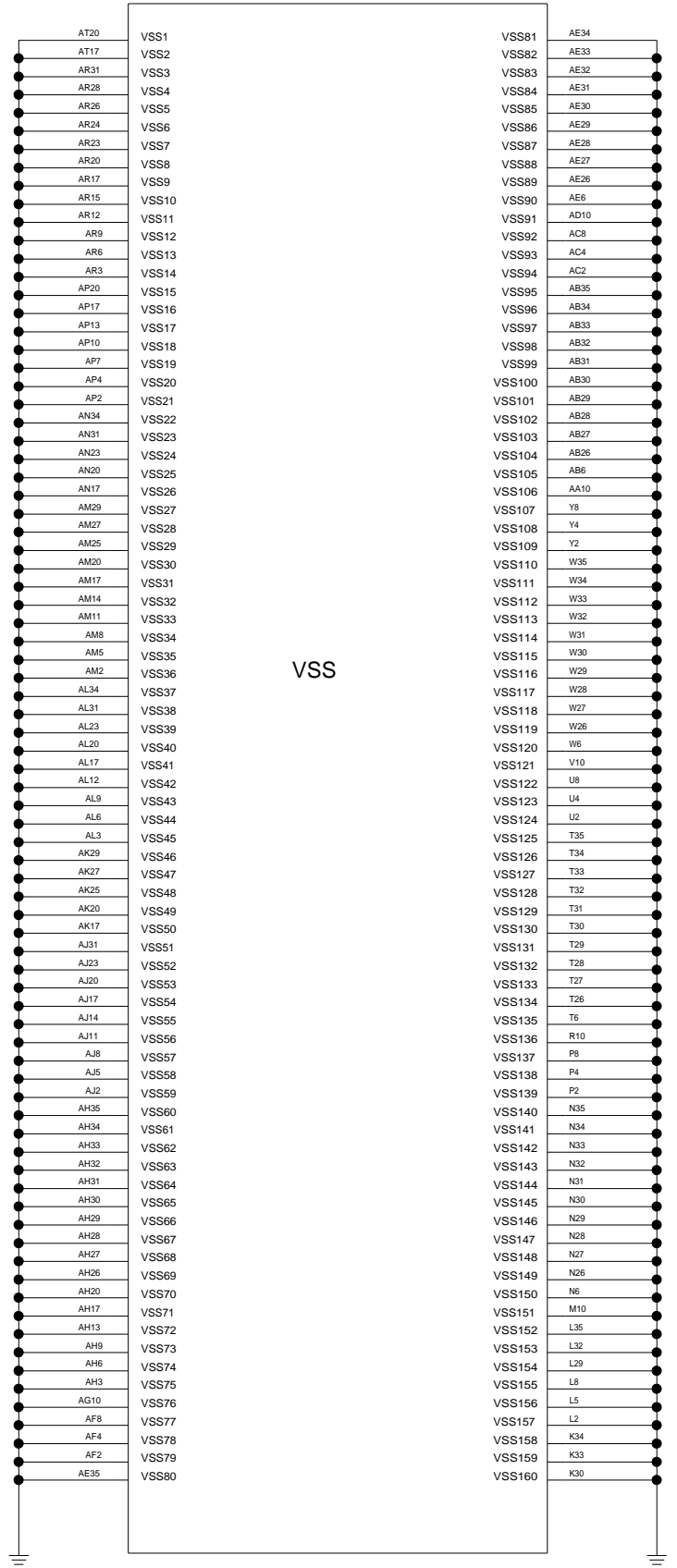
DESIGNER	K.Y	09/29/08	PART NO.
CHECKED	Y.I	09/29/08	VER.0.56
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	CPU(7/8):GFX/PWR
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL

VER.0.56

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			10 / 108

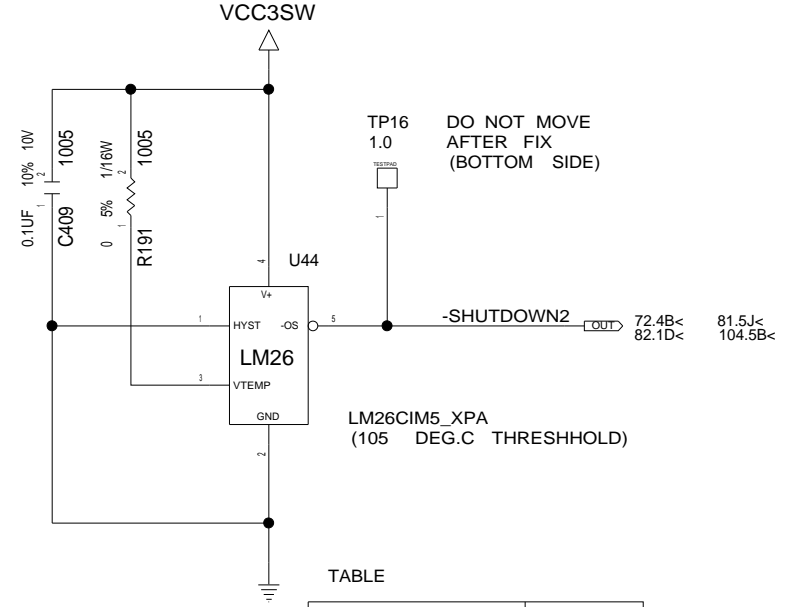
U58
AUBURNDALE(8/9)

U58
AUBURNDALE(9/9)



VSS

VSS



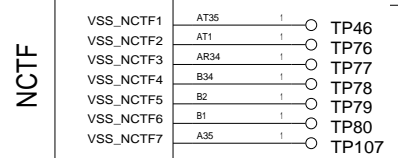
DO NOT MOVE AFTER FIX (BOTTOM SIDE)

TABLE

U44	R191
NS LM26	NO_ASM
MAXIM MAX6519	
MAXIM MAX6501	ASM
ADI ADT6501	

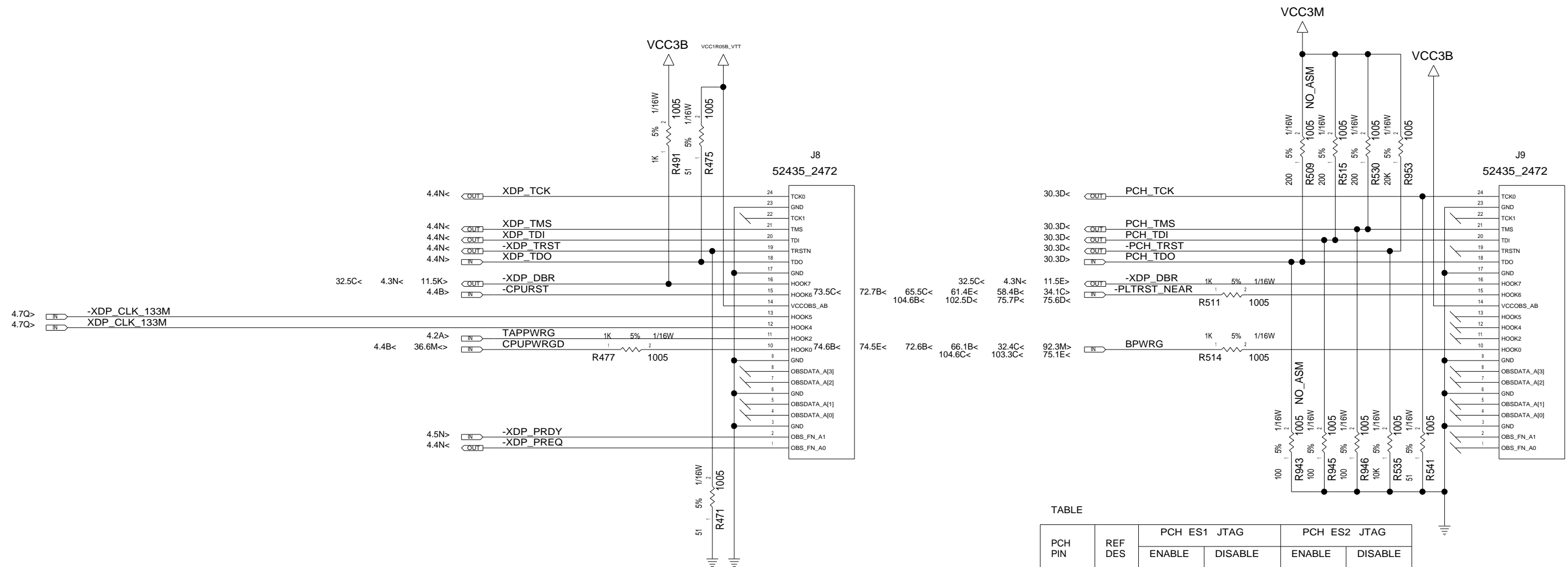
← LOGIC

FOR SOLDER CRACK DETECTION



DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	CPU(8/8):GND	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

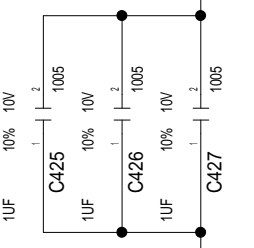
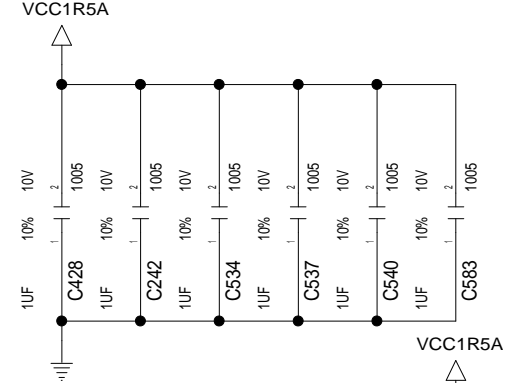
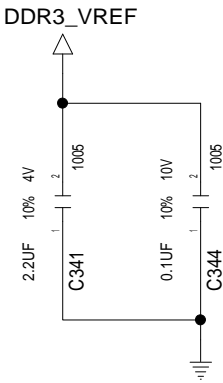
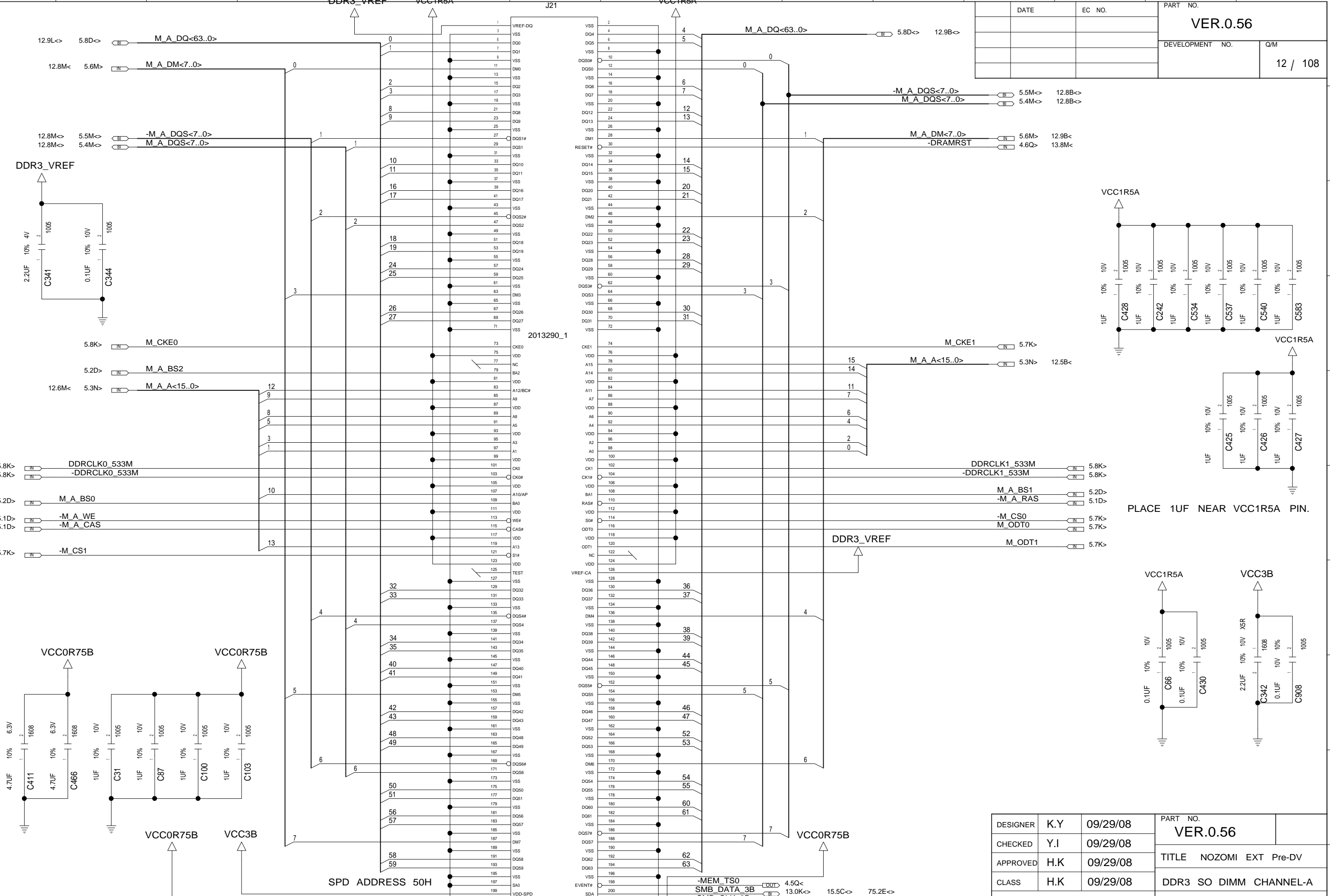


TABLE

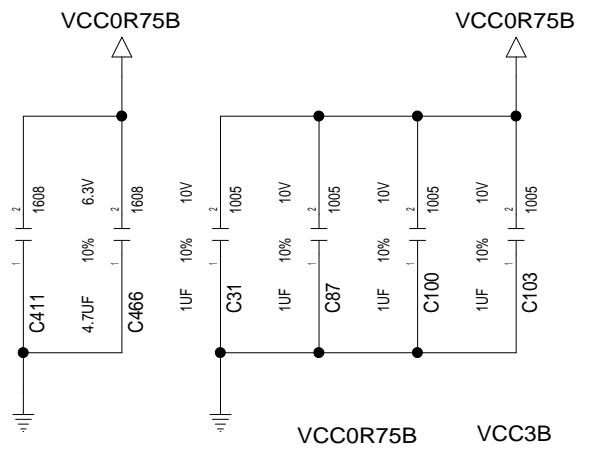
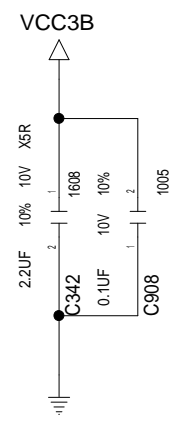
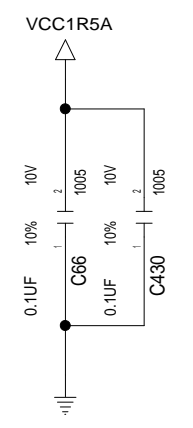
PCH PIN	REF DES	PCH ES1 JTAG		PCH ES2 JTAG	
		ENABLE	DISABLE	ENABLE	DISABLE
TDO	R509	NO_ASM	NO_ASM	200	NO_ASM
	R943	NO_ASM	NO_ASM	100	NO_ASM
TMS	R530	200	NO_ASM	200	NO_ASM
	R946	100	NO_ASM	100	NO_ASM
TDI	R515	200	20K	200	NO_ASM
	R945	100	10K	100	NO_ASM
TCK	R541	51	51	51	51
TRST#	R953	20K	NO_ASM	20K	NO_ASM
	R535	10K	NO_ASM	10K	NO_ASM

↑
LOGIC

DATE	EC NO.	PART NO.
		VER.0.56
DEVELOPMENT NO.		Q/M
		12 / 108



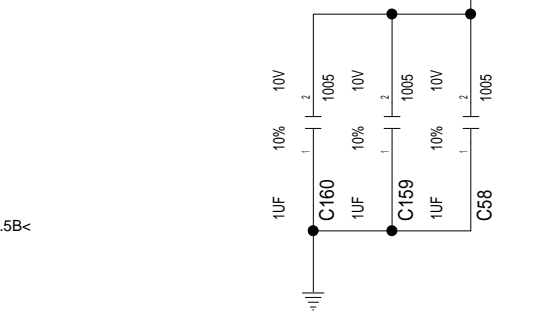
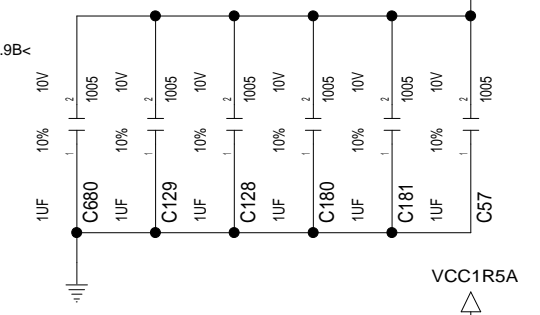
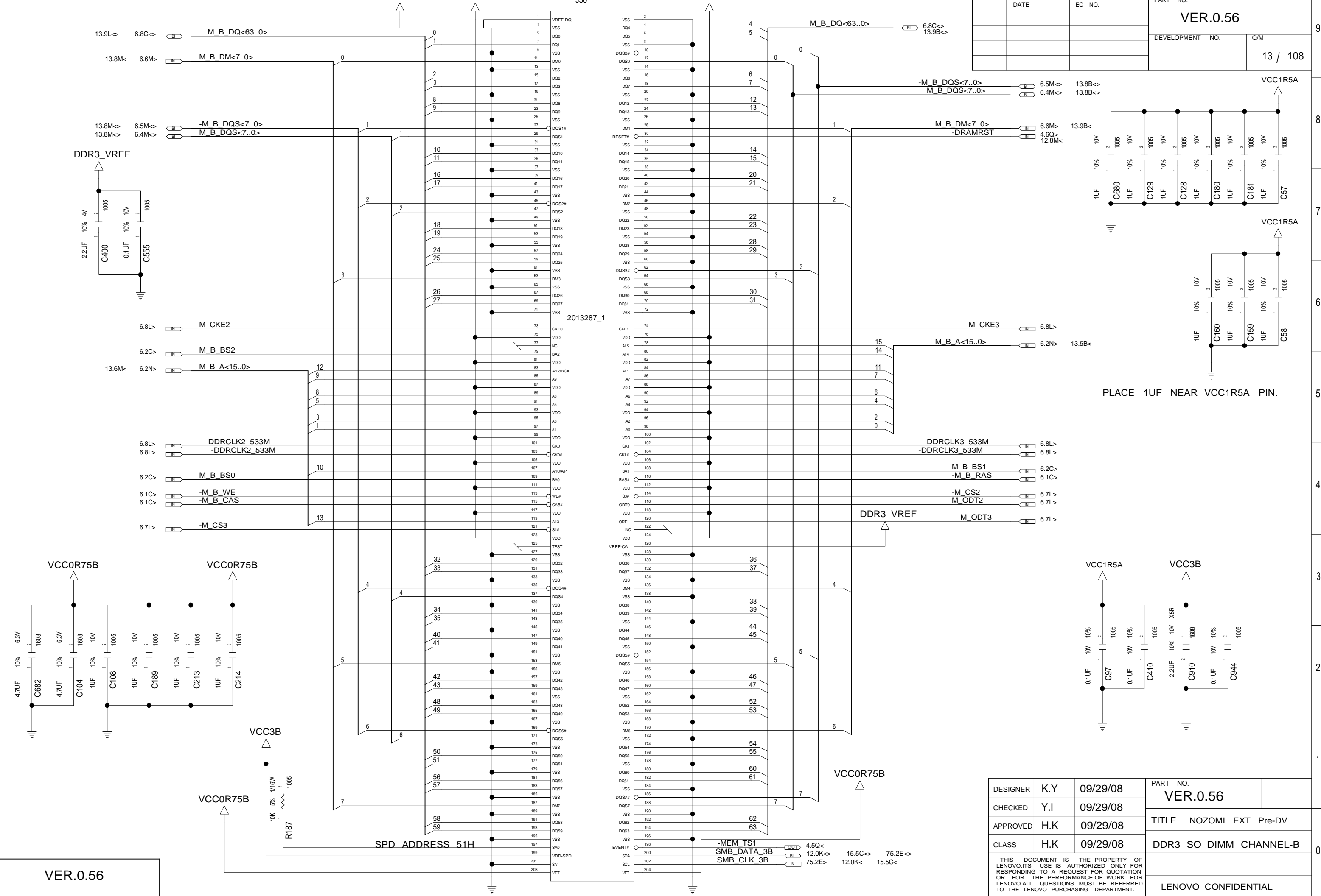
PLACE 1UF NEAR VCC1R5A PIN.



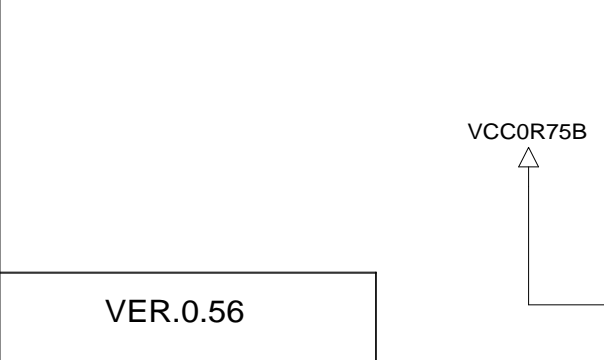
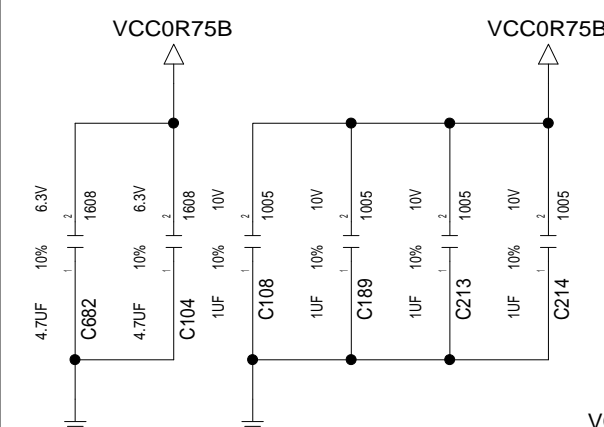
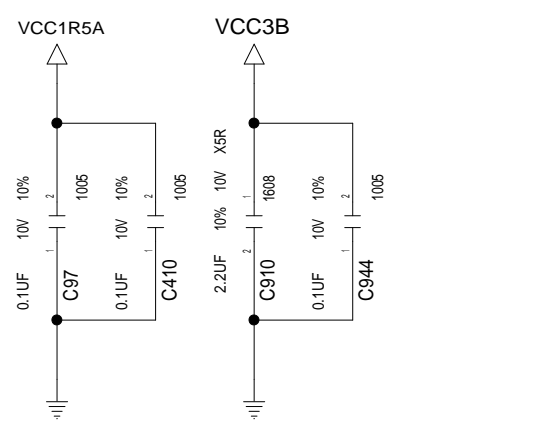
VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.
CHECKED	Y.I	09/29/08	VER.0.56
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	DDR3 SO DIMM CHANNEL-A
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			
LENOVO CONFIDENTIAL			

DATE	EC NO.	PART NO.	
		VER.0.56	
DEVELOPMENT NO.		Q/M	
		13 / 108	

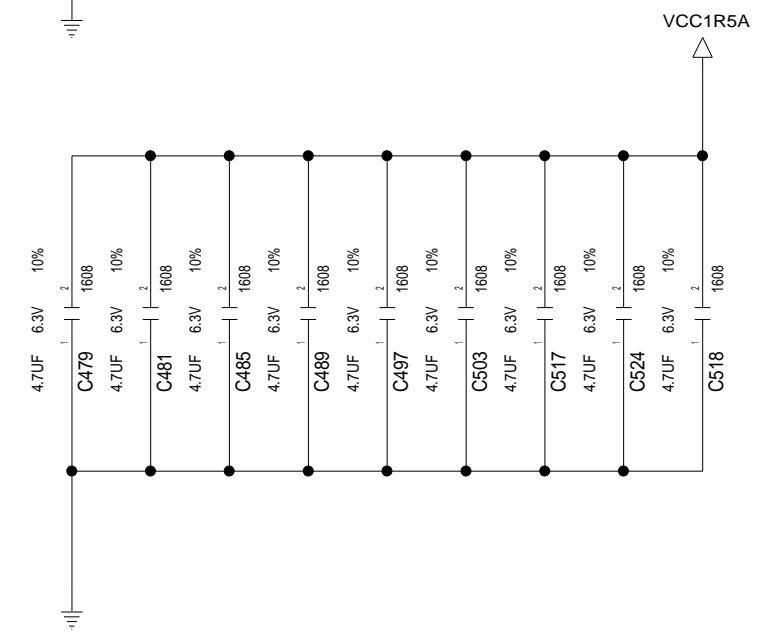
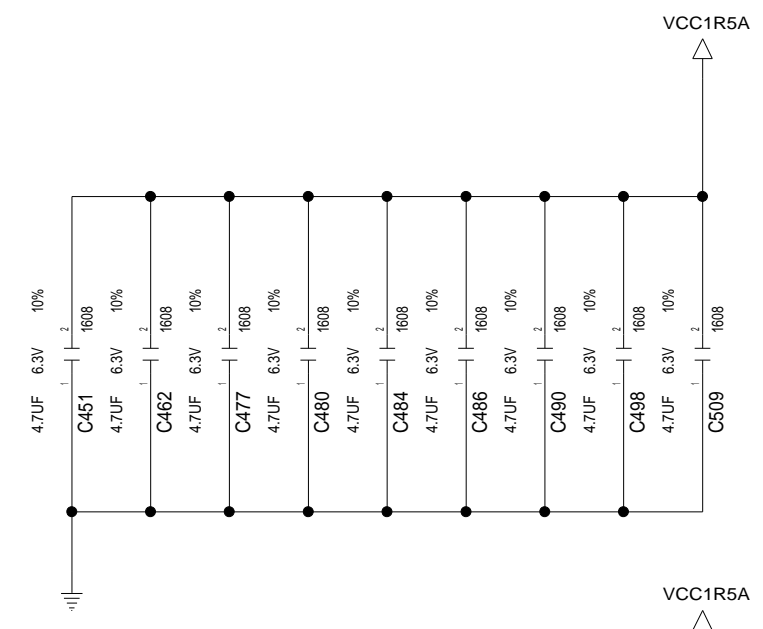
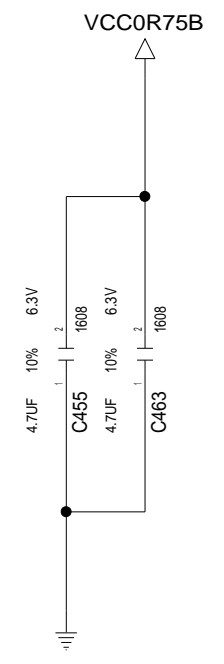


PLACE 1UF NEAR VCC1R5A PIN.



DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	DDR3 SO DIMM CHANNEL-B	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.				
LENOVO CONFIDENTIAL				

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				14 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	DDR3 DECOUPLING	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

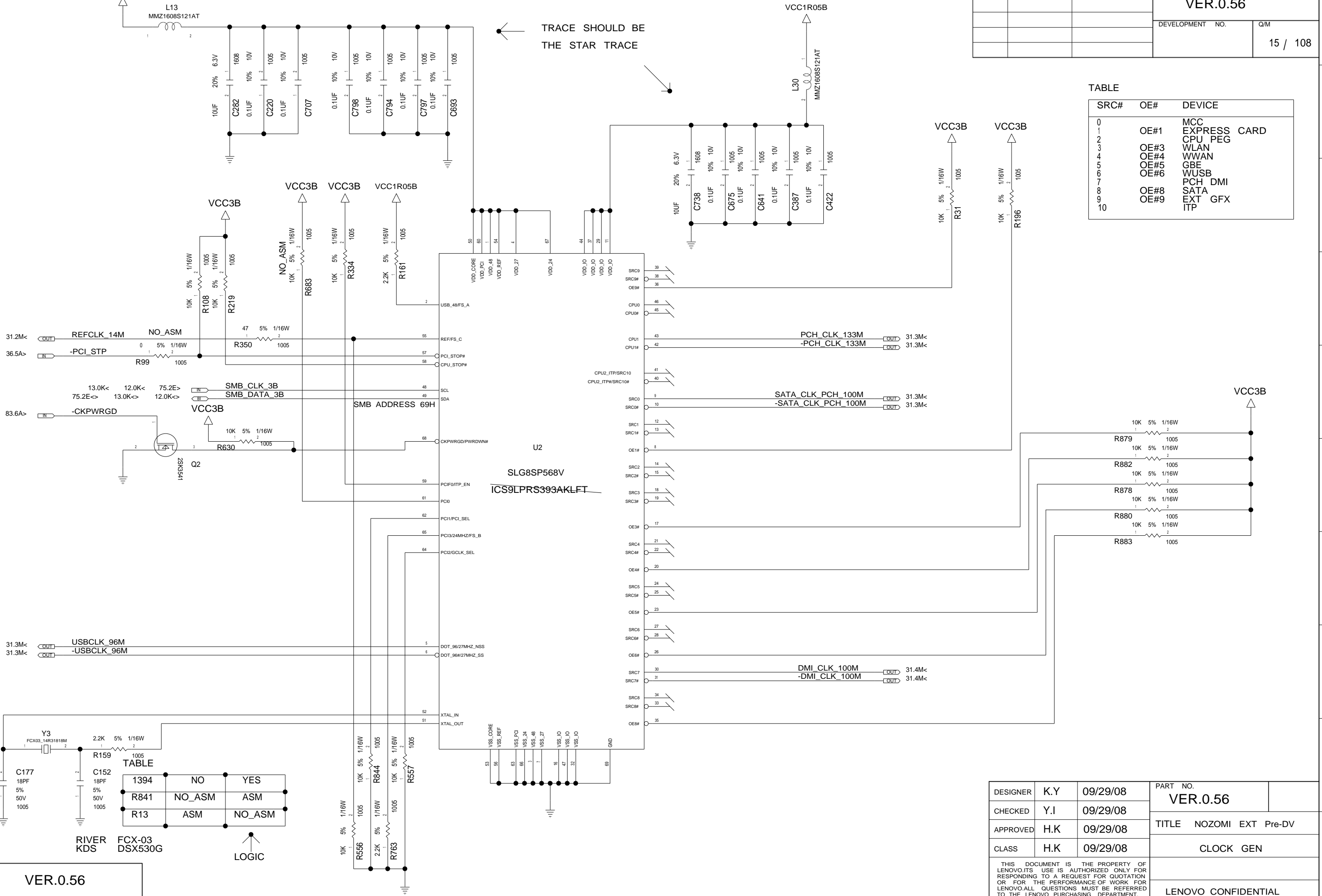
DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			15 / 108

PLACE AT LEAST 1 CAP FOR EACH VDD PINS

TRACE SHOULD BE THE STAR TRACE

TABLE

SRC#	OE#	DEVICE
0		MCC
1	OE#1	EXPRESS CARD
2		CPU_PEG
3		WLAN
4	OE#3	WWAN
5	OE#4	GBE
6	OE#5	WUSB
7	OE#6	PCH DMI
8	OE#8	SATA
9	OE#9	EXT GFX
10		ITP



TABLE

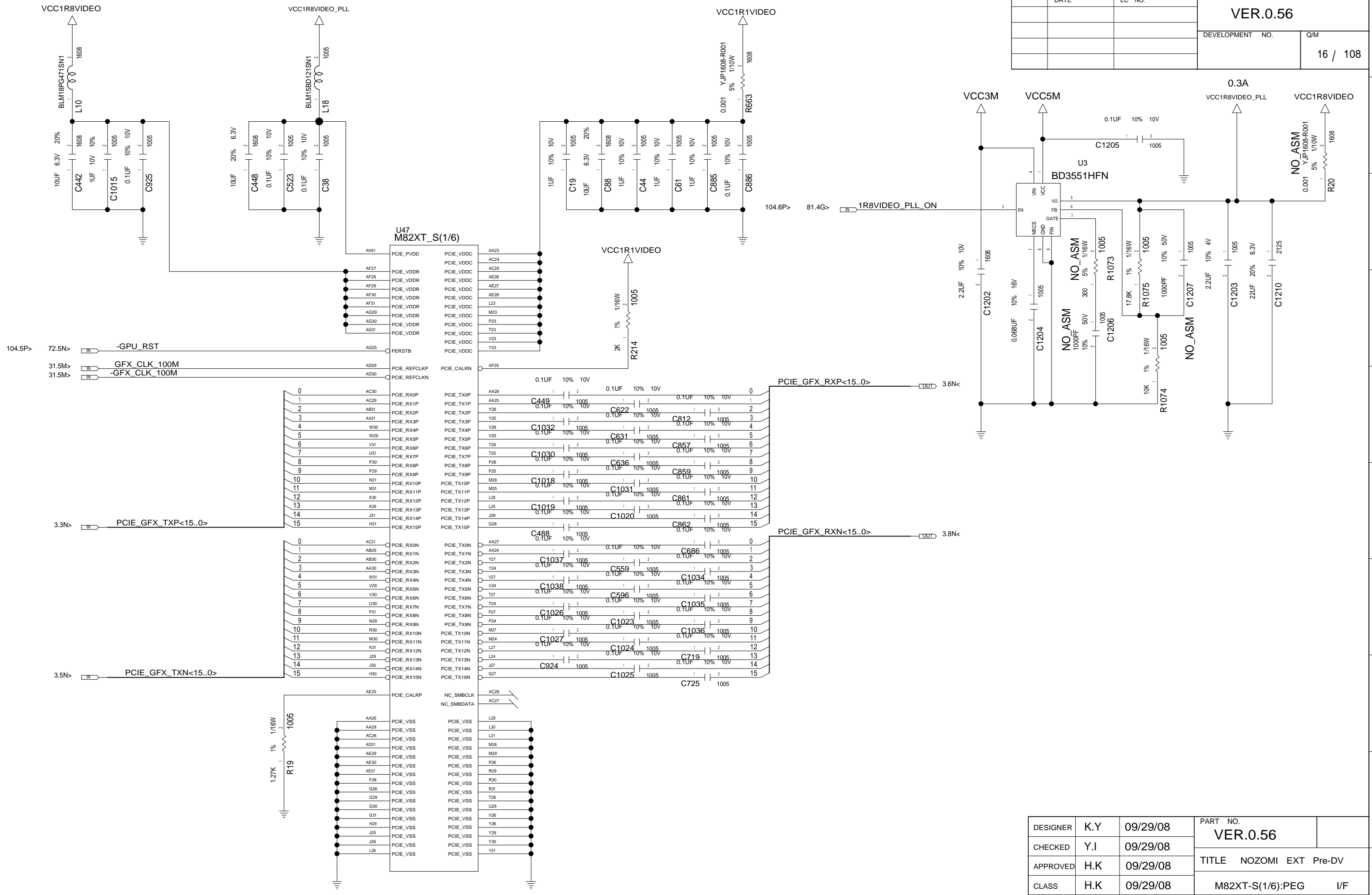
1394	NO	YES
R841	NO_ASM	ASM
R13	ASM	NO_ASM

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE	NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	CLOCK GEN	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

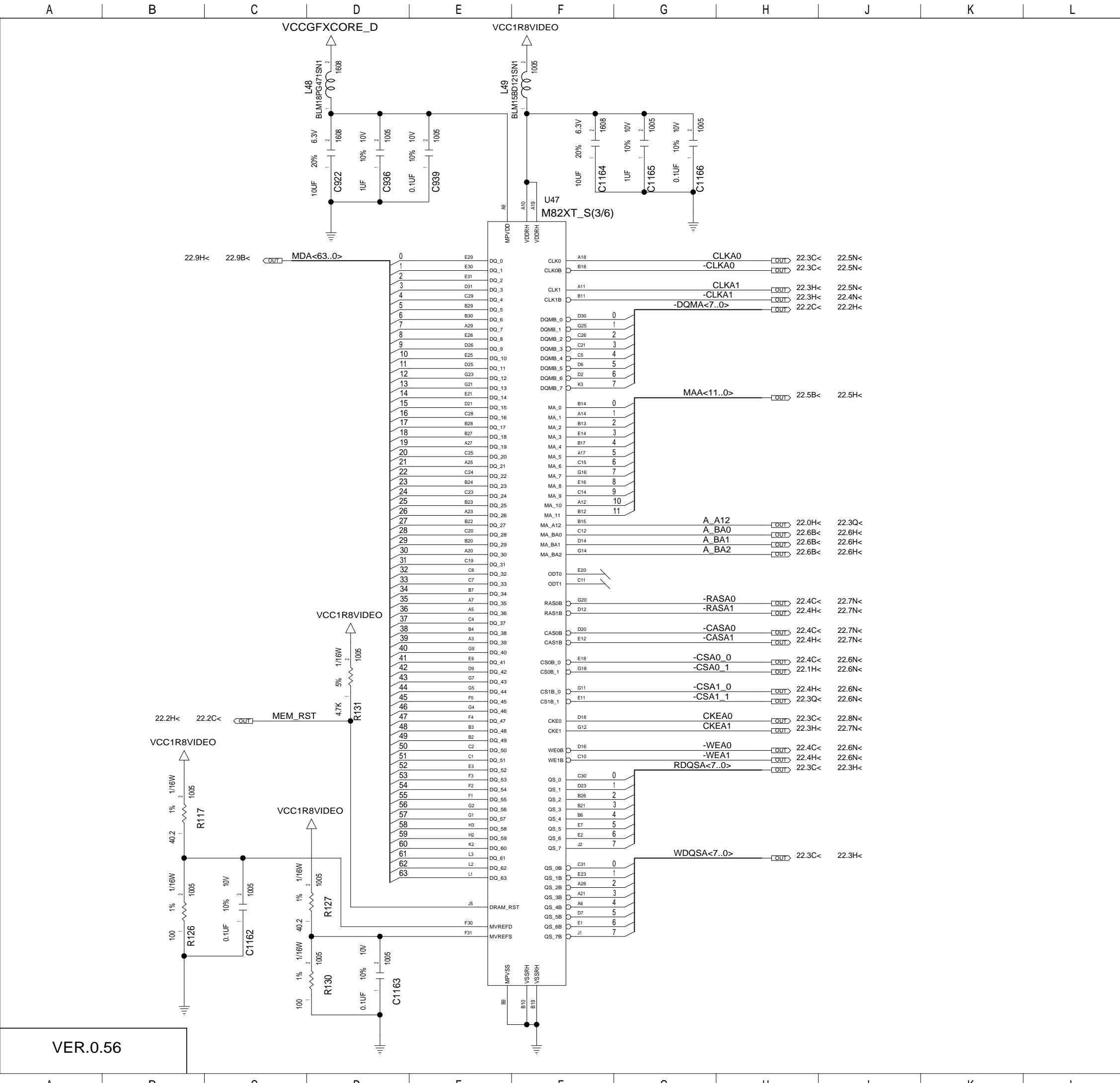
LENOVO CONFIDENTIAL

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			16 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	M82XT-S(1/6):PEG	I/F
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.				
LENOVO CONFIDENTIAL				



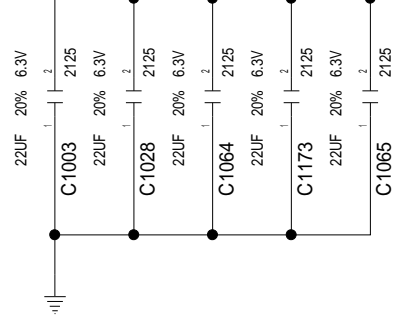
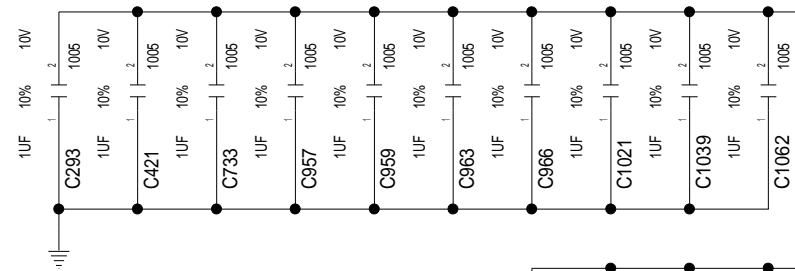
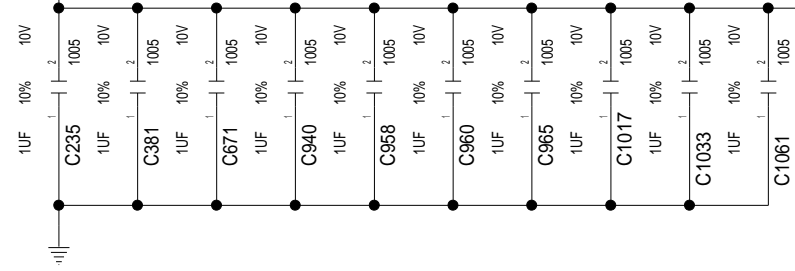
DATE	EC NO.	PART NO.	
		VER.0.56	
DEVELOPMENT NO.		Q/M	
		18 / 108	

VER.0.56

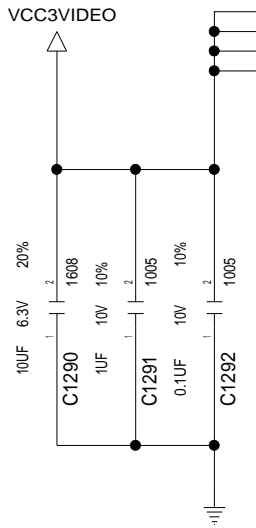
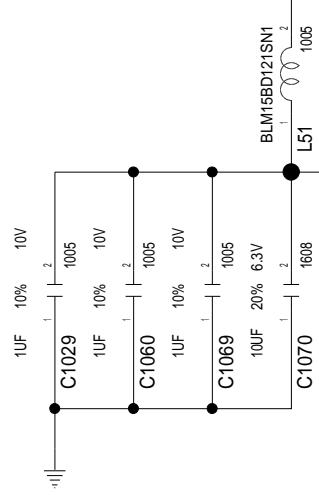
DESIGNER	K.Y	09/29/08	PART NO.		
CHECKED	Y.I	09/29/08	VER.0.56		
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV		
CLASS	H.K	09/29/08	M82XT-S(3/6):VRAM	I/F	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.					
LENOVO CONFIDENTIAL					

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			20 / 108

VCCGFXCORE_D

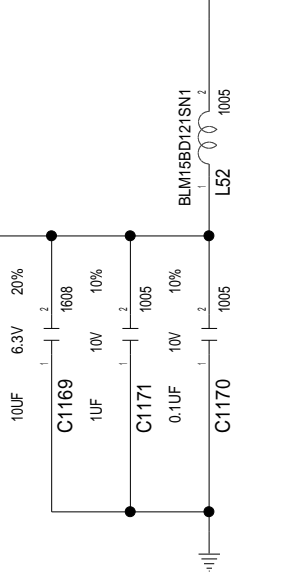


VCCGFXCORE_D

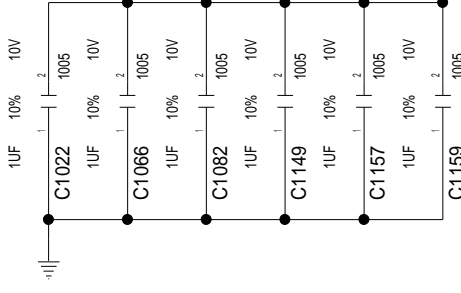
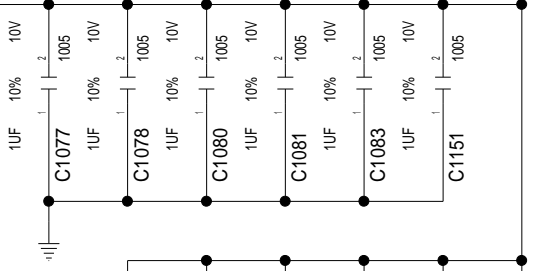
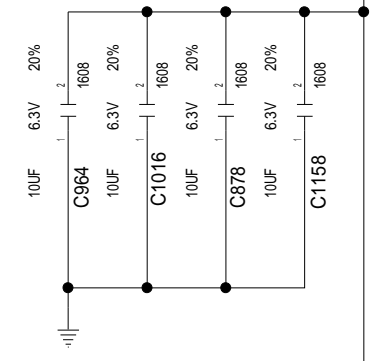


VCC3VIDEO

VCC1R8VIDEO



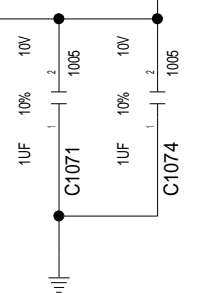
VCC1R8VIDEO



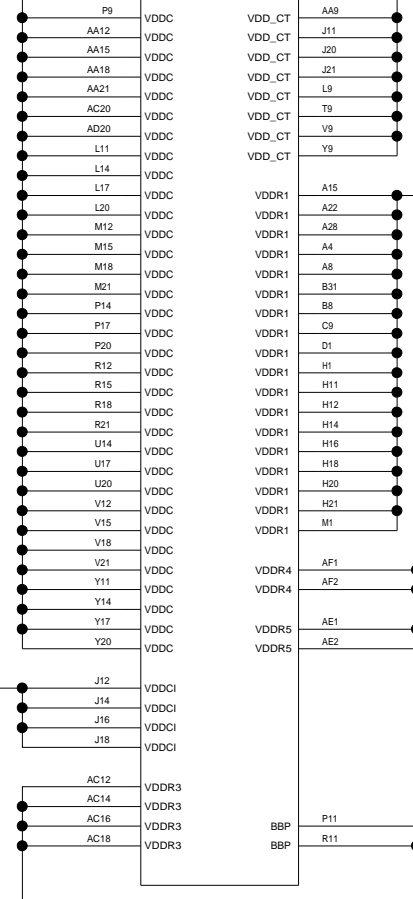
VCC1R8VIDEO

VCC1R8VIDEO

VCCBBP



U47
M82XT_S(5/6)



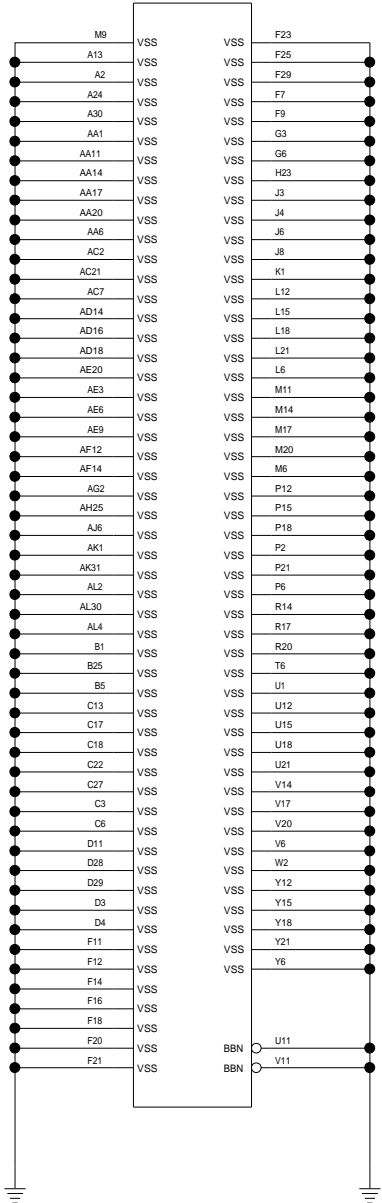
VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.
CHECKED	Y.I	09/29/08	VER.0.56
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	M82XT-S(5/6):POWER
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				21 / 108

U47

M82XT_S(6/6)

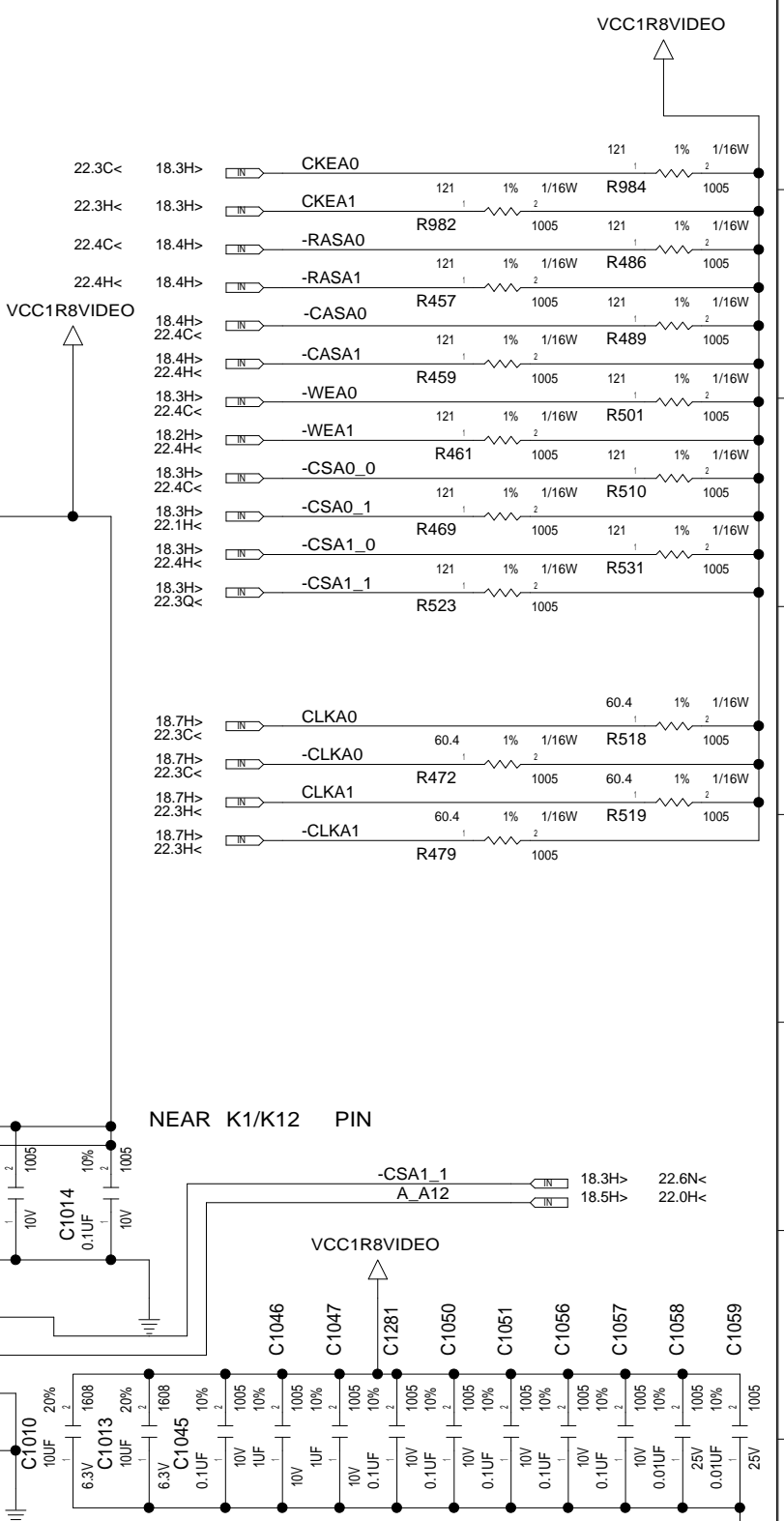
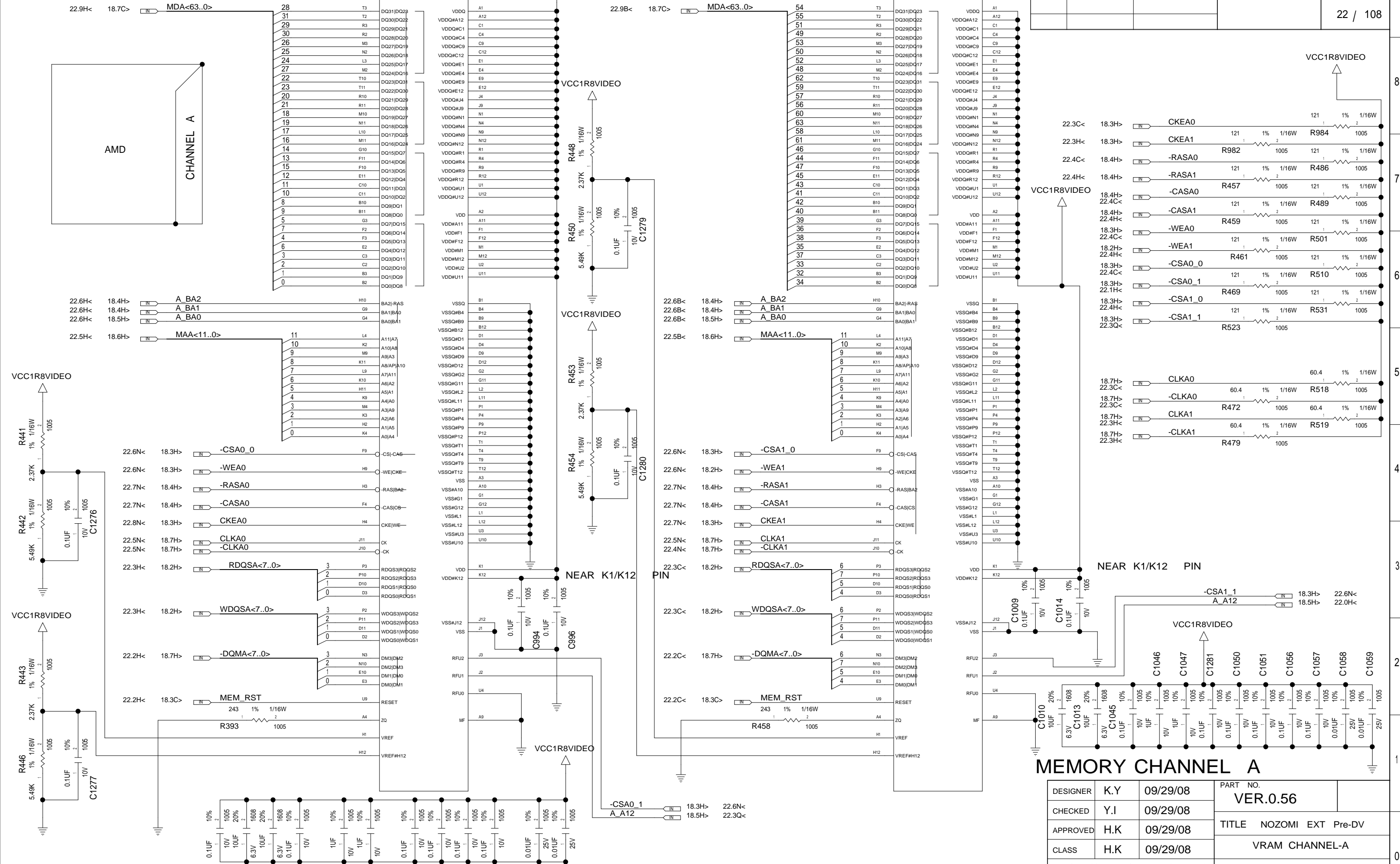


VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	M82XT-S(6/6):GND	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

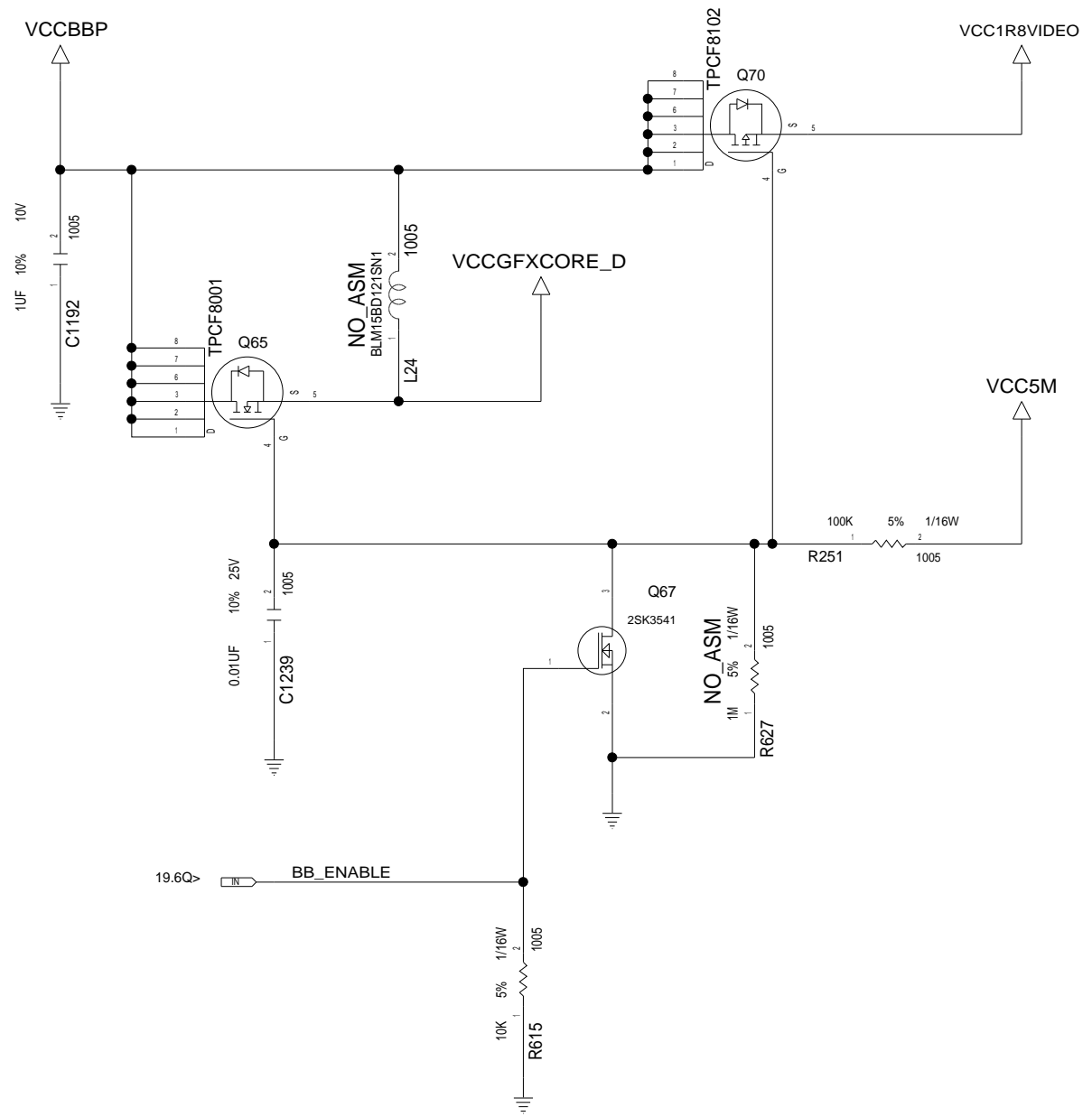
(TOP SIDE) U35 HY5RS123235FP K4J10324QD-HC12000 VCC1R8VIDEO (TOP SIDE) U46 HY5RS123235FP K4J10324QD-HC12000 VCC1R8VIDEO

DATE	EC NO.	PART NO.
		VER.0.56
		DEVELOPMENT NO. Q/M
		22 / 108



DESIGNER	K.Y	09/29/08	PART NO.
CHECKED	Y.I	09/29/08	VER.0.56
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	VRAM CHANNEL-A
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			
LENOVO CONFIDENTIAL			

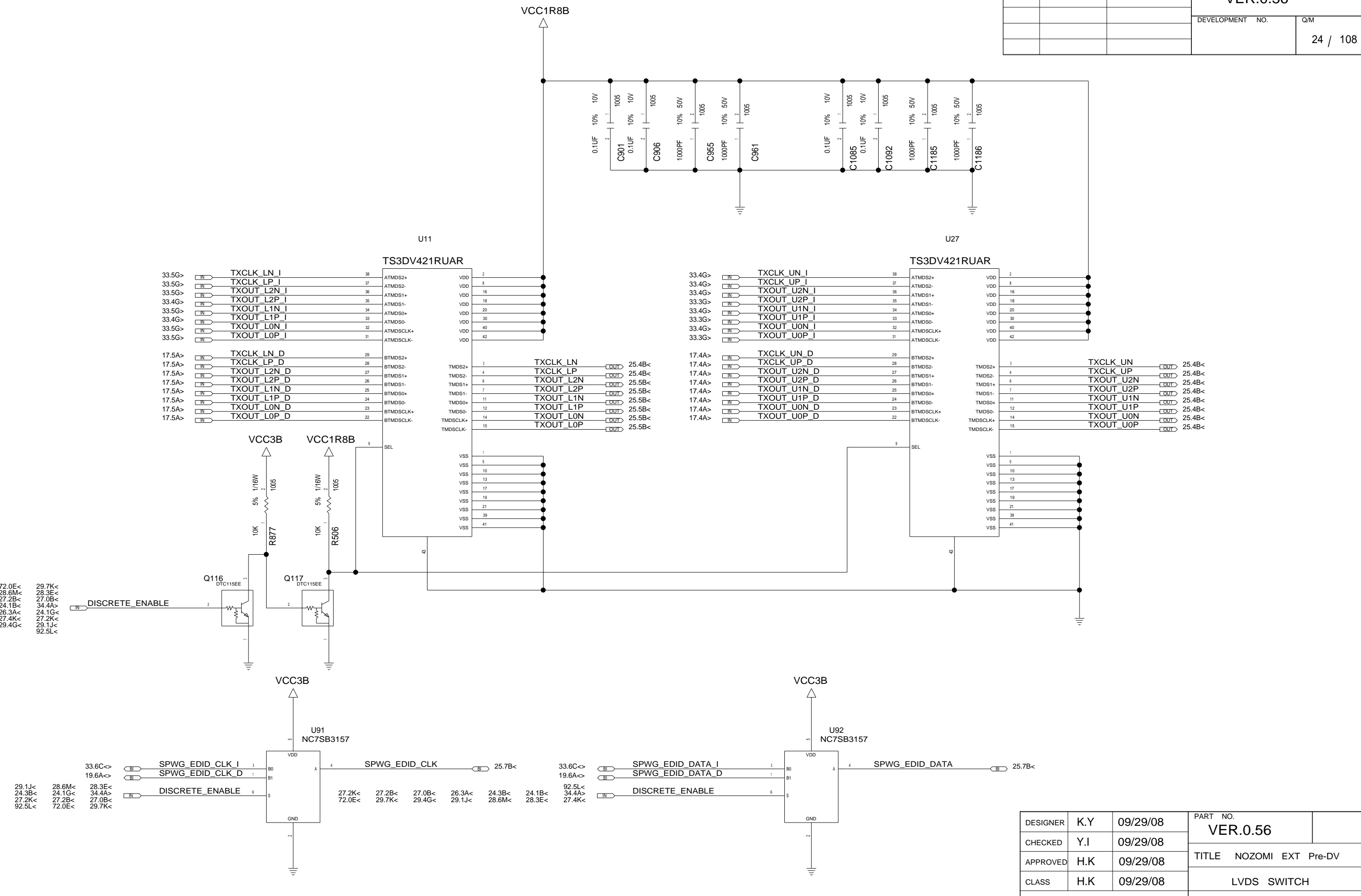
	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				23 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	BACK BIAS POWER	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>			LENOVO CONFIDENTIAL	

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			24 / 108

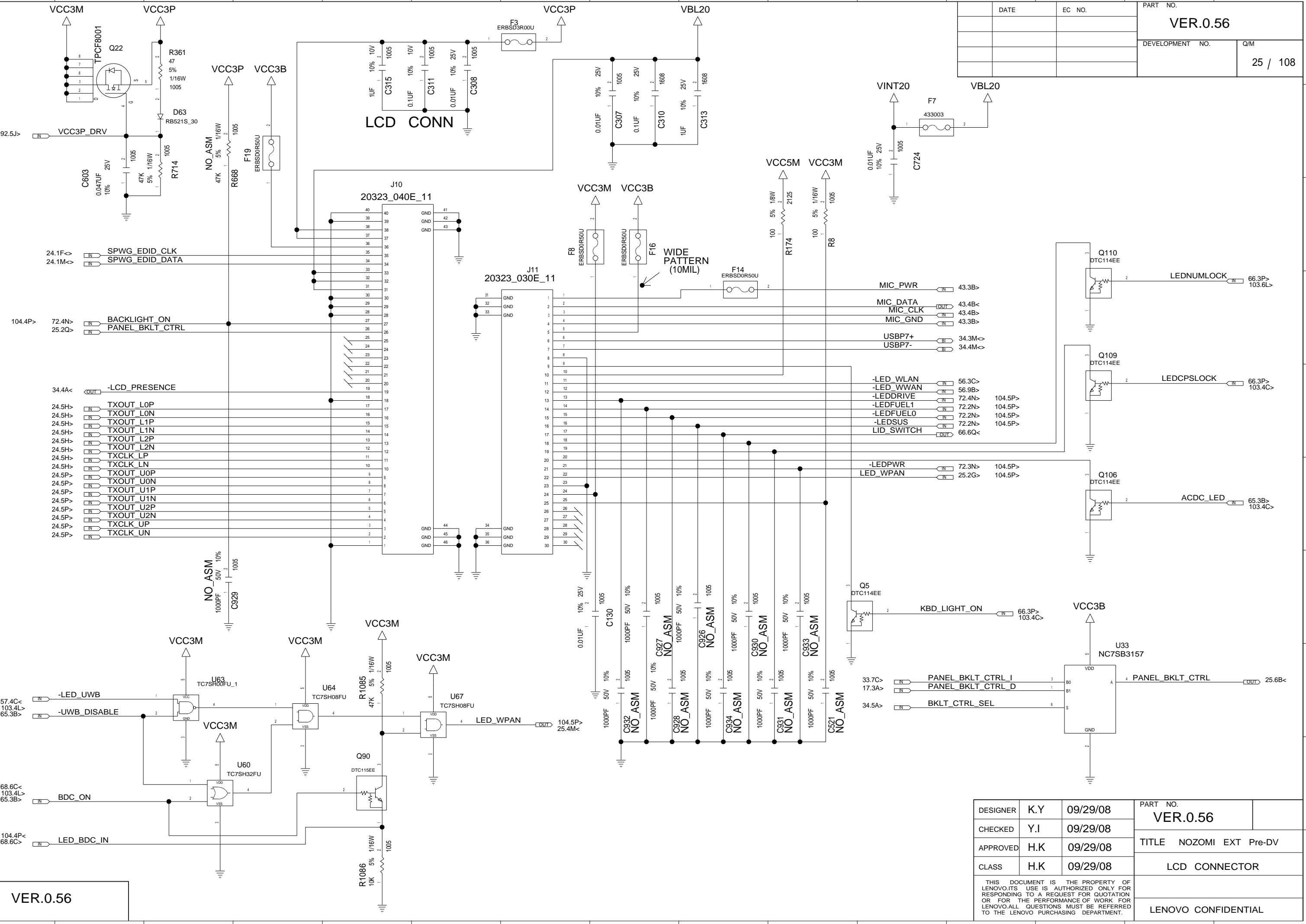


VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	LVDS SWITCH	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

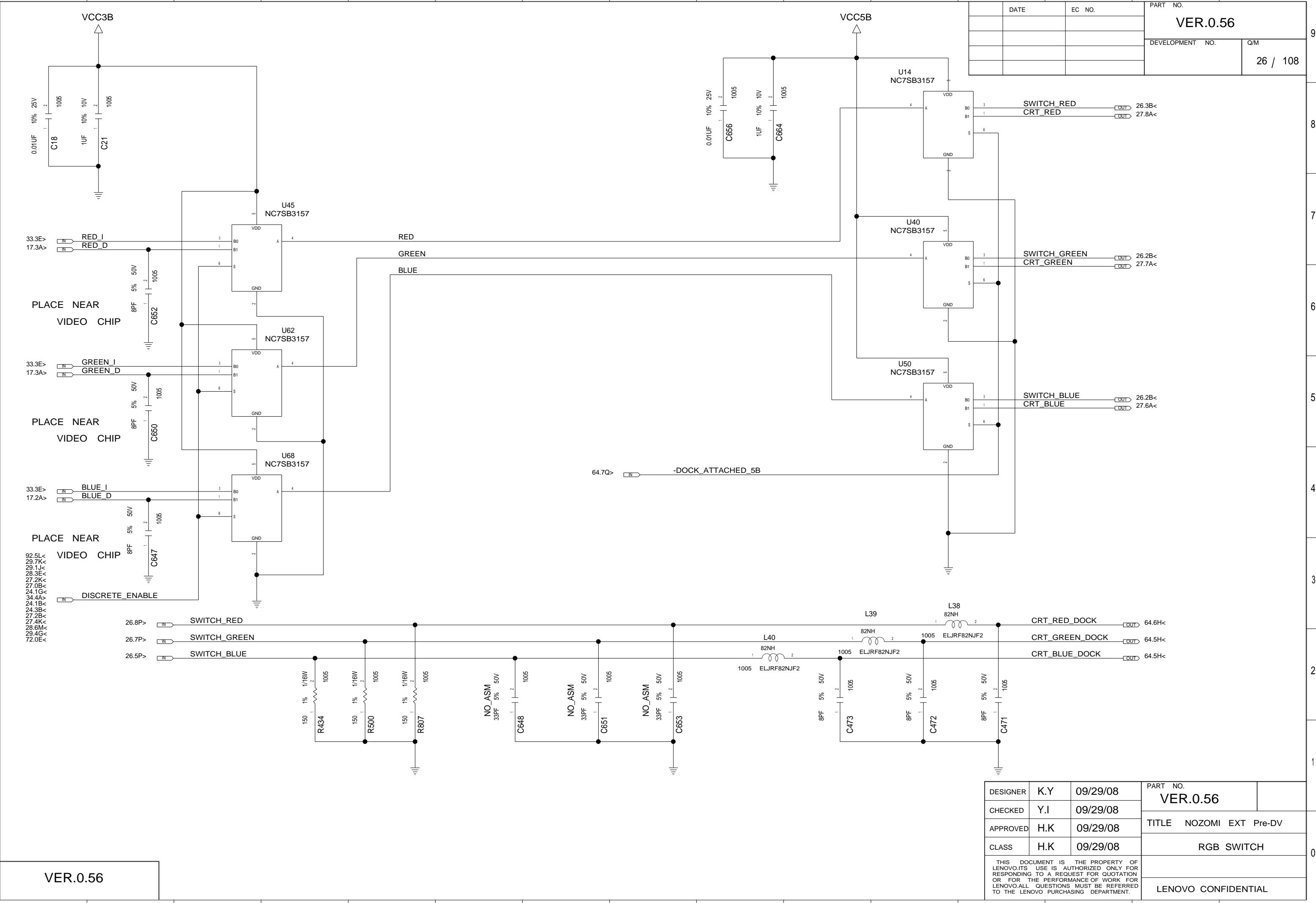
DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			25 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.
CHECKED	Y.I	09/29/08	VER.0.56
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	LCD CONNECTOR
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL

DATE	EC NO.	PART NO.
		VER.0.56
DEVELOPMENT NO.		Q/M
		26 / 108



33.3E>
17.3A>
RED_I
RED_D

33.3E>
17.3A>
GREEN_I
GREEN_D

33.3E>
17.2A>
BLUE_I
BLUE_D

26.8P>
26.7P>
26.5P>
SWITCH_RED
SWITCH_GREEN
SWITCH_BLUE

26.3B<
27.8A<

26.2B<
27.7A<

26.2B<
27.6A<

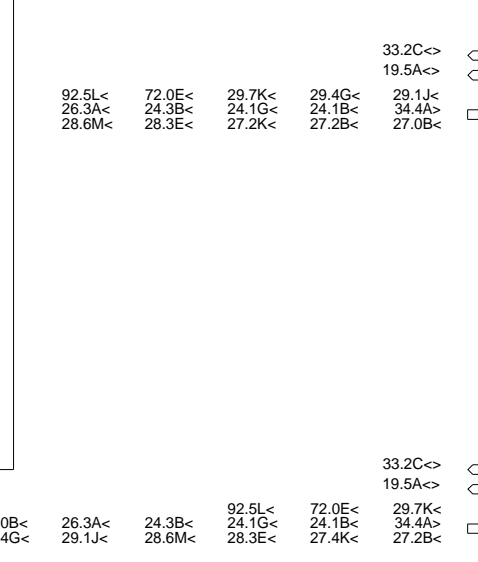
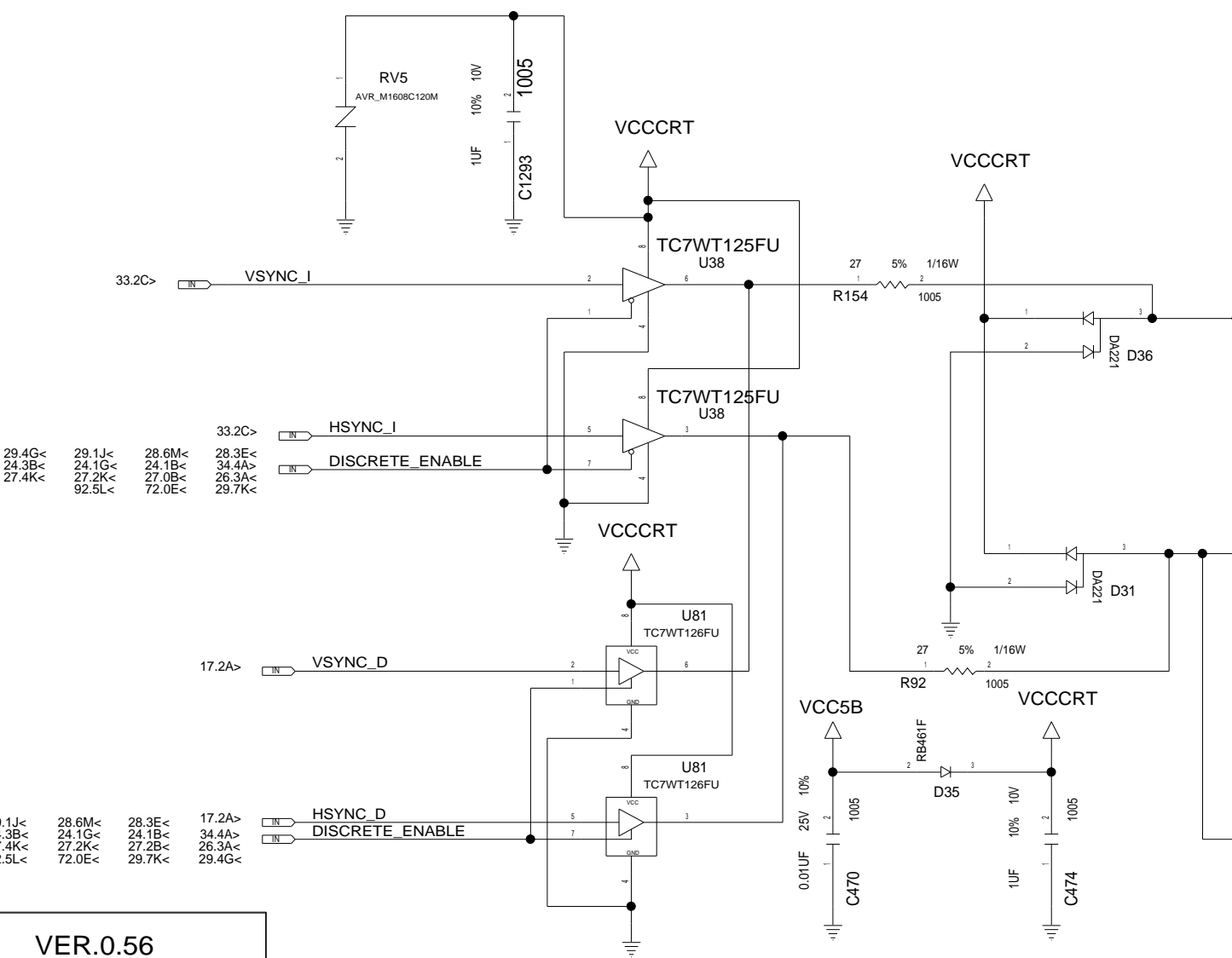
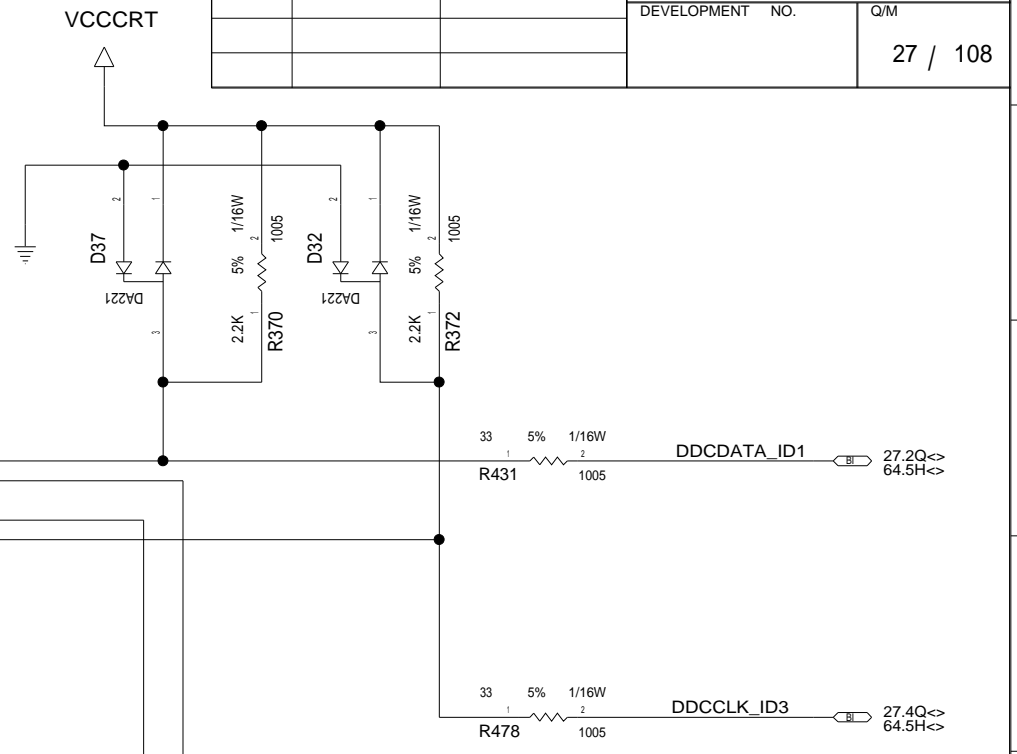
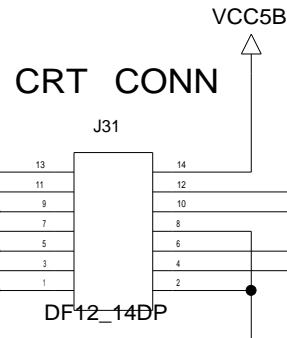
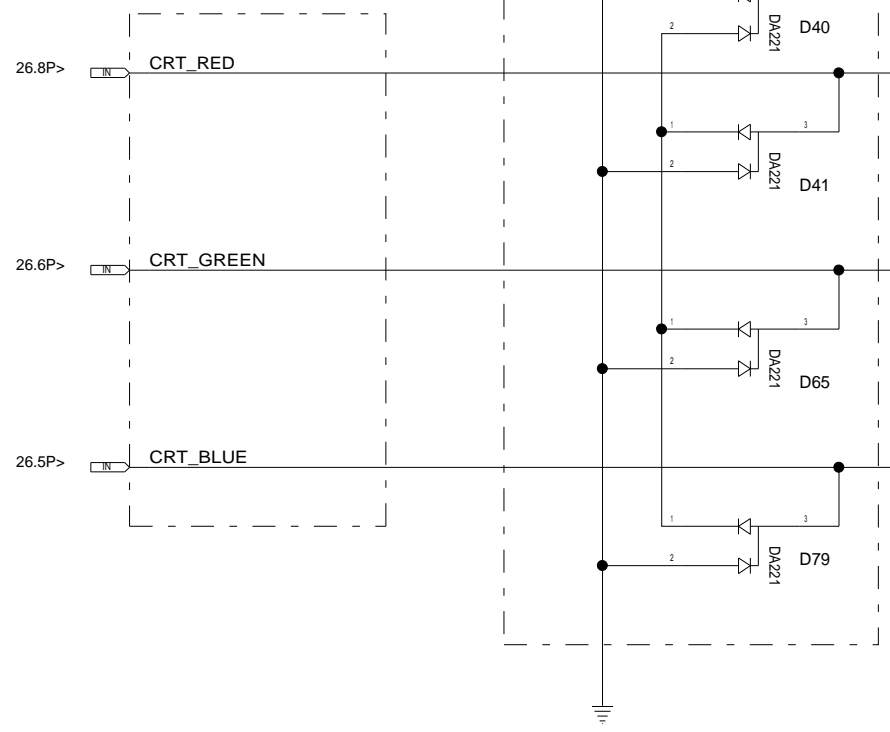
64.6H<
64.5H<
64.5H<

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.
CHECKED	Y.I	09/29/08	VER.0.56
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	RGB SWITCH
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			
LENOVO CONFIDENTIAL			

DATE	EC NO.	PART NO.	
		VER.0.56	
DEVELOPMENT NO.		Q/M	
		27 / 108	

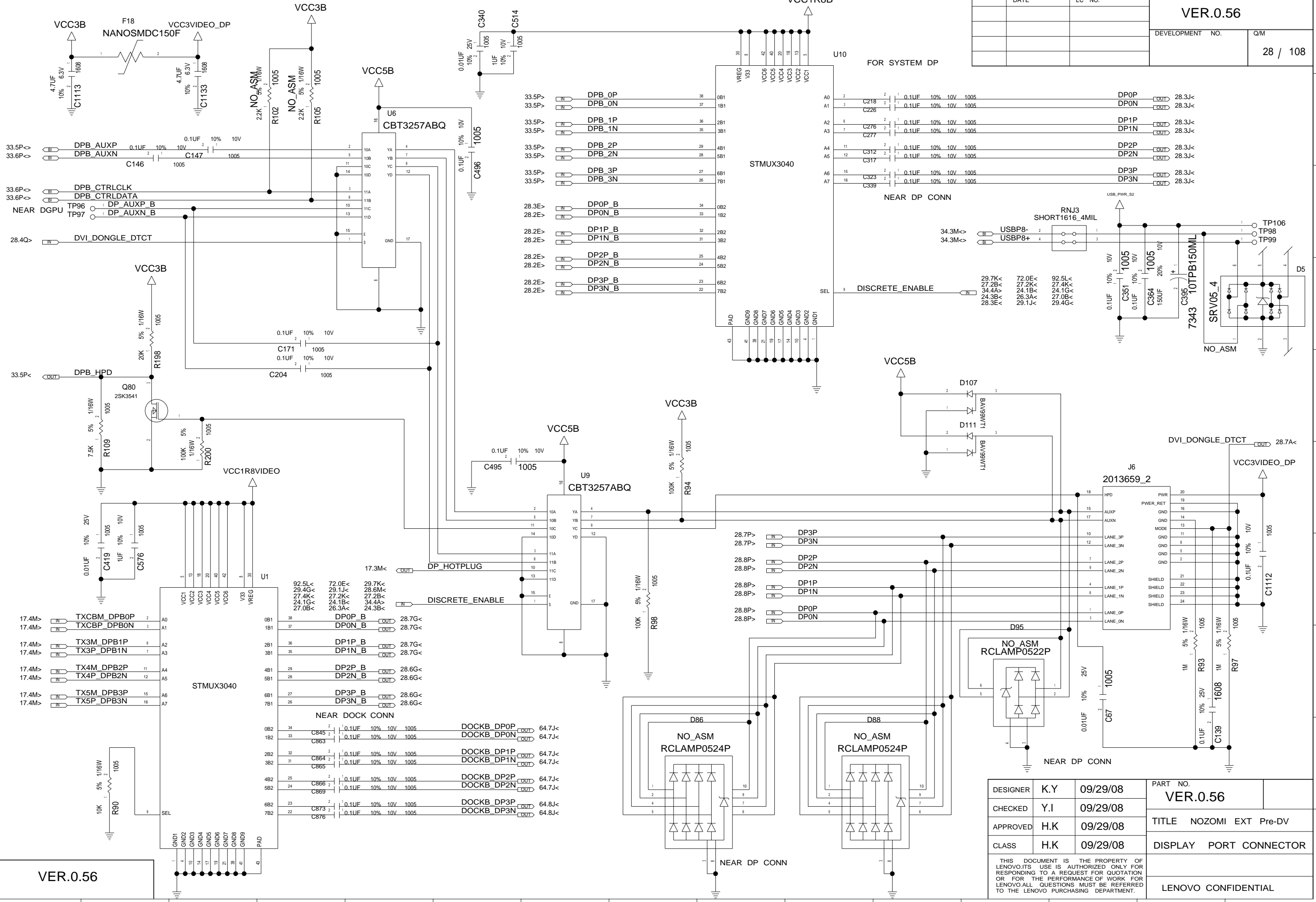
GND GUARDING
EACH SIGNAL WIDTH=4MIL,
SPACING=8MIL



DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	EXT CRT INTERFACE	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

VER.0.56

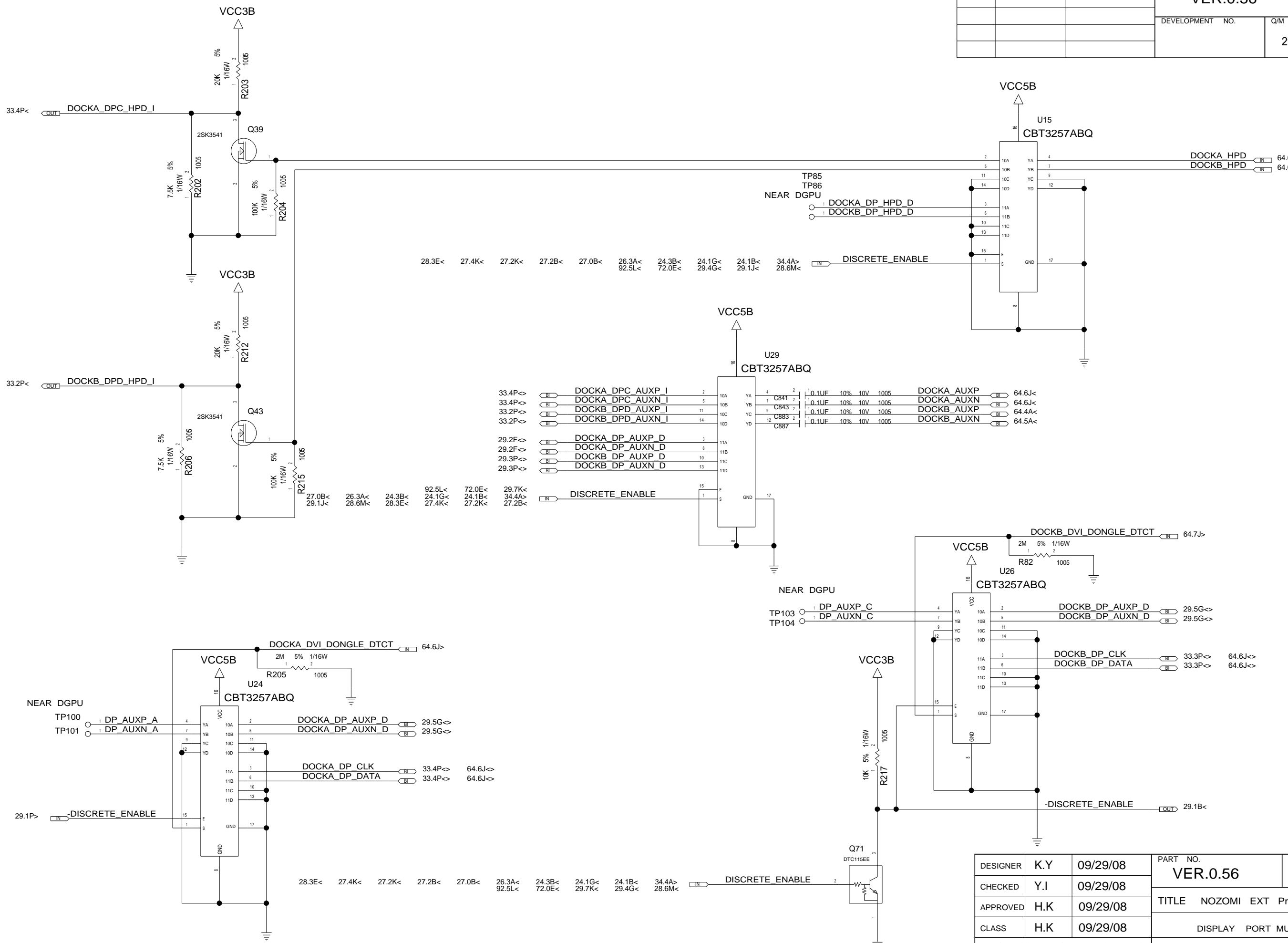
DATE	EC NO.	PART NO.
		VER.0.56
DEVELOPMENT NO.		Q/M
		28 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.
CHECKED	Y.I	09/29/08	VER.0.56
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	DISPLAY PORT CONNECTOR
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			
LENOVO CONFIDENTIAL			

DATE	EC NO.	PART NO.
		VER.0.56
DEVELOPMENT NO.		Q/M
		29 / 108

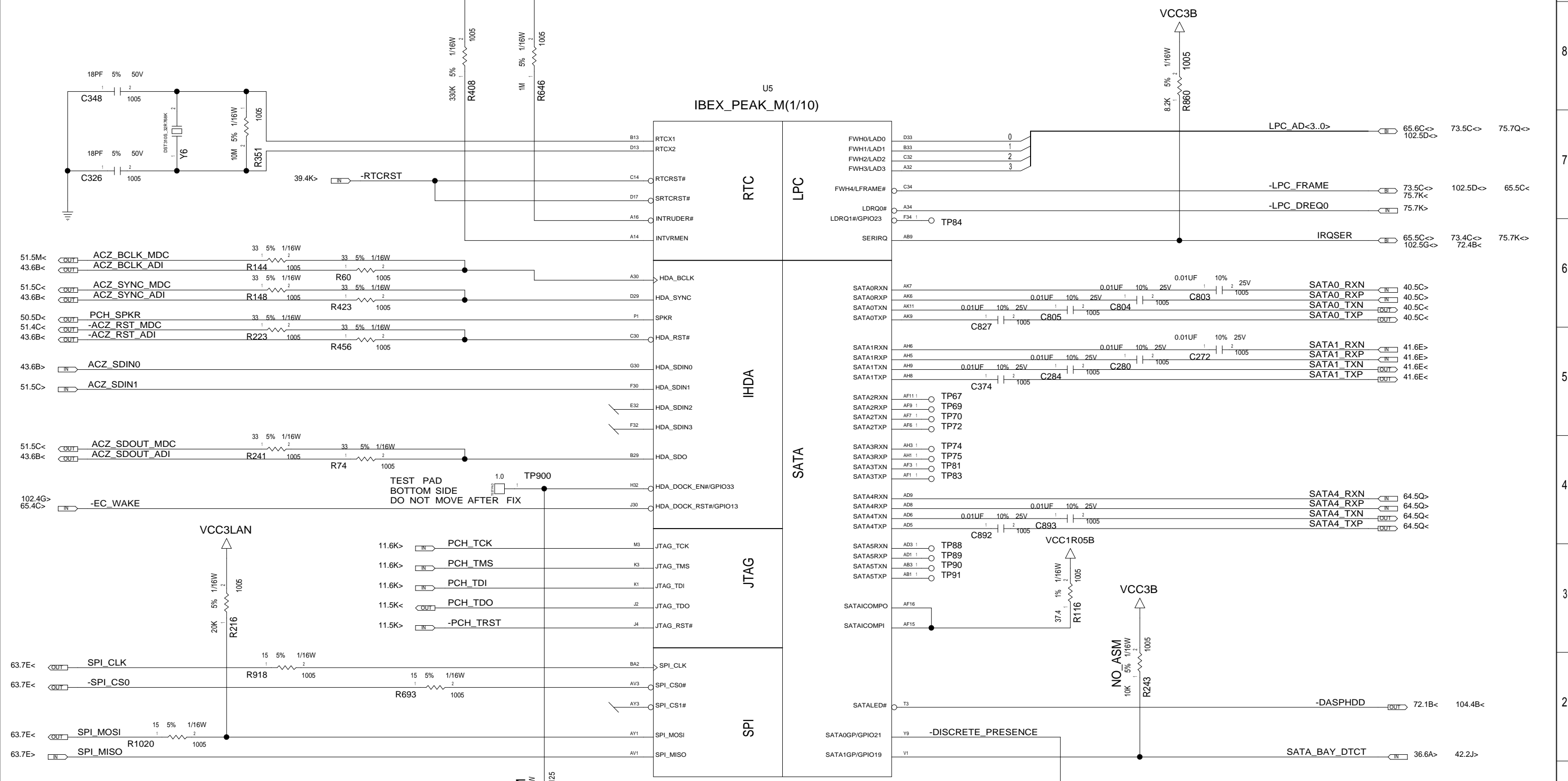


VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	DISPLAY PORT MUX	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			30 / 108



TABLE

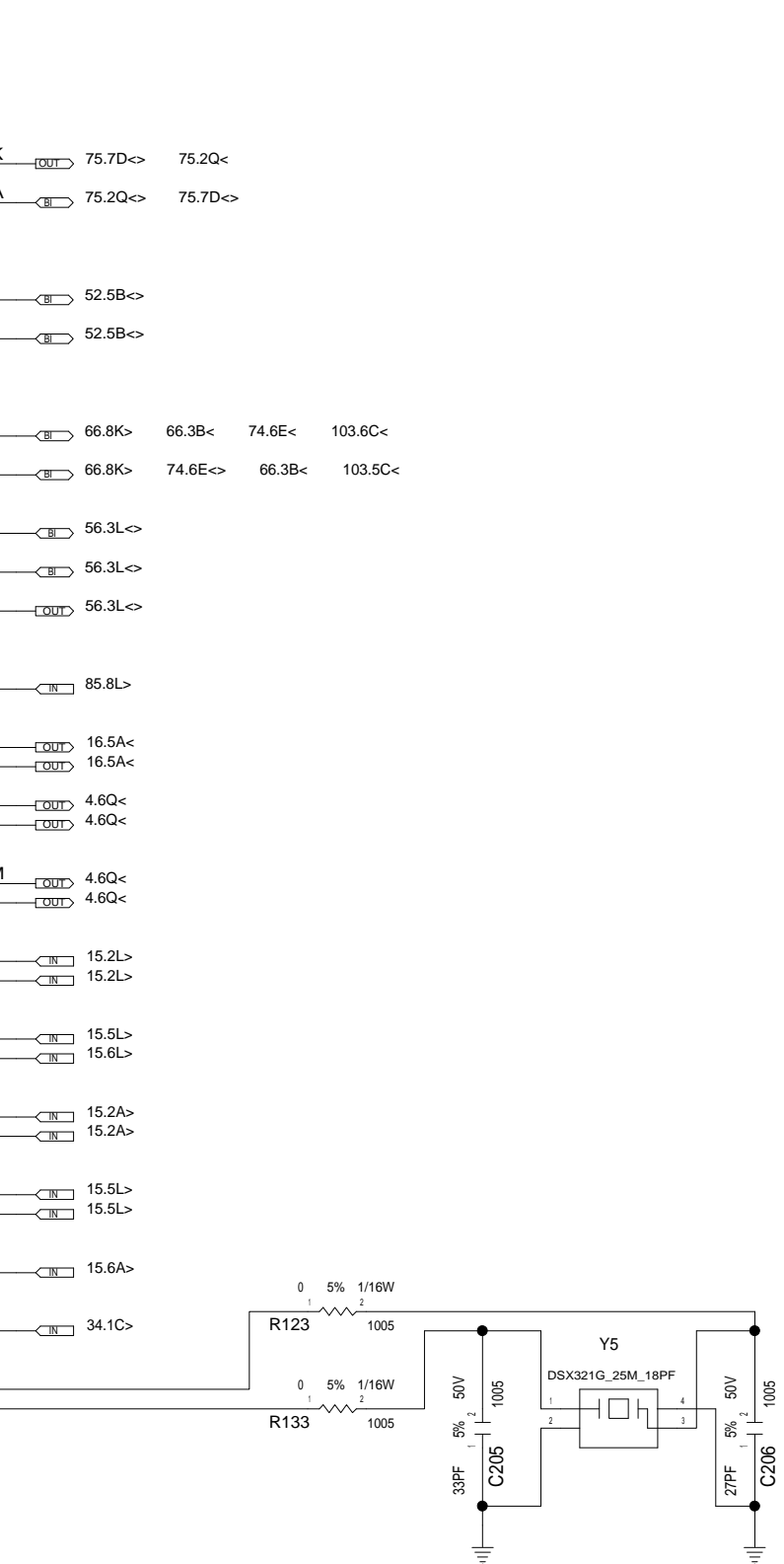
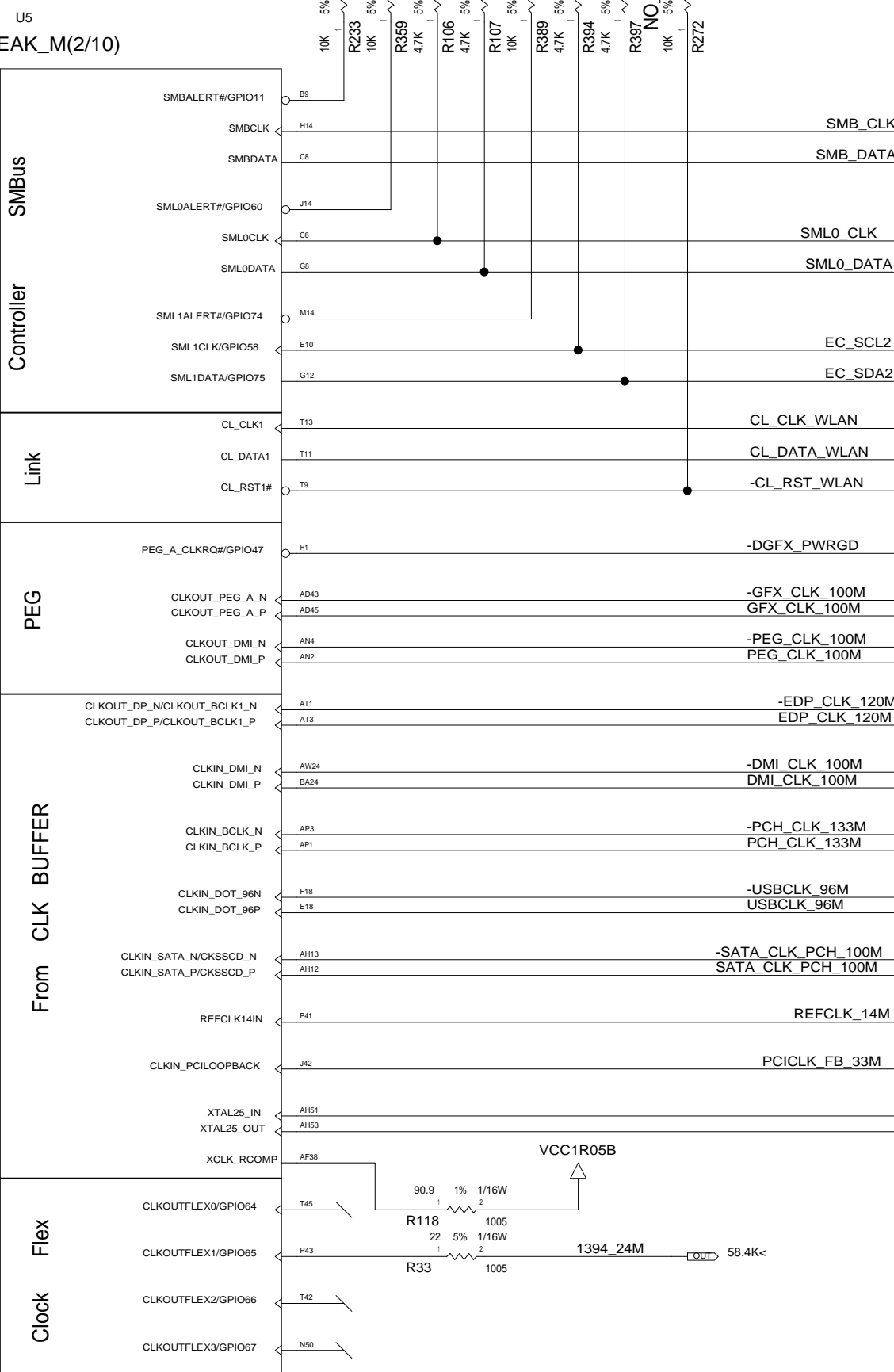
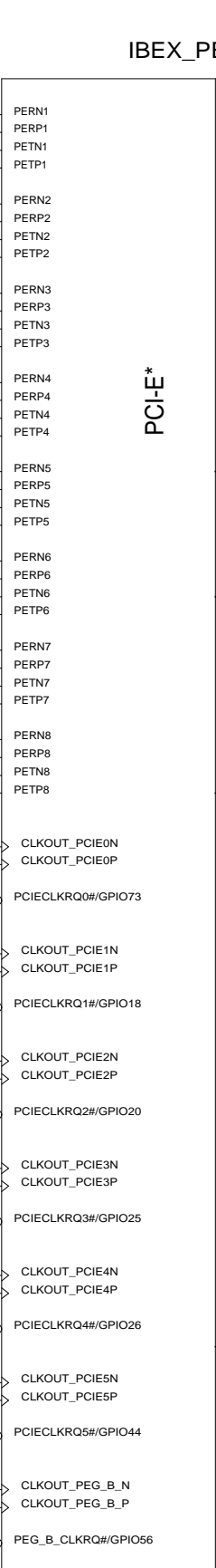
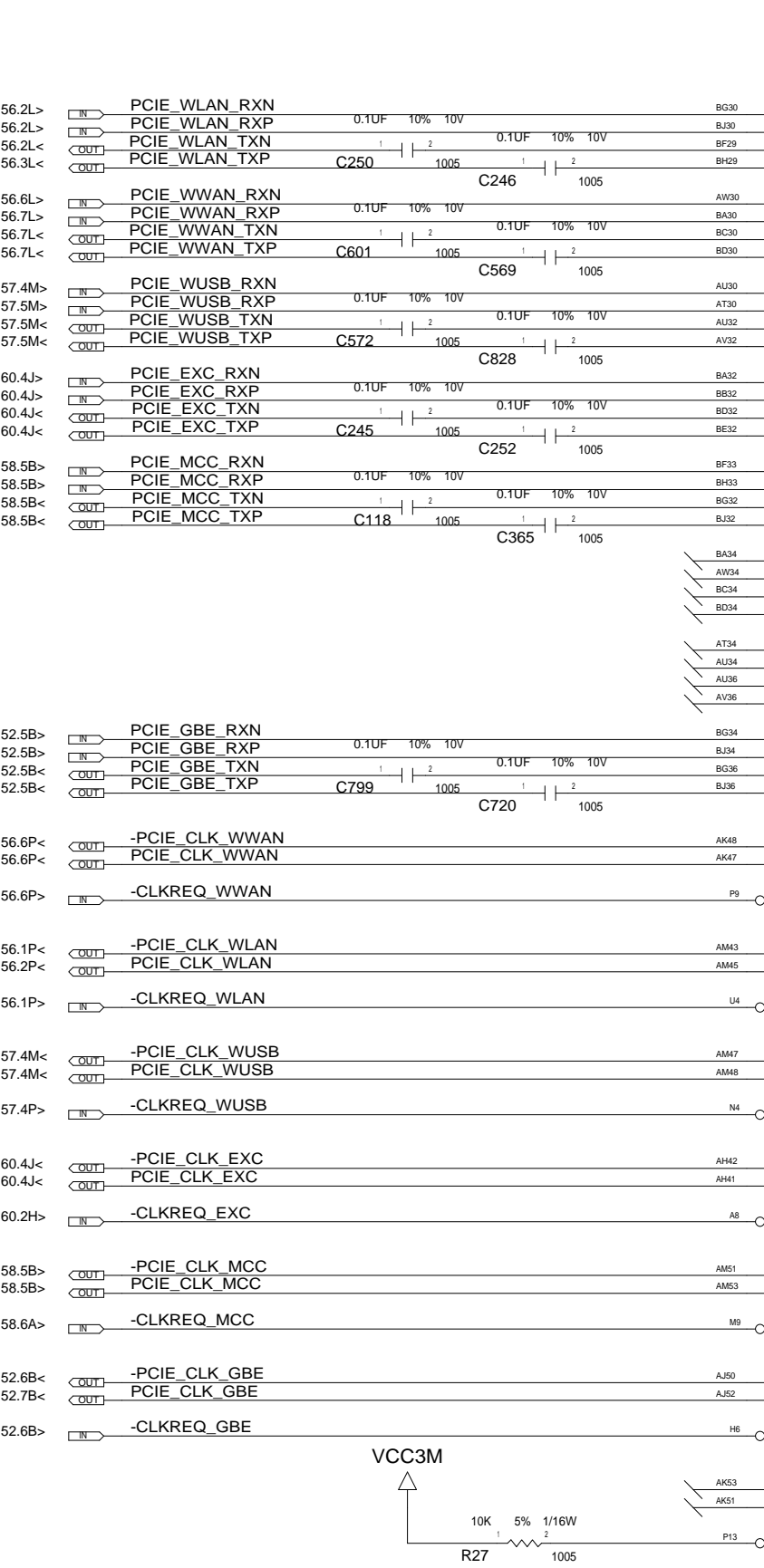
SPI_MOSI	PULL UP : ENABLE ITPM
	FLOAT : DISABLE ITPM

NO_ASM
5% 18W
2125

PLACE ON TOP SIDE
LOCATE AT USB SLOT AREA

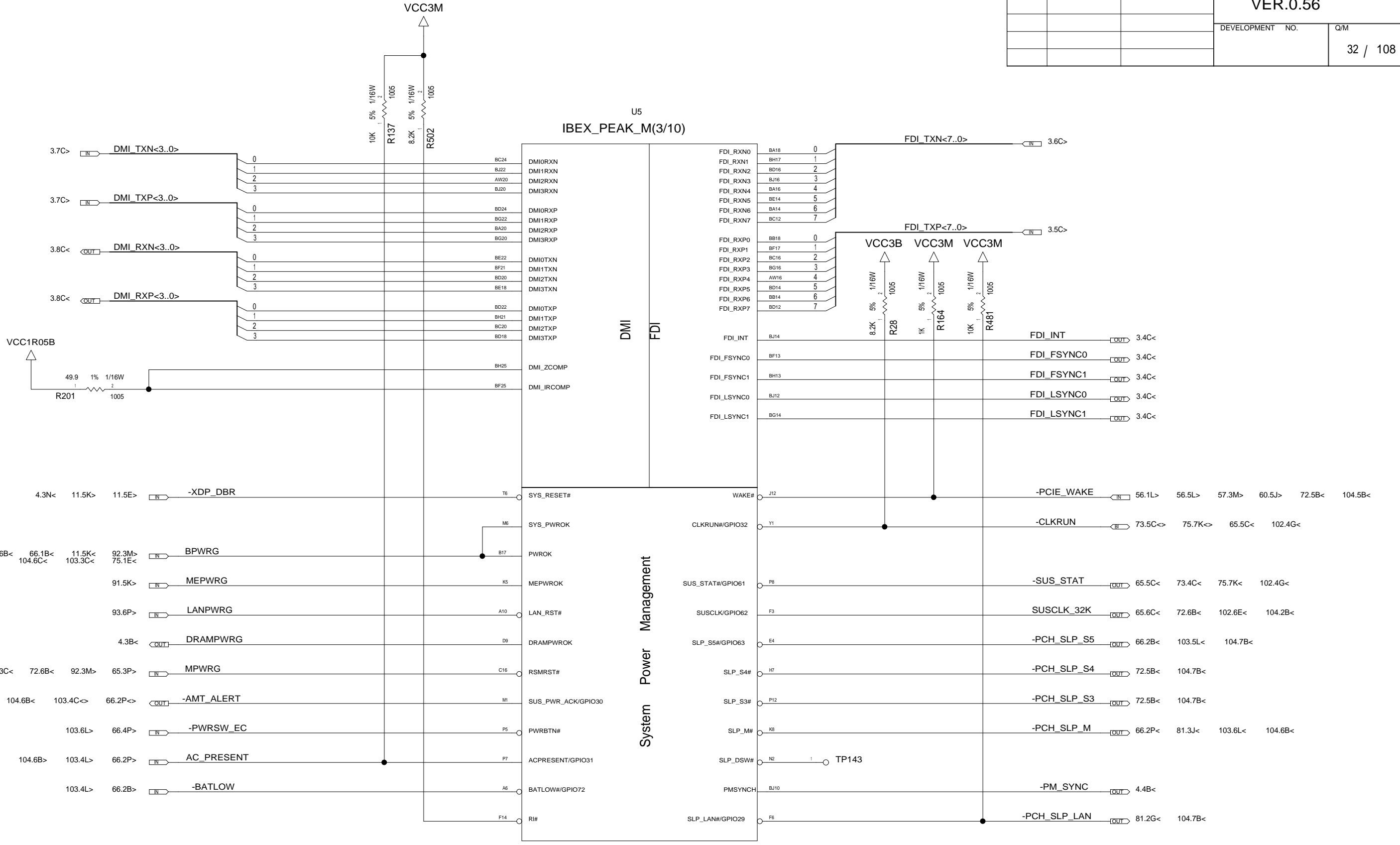
DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	PCH(1/8):HDA/JTAG/SATA	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.				
LENOVO CONFIDENTIAL				

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			31 / 108



DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	PCH(2/8):PCIE/SMBUS/CLK	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.				
LENOVO CONFIDENTIAL				

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			32 / 108



DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	PCH(3/8):DMI/FDI/PM	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

U5
IBEX_PEAK_M(5/10)

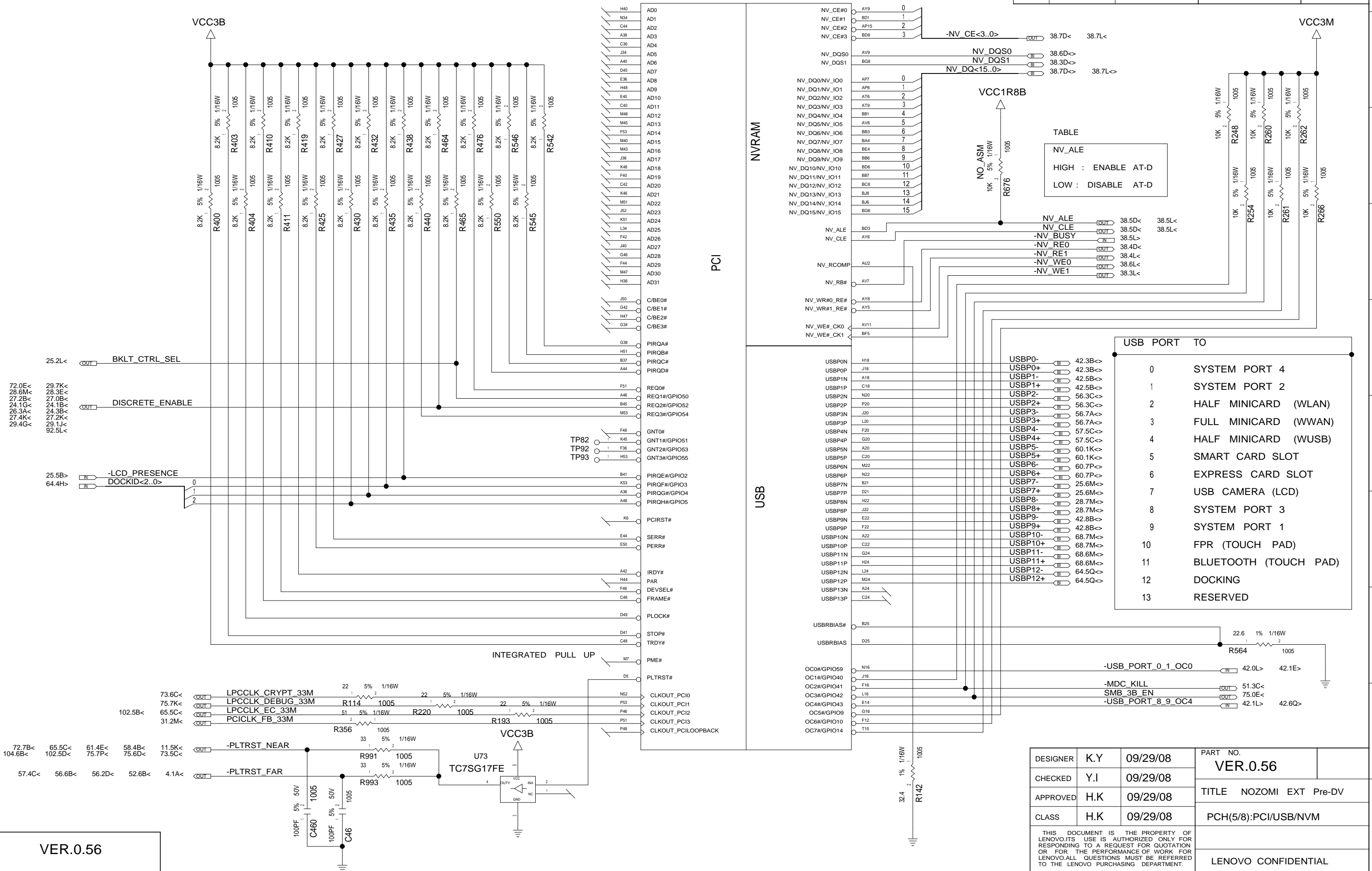
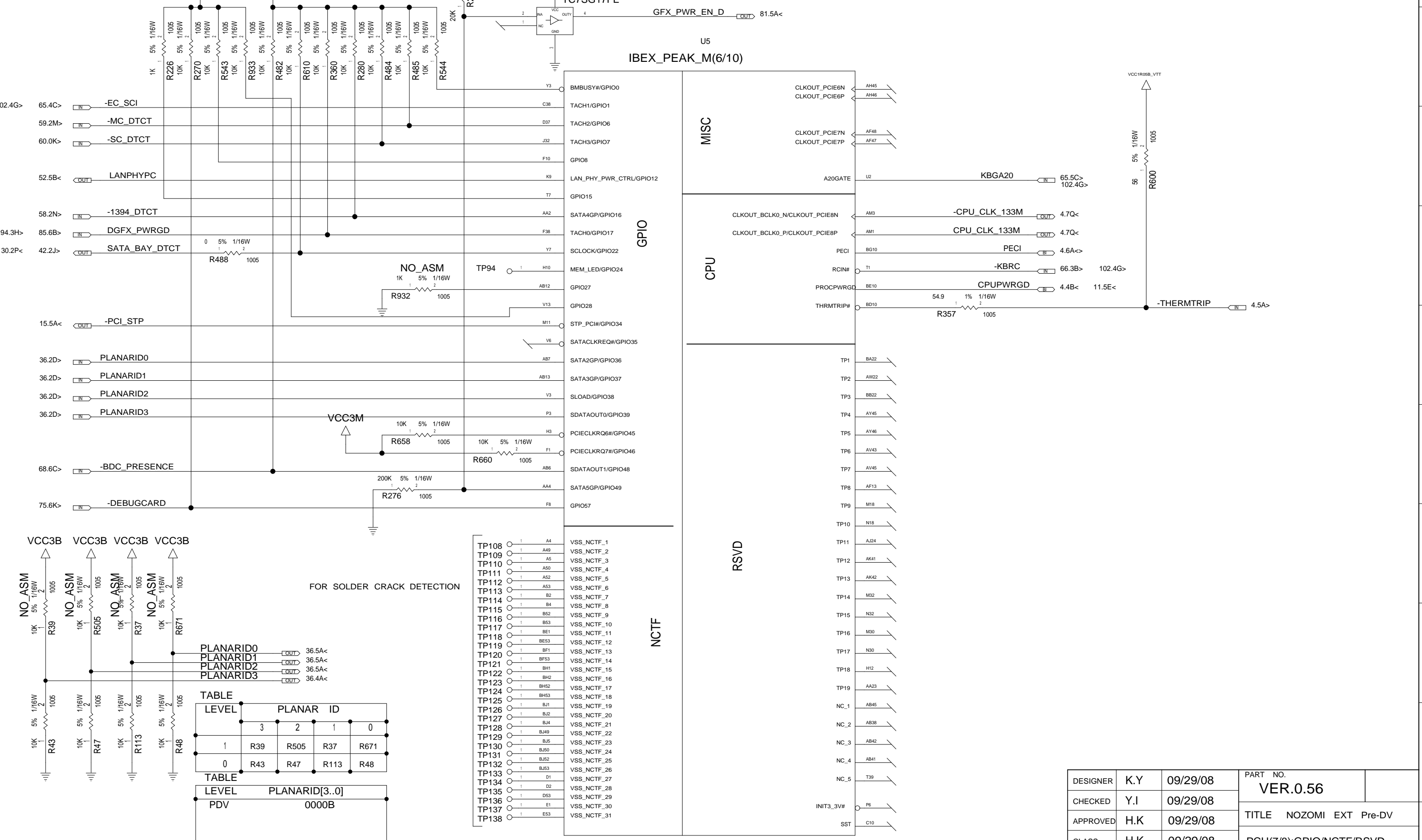


TABLE	
GPIO15 ME CRYPTO STRAP	
HIGH : WITH CONFIDENTIALITY	
LOW : NO CONFIDENTIALITY	

DATE	EC NO.	PART NO.
		VER.0.56
		DEVELOPMENT NO.
		Q/M
		36 / 108

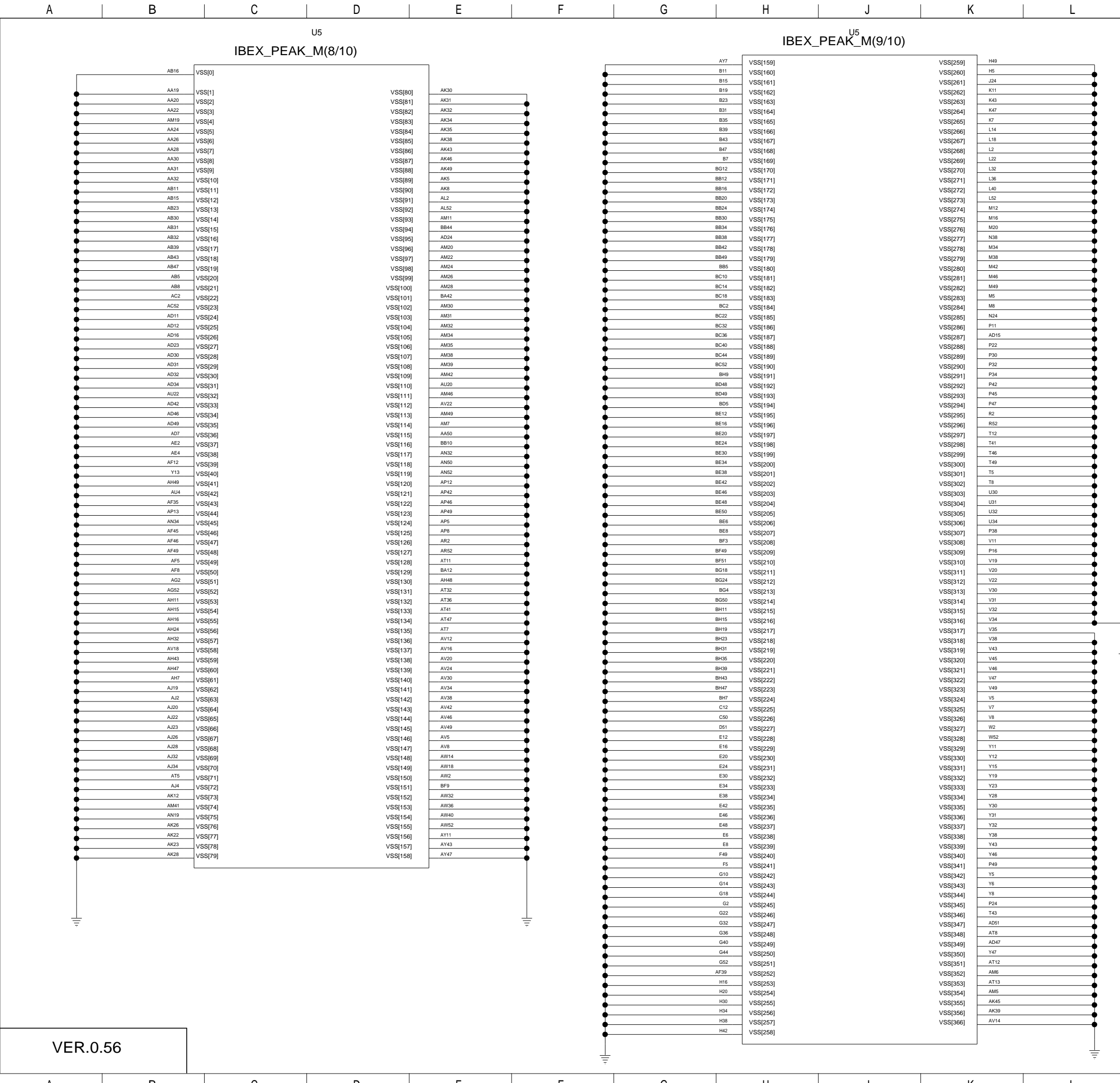


VER.0.56

TABLE	
LEVEL	PLANAR ID
1	R39 R505 R37 R671
0	R43 R47 R113 R48
TABLE	
LEVEL	PLANARID[3..0]
PDV	0000B

TP108	A4	VSS_NCTF_1
TP109	A9	VSS_NCTF_2
TP110	A5	VSS_NCTF_3
TP111	A50	VSS_NCTF_4
TP112	A52	VSS_NCTF_5
TP113	A53	VSS_NCTF_6
TP114	B2	VSS_NCTF_7
TP115	B4	VSS_NCTF_8
TP116	B52	VSS_NCTF_9
TP117	B53	VSS_NCTF_10
TP118	BE1	VSS_NCTF_11
TP119	BE3	VSS_NCTF_12
TP120	BF1	VSS_NCTF_13
TP121	BF3	VSS_NCTF_14
TP122	BH1	VSS_NCTF_15
TP123	BH2	VSS_NCTF_16
TP124	BH52	VSS_NCTF_17
TP125	BH53	VSS_NCTF_18
TP126	BJ1	VSS_NCTF_19
TP127	BJ2	VSS_NCTF_20
TP128	BJ4	VSS_NCTF_21
TP129	BJ49	VSS_NCTF_22
TP130	BJ5	VSS_NCTF_23
TP131	BJ50	VSS_NCTF_24
TP132	BJ52	VSS_NCTF_25
TP133	BJ53	VSS_NCTF_26
TP134	D1	VSS_NCTF_27
TP135	D2	VSS_NCTF_28
TP136	D53	VSS_NCTF_29
TP137	E1	VSS_NCTF_30
TP138	E53	VSS_NCTF_31

DESIGNER	K.Y	09/29/08	PART NO.
CHECKED	Y.I	09/29/08	VER.0.56
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	PCH(7/8):GPIO/NCTF/RSVD
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			
LENOVO CONFIDENTIAL			

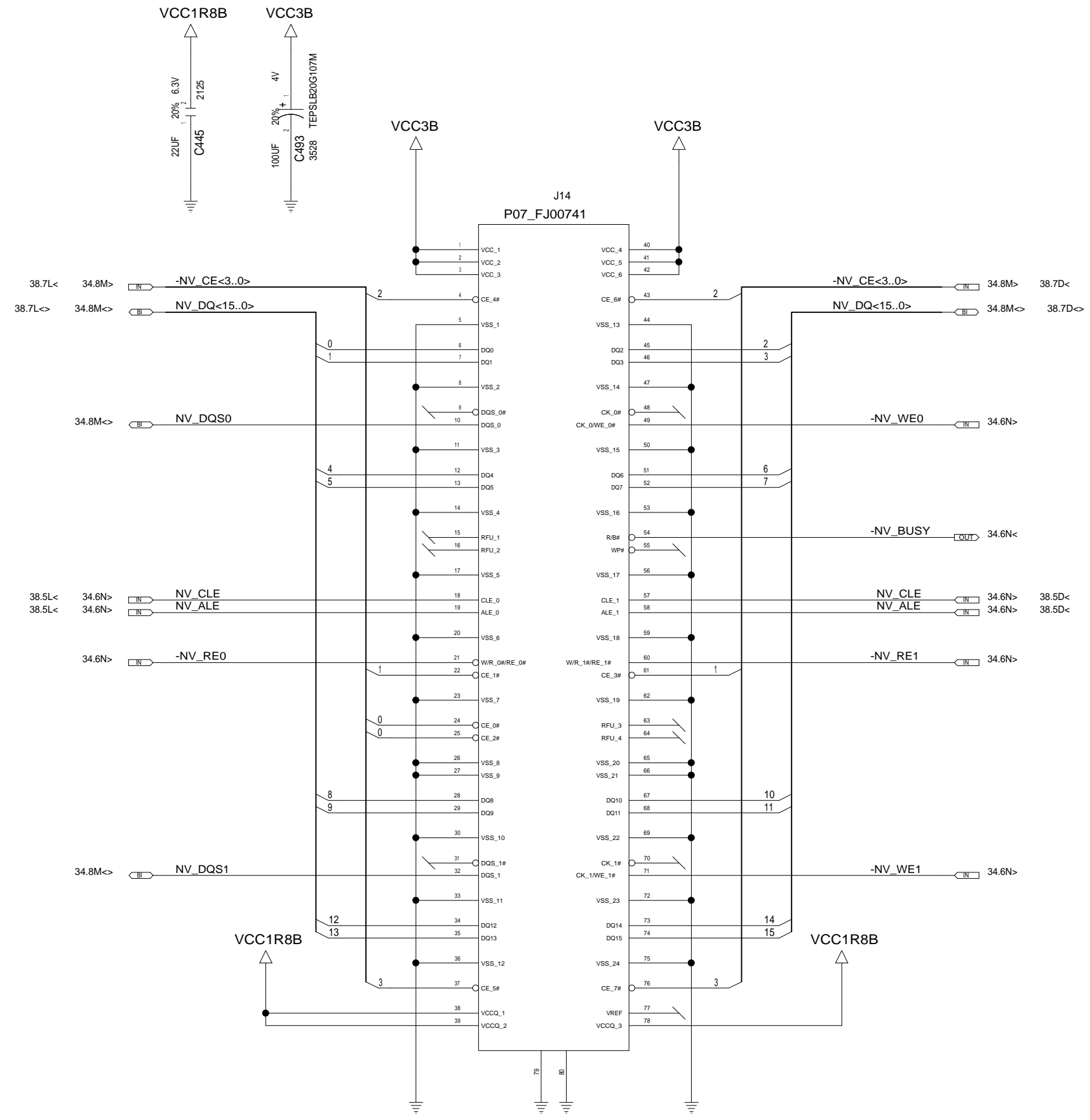


DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			37 / 108

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	PCH(8/8):GND	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.				
LENOVO CONFIDENTIAL				

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			38 / 108

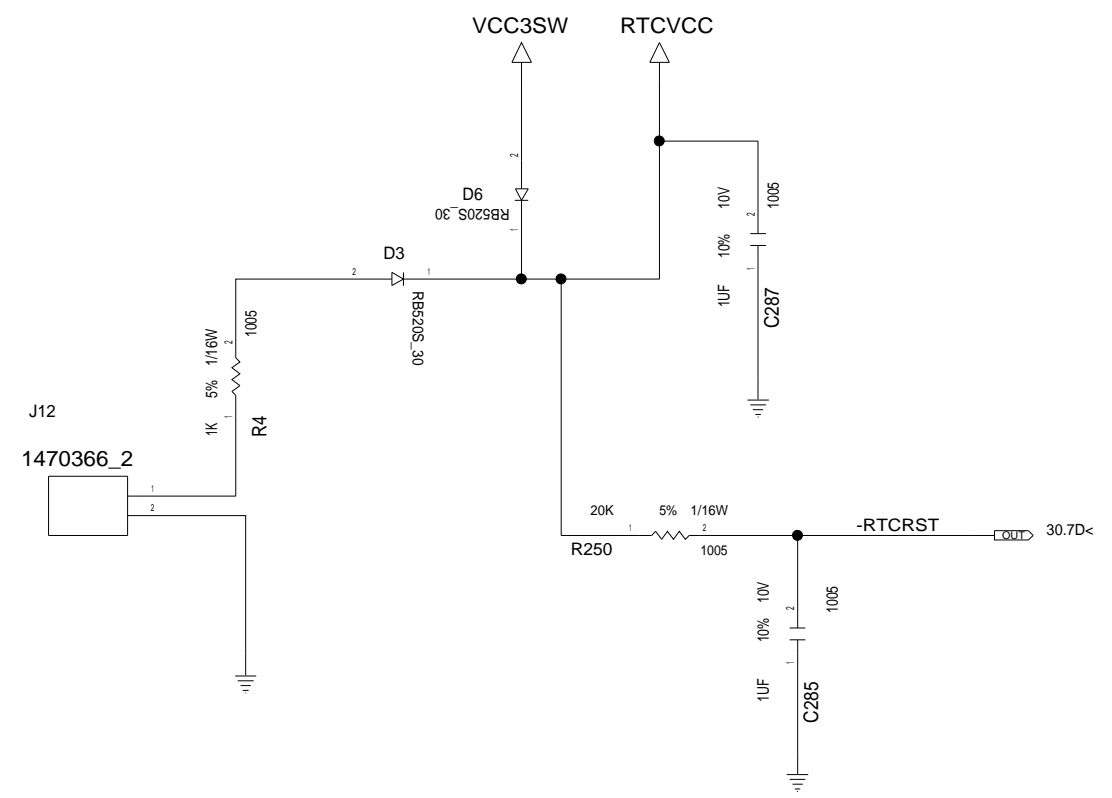


VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	TURBO MEMORY SLOT	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>				

A B C D E F G H J K L M N P Q

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				39 / 108

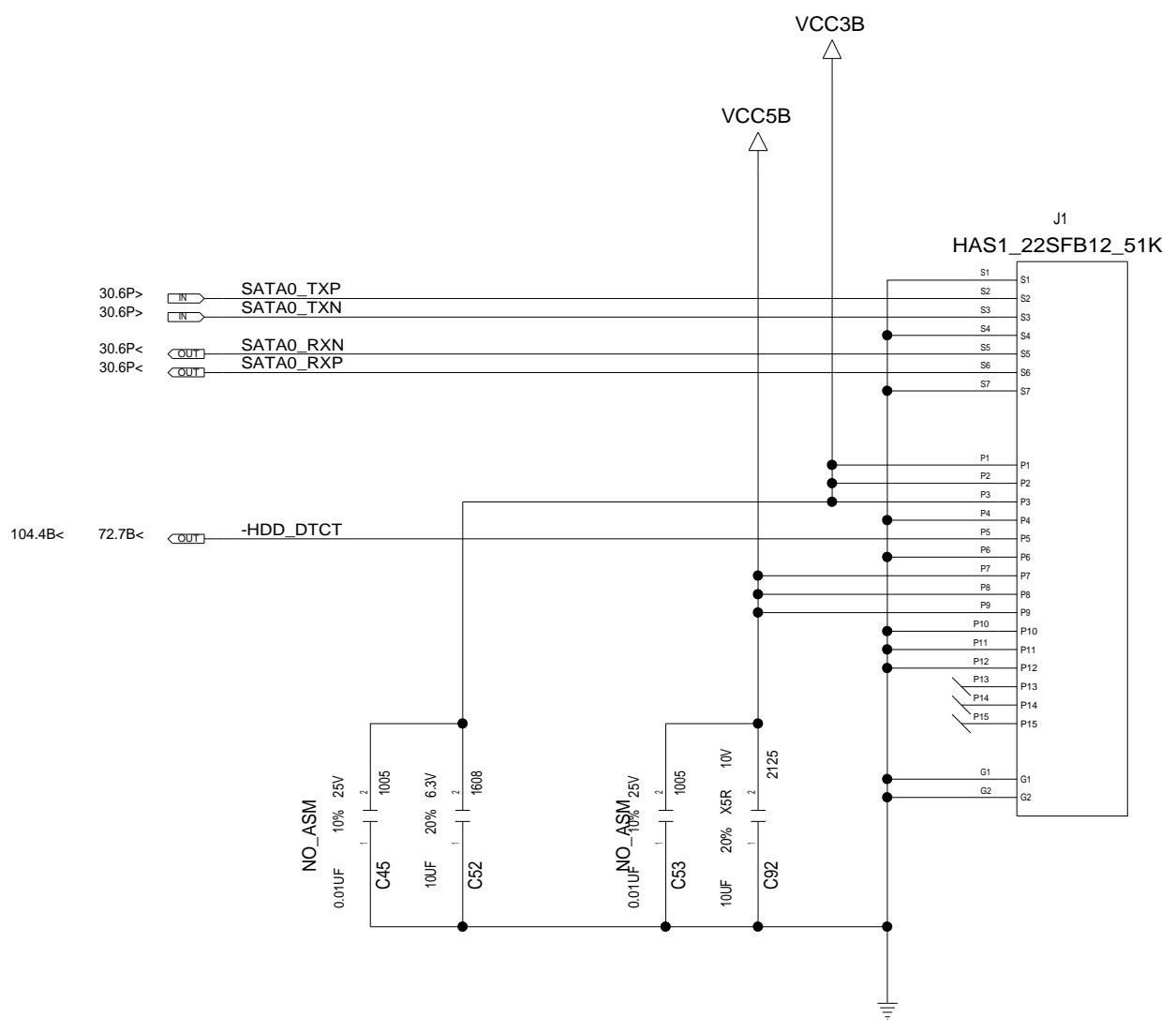


VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	RTC BATTERY	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>			LENOVO CONFIDENTIAL	

A B C D E F G H J K L M N P Q

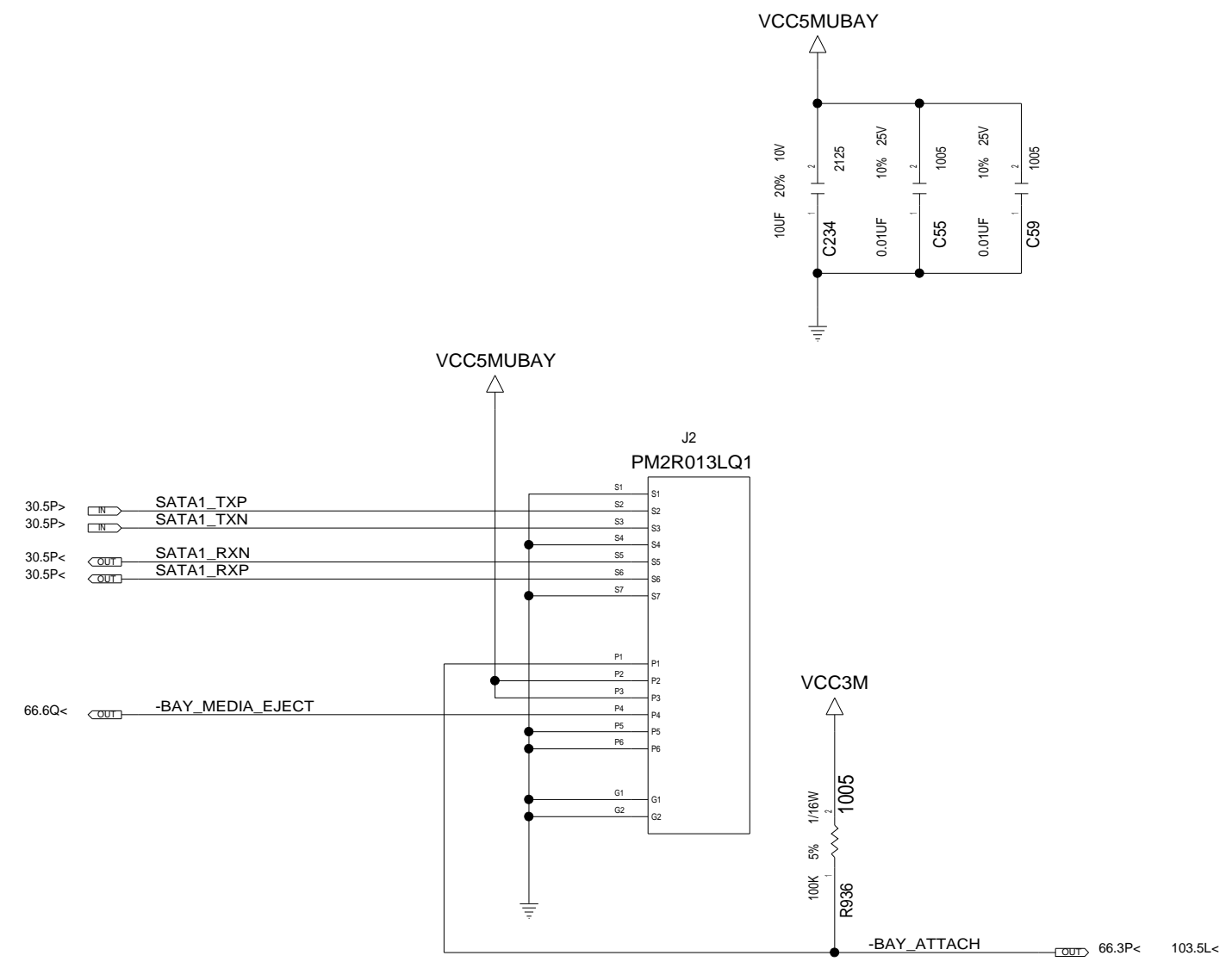
	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				40 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	SATA HDD CONN	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

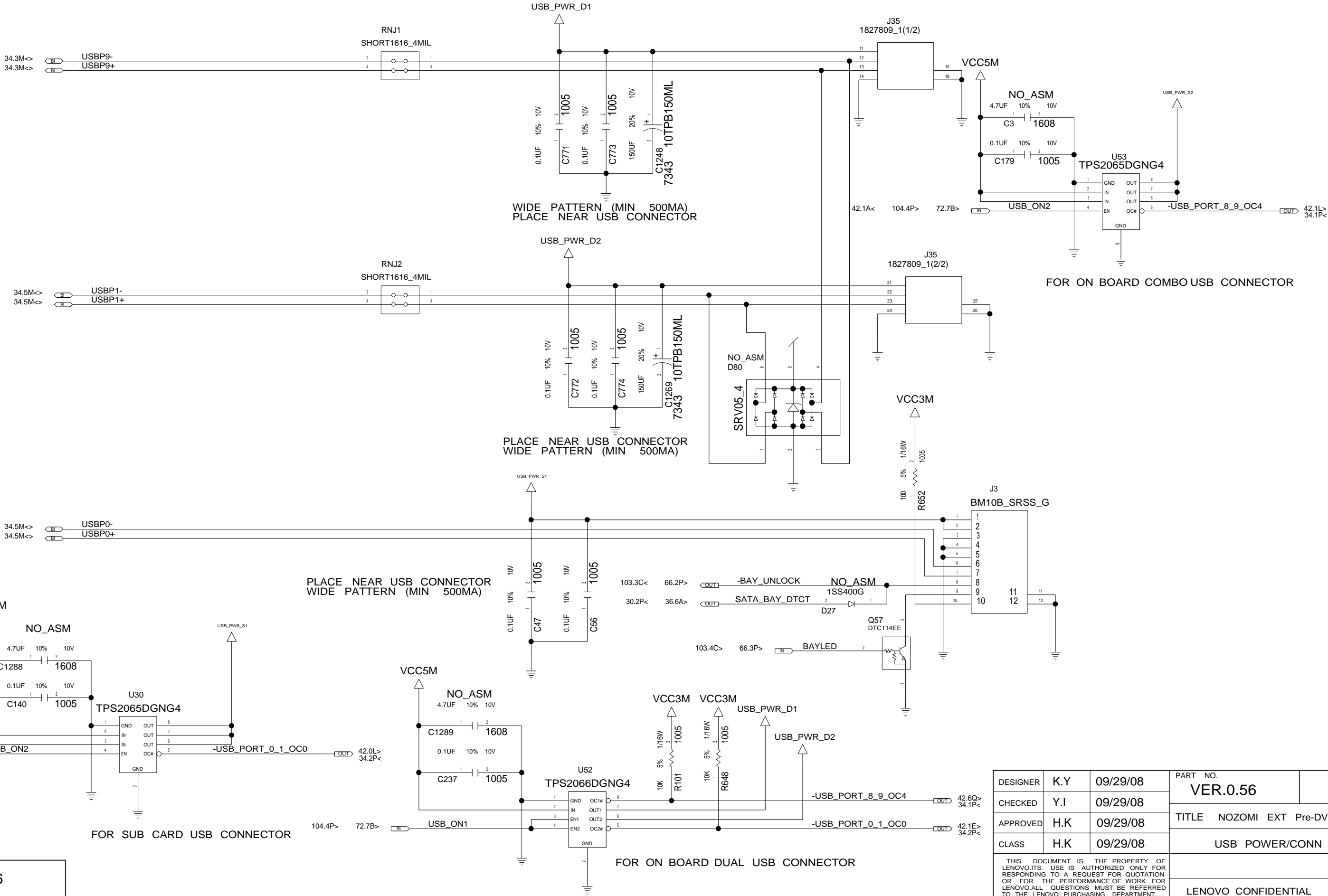
	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				41 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	SATA BAY I/F CONN	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>			LENOVO CONFIDENTIAL	

DATE	EC NO.	PART NO.
		VER.0.56
DEVELOPMENT NO.		Q/M
		42 / 108



WIDE PATTERN (MIN 500MA)
PLACE NEAR USB CONNECTOR

PLACE NEAR USB CONNECTOR
WIDE PATTERN (MIN 500MA)

PLACE NEAR USB CONNECTOR
WIDE PATTERN (MIN 500MA)

FOR SUB CARD USB CONNECTOR

FOR ON BOARD DUAL USB CONNECTOR

FOR ON BOARD COMBO USB CONNECTOR

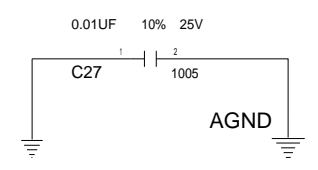
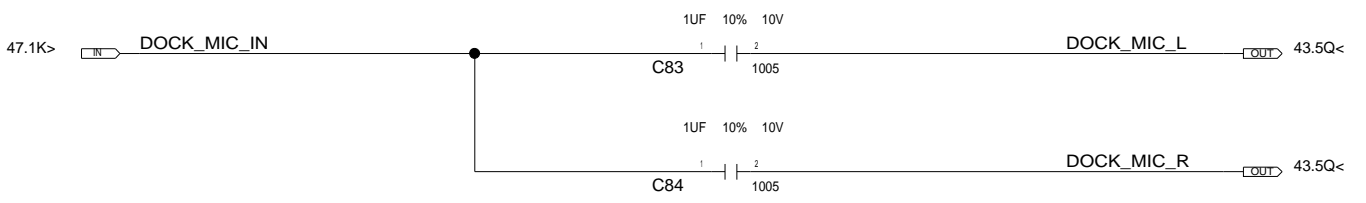
VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	USB POWER/CONN	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

A B C D E F G H J K L M N P Q

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				44 / 108



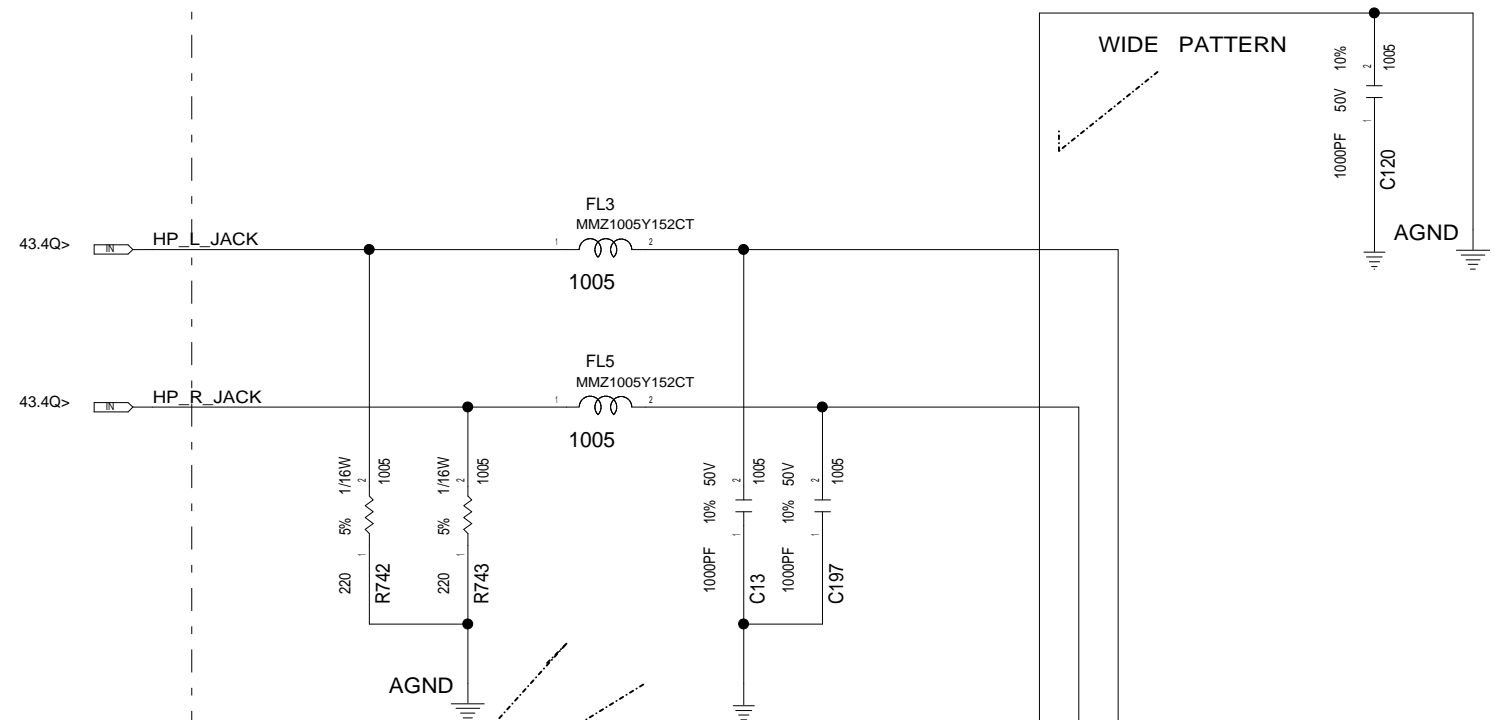
VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	AUDIO MISC	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

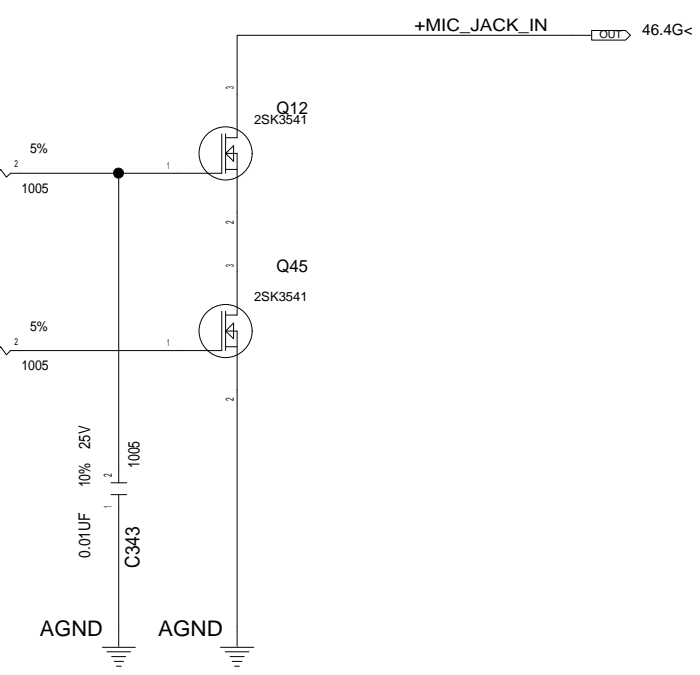
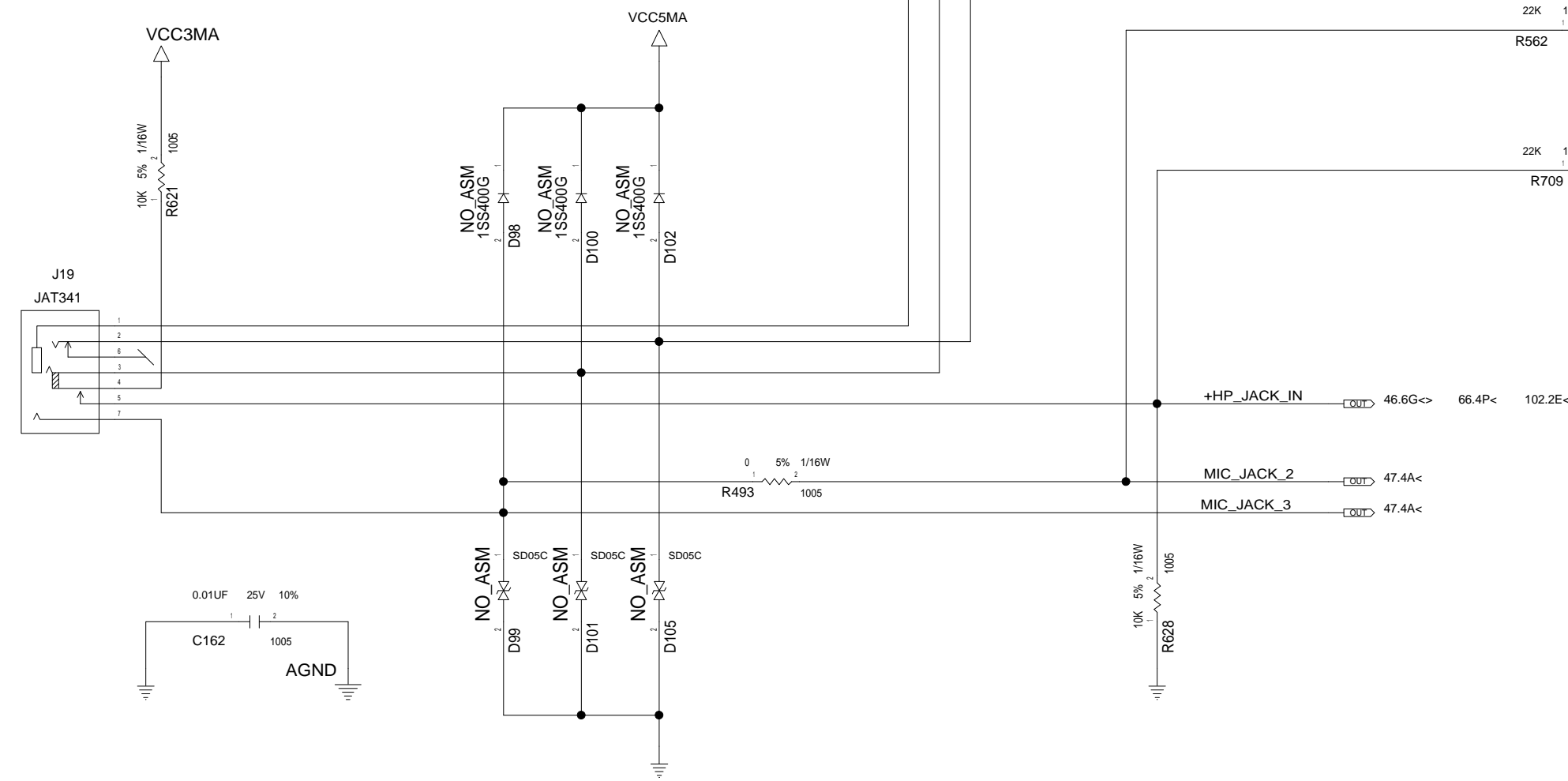
A B C D E F G H J K L M N P Q

NEAR HEADPHONE CONN

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			45 / 108



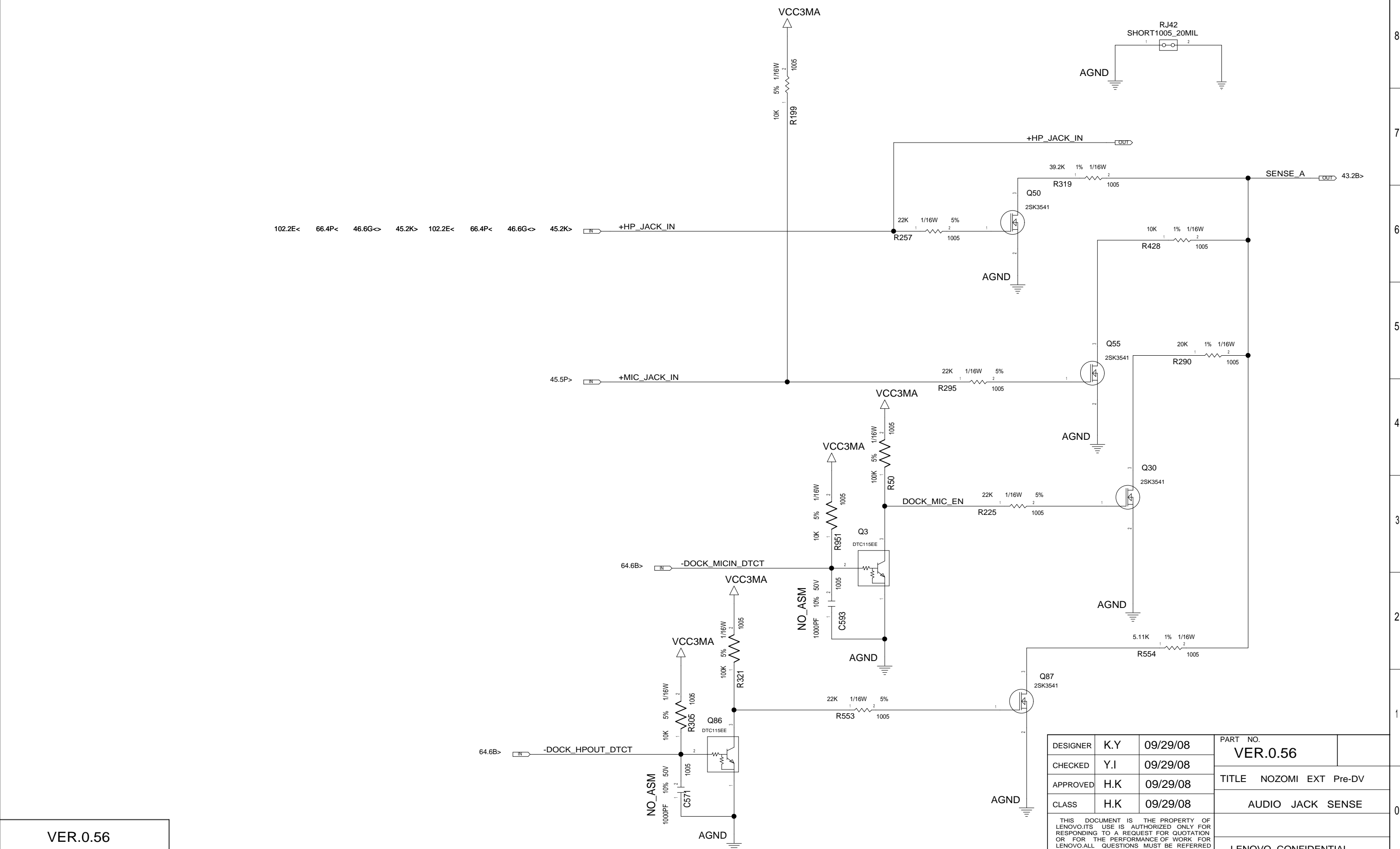
WIDE AND SHORT PATTERN



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.
CHECKED	Y.I	09/29/08	VER.0.56
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	AUDIO CONNECTOR
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			
LENOVO CONFIDENTIAL			

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			46 / 108

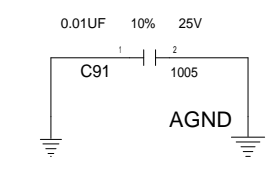
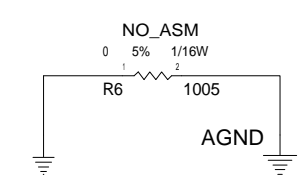
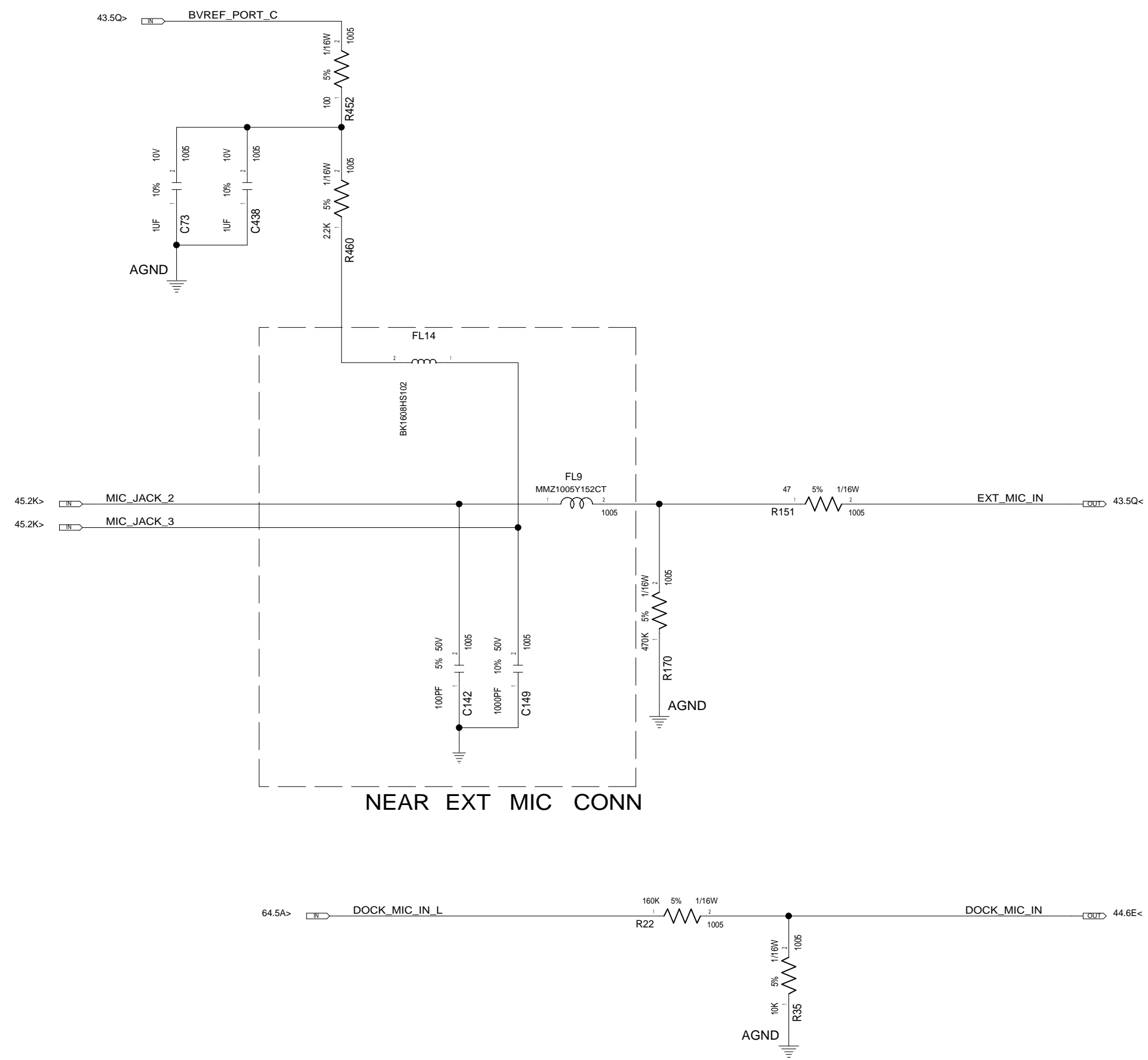


VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	AUDIO JACK SENSE	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

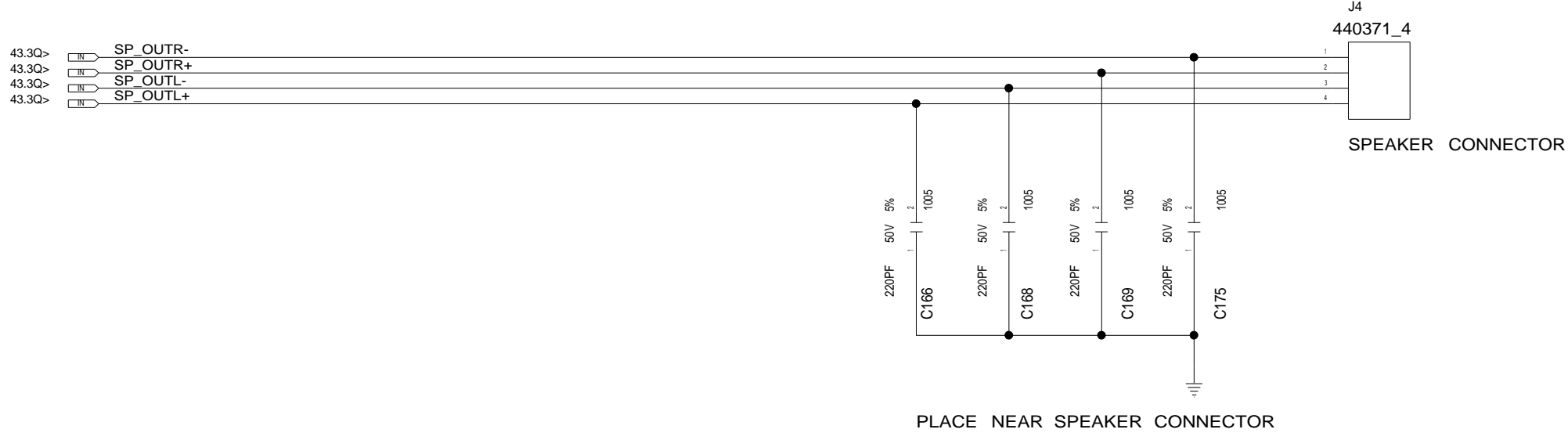
	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				47 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	AUDIO EXT MIC I/F	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>				

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			48 / 108

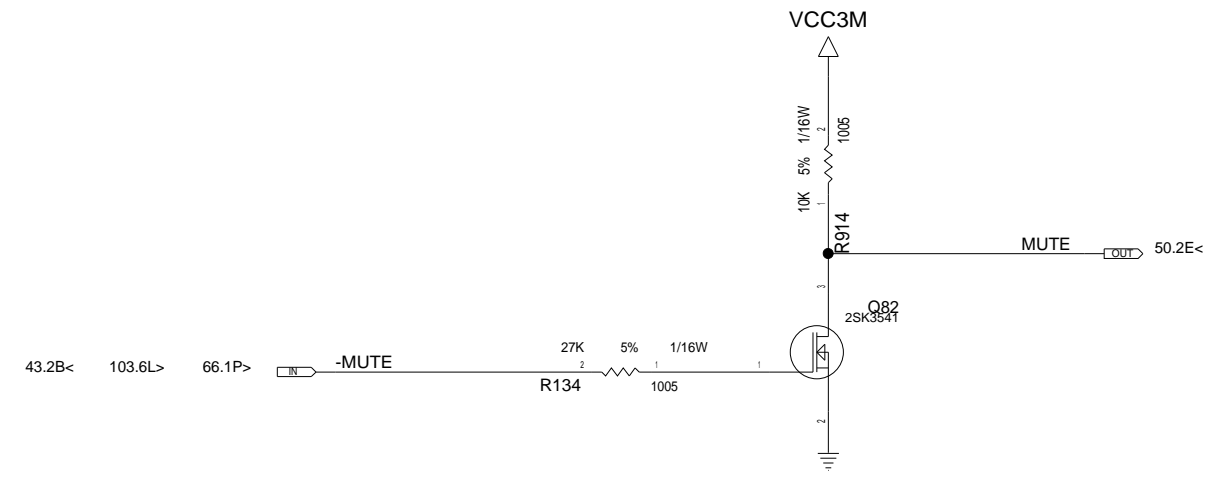


VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	AUDIO SPEAKER	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>				

A B C D E F G H J K L M N P Q

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				49 / 108

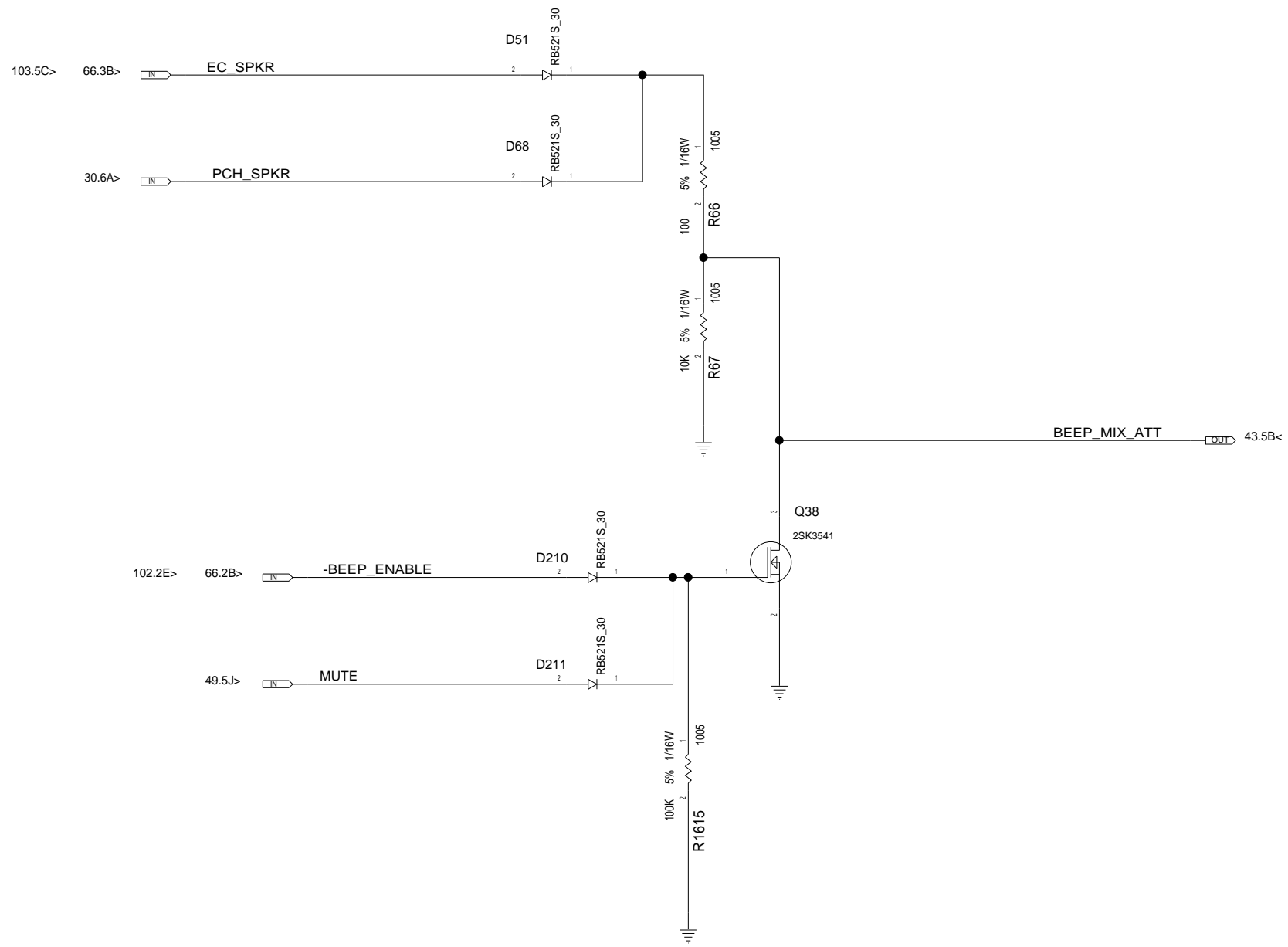


VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	AUDIO HDP AMP	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

A B C D E F G H J K L M N P Q

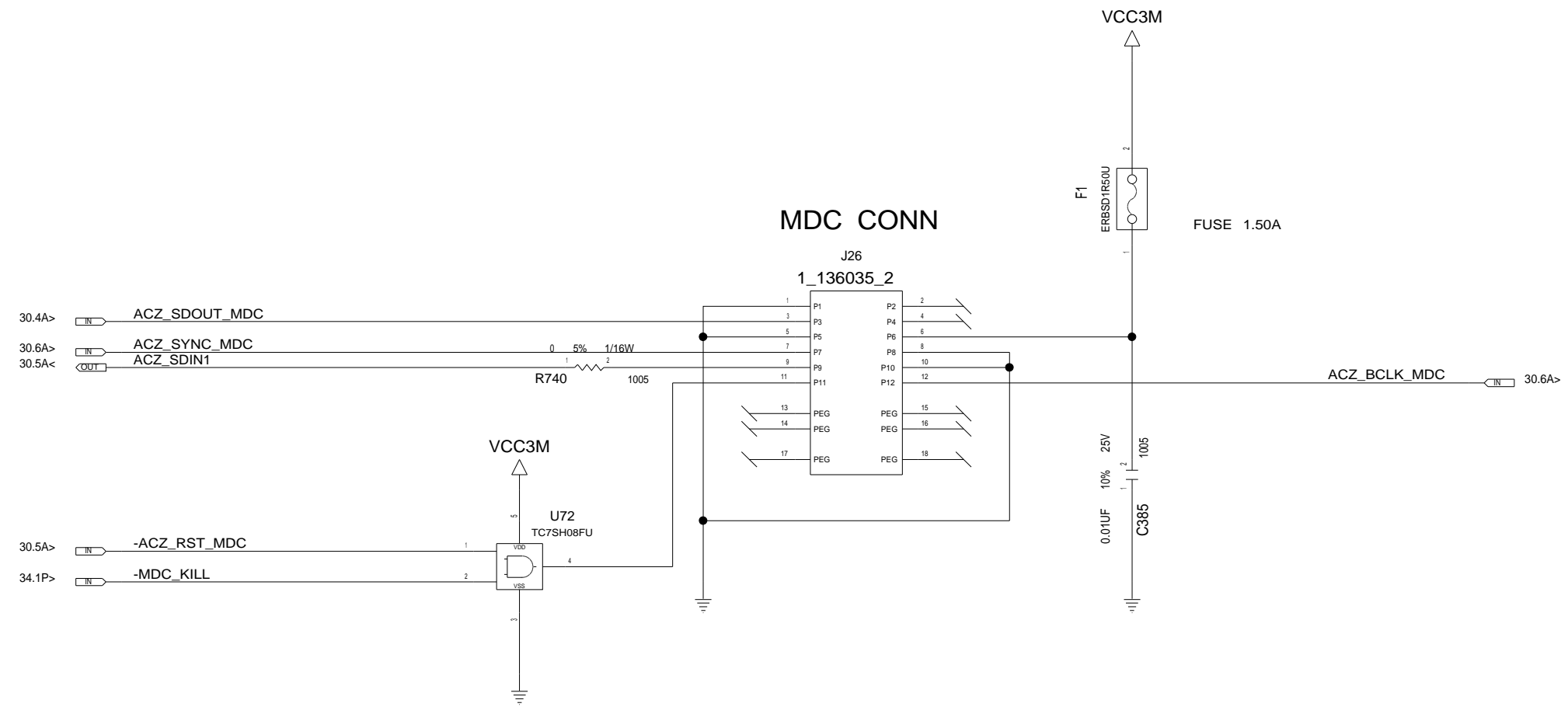
	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				50 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	AUDIO BEEP	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

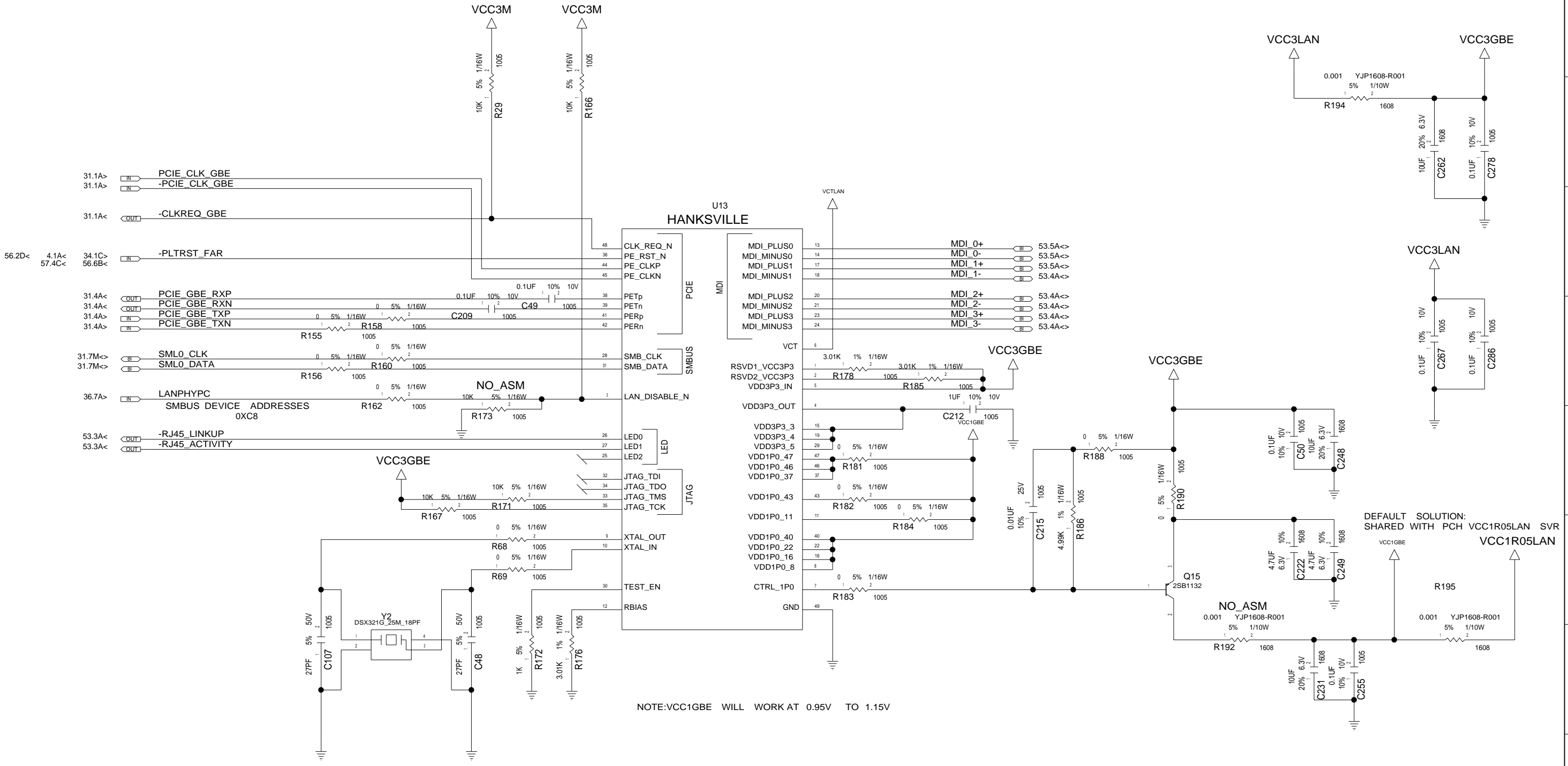
DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			51 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	MDC CONNECTOR	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>				

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			52 / 108

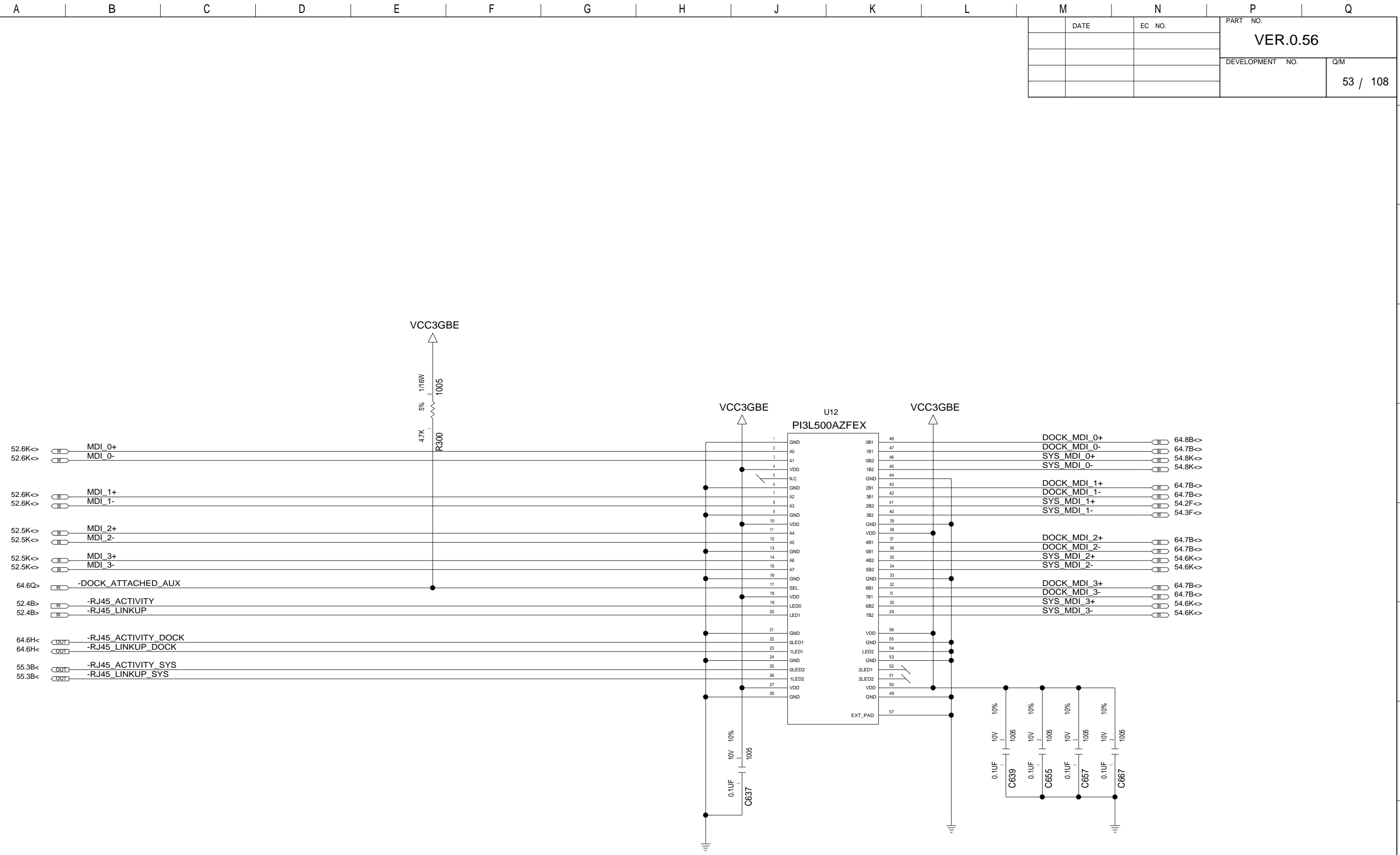


NOTE:VCC1GBE WILL WORK AT 0.95V TO 1.15V

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	GBE HANKSVILLE	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

DATE		EC NO.		PART NO.	
				VER.0.56	
DEVELOPMENT NO.				Q/M	
				53 / 108	

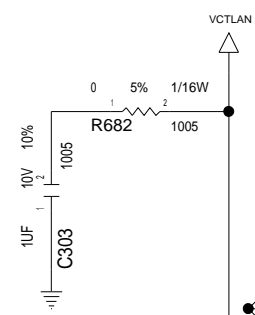


VER.0.56

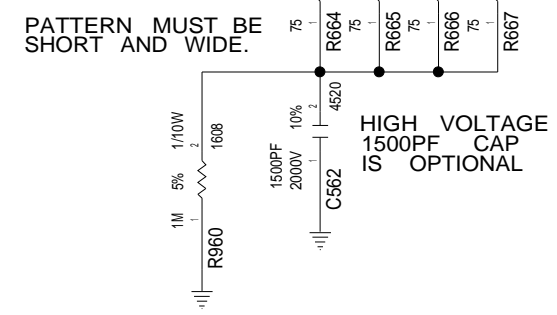
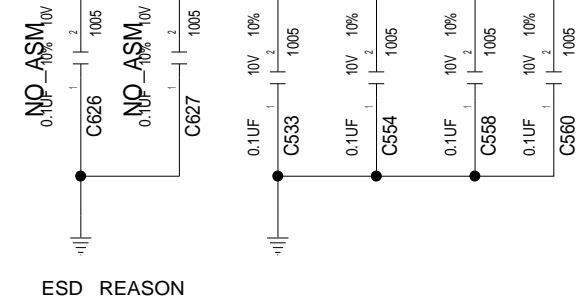
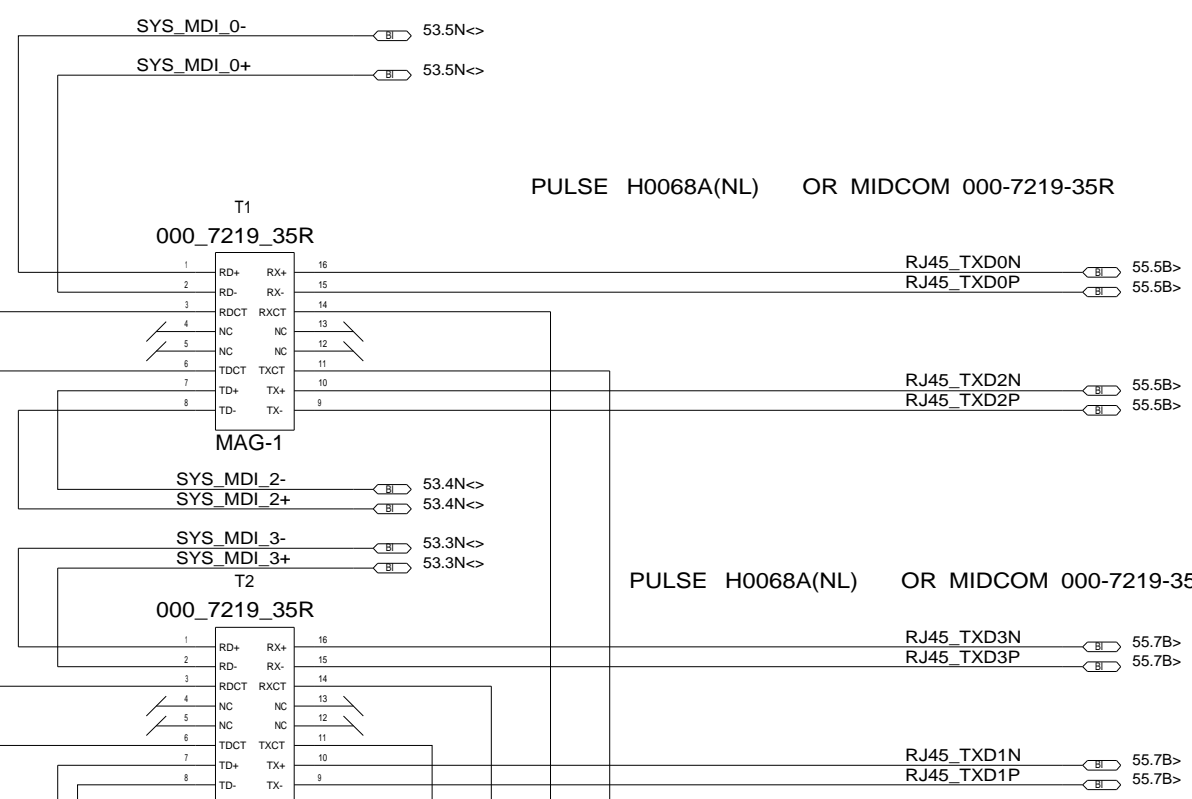
DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	GBE LAN SWITCH	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

DATE		EC NO.		PART NO.	
				VER.0.56	
DEVELOPMENT NO.				Q/M	
				54 / 108	

C303 AND 0 OHM RESISTOR SHOULD BE PLACED AS CLOSE TO MAGNETICS AS POSSIBLE.



THE WIDTH OF THESE TRACE SHOULD BE WIDER THAN 35MIL TO PREVENT VOLTAGE DROP.



PATTERN MUST BE SHORT AND WIDE.

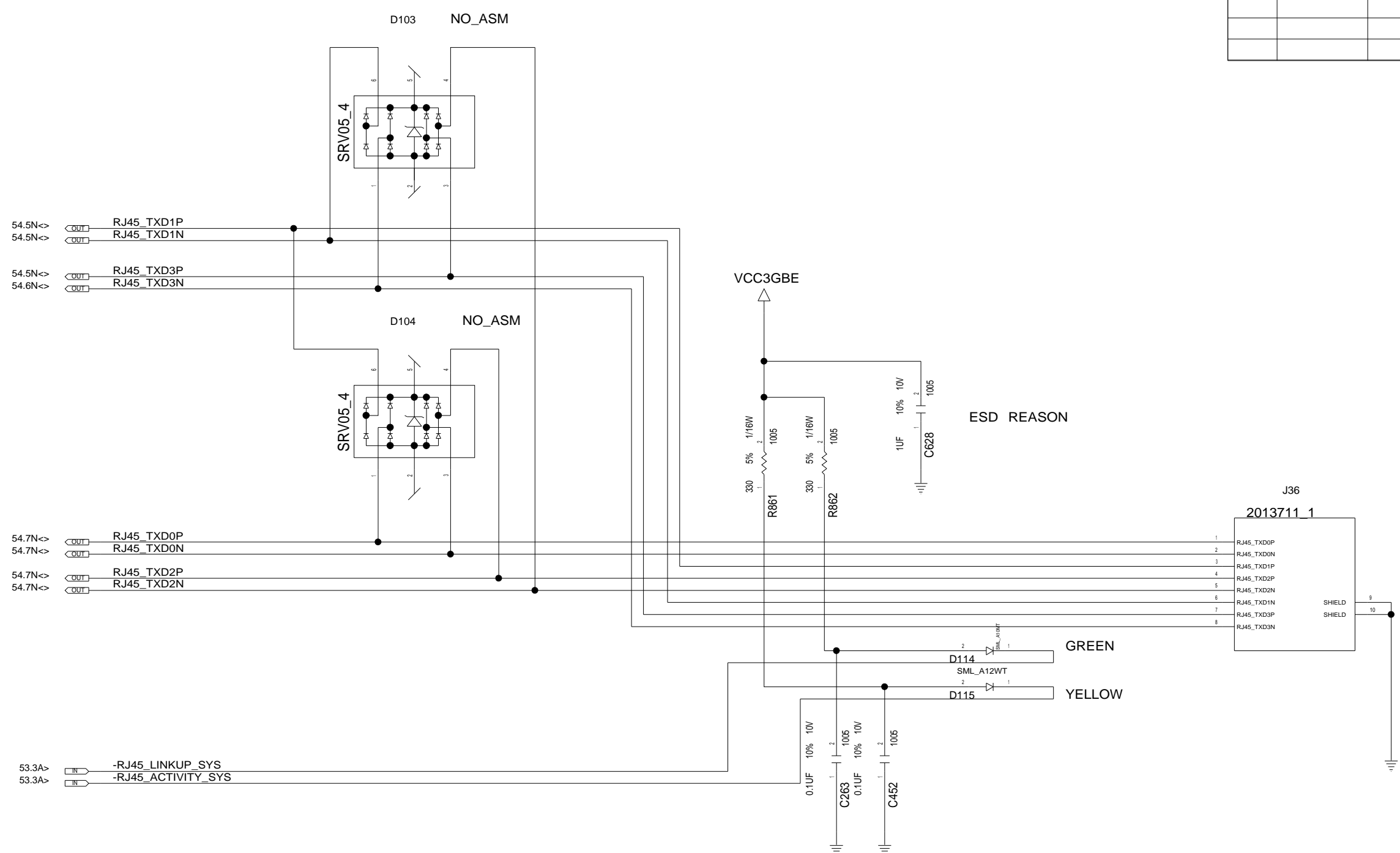
HIGH VOLTAGE 1500PF CAP IS OPTIONAL

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	GBE MAGNETICS	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				55 / 108

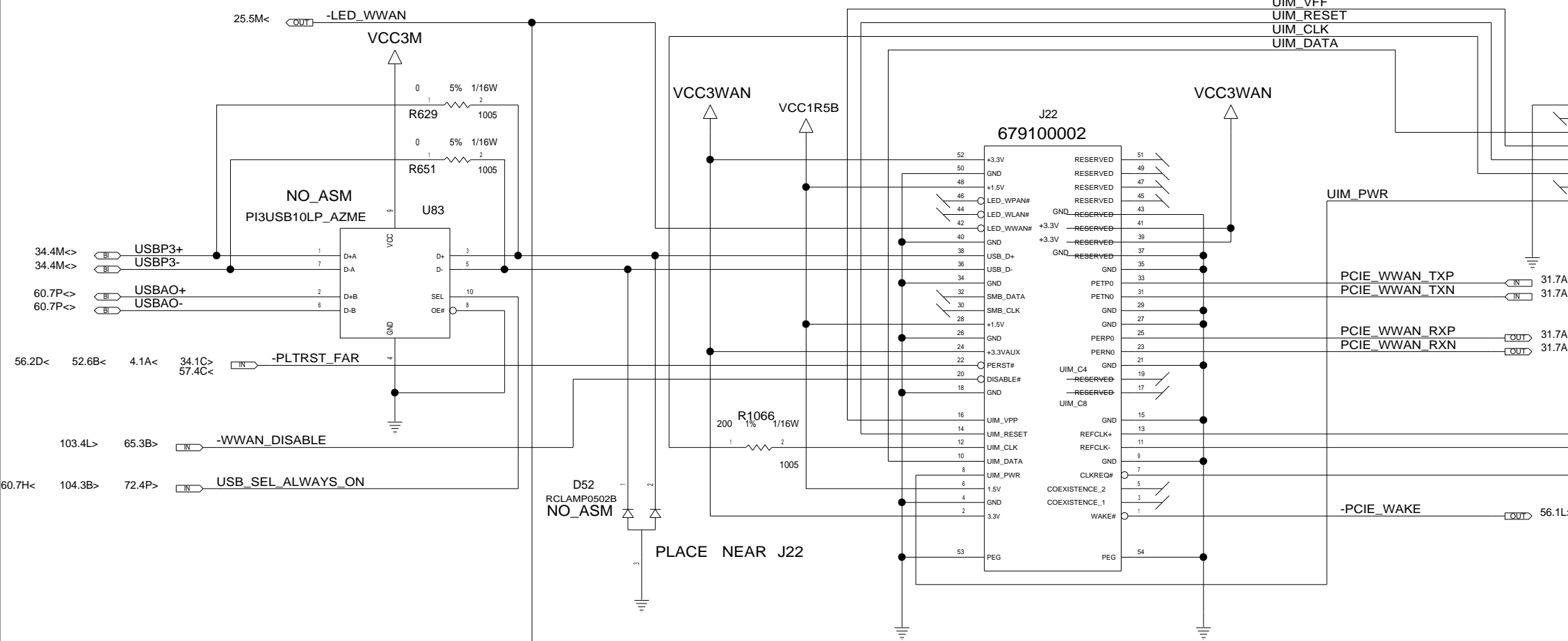


VER.0.56

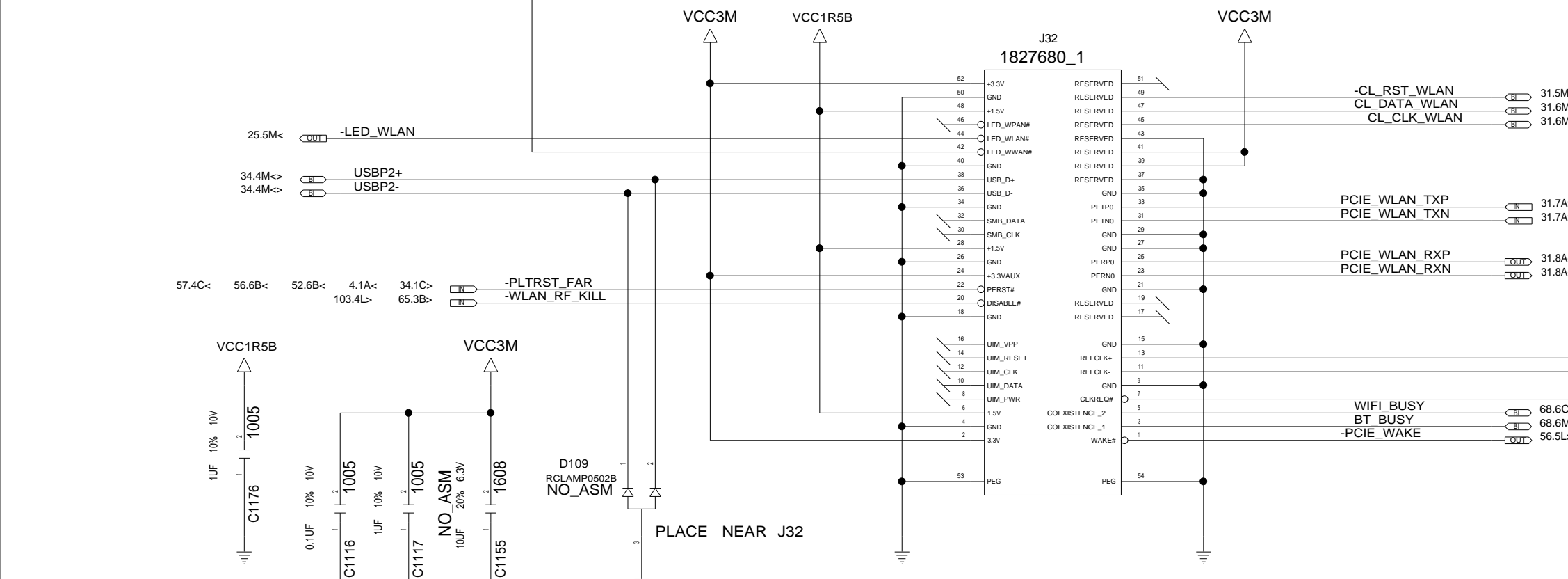
DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	RJ45 CONNECTOR	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

FULL MINI CARD FOR WWAN 4.1H CONNECTOR

DATE	EC NO.	PART NO.
		VER.0.56
DEVELOPMENT NO.	Q/M	56 / 108

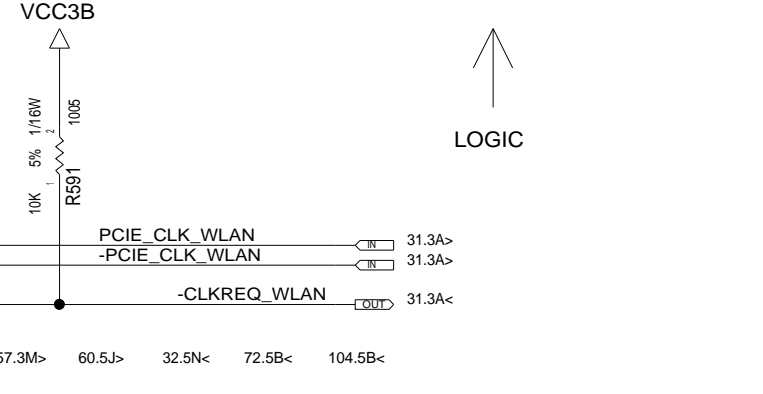


HALF MINI CARD FOR WLAN 7.0H CONNECTOR



TABLE

Component	WWAN ALWAYS ON	W/WWAN REG	W/WWAN LITE/BB/NO	W/O WWAN NO
J22		ASM	ASM	NO_ASM
J25		ASM	ASM	NO_ASM
C1118		ASM	ASM	NO_ASM
C1119		ASM	ASM	NO_ASM
R1066		ASM	ASM	NO_ASM
U83		ASM	NO_ASM	NO_ASM
R629		NO_ASM	ASM	NO_ASM
R651		NO_ASM	ASM	NO_ASM



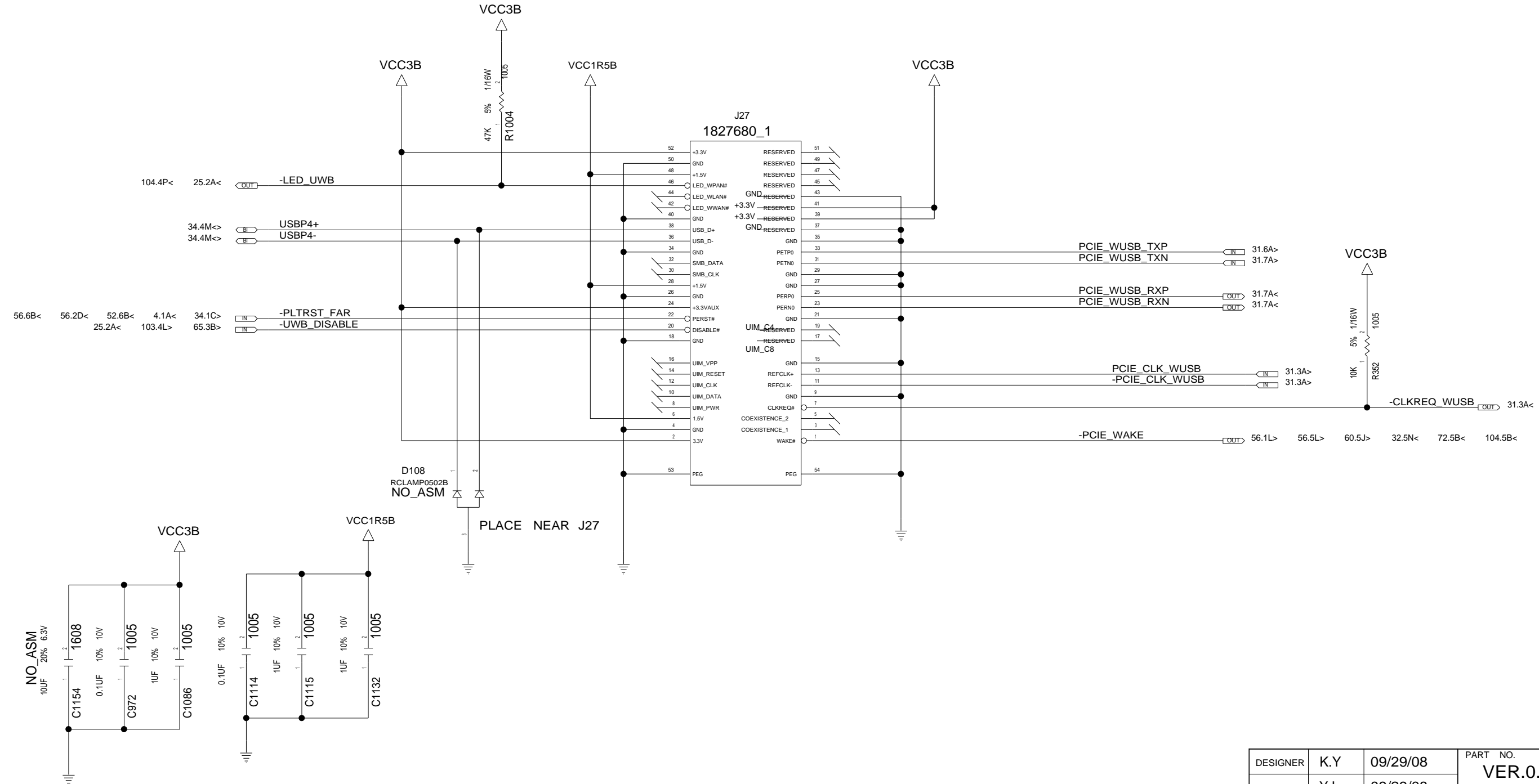
DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	PCIE MINI CARD SLOT(1/2)	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

VER.0.56

HALF MINI CARD FOR WUSB 7.0H CONNECTOR

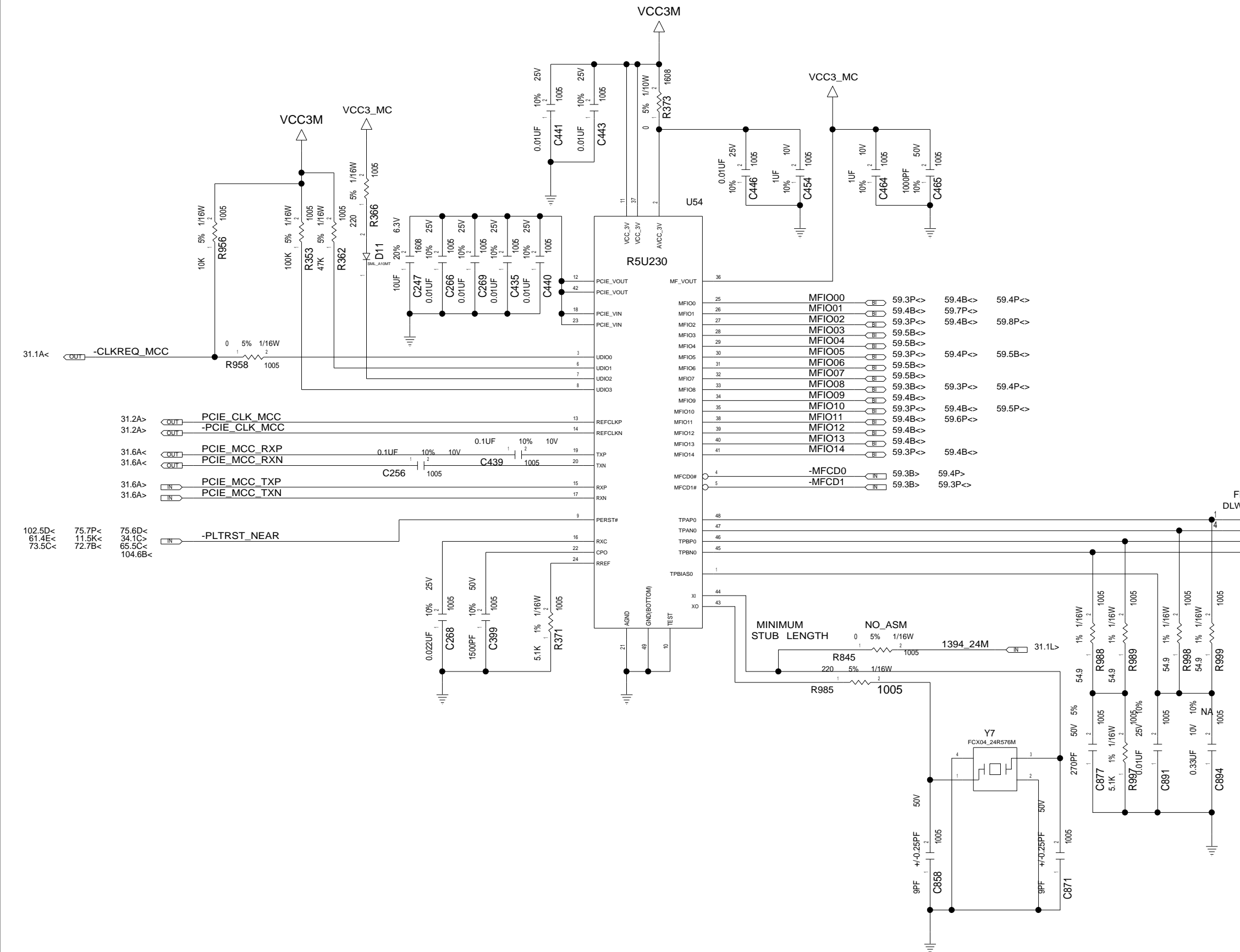
	DATE	EC NO.	PART NO. VER.0.56	
			DEVELOPMENT NO.	Q/M 57 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO. VER.0.56	
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV PCIE MINI CARD SLOT(2/2)	
APPROVED	H.K	09/29/08		
CLASS	H.K	09/29/08		
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			58 / 108



TABLE

MEDIA I/F	SD/MMC	MEMORYSTICK	XD
MFI00	SDWP#	MSBS	XD_D7
MFI01	SD_D1	MS_D1	XD_D6
MFI02	SD_D0	MS_D1	XD_D5
MFI03	(SD_D7)	(MS_D5)	XD_D4
MFI04	(SD_D6)	(MS_D5)	XD_D3
MFI05	SD_CLK	MS_D0	XD_D2
MFI06			XD_D1
MFI07	(SD_D5)	(MS_D4)	XD_D0
MFI08	SD_CDM	MS_D2	XD_WP#
MFI09	(SD_D4)	(MS_D6)	XD_WE#
MFI10	SD_D3	MS_D3	XD_ALE
MFI11	SD_D2		XD_CLE
MFI12			XD_CE#
MFI13		(MS_D7)	XD_RE#
MFI14		MS_CLK	XD_R/B#
MFCD0#	SDCD#		XDCD0#
MFCD1#		MSINS#	XDCD1#

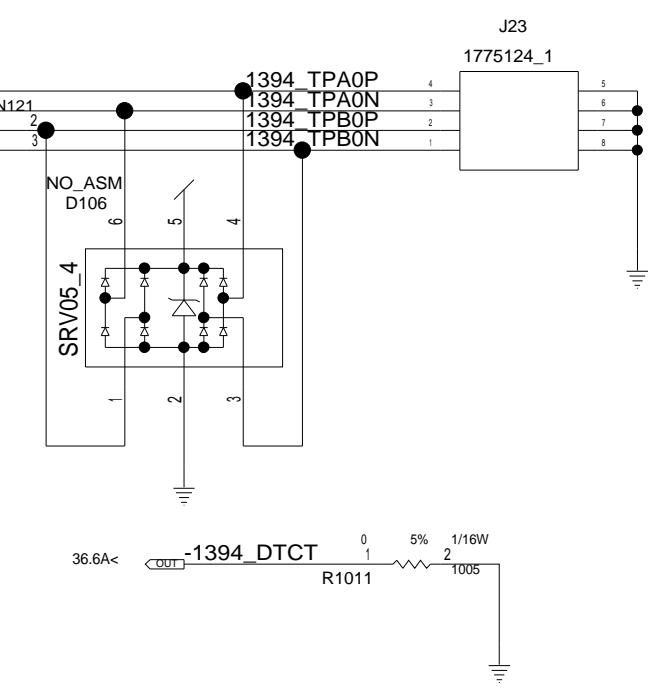
31.1A< -CLKREQ_MCC

31.2A> PCIE_CLK_MCC
31.2A> -PCIE_CLK_MCC

31.6A< PCIE_MCC_RXP
31.6A< PCIE_MCC_RXN

31.6A> PCIE_MCC_TXP
31.6A> PCIE_MCC_TXN

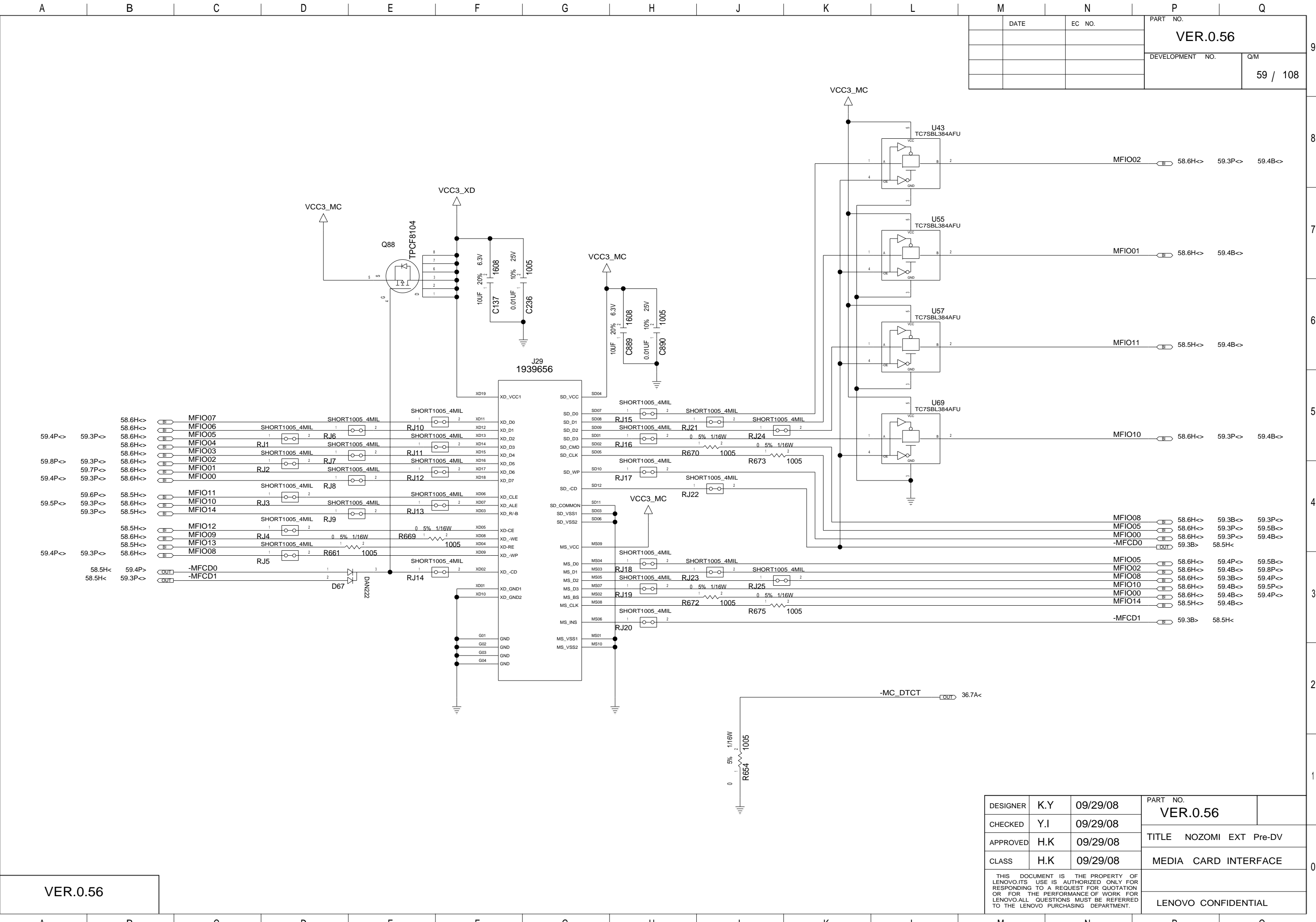
102.5D< 75.7P< 75.6D<
61.4E< 11.5K< 34.1C<
73.5C< 72.7B< 65.5C<
104.6B<



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	1394/MEDIA CARD CONTROLLER	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

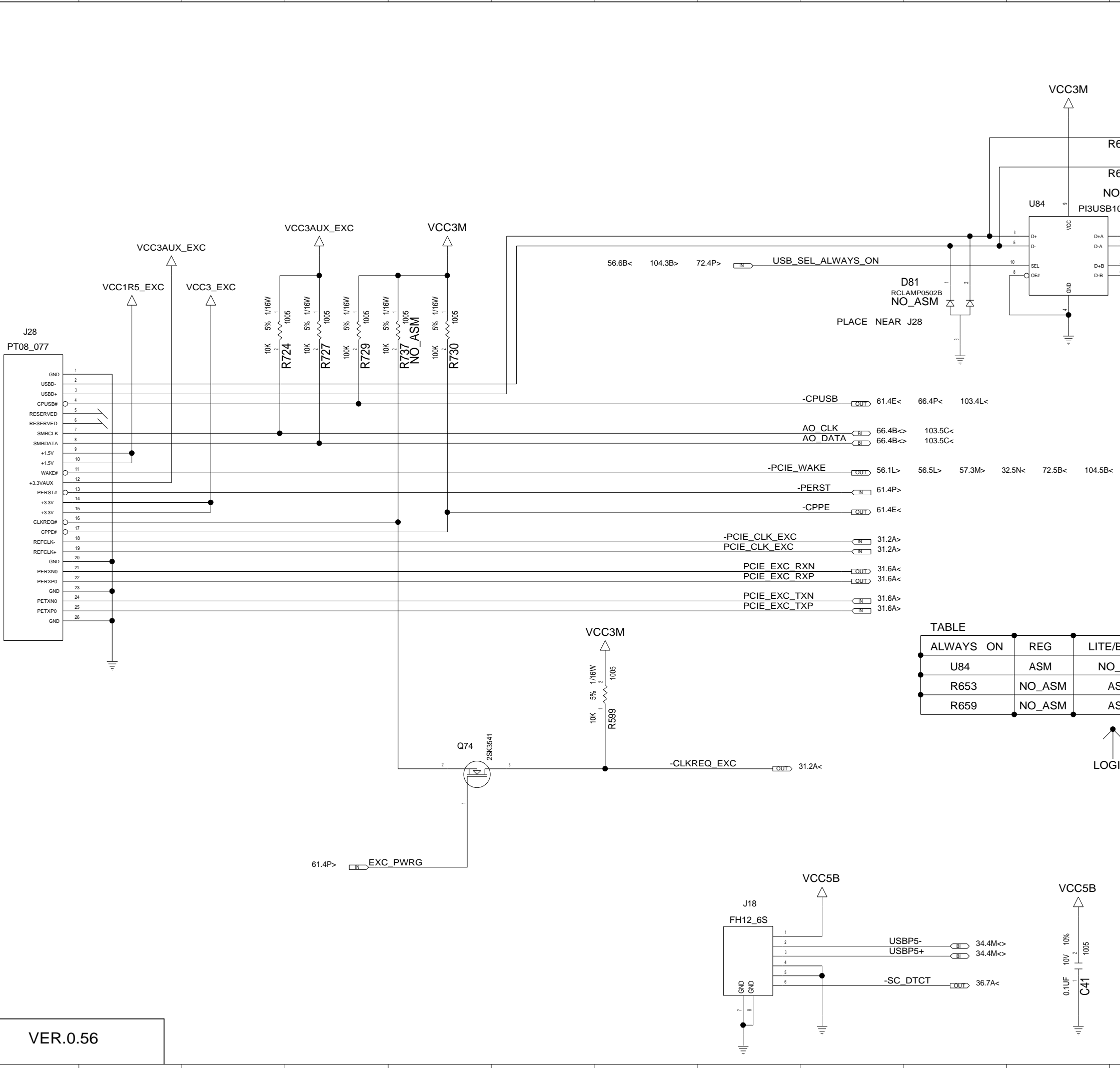
DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			59 / 108



VER.0.56

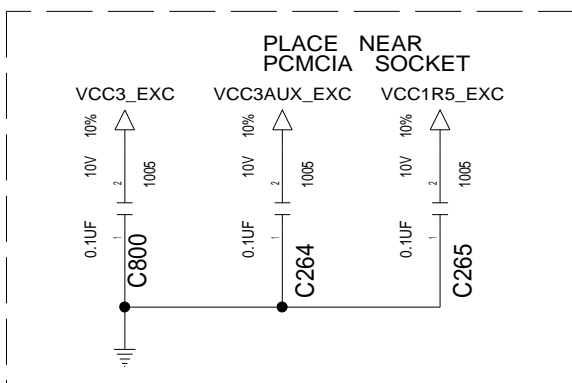
DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	MEDIA CARD INTERFACE	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

DATE	EC NO.	PART NO. VER.0.56	
		DEVELOPMENT NO.	Q/M 60 / 108



TABLE

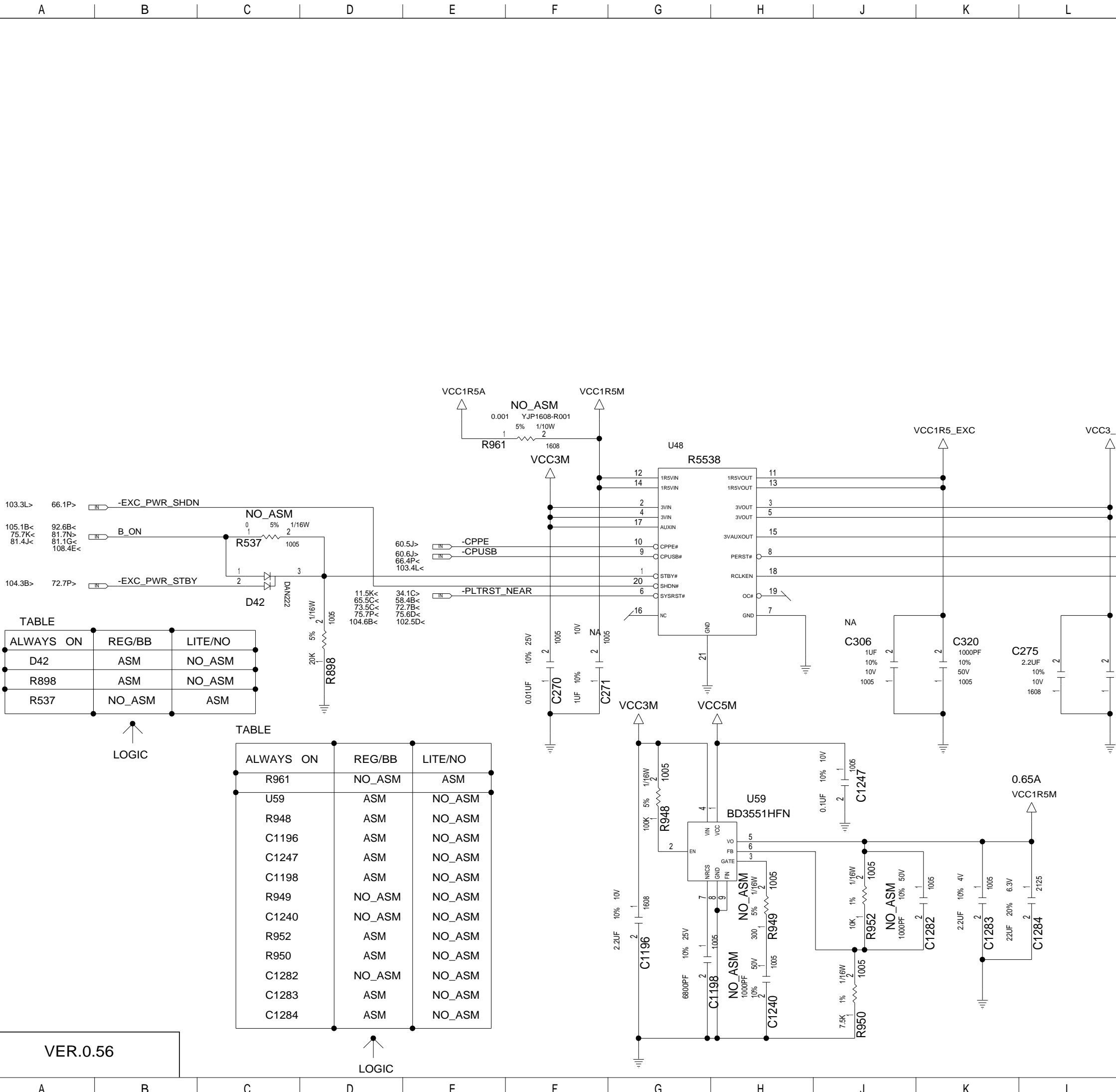
COMPONENT	ALWAYS ON	REG	LITE/BB/NO
U84	U84	ASM	NO_ASM
R653	R653	NO_ASM	ASM
R659	R659	NO_ASM	ASM



DESIGNER	K.Y	09/29/08	PART NO. VER.0.56	
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	EXPRESS CARD/ SMART CARD I/F	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			61 / 108



TABLE

ALWAYS ON	REG/BB	LITE/NO
D42	ASM	NO_ASM
R898	ASM	NO_ASM
R537	NO_ASM	ASM

TABLE

ALWAYS ON	REG/BB	LITE/NO
R961	NO_ASM	ASM
U59	ASM	NO_ASM
R948	ASM	NO_ASM
C1196	ASM	NO_ASM
C1247	ASM	NO_ASM
C1198	ASM	NO_ASM
R949	NO_ASM	NO_ASM
C1240	NO_ASM	NO_ASM
R952	ASM	NO_ASM
R950	ASM	NO_ASM
C1282	NO_ASM	NO_ASM
C1283	ASM	NO_ASM
C1284	ASM	NO_ASM

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	SLOT POWER CONTROL	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

A B C D E F G H J K L M N P Q

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				62 / 108

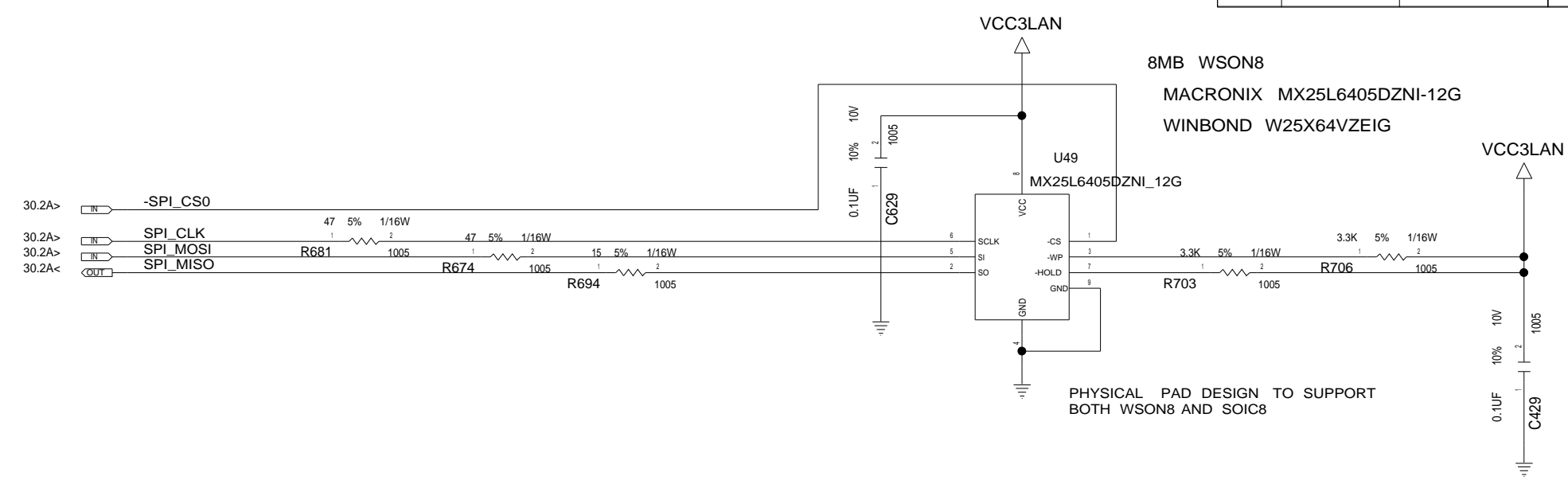
BLANK

A B C D E F G H J K L M N P Q

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	BLANK	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>			LENOVO CONFIDENTIAL	

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				63 / 108



PHYSICAL PAD DESIGN TO SUPPORT BOTH WSON8 AND SOIC8

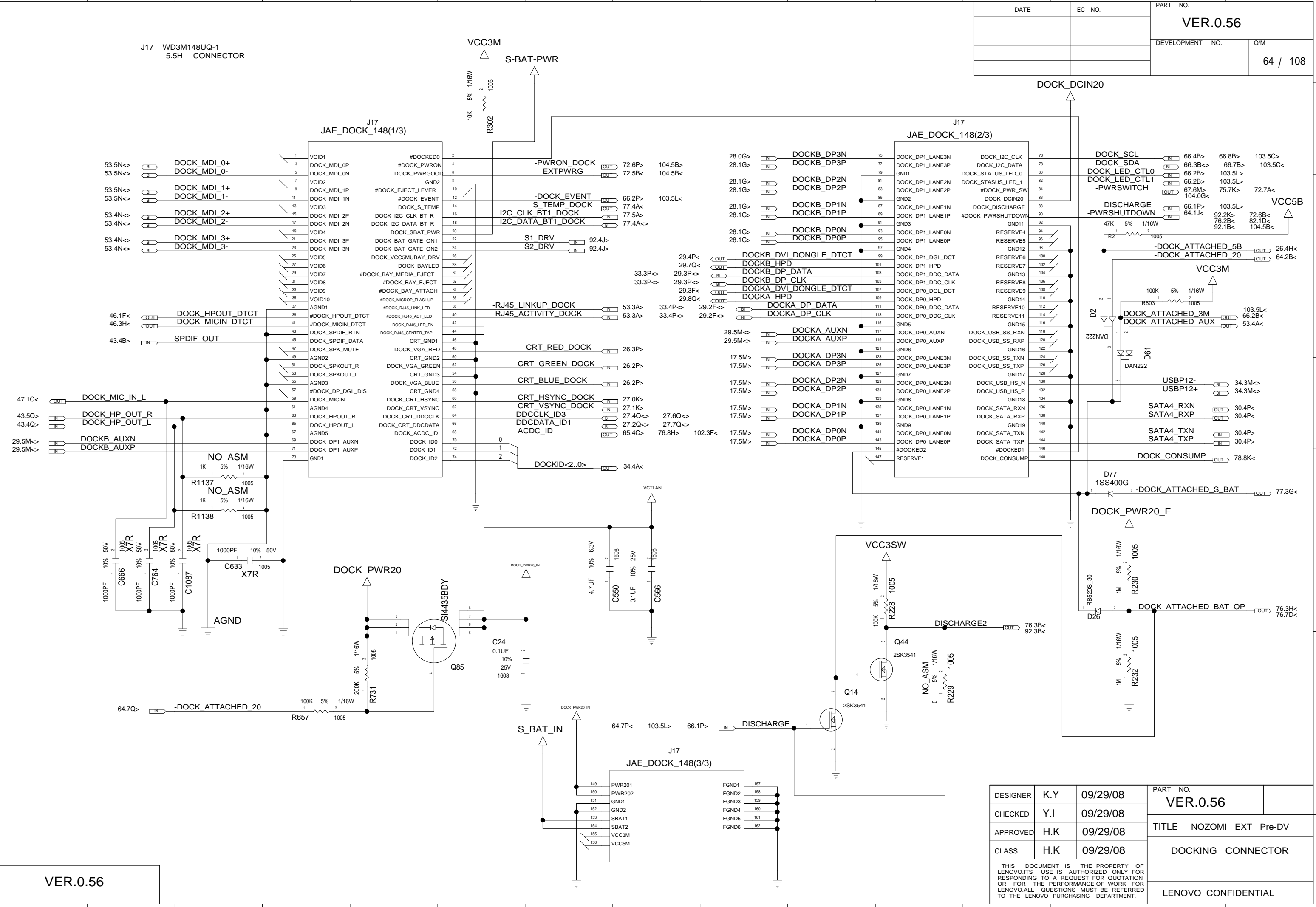
TABLE

8MB WSON8 PIN	SIGNAL	8MB SOP16 PIN
1	-CS	7
2	SO	8
3	-WP	9
4	GND	10
5	SI	15
6	SCLK	16
7	-HOLD	1
8	VCC	2

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	SPI FLASH	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>				

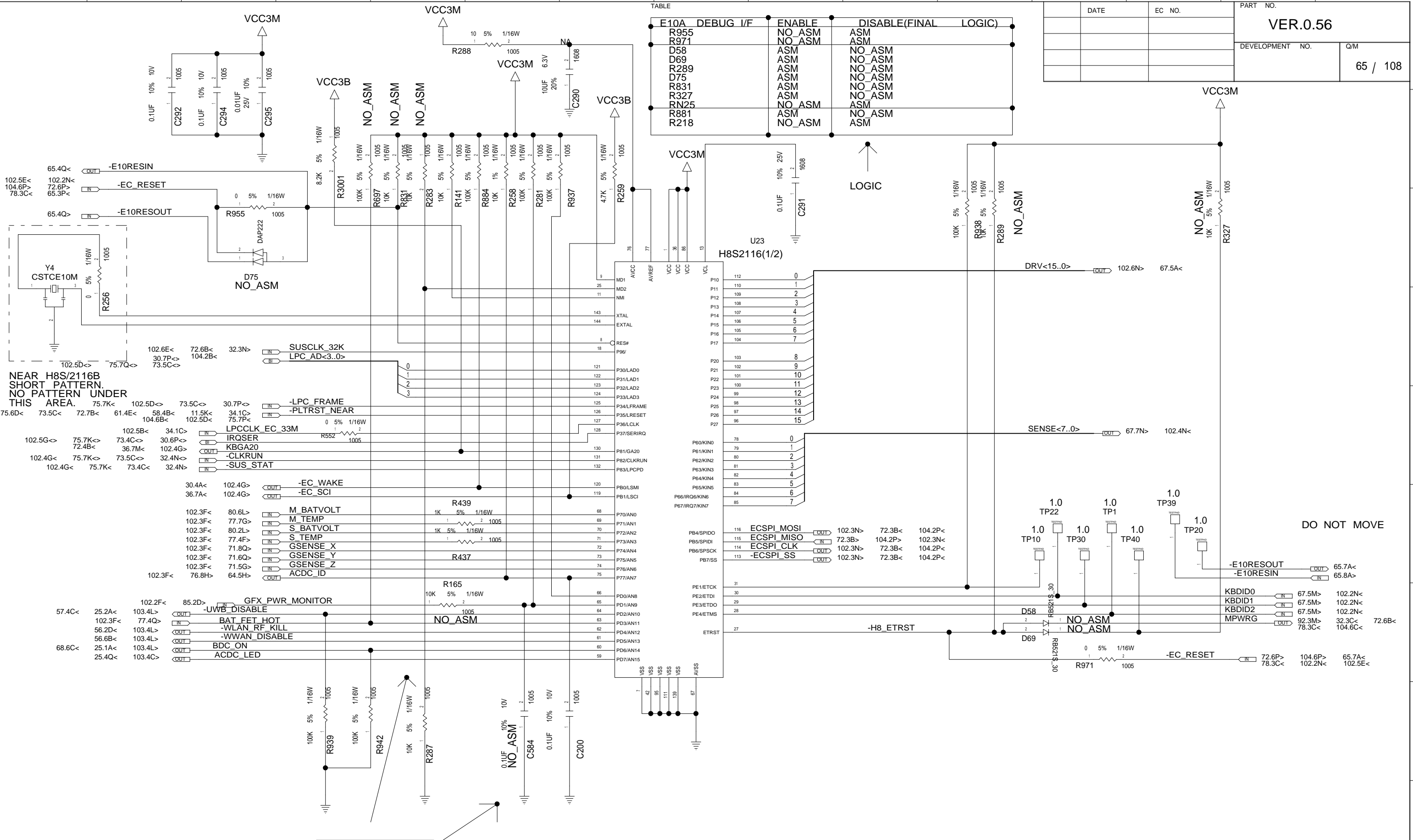
DATE	EC NO.	PART NO.
		VER.0.56
		DEVELOPMENT NO.
		Q/M
		64 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.
CHECKED	Y.I	09/29/08	VER.0.56
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	DOCKING CONNECTOR
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL

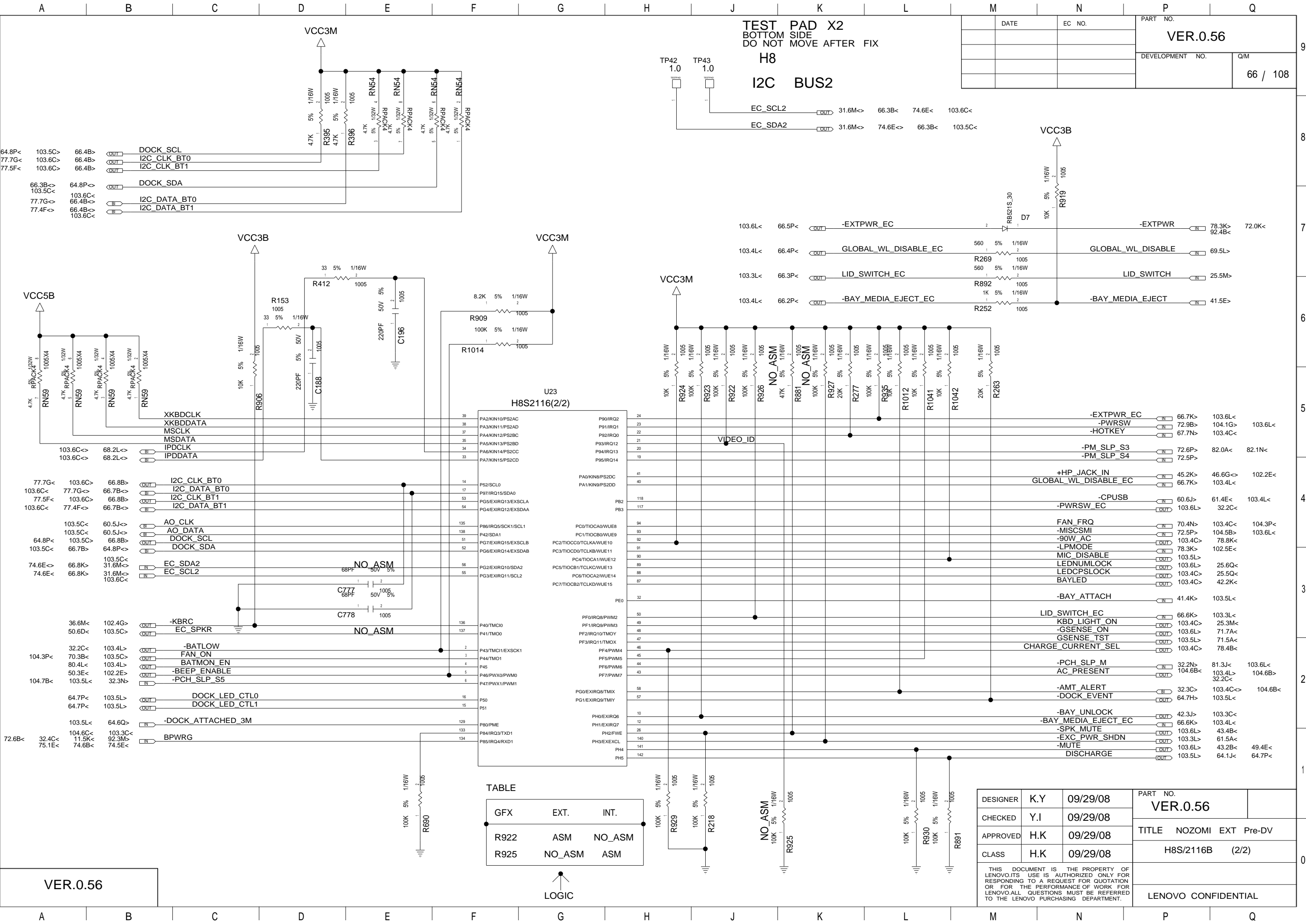
DATE		EC NO.		PART NO.	
				VER.0.56	
DEVELOPMENT NO.			Q/M		
			65 / 108		



NEAR H8S/2116B SHORT PATTERN. NO PATTERN UNDER THIS AREA.

PLACE NEAR H8

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	H8S/2116B (1/2)	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	



TEST PAD X2
 BOTTOM SIDE
 DO NOT MOVE AFTER FIX
 H8
 I2C BUS2

DATE	EC NO.	PART NO.	
		VER.0.56	
DEVELOPMENT NO.		Q/M	
		66 / 108	

TABLE

	GFX	EXT.	INT.
R922		ASM	NO_ASM
R925		NO_ASM	ASM

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	H8S/2116B (2/2)	

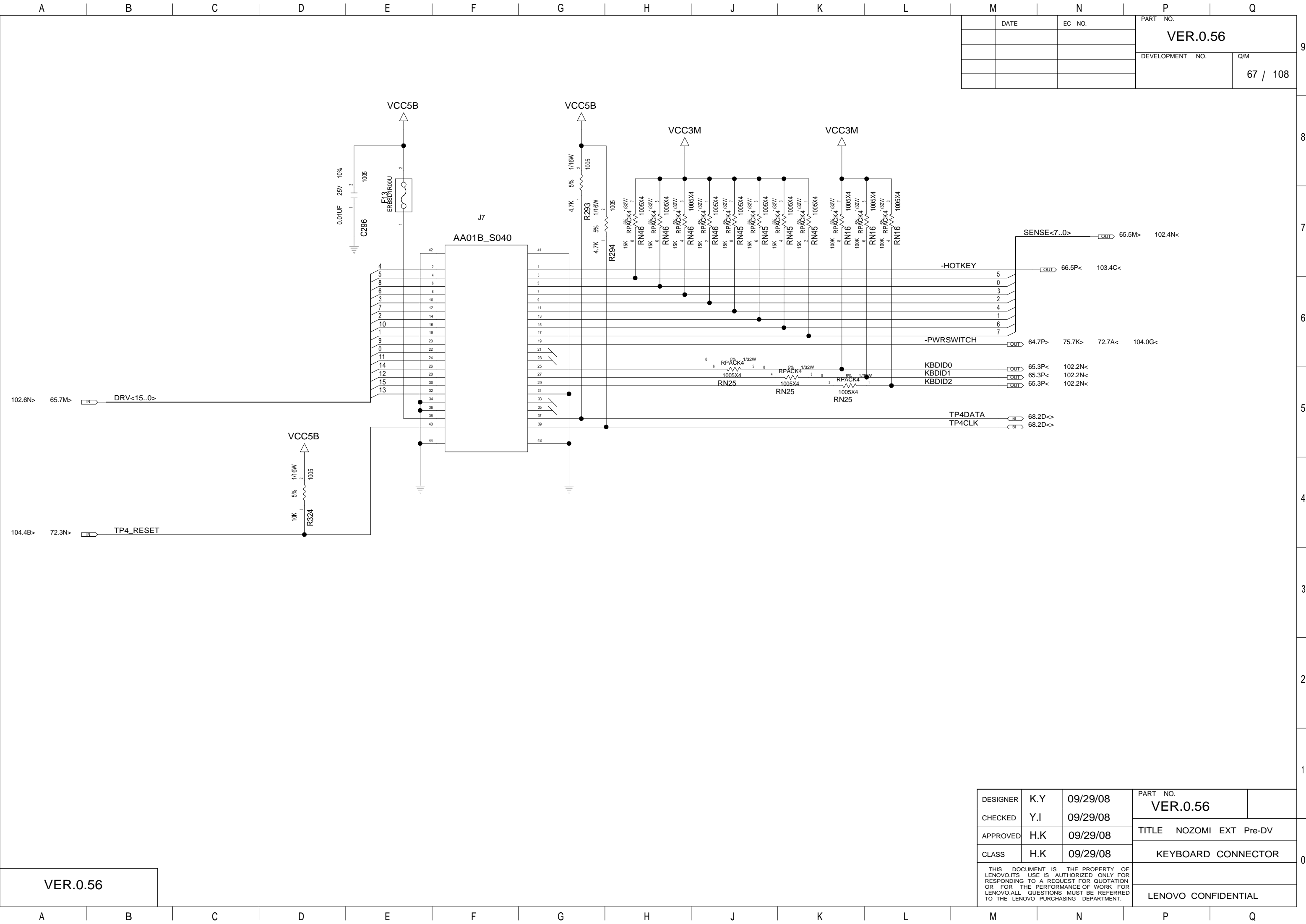
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

LENOVO CONFIDENTIAL

VER.0.56

LOGIC

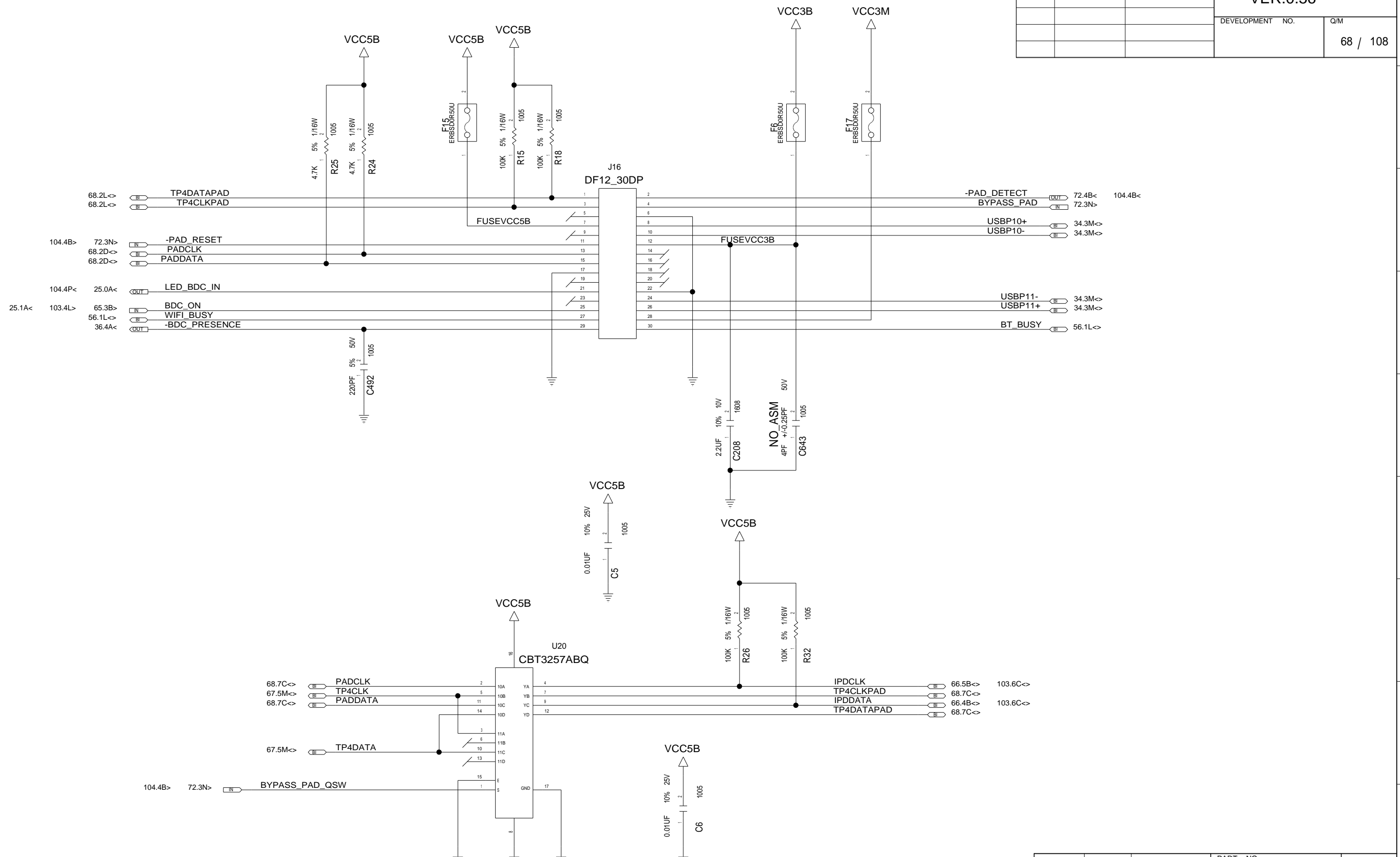
DATE		EC NO.		PART NO.	
				VER.0.56	
DEVELOPMENT NO.				Q/M	
				67 / 108	



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08		
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	KEYBOARD CONNECTOR	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			68 / 108

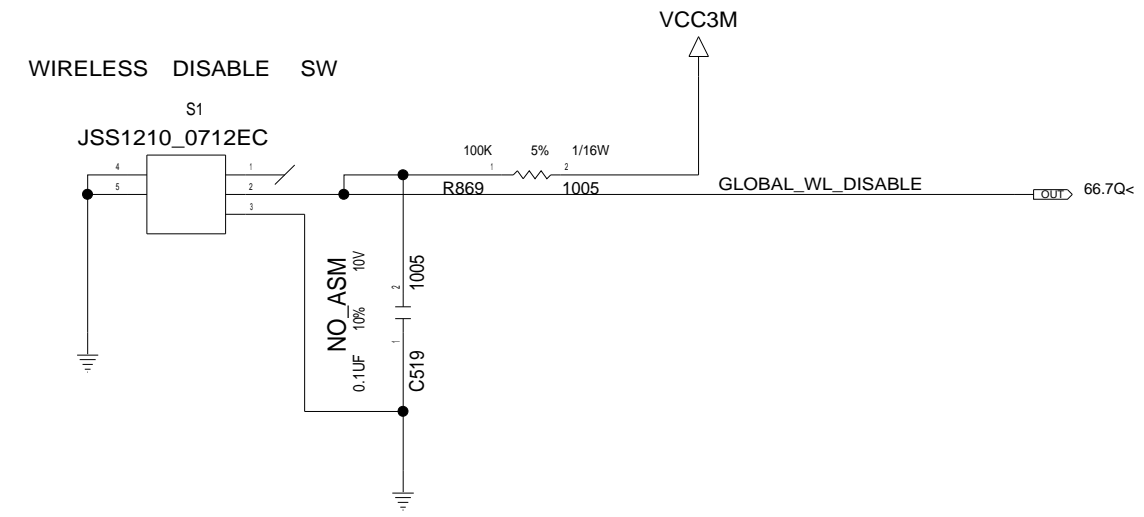


VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	TOUCH PAD CONNECTOR	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

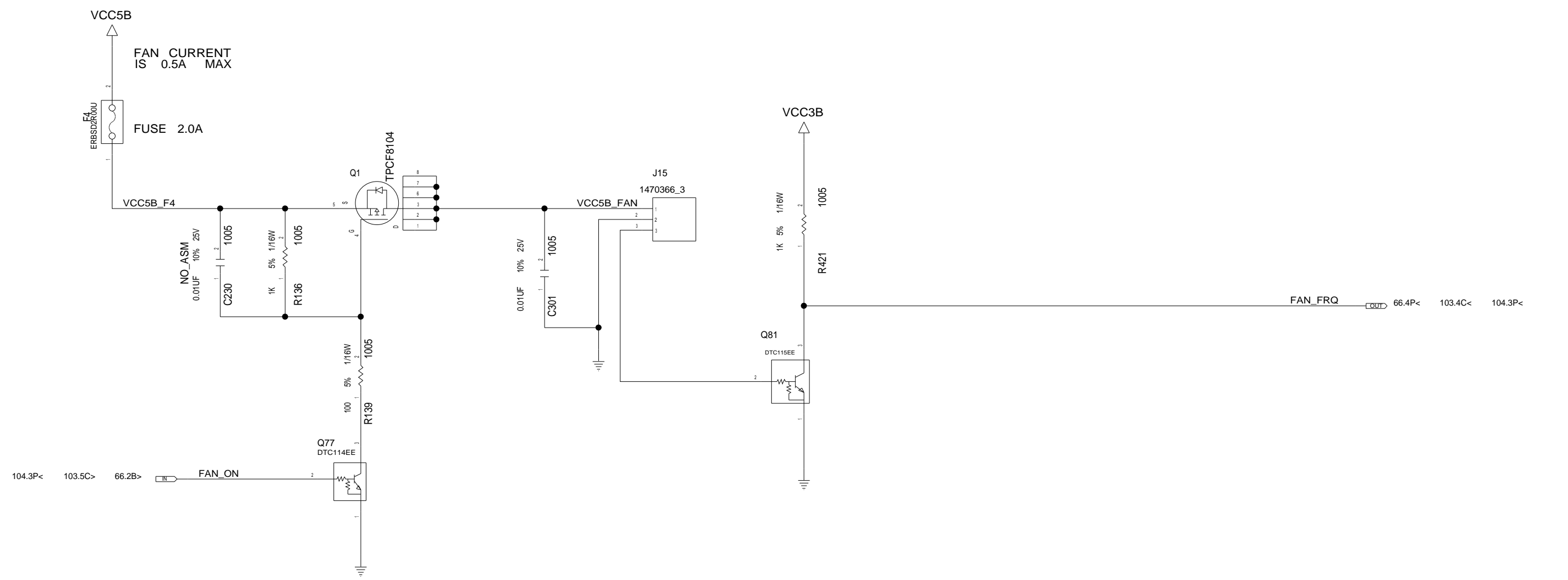
	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				69 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	WIRELESS DISABLE SW	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>			LENOVO CONFIDENTIAL	

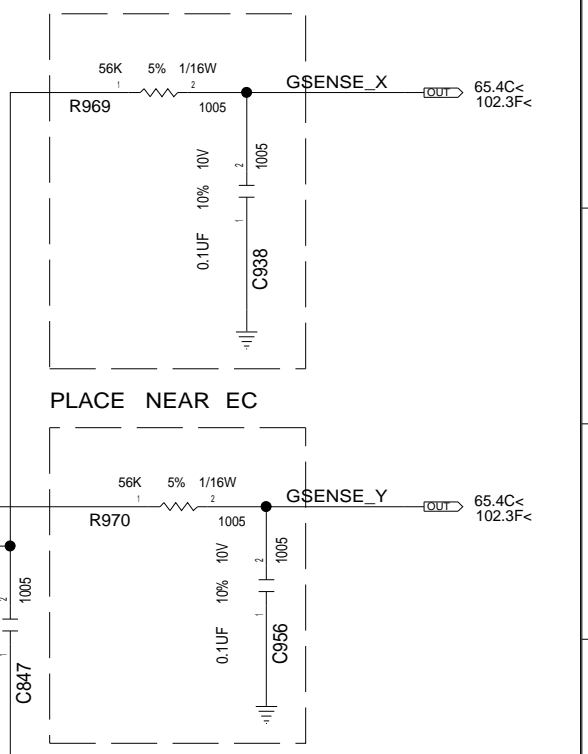
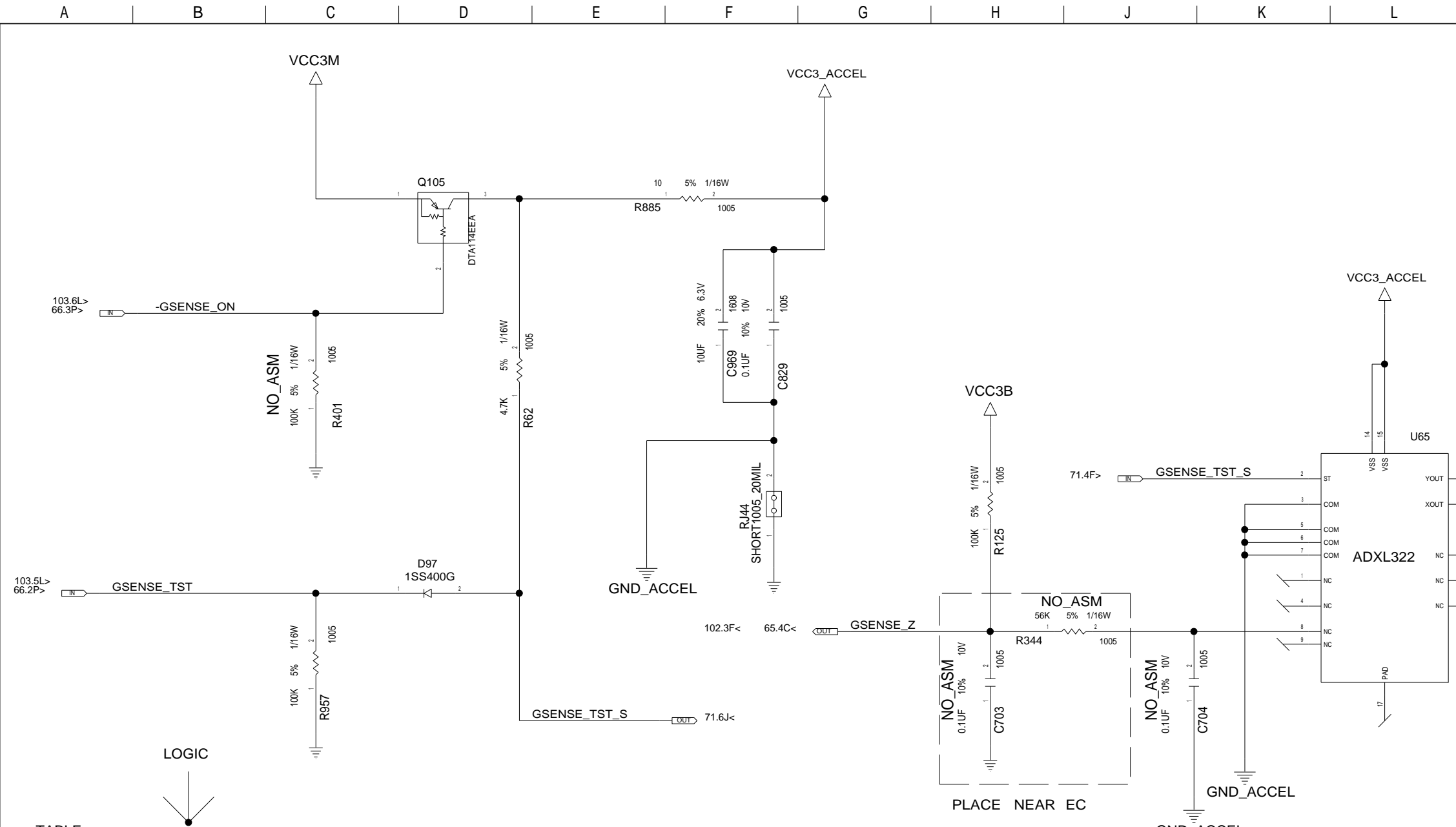
	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				70 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	FAN CONNECTOR	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

DATE	EC NO.	PART NO. VER.0.56	
		DEVELOPMENT NO.	Q/M 71 / 108



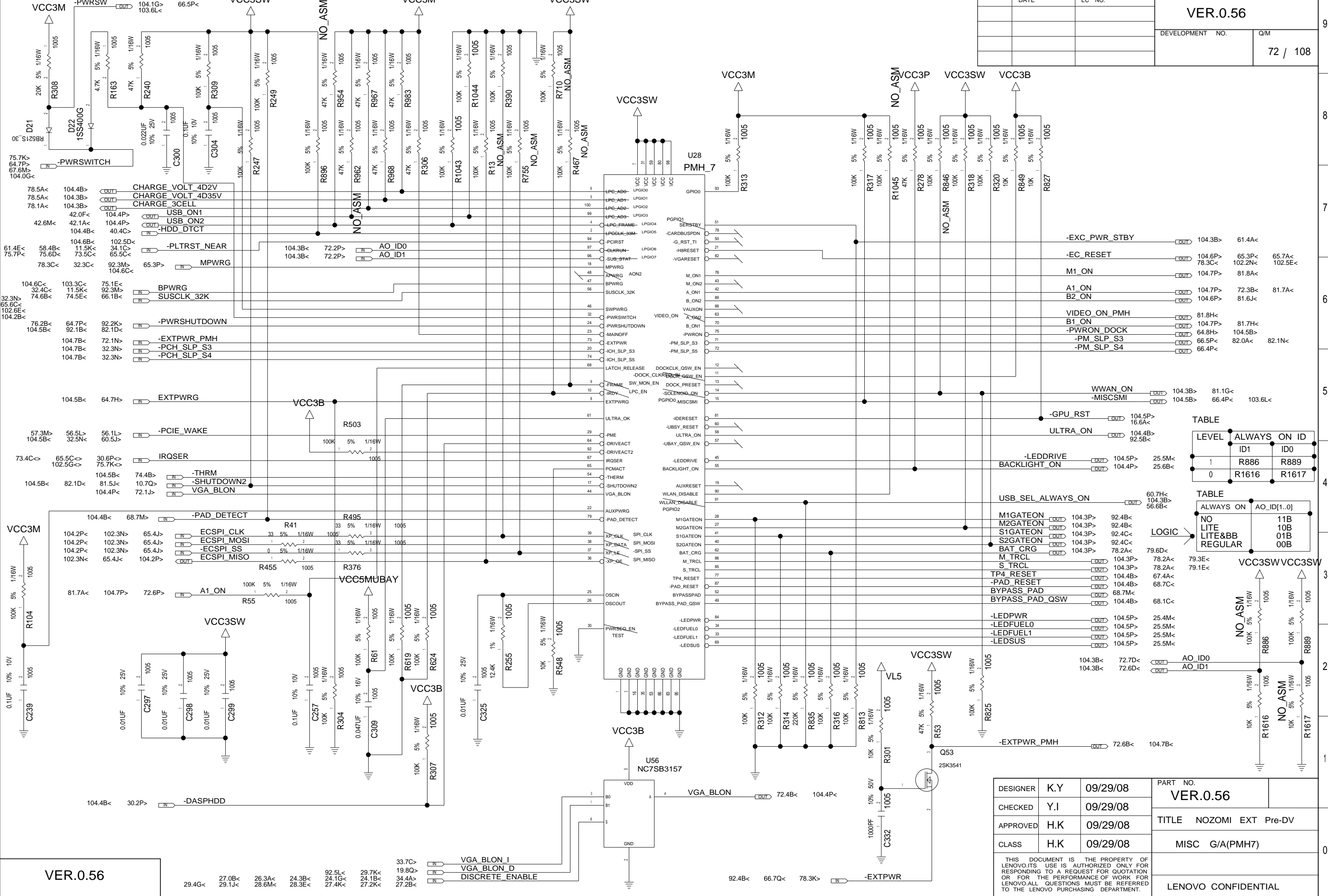
LOGIC

TABLE

Component	ADXL322/LIS244AL LIS34AL	NO ACC.
R401	NO_ASM	ASM
R957	ASM	ASM
U65	ASM	NO_ASM
Q105	ASM	NO-ASM
D97	ASM	NO-ASM
R62	ASM	NO-ASM
R885	10-OHM	NO-ASM
C829	ASM	NO-ASM
C969	ASM	NO-ASM
C830	ASM	NO-ASM
C847	ASM	NO-ASM
R969	56K	NO-ASM
C938	ASM	NO-ASM
R970	56K	NO-ASM
C956	ASM	NO-ASM
C704	NO-ASM	NO-ASM
R344	NO-ASM	NO-ASM
C703	NO-ASM	NO-ASM
R125	ASM	ASM

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO. VER.0.56
CHECKED	Y.I	09/29/08	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	G-SENSOR
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL



TABLE

LEVEL	ALWAYS ON ID1	ID0
1	R886	R889
0	R1616	R1617

TABLE

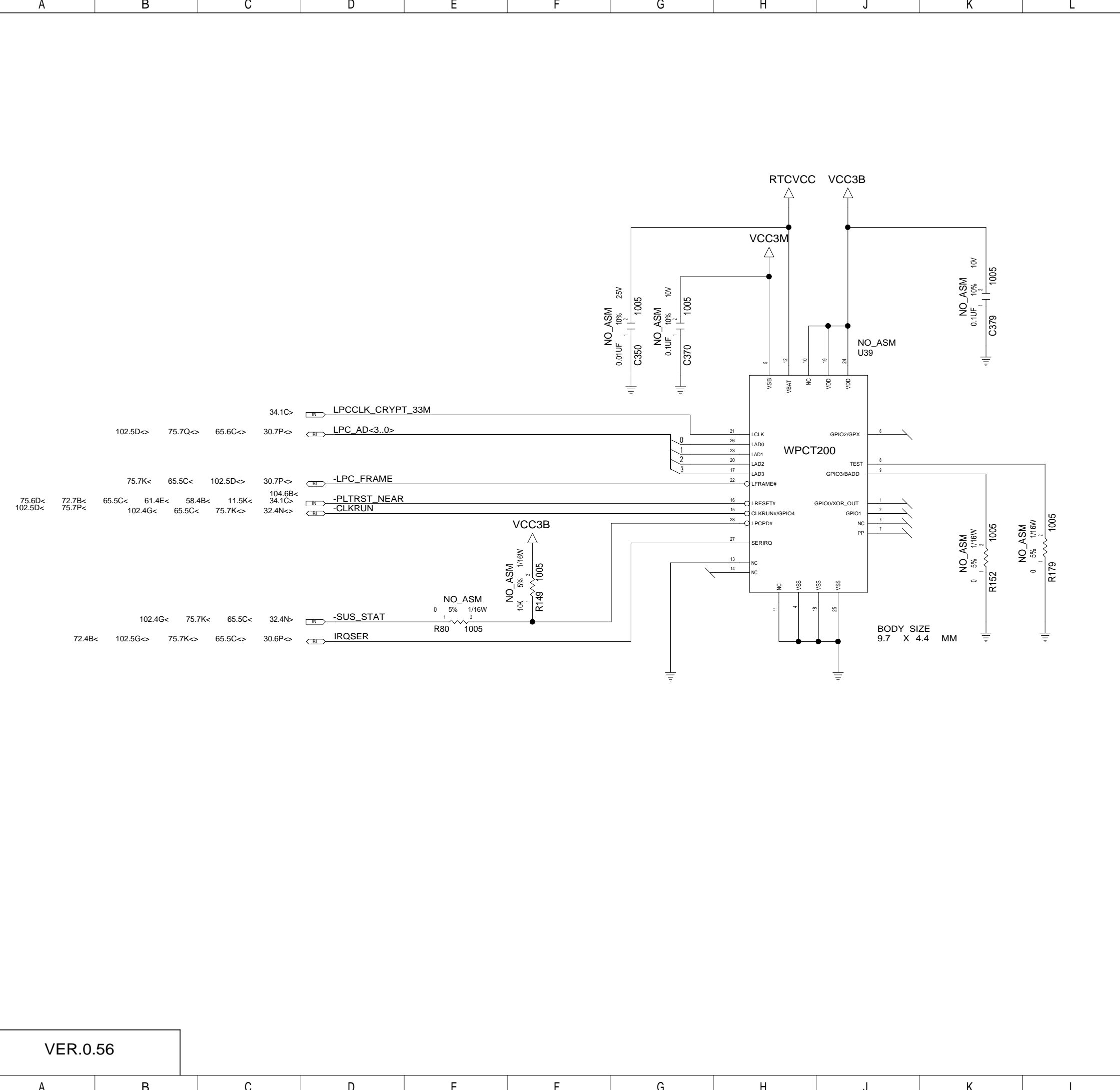
ALWAYS ON	AO_ID[1..0]
NO LITE&BB REGULAR	11B 10B 01B 00B

LOGIC

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE	NOZOMI EXT Pre-DV
APPROVED	H.K	09/29/08	MISC	G/A(PMH7)
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

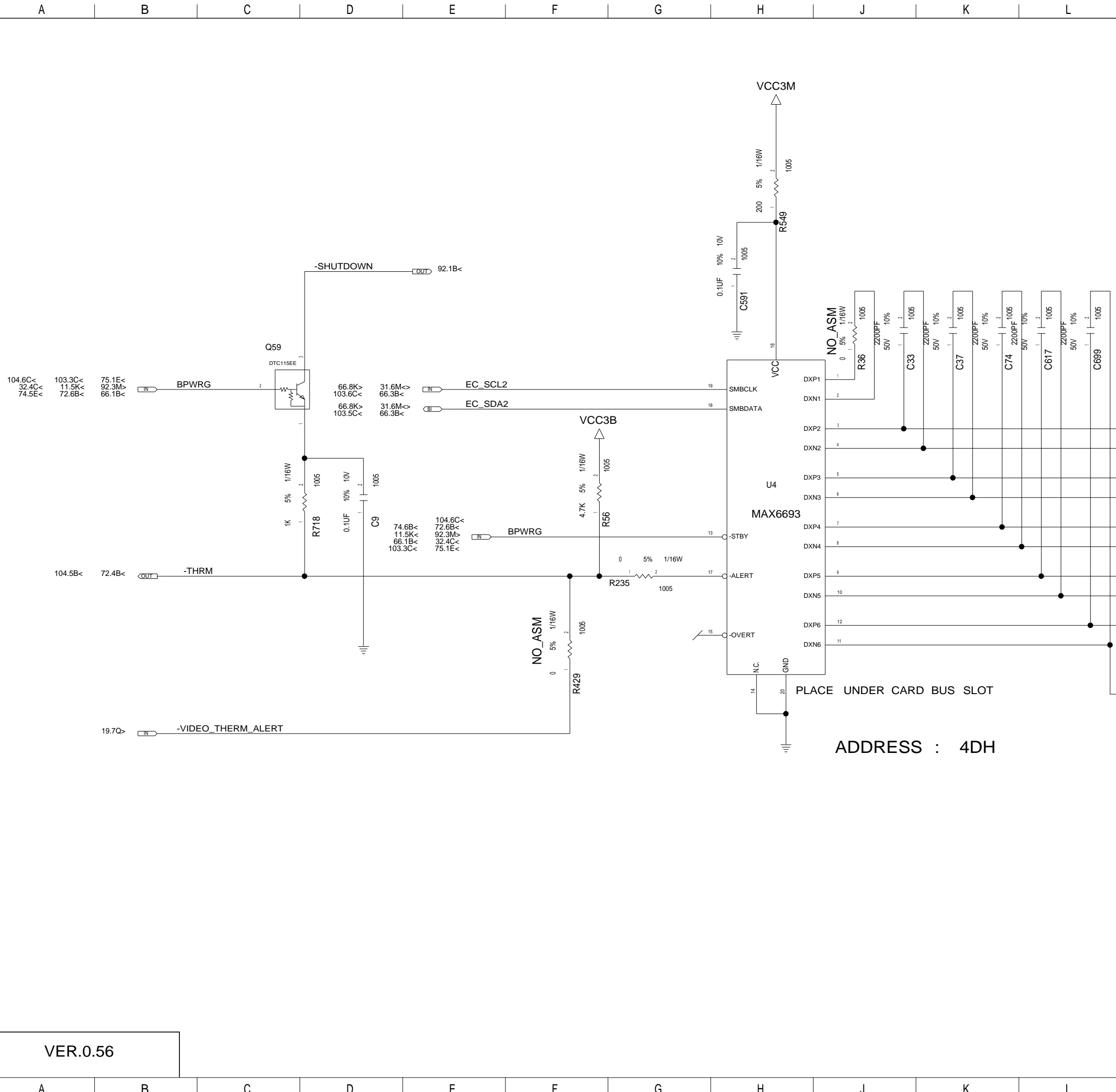
	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				73 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	TPM	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				74 / 108



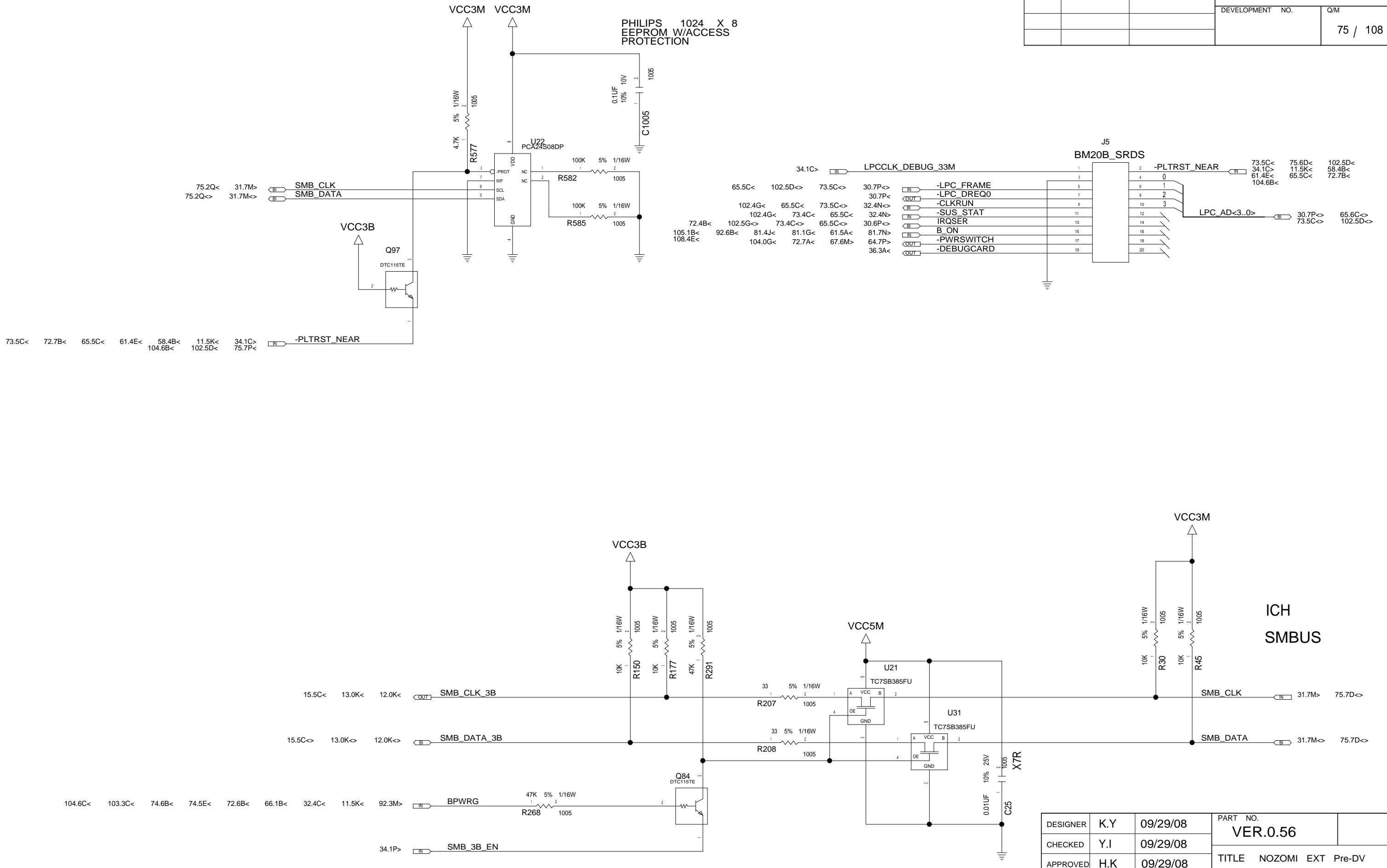
PLACE UNDER CARD BUS SLOT

ADDRESS : 4DH

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	THERMAL SENSOR	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			75 / 108



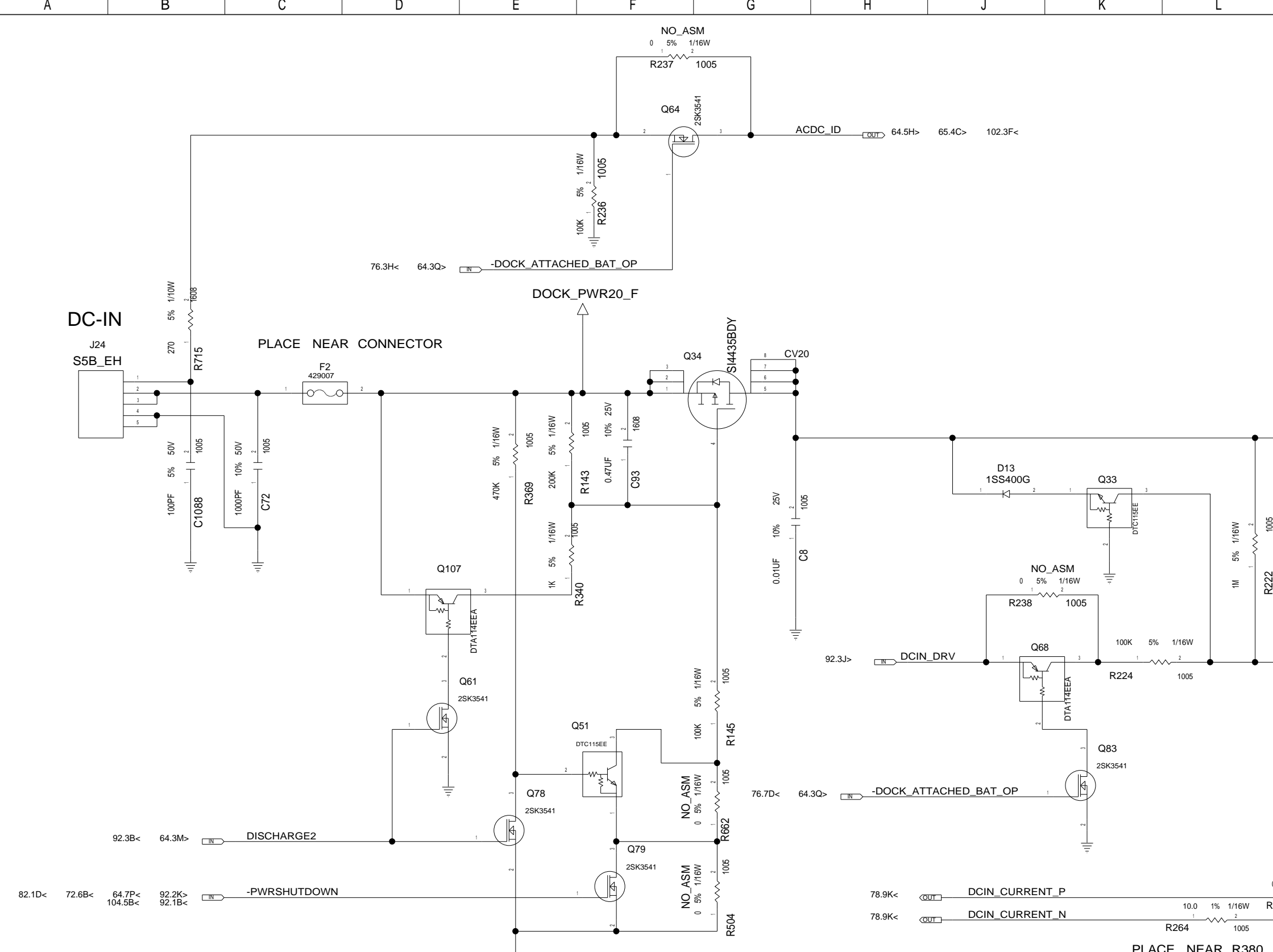
VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.
CHECKED	Y.I	09/29/08	VER.0.56
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	EEPROM/SMBUS SW

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

LENOVO CONFIDENTIAL

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			76 / 108



TABLE

PEAK	SHIFT	YES	NO
R662		NO-ASM	ASM
R369		ASM	NO-ASM
Q78		ASM	NO-ASM
Q51		ASM	NO-ASM

LOGIC

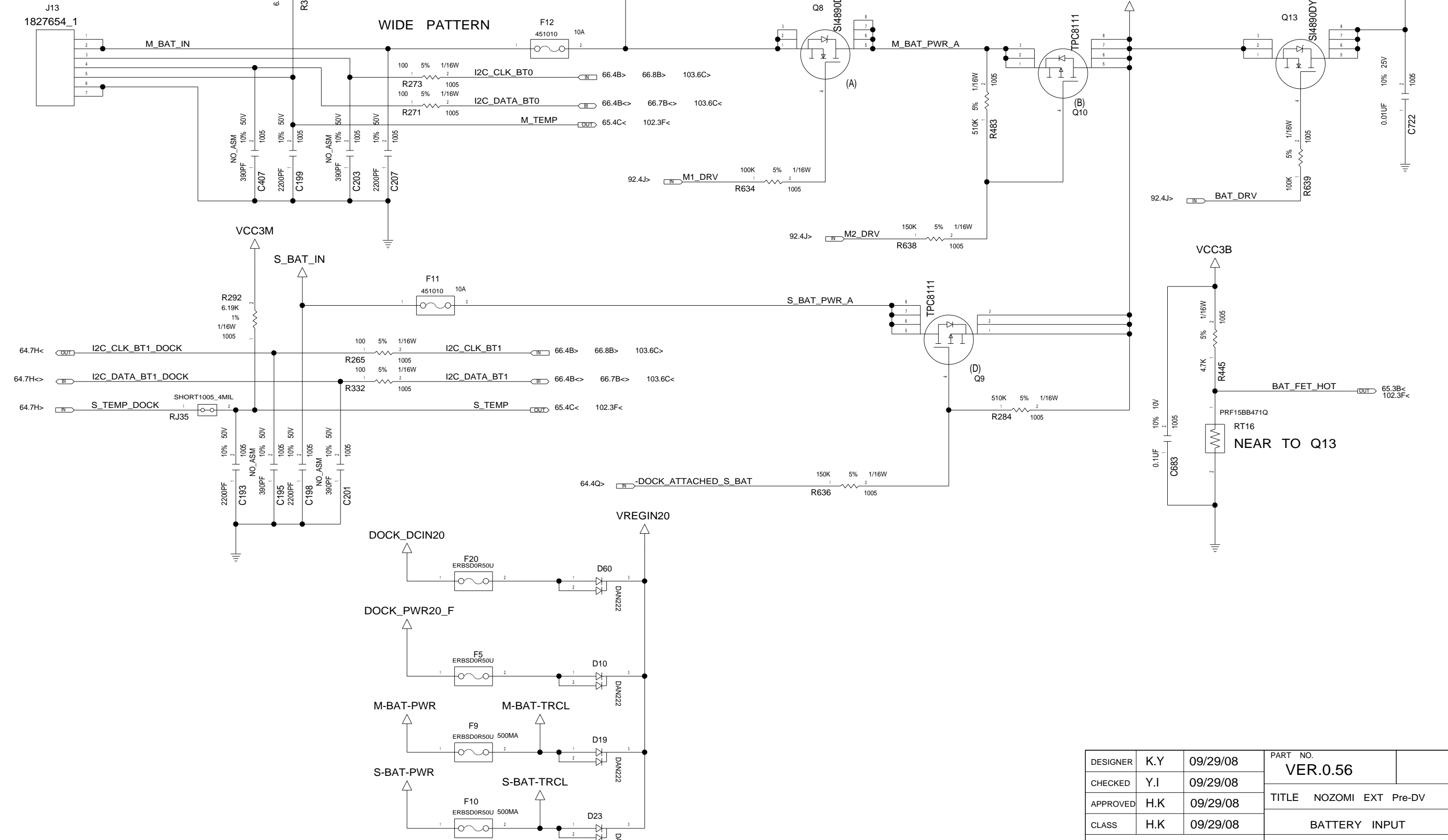
PLACE NEAR R380

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE	NOZOMI EXT Pre-DV
APPROVED	H.K	09/29/08		
CLASS	H.K	09/29/08		DC-IN
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.				LENOVO CONFIDENTIAL

DATE	EC NO.	PART NO.
		VER.0.56
		DEVELOPMENT NO.
		Q/M
		77 / 108

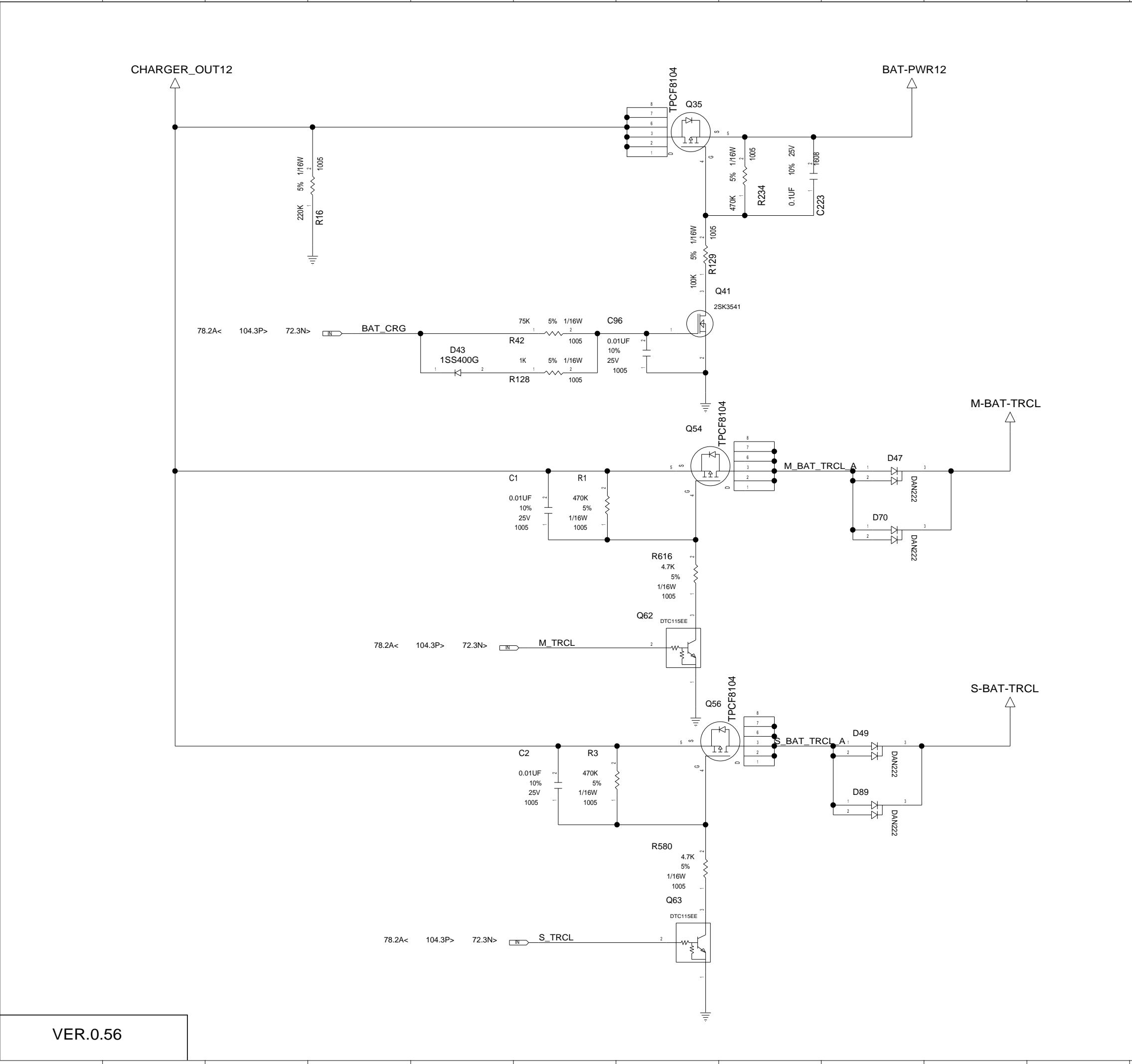
MAIN BAT CONN



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.
CHECKED	Y.I	09/29/08	VER.0.56
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	BATTERY INPUT
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			79 / 108

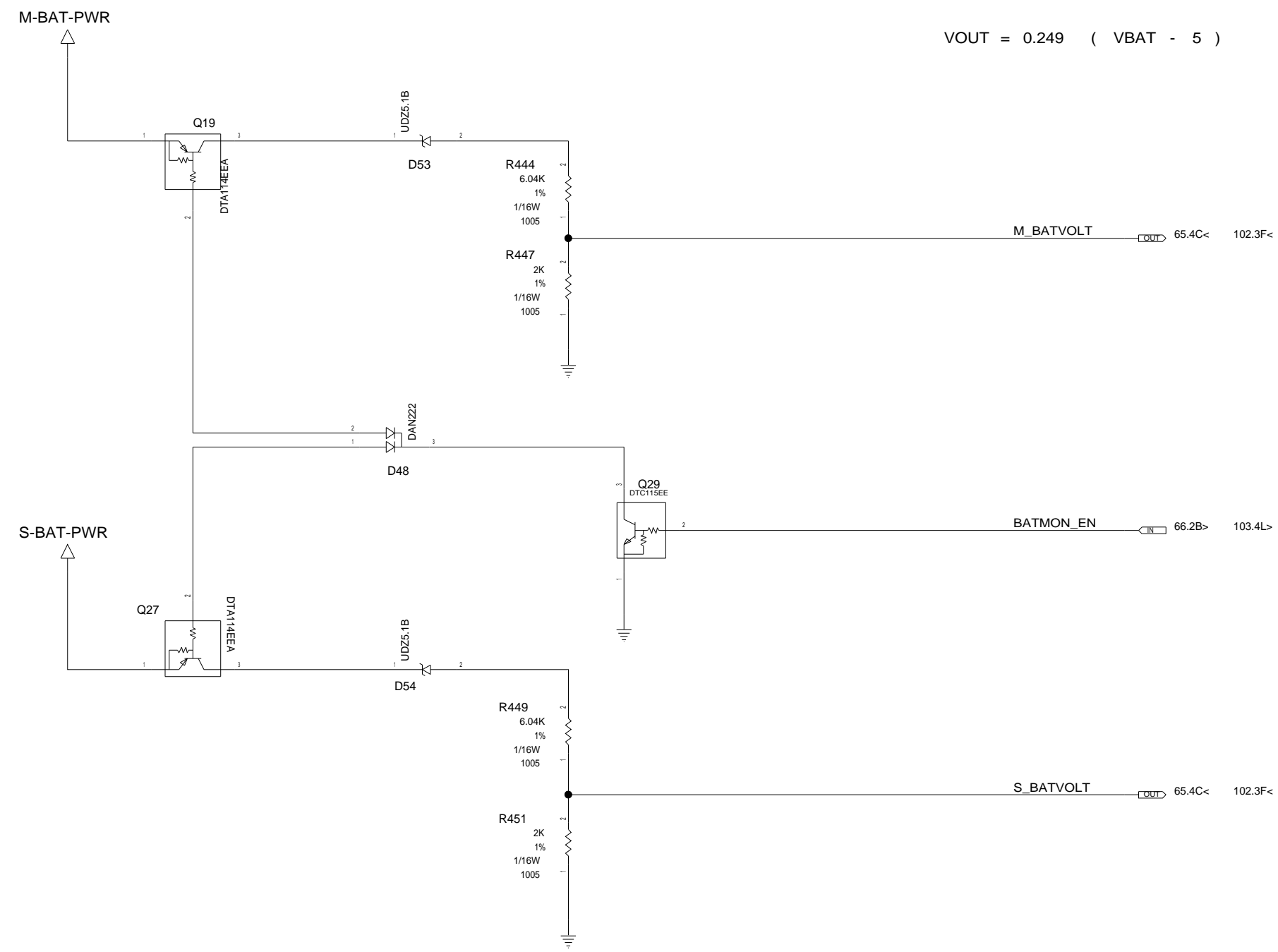


VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	CHARGE SELECTOR	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

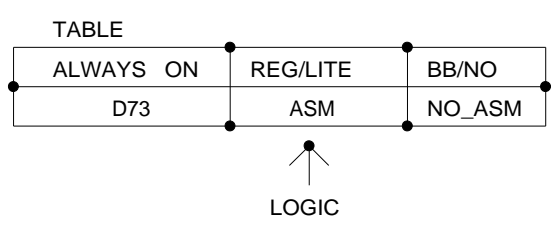
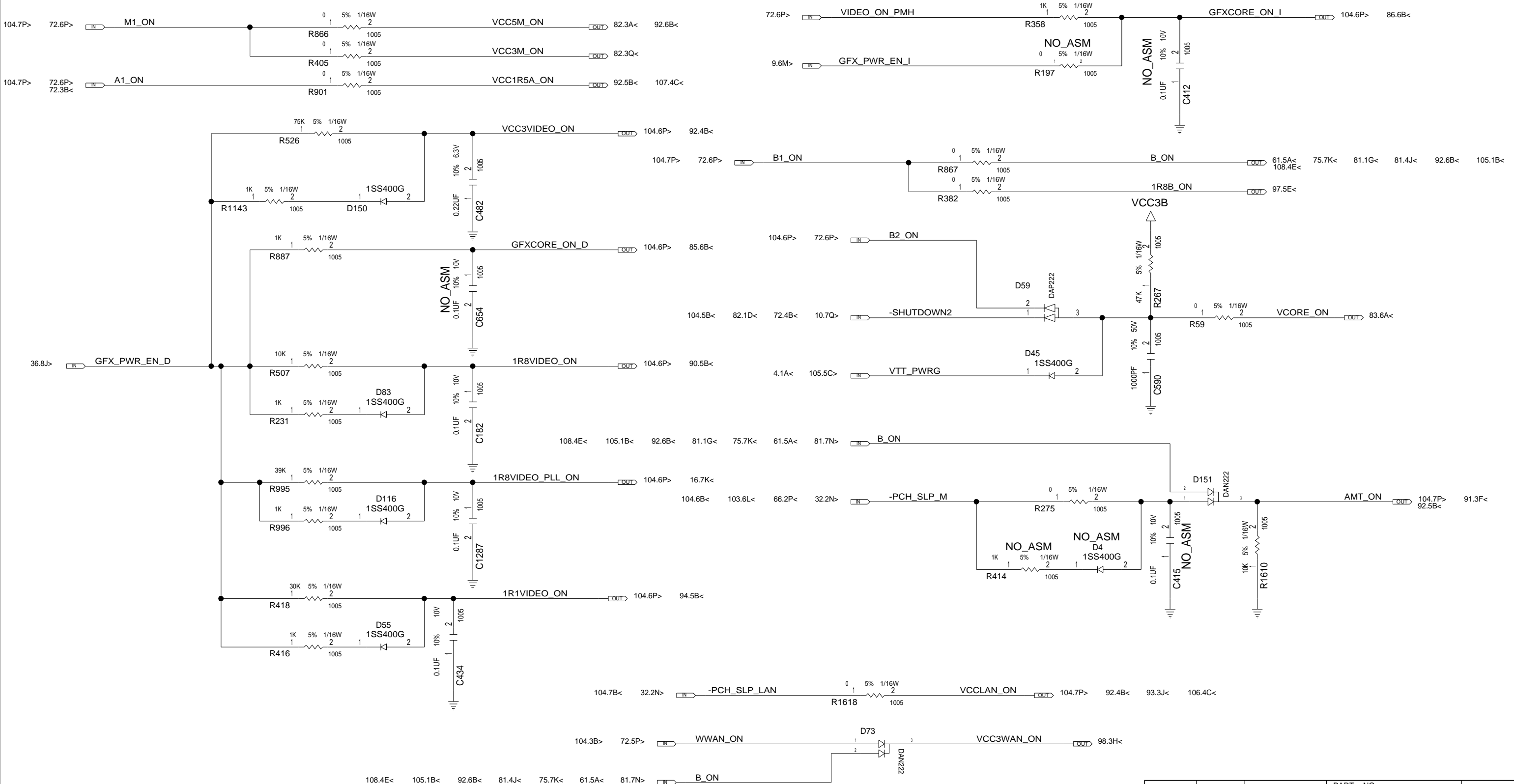
	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				80 / 108



VER.0.56

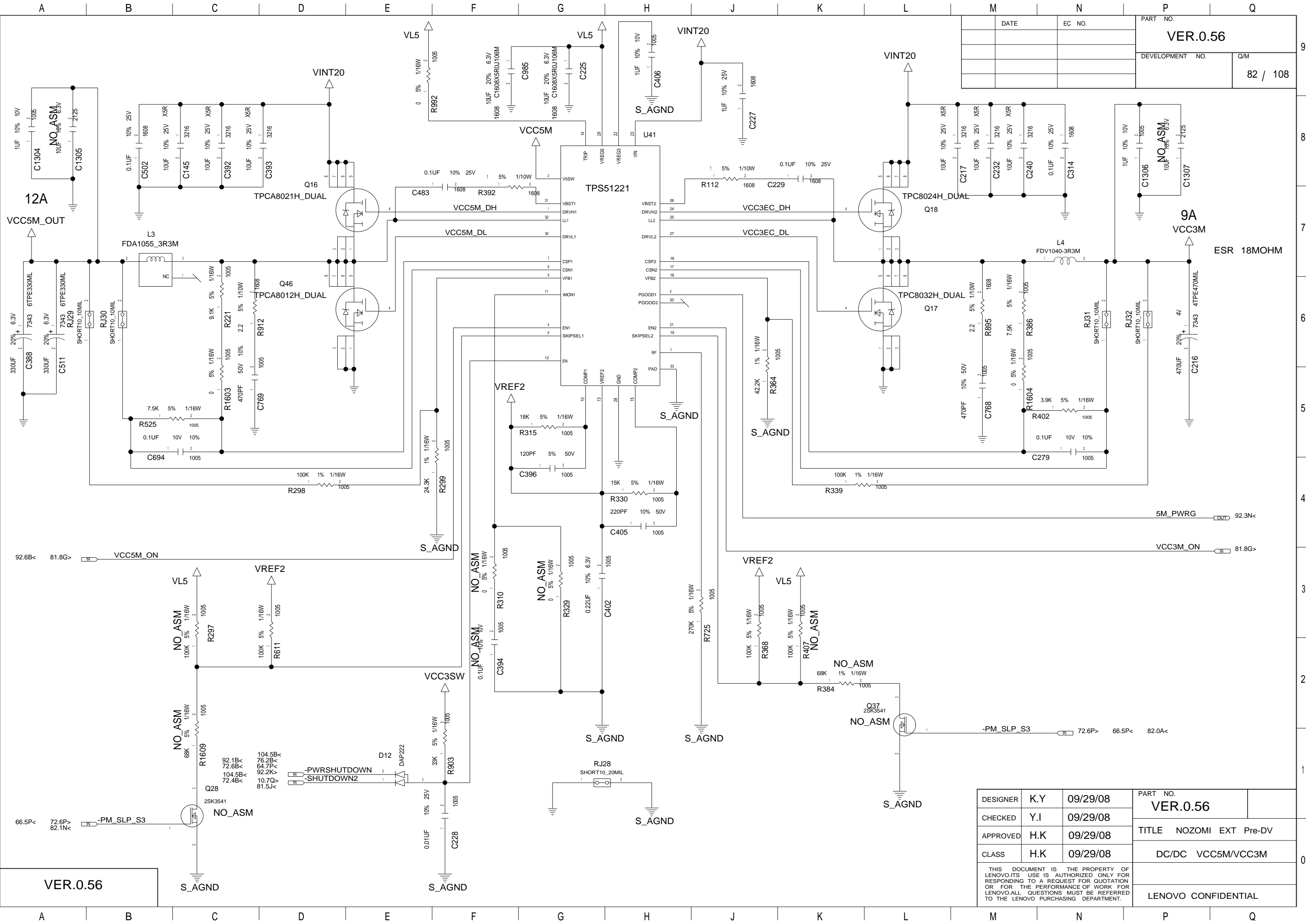
DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	BATTERY MONITOR	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			81 / 108



VER.0.56

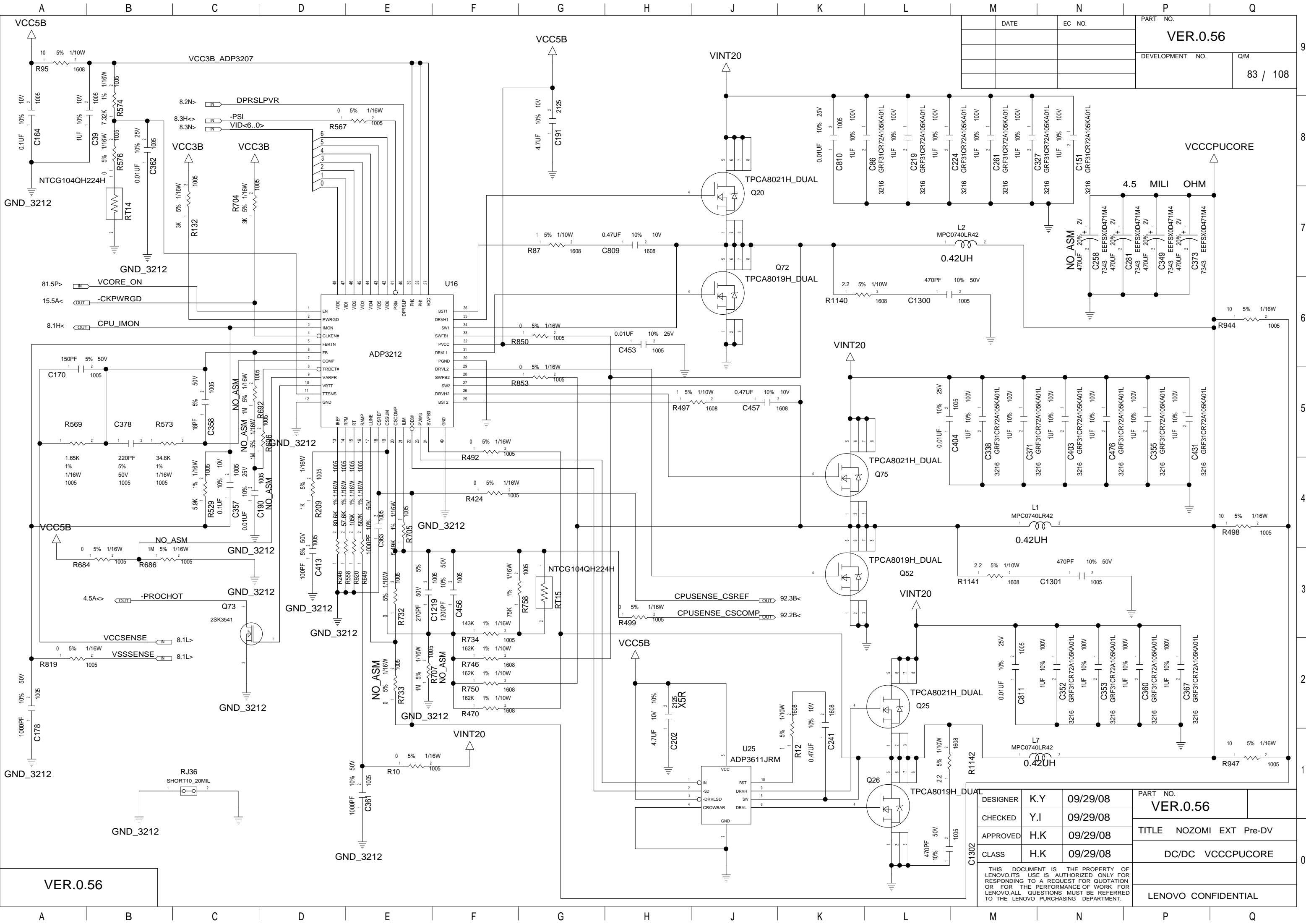
DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	POWER SEQUENCE	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	



DATE	EC NO.	PART NO.	
		VER.0.56	
DEVELOPMENT NO.		Q/M	
		82 / 108	

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.
CHECKED	Y.I	09/29/08	VER.0.56
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	DC/DC VCC5M/VCC3M
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			
LENOVO CONFIDENTIAL			

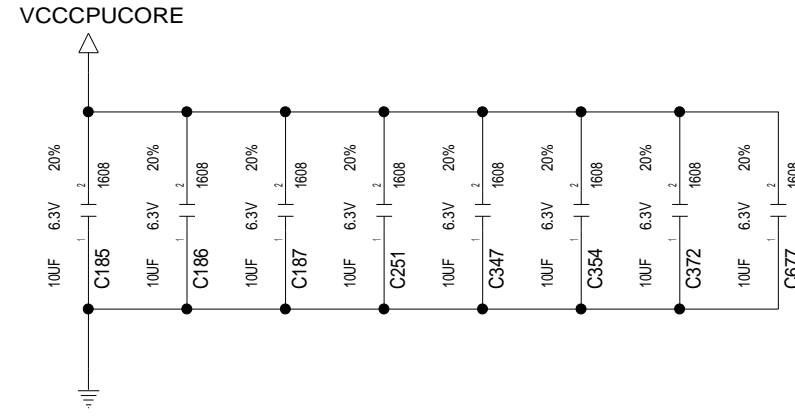
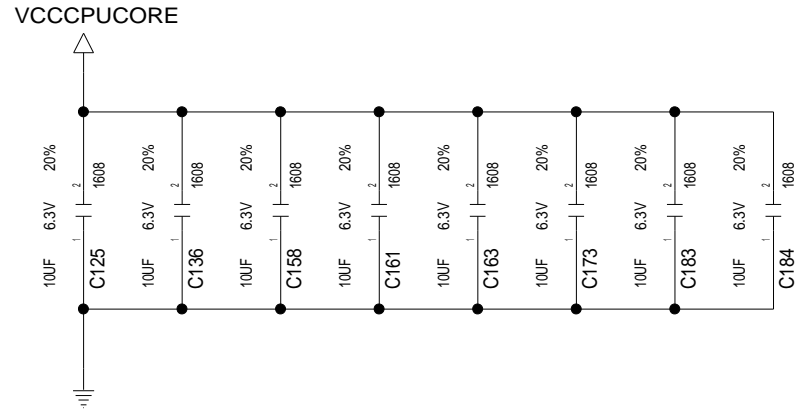


DATE	EC NO.	PART NO.	
		VER.0.56	
DEVELOPMENT NO.		Q/M	
		83 / 108	

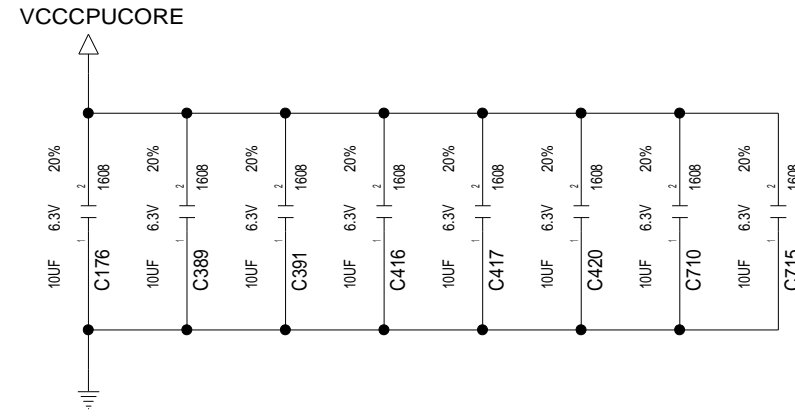
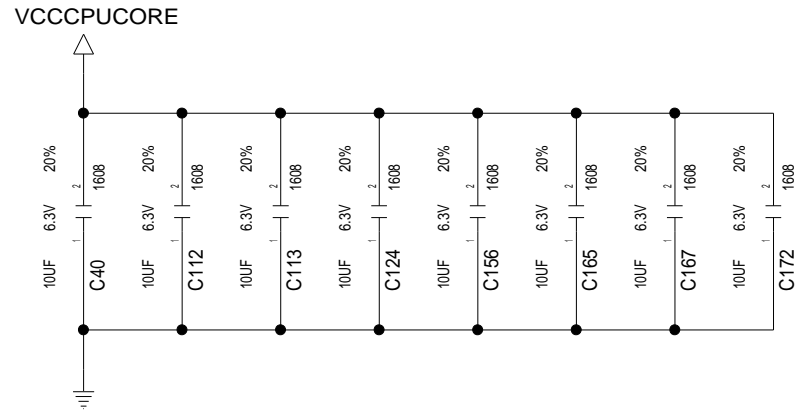
VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	DC/DC VCCCPUCORE	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.				
LENOVO CONFIDENTIAL				

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				84 / 108



10UF 6.3V X5R 1608 1/16W X 16PCS

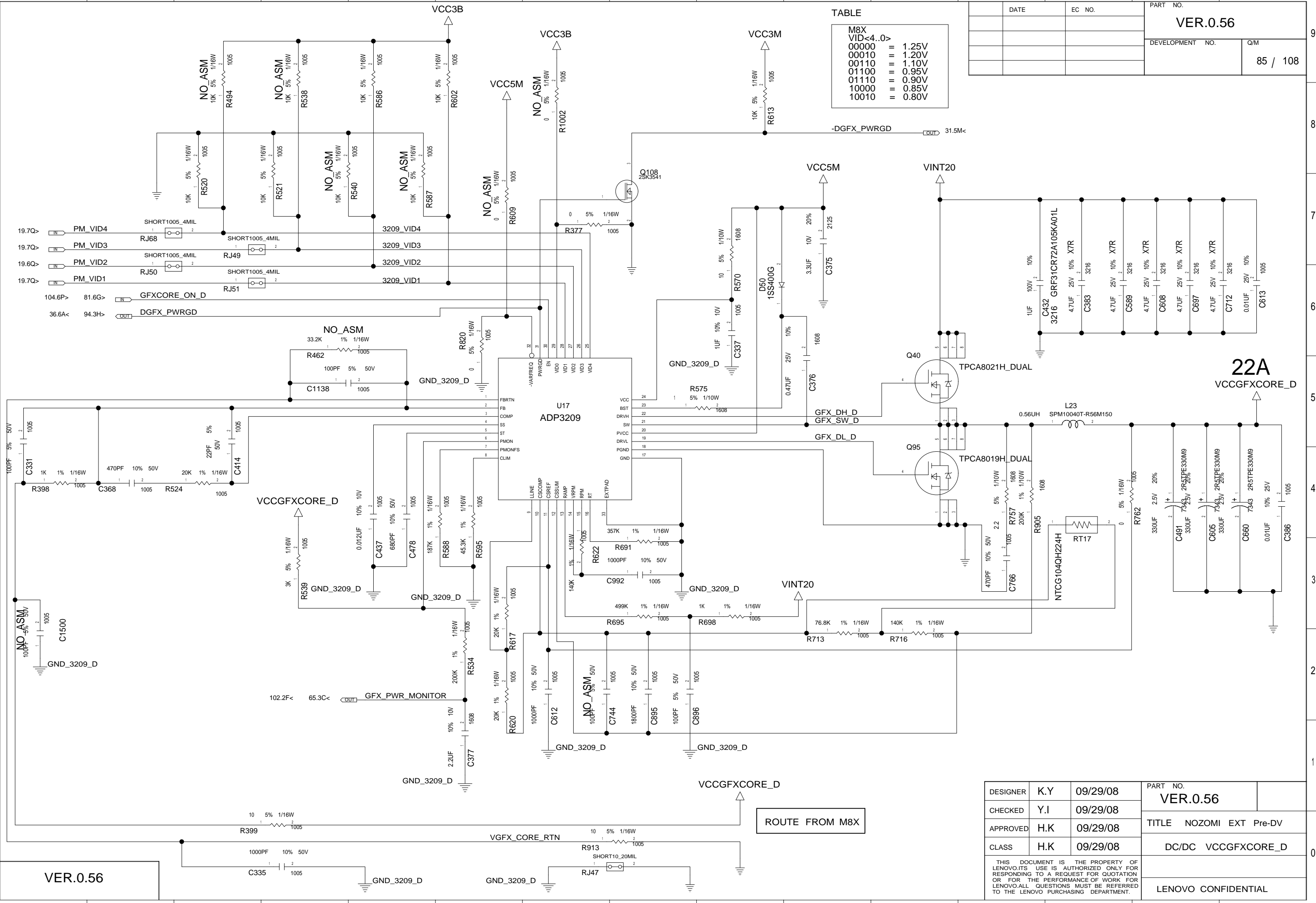


10UF 6.3V X5R 1608 1/16W X 16PCS

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	VCCCPUCORE DECOUPLING	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

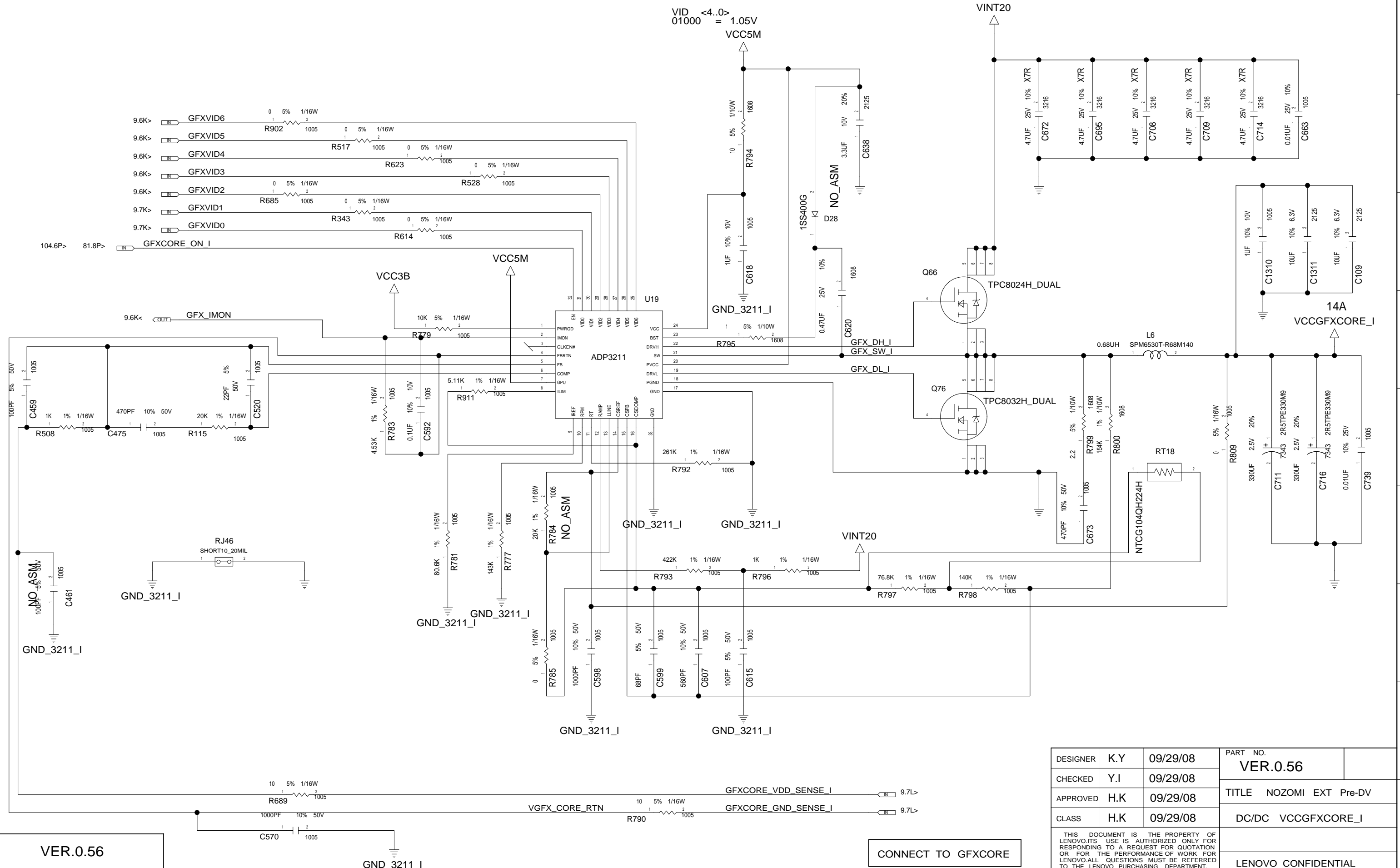
TABLE	
M8X	VID<4..0>
00000	= 1.25V
00010	= 1.20V
00110	= 1.10V
01100	= 0.95V
01110	= 0.90V
10000	= 0.85V
10010	= 0.80V



DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	DC/DC VCCGFXCORE_D	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

INTEG VCCGFXCORE VOLTAGE
 1.NORMAL; 1.05V
 2.GRAPHICS RENDER STANDBY MODE; 0.75V

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			86 / 108



VER.0.56

CONNECT TO GFXCORE

DESIGNER	K.Y	09/29/08	PART NO.
CHECKED	Y.I	09/29/08	VER.0.56
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV
CLASS	H.K	09/29/08	DC/DC VCCGFXCORE_I
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL

BLANK

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				87 / 108

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	BLANK	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

VER.0.56

BLANK

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				88 / 108

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	BLANK	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

VER.0.56

A B C D E F G H J K L M N P Q

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				89 / 108

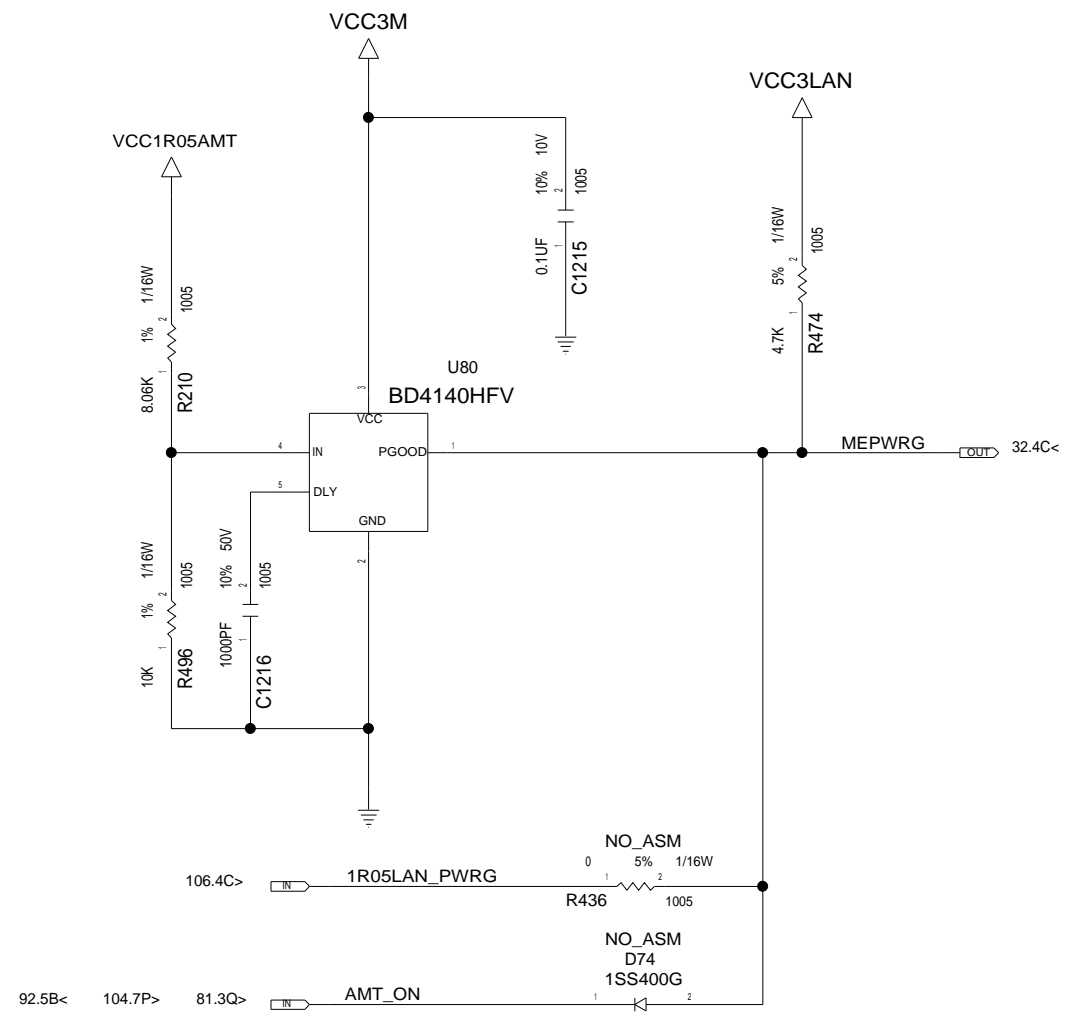
BLANK

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	BLANK	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>			LENOVO CONFIDENTIAL	

A B C D E F G H J K L M N P Q

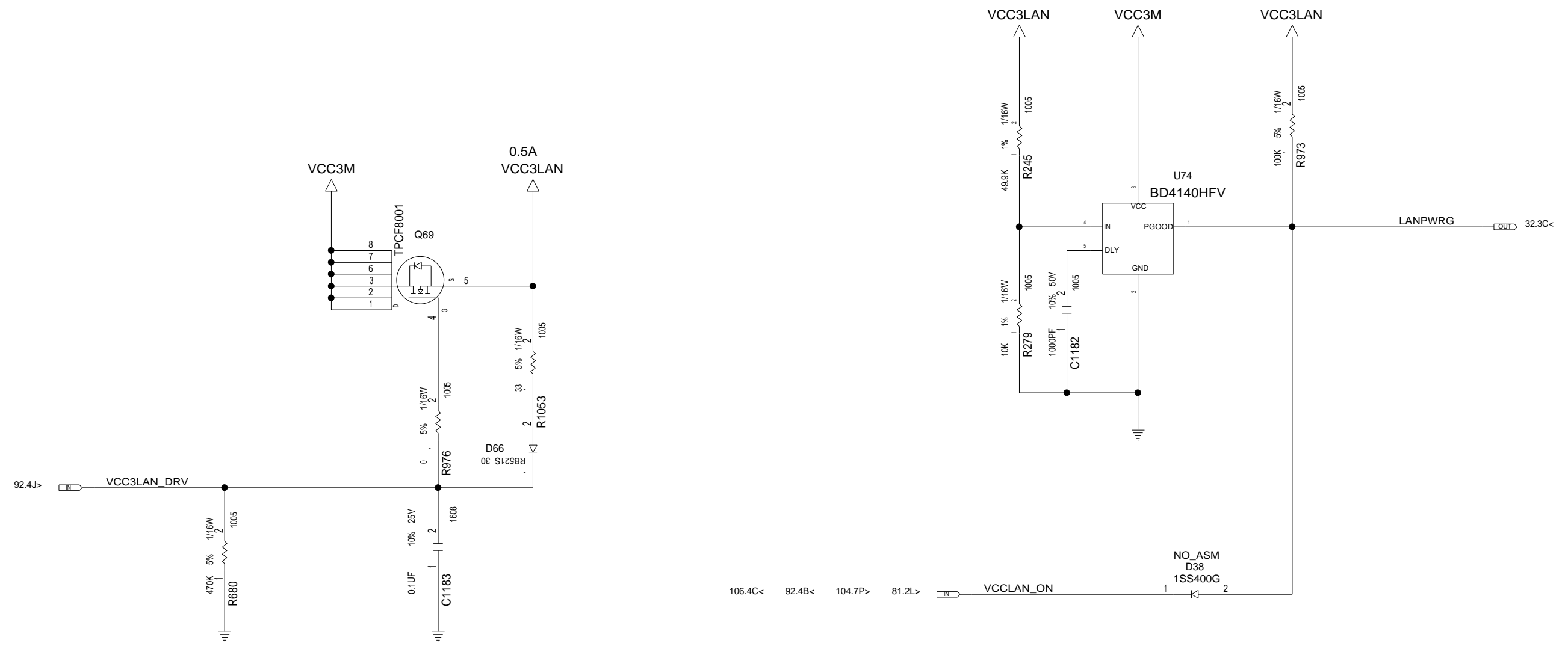
	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				91 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	MEPW RG	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

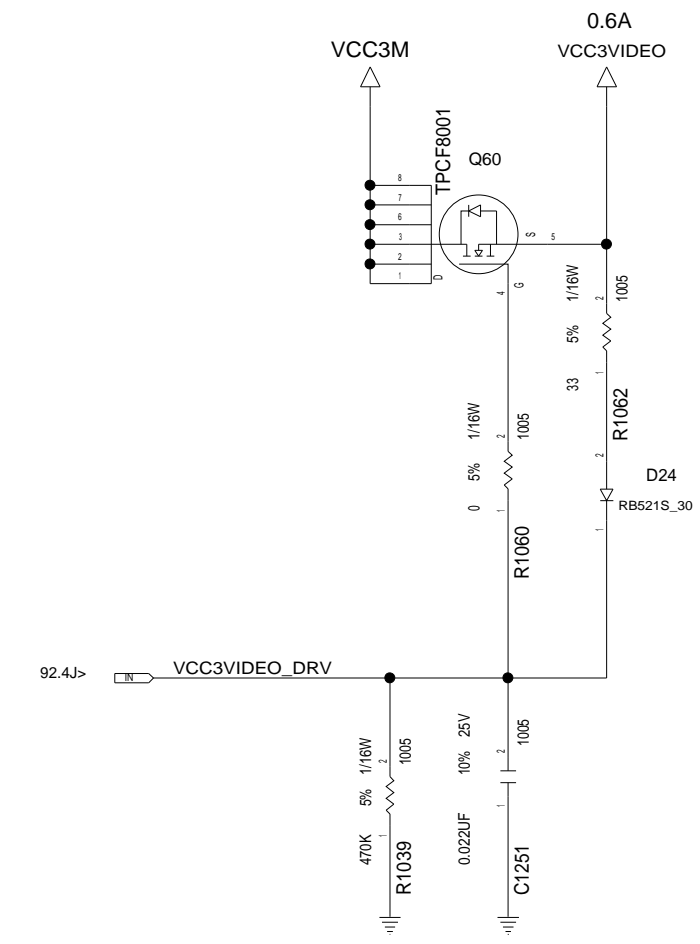
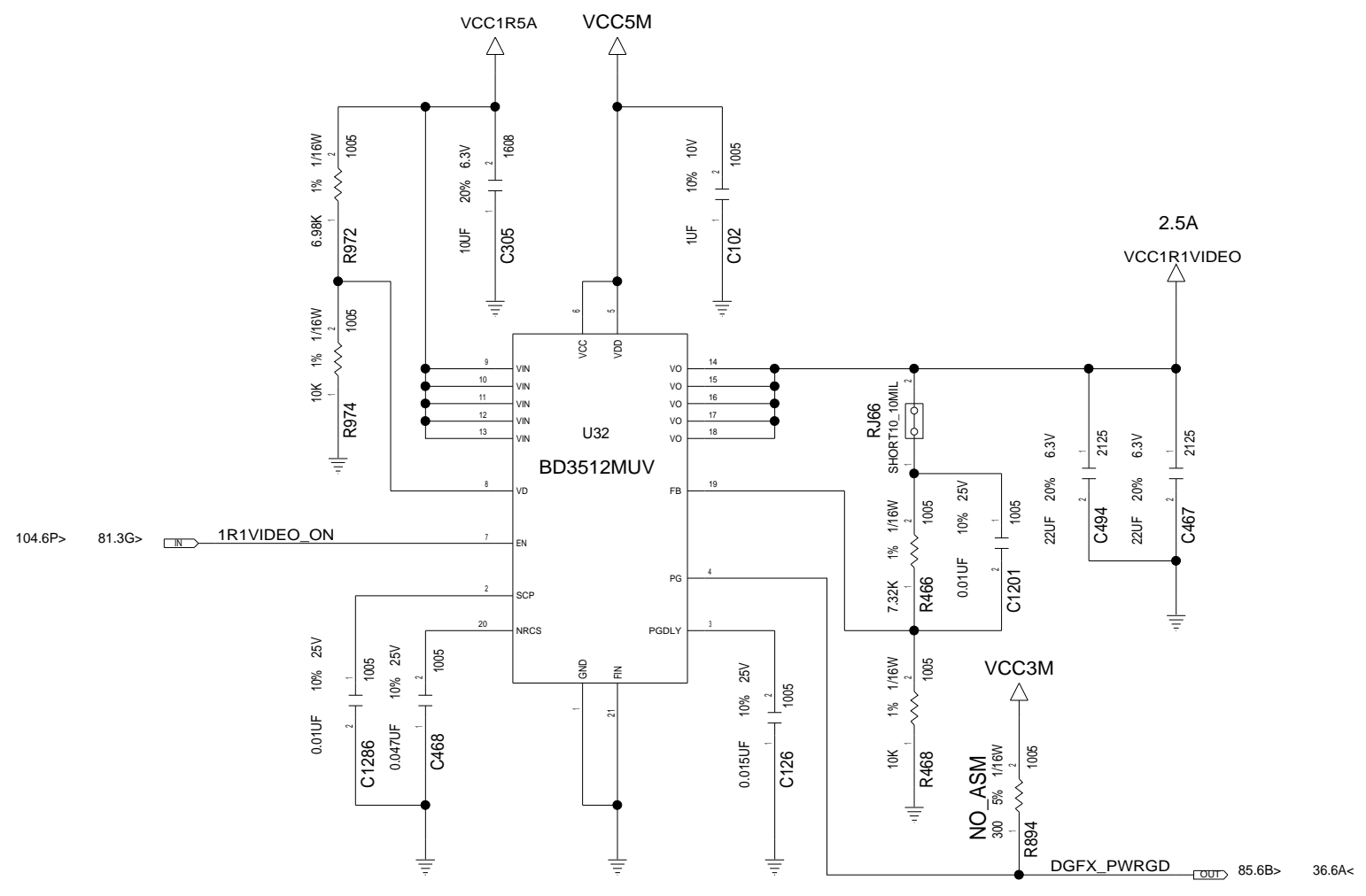
DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			93 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	LOAD SW LAN & LANPWRG	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>				

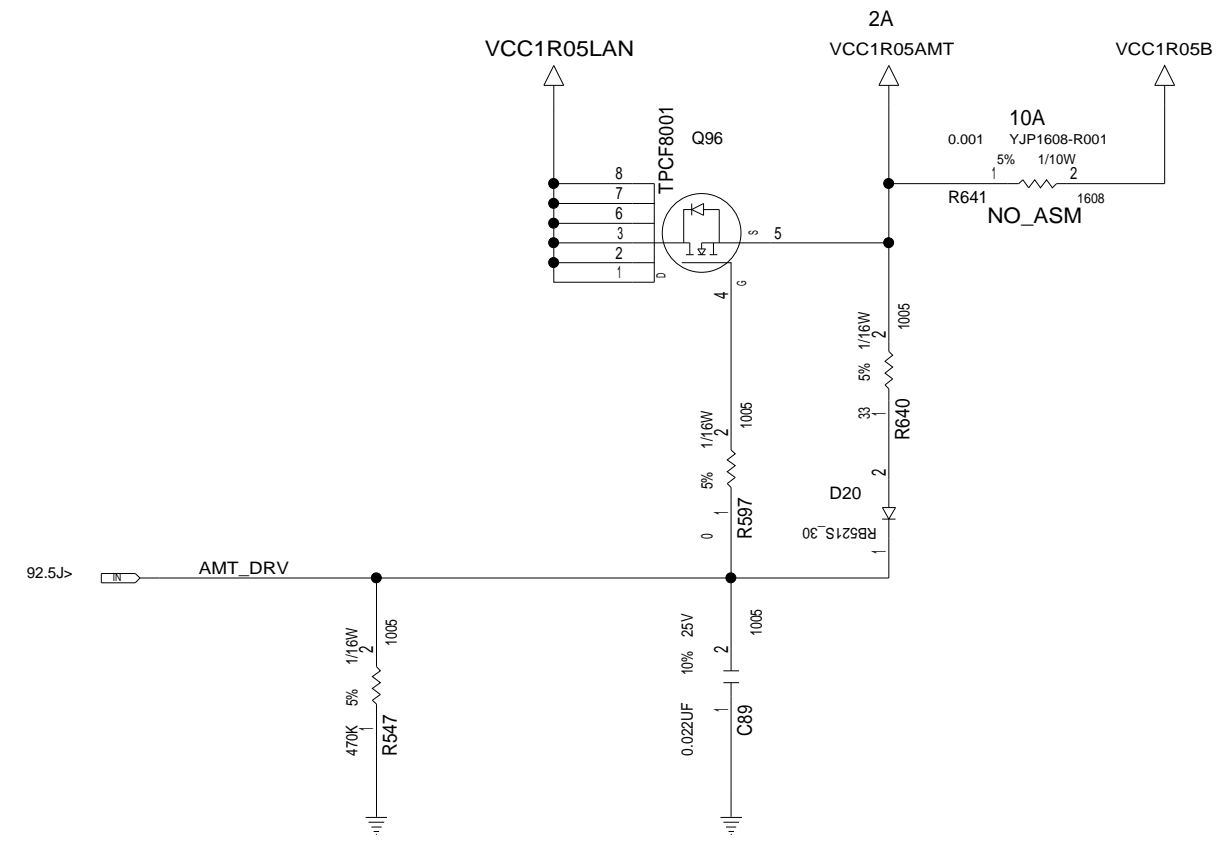
	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				94 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	DC/DC VCC1R1VIDEO & LOAD SW VIDEO	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				95 / 108



VER.0.56

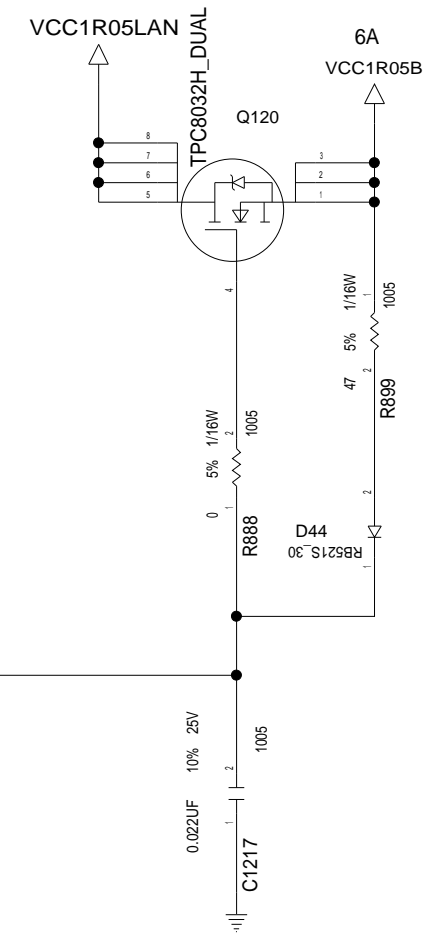
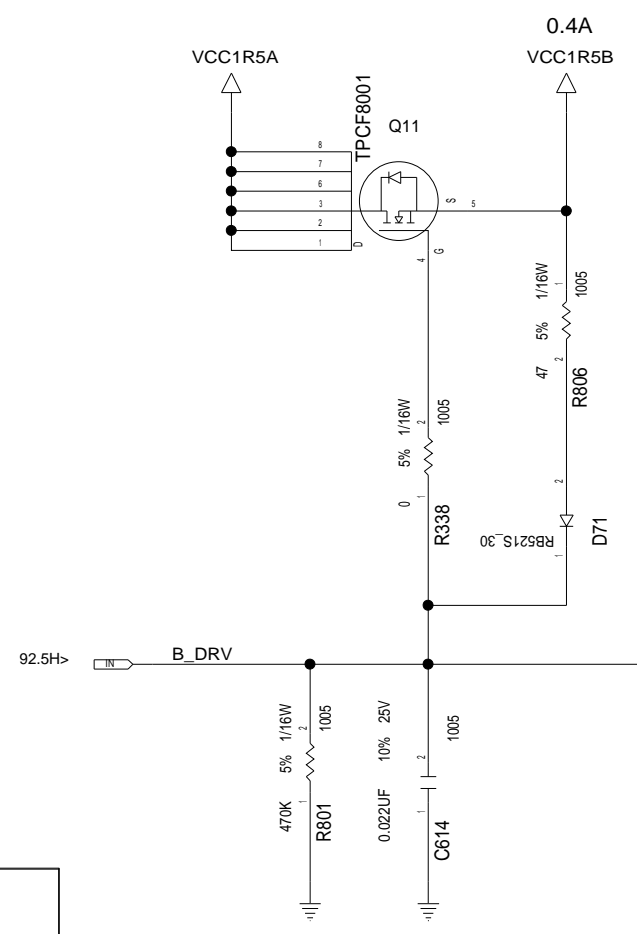
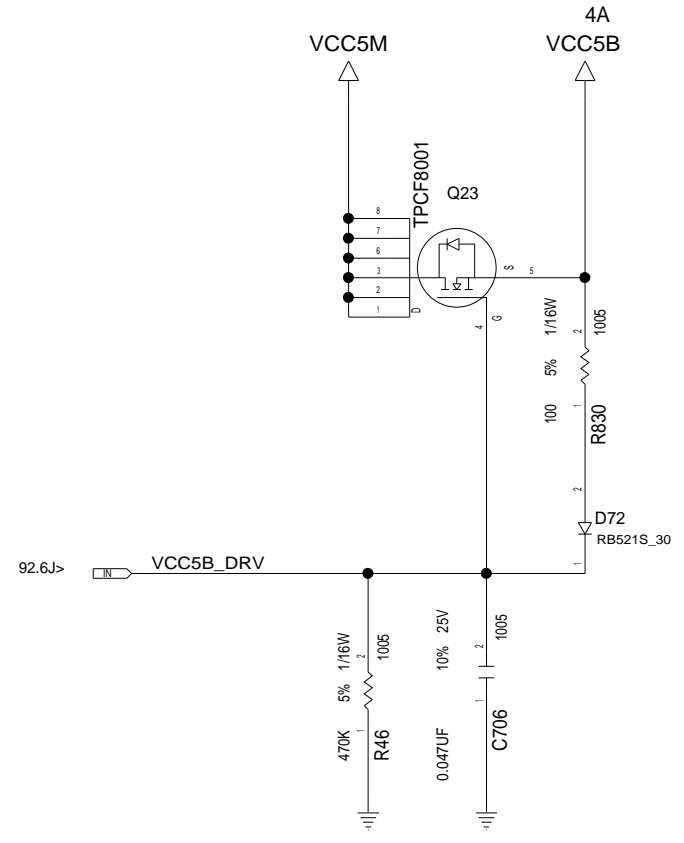
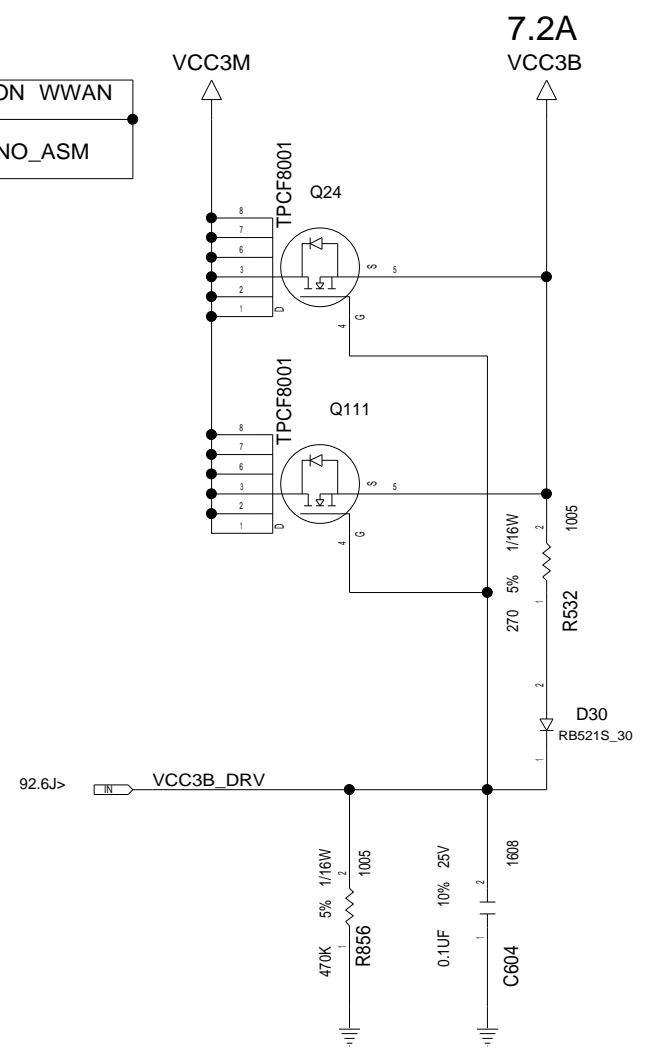
DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	LOAD SW AMT	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			96 / 108

TABLE

WWAN	NON WWAN
Q111	NO_ASM

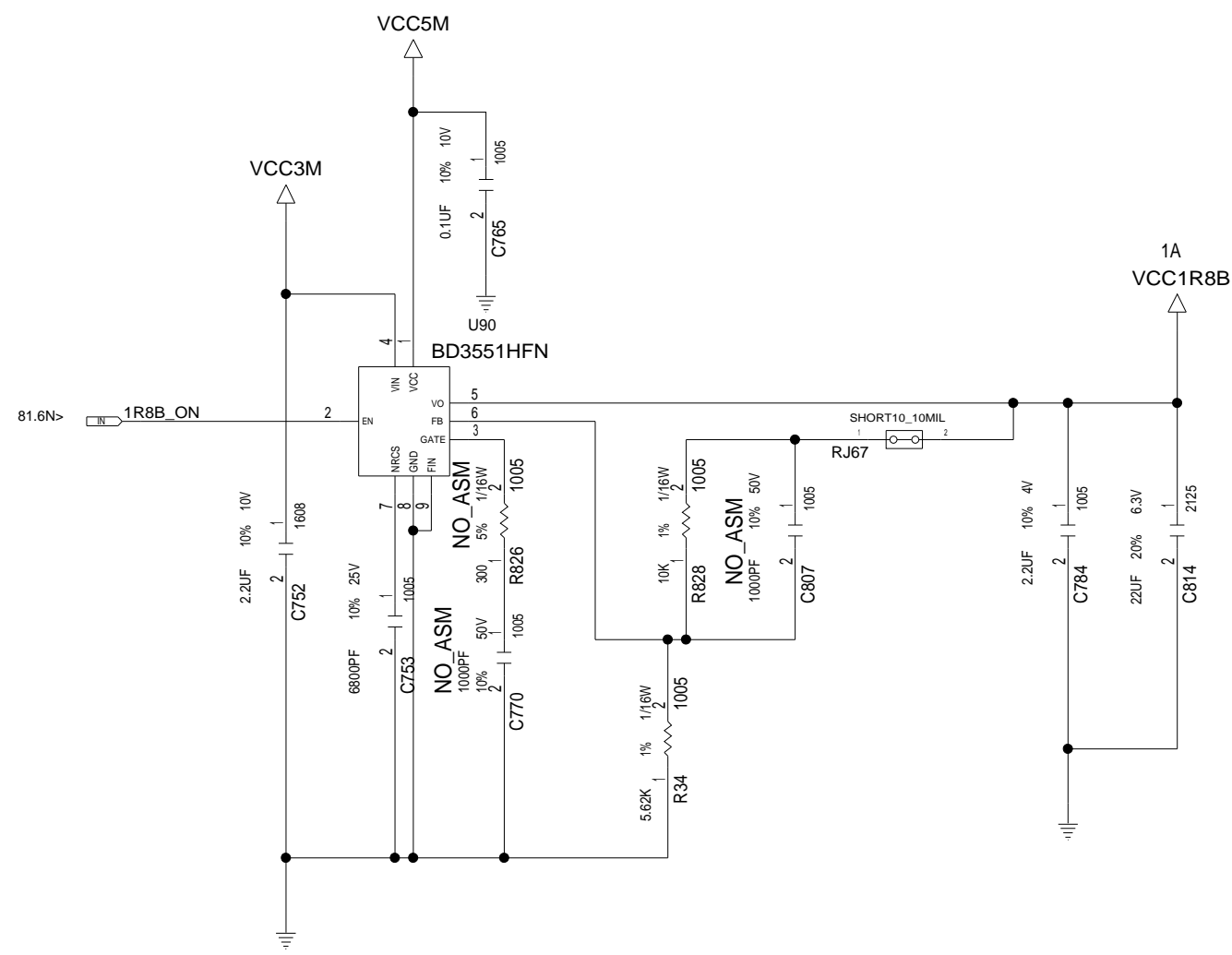
LOGIC



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	LOAD SW B	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	

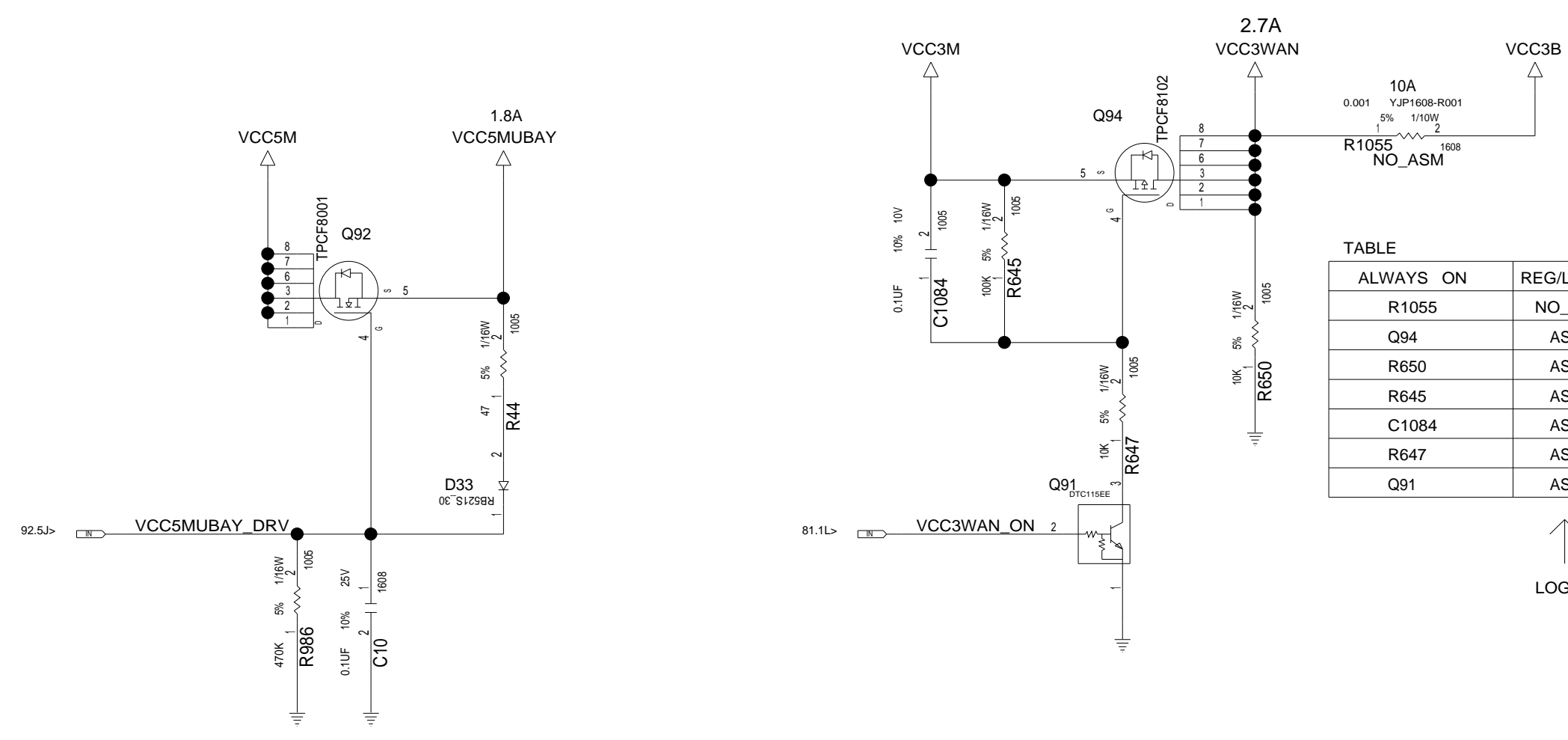
	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				97 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	DC/DC VCC1R8B	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>				

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			98 / 108



TABLE

ALWAYS ON	REG/LITE	BB/NO
R1055	NO_ASM	ASM
Q94	ASM	NO_ASM
R650	ASM	NO_ASM
R645	ASM	NO_ASM
C1084	ASM	NO_ASM
R647	ASM	NO_ASM
Q91	ASM	NO_ASM

↑
LOGIC

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	LOAD SW UBAY & WWAN	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>				

BLANK

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				99 / 108

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	BLANK	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

VER.0.56

BLANK

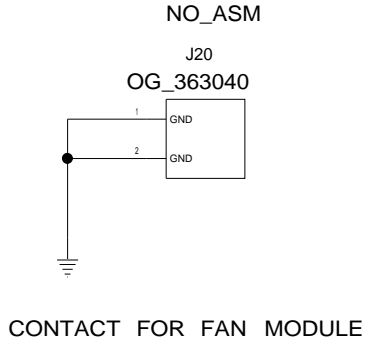
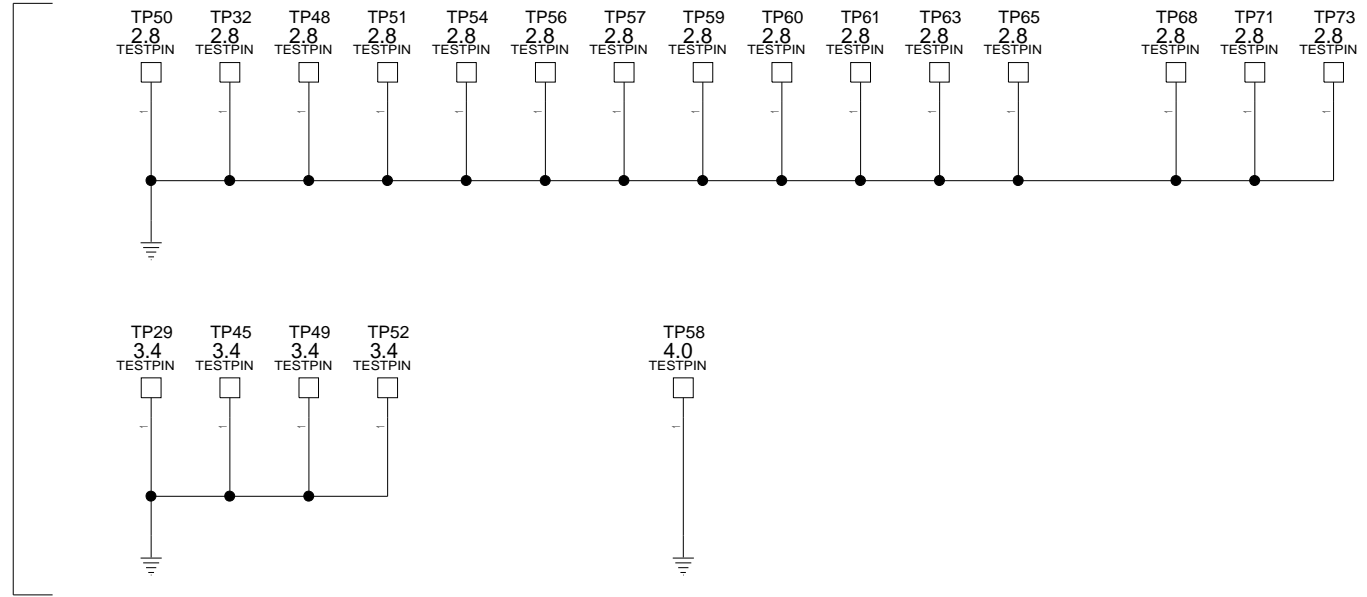
	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				100 / 108

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	BLANK	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

VER.0.56

	DATE	EC NO.	PART NO.	
			VER.0.56	
			DEVELOPMENT NO.	Q/M
				101 / 108

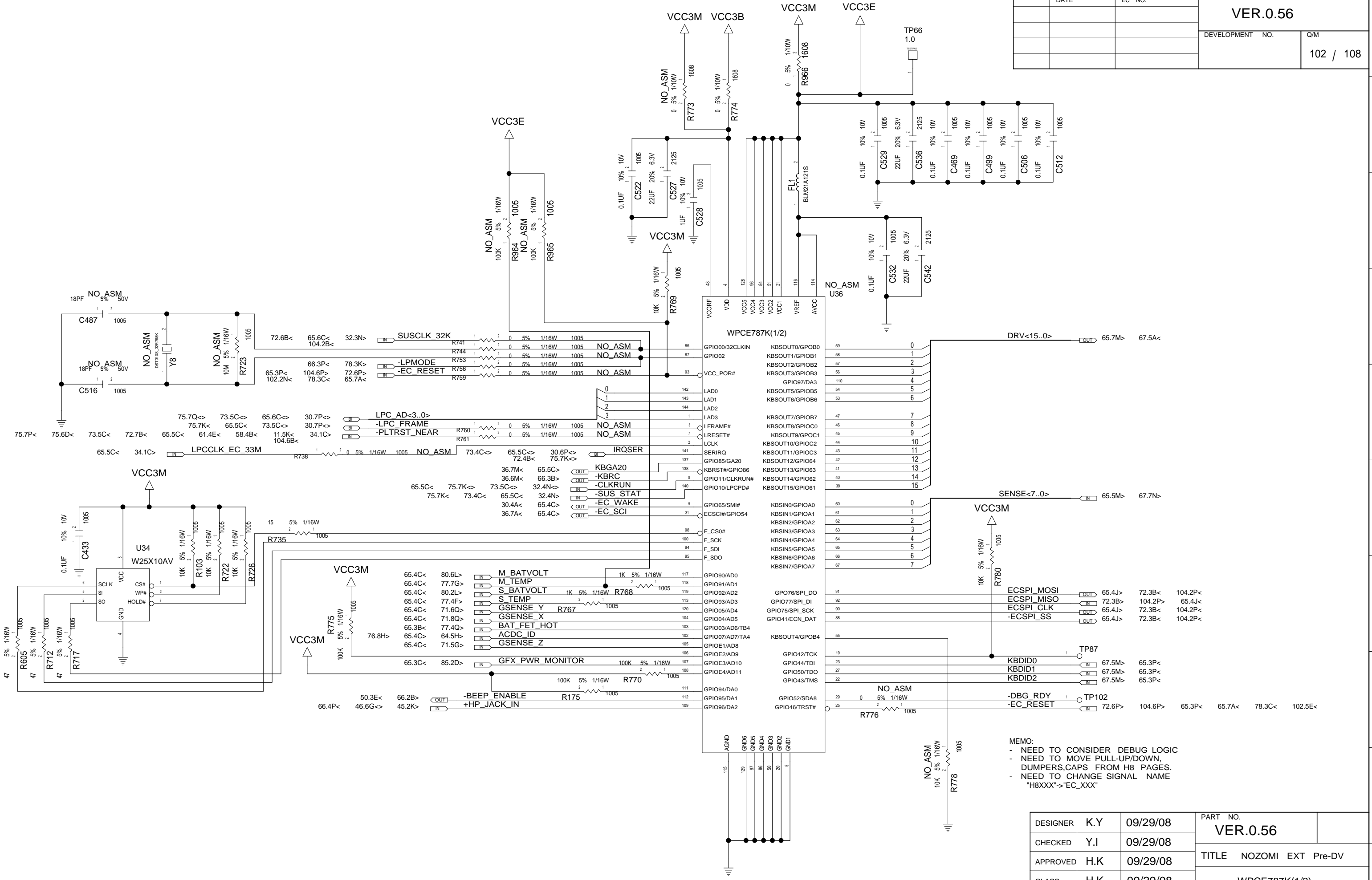
PTH FOR SCREW HOLE



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	PTH FOR SCREW HOLES	
THIS DOCUMENT IS THE PROPERTY OF LENOVO.ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO.ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

DATE	EC NO.	PART NO.	
		VER.0.56	
DEVELOPMENT NO.		Q/M	
		102 / 108	



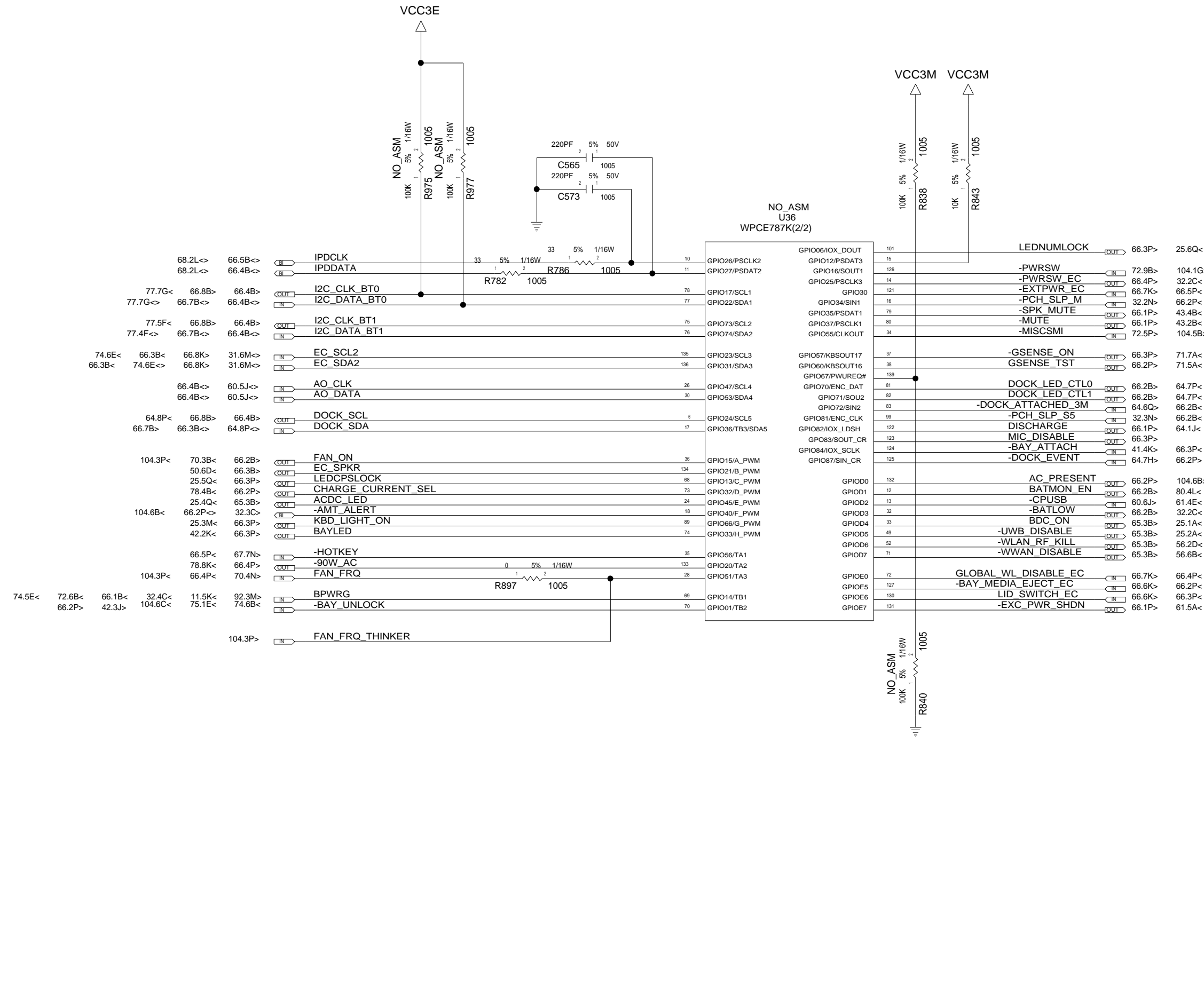
MEMO:
 - NEED TO CONSIDER DEBUG LOGIC
 - NEED TO MOVE PULL-UP/DOWN, DUMPERS,CAPS FROM H8 PAGES.
 - NEED TO CHANGE SIGNAL NAME "H8XXX"->"EC_XXX"

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	WPCE787K(1/2)	

THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.

LENOVO CONFIDENTIAL

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			103 / 108

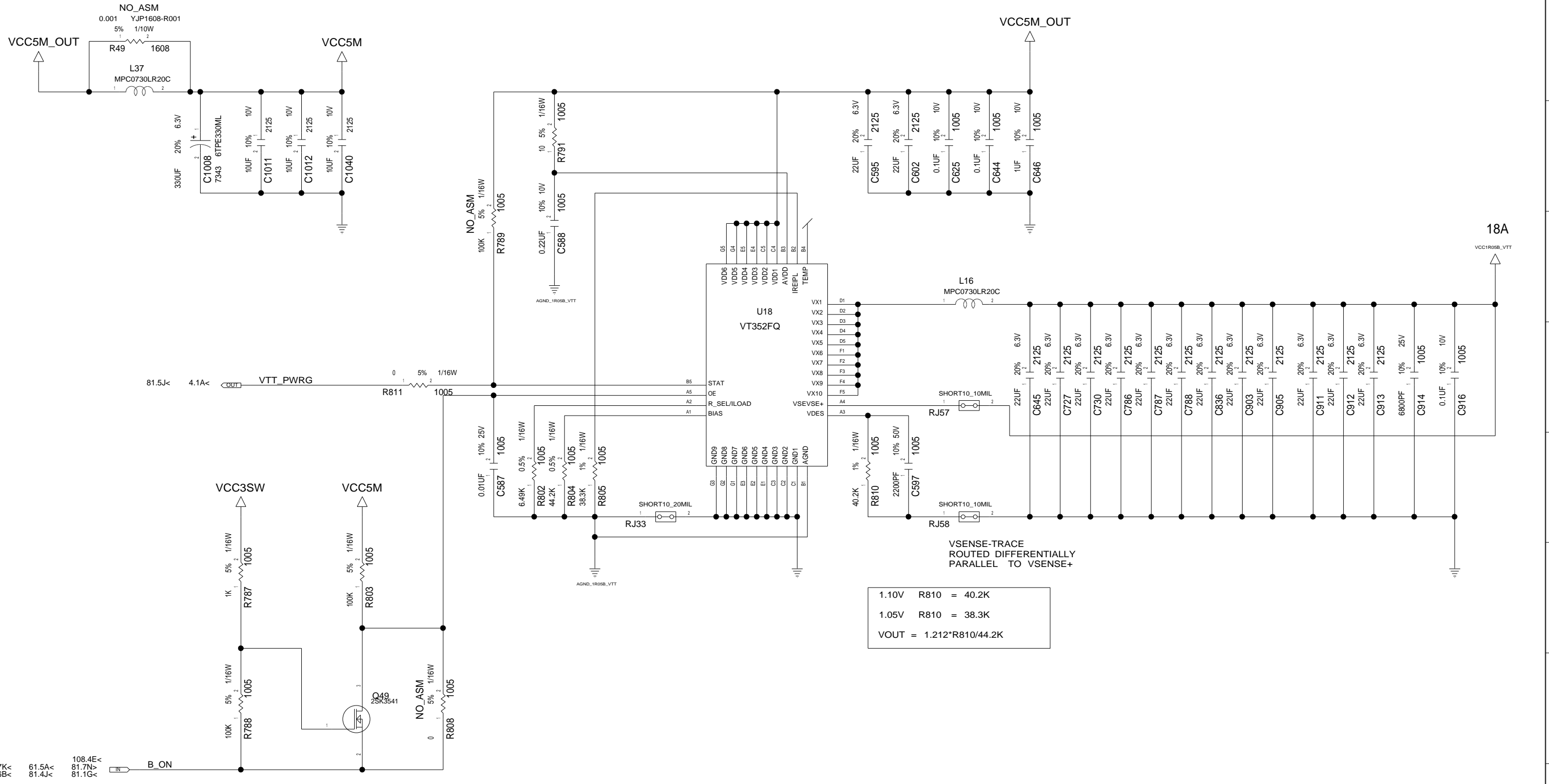


VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	
CHECKED	Y.I	09/29/08	VER.0.56	
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	WPCE787K(2/2)	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			105 / 108

LAY OUT THIS 0.001OHM RESISTOR INSIDE OF L37



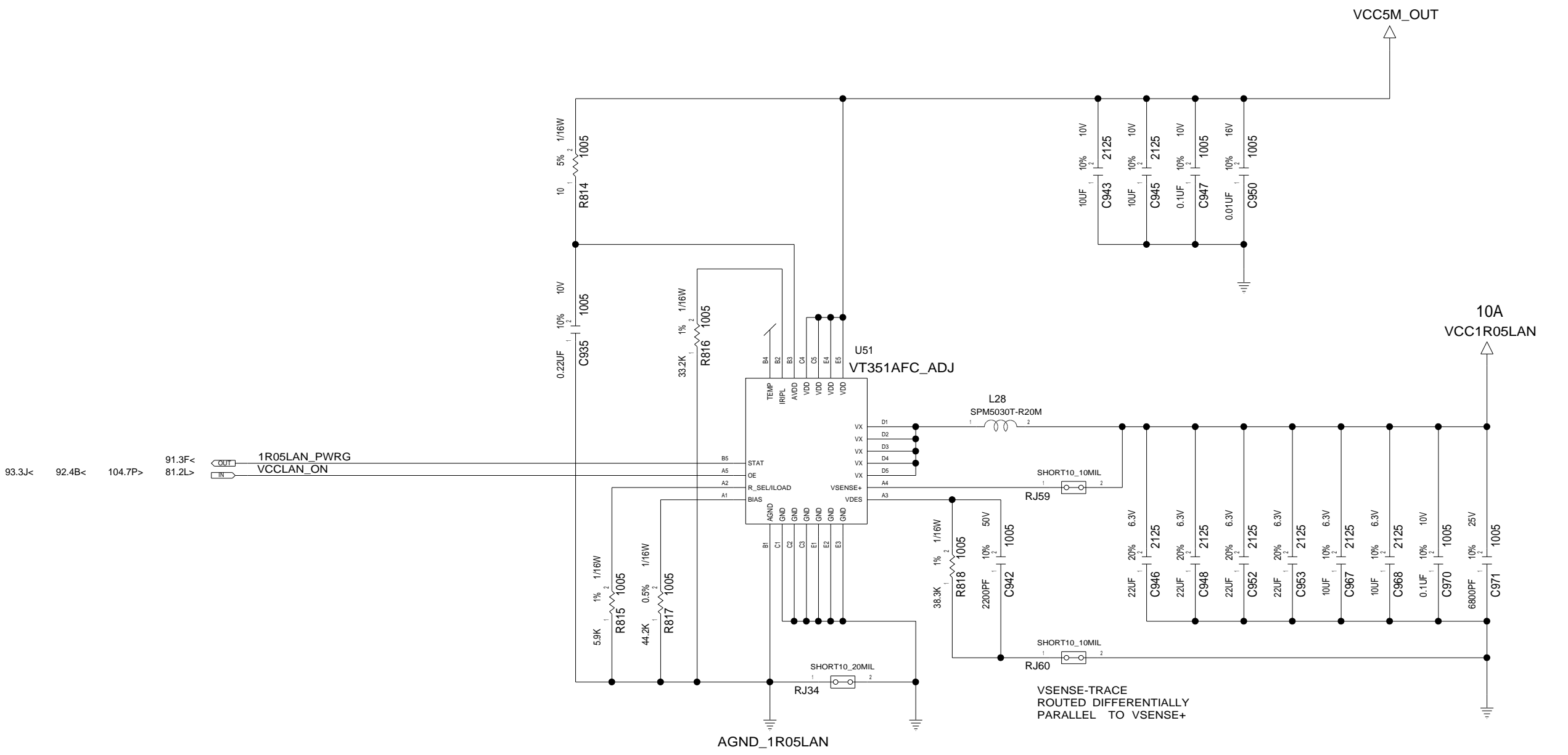
1.10V R810 = 40.2K
 1.05V R810 = 38.3K
 VOUT = 1.212 * R810 / 44.2K

75.7K< 61.5A< 108.4E<
 92.6B< 81.4J< 81.7N> 81.1G<

VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08		
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	DC/DC VCC1R05B_VTT	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	

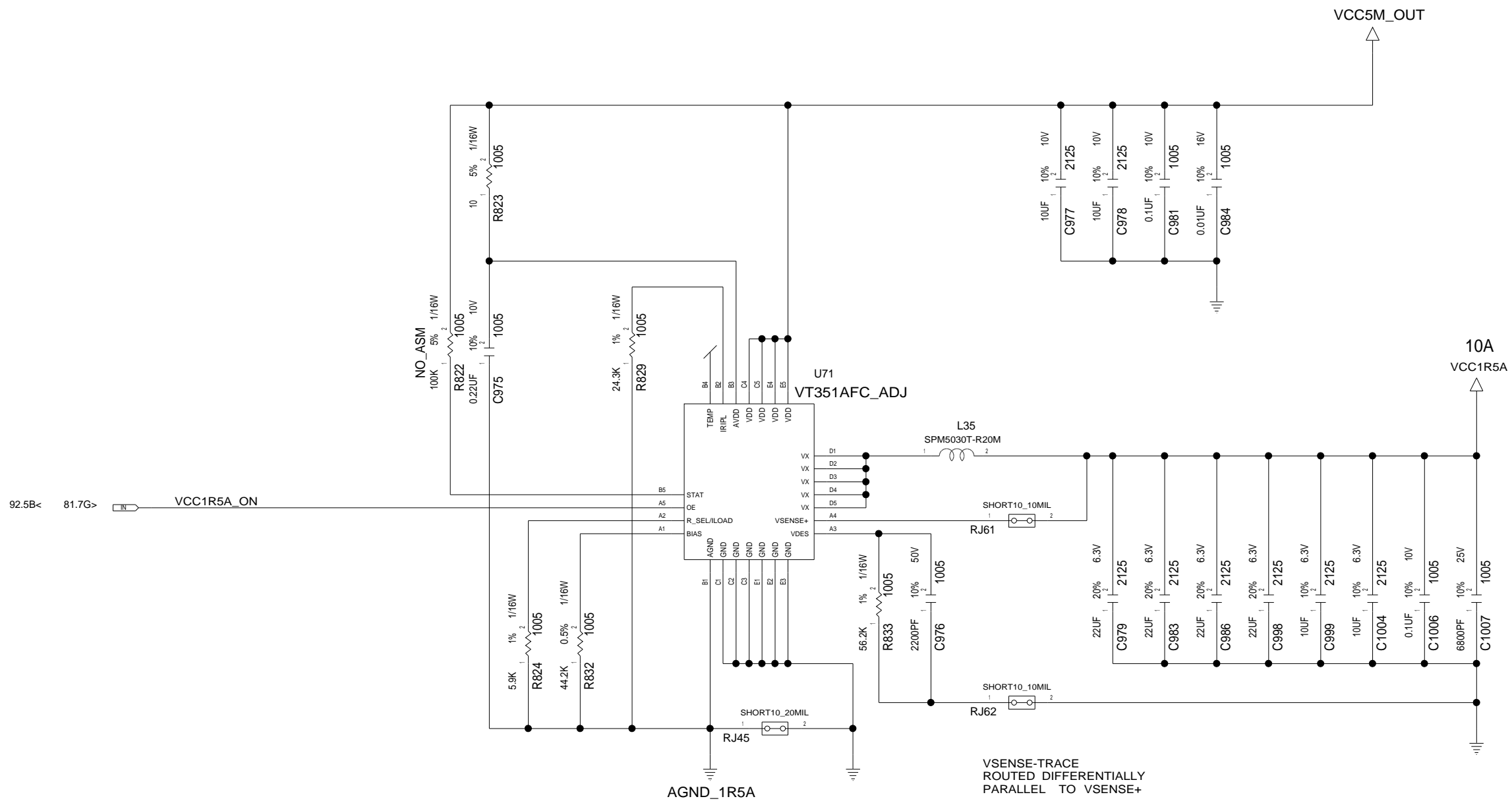
DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			106 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	DC/DC VCC1R05LAN	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.				

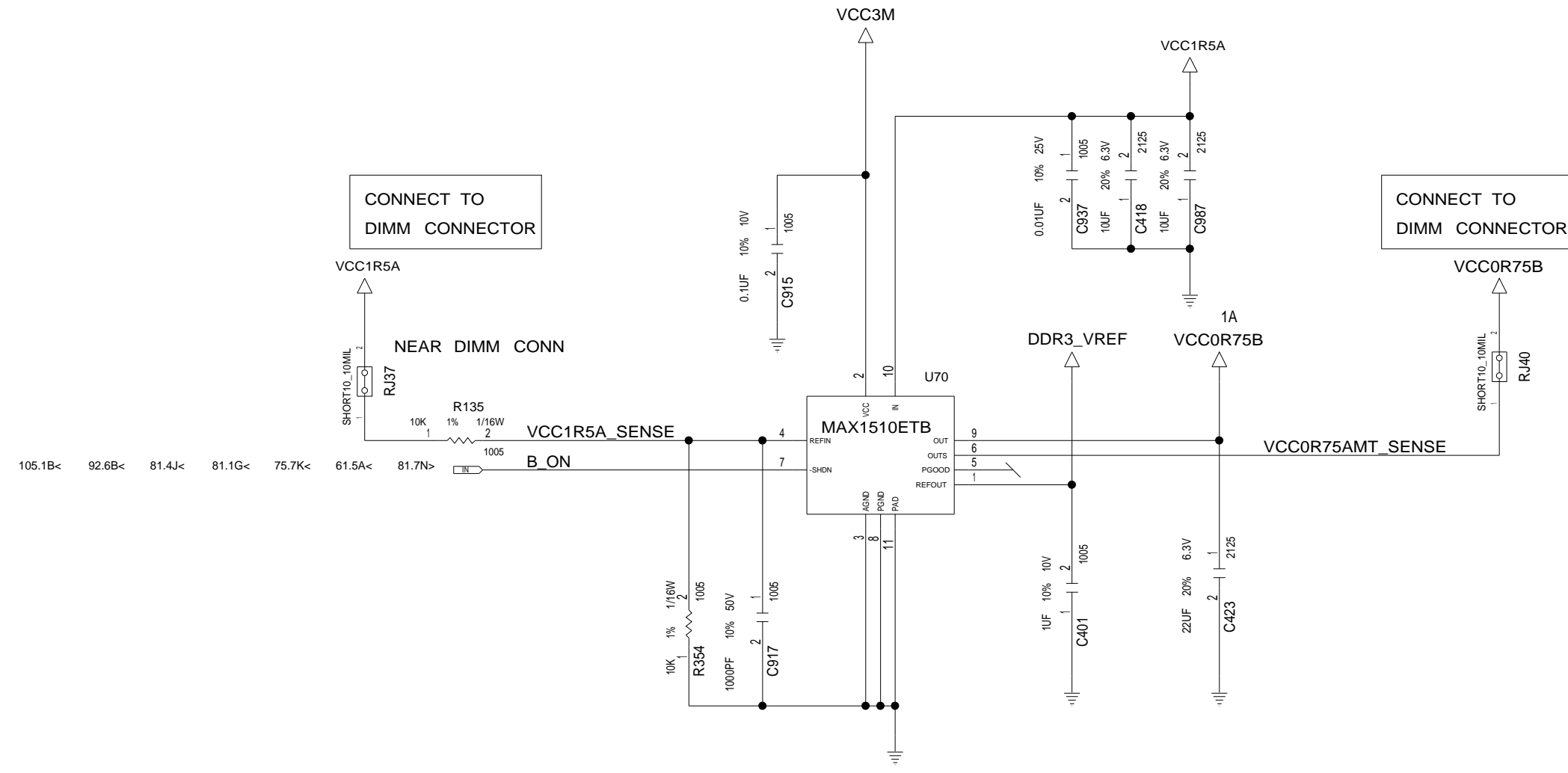
DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			107 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08	TITLE NOZOMI EXT Pre-DV	
APPROVED	H.K	09/29/08	DC/DC VCC1R5A	
CLASS	H.K	09/29/08	LENOVO CONFIDENTIAL	
<small>THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.</small>				

DATE	EC NO.	PART NO.	
		VER.0.56	
		DEVELOPMENT NO.	Q/M
			108 / 108



VER.0.56

DESIGNER	K.Y	09/29/08	PART NO.	VER.0.56
CHECKED	Y.I	09/29/08		
APPROVED	H.K	09/29/08	TITLE NOZOMI EXT Pre-DV	
CLASS	H.K	09/29/08	DC/DC VCC0R75B	
THIS DOCUMENT IS THE PROPERTY OF LENOVO. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR LENOVO. ALL QUESTIONS MUST BE REFERRED TO THE LENOVO PURCHASING DEPARTMENT.			LENOVO CONFIDENTIAL	