


	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		1 /82

APOLLO-9 PLANAR (M9/KINNERETH-R BASE)

VER 0.60 DEC/26/2003

- | | |
|---------------------------------|---|
| 1. TITLE PAGE | 44. EMC DECOUPLING |
| 2. EC HISTORY | 45. MINI PCI SLOT |
| 3. CPU(1/3) | 46. PCI BUS SWITCH |
| 4. CPU(2/3) | 47. DOCKING CONNECTOR |
| 5. CPU(3/3) | 48. FWH,RTC BATTERY |
| 6. ITP CONN | 49. H8S/2169A |
| 7. VCCCPUCORE DECOUPLING | 50. KEYBOARD CONNECTOR |
| 8. MCH-M(1/4) | 51. TOUCH PAD CONNECTOR |
| 9. MCH-M(2/4) | 52. MISC G/A (PMH-4) |
| 10. MCH-M(3/4) | 53. DC-DC VCCCPUCORE DECAP |
| 11. MCH-M(4/4) | 54. SUPER I/O PC87392 |
| 12. DDR SO DIMM CONNECTOR 0 | 55. SERIAL INTERFACE |
| 13. DDR SO DIMM CONNECTOR 1 | 56. EXT CRT INTERFACE |
| 14. SSTL-2 TERMINATION | 57. TV-OUT |
| 15. SSTL-2 DECOUPLING | 58. PARALLELL INTERFACE |
| 16. CLOCK GEN(CK-TITAN) | 59. THERMAL SENSOR |
| 17. RADEON M9_CSP (1/7) | 60. I2CBUS/SMBUS/CRYPT |
| 18. RADEON M9_CSP (2/7) | 61. FAN CONTROL |
| 19. RADEON M9_CSP (3/7) | 62. DC-IN AND CHARGER |
| 20. RADEON M9_CSP (4/7) | 63. CHARGE SELECTOR |
| 21. RADEON M9_CSP (5/7) | 64. BATTERY INPUT |
| 22. RADEON M9_CSP(6/7)(7/7) | 65. BATTERY MONITOR |
| 23. DC/DC MAX_PWR_CTRL | 66. POWER SEQUENCE |
| 24. LCD CONNECTOR | 67. DC-DC VCC3M/VCC5M(MAX1631) |
| 25. ICH4-M(1/3) | 68. DC-DC VCCCPUCORE (ADP3205) |
| 26. ICH4-M(2/3) | 69. DC-DC VCC1R2M/VCCCPUIO(MAX1845) |
| 27. ICH4-M(3/3) | 70. DC-DC VCC2R5A/VCC1R25B(MAX1845) |
| 28. HDD I/F CONNECTOR | 71. DC-DC VCC1R8M/VCCVIDEOCORE(MAX1844) |
| 29. CLEAN SHEET BAY | 72. VCC1R5M/A/B/AUX |
| 30. USB POWER | 73. TSURUMAI |
| 31. AUDIO AD1981A | 74. GIGABIT ETHER LOAD SW |
| 32. AUDIO MISC | 75. LOAD SW |
| 33. AUDIO INT MIC | 76. GIGABIT ETHERNET (1/3) |
| 34. AUDIO HP & LINE IN CONN | 77. GIGABIT ETHERNET (2/3) |
| 35. AUDIO EXT MIC CONN | 78. GIGABIT ETHERNET (3/3) |
| 36. AUDIO SPEAKER | 79. IR MODULE / LARGE PTH HOLE |
| 37. AUDIO HDP AMP AN12942A(1/2) | 80. USB INTERFACE |
| 38. AUDIO HDP AMP AN12942A(2/2) | 81. RJ11/RJ45 CONNECTOR |
| 39. CDC CONNECTOR | 82. G-SENSOR |
| 40. CARD BUS PCI4520(1/2) | |
| 41. CARD BUS PCI4520(2/2) | |
| 42. CARD BUS POWER CTRL | |
| 43. CARD BUS SLOT | |

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03			
APPROVED	K.T	12/26/03	TITLE APOLLO-9 (V060)		
CLASS	K.T	12/26/03	TITLE PAGE		
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	

EC HISTORY

	DATE	EC NO.	PART NO.
REL	12/02/03	J46283	13R1151
RED	12/10/03	J46283A	DEVELOPMENT NO.
RED	12/26/03	J46283B	Q/M
			2 /82

SDV

VER.0.01 12/19/2002 INITIAL. FROM ROME-1 VER.0.86
 VER.0.02 01/07/2003 APPLIED RM2_EC_SDV002/003/004
 VER.0.03 01/14/2003 APPLIED RM2_EC_SDV005
 VER.0.04 01/17/2003 APPLIED RM2_EC_SDV006
 VER.0.05 01/21/2003 APPLIED RM2_EC_SDV007
 VER.0.06 01/23/2003 APPLIED RM2_EC_SDV008
 VER.0.07 01/28/2003 APPLIED RM2_EC_SDV009/010
 VER.0.08 01/29/2003 APPLIED RM2_EC_SDV011
 VER.0.09 01/30/2003 APPLIED RM2_EC_SDV012
 VER.0.10 01/31/2003 APPLIED RM2_EC_SDV013
 VER.0.11 02/07/2003 APPLIED RM2_EC_SDV014
 VER.0.12 02/13/2003 APPLIED RM2_EC_SDV015

FVT

VER.0.13 02/21/2003 APPLIED RM2_EC_FVT001
 VER.0.14 02/25/2003 APPLIED RM2_EC_FVT002
 VER.0.15 02/26/2003 APPLIED RM2_EC_FVT003
 VER.0.16 02/27/2003 APPLIED RM2_EC_FVT004
 VER.0.17 03/05/2003 APPLIED RM2_EC_FVT005(R20 VALUE CHANGE ONLY)

SIV

VER.0.18 03/10/2003 NOT APPLIED RM2_EC_SIV001
 VER.0.19 03/13/2003 APPLIED RM2_EC_SIV002
 VER.0.20 03/17/2003 APPLIED RM2_EC_SIV003
 VER.0.21 03/18/2003 APPLIED RM2_EC_SIV004
 VER.0.22 03/19/2003 APPLIED RM2_EC_SIV005
 VER.0.23 03/31/2003 APPLIED RM2_EC_SIV006
 VER.0.24 04/01/2003 APPLIED RM2_EC_SIV007
 VER.0.25 04/04/2003 APPLIED RM2_EC_SIV008
 VER.0.26 04/07/2003 APPLIED RM2_EC_SIV009
 VER.0.27 04/09/2003 APPLIED EC BY MEMO@APR/08

SIT

VER.0.28 04/09/2003 APPLIED AP_EC_SIT001
 VER.0.29 04/15/2003 APPLIED AP_EC_SIT002

SIT M10-7A

VER.0.30 04/16/2003 APPLIED AP_EC_M10_01
 VER.0.31 04/24/2003 NOT APPLIED
 VER.0.32 04/28/2003 NOT APPLIED
 VER.0.33 04/28/2003 APPLIED AP_EC_M10_02/03/04
 VER.0.34 04/30/2003 APPLIED AP_EC_M10_05
 VER.0.35 05/06/2003 NOT APPLIED
 VER.0.36 05/06/2003 APPLIED AP_EC_M10_06
 VER.0.37 05/08/2003 NOT APPLIED
 VER.0.38 05/08/2003 APPLIED AP_EC_M10_07
 VER.0.39 05/09/2003 NOT APPLIED
 VER.0.40 05/09/2003 APPLIED AP_EC_M10_08
 VER.0.41 05/21/2003 APPLIED AP_EC_M10_09/10
 VER.0.42 05/28/2003 APPLIED AP_EC_M10_11
 VER.0.43 06/03/2003 APPLIED AP_EC_M10_12

SVT-AP5

VER.0.44 06/03/2003 APPLIED AP5_EC_001
 VER.0.45 06/04/2003 APPLIED AP5_EC_002
 VER.0.46 06/05/2003 APPLIED AP5_EC_003
 VER.0.47 06/06/2003 APPLIED AP5_EC_004
 SVT(AP5) GERBER RELEASE ON 06/11/2003
 VER.0.48 06/12/2003 APPLIED AP5_EC_005

SVT-AP6

VER.0.49 07/23/2003 APPLIED AP6_EC_001(MAX CTRL EC)
 VER.0.50 07/25/2003 APPLIED AP6_EC_002(CHANGE Q86 TO FDC655AN)
 SVT(AP6) GERBER RELEASE ON 07/31/2003

AP7

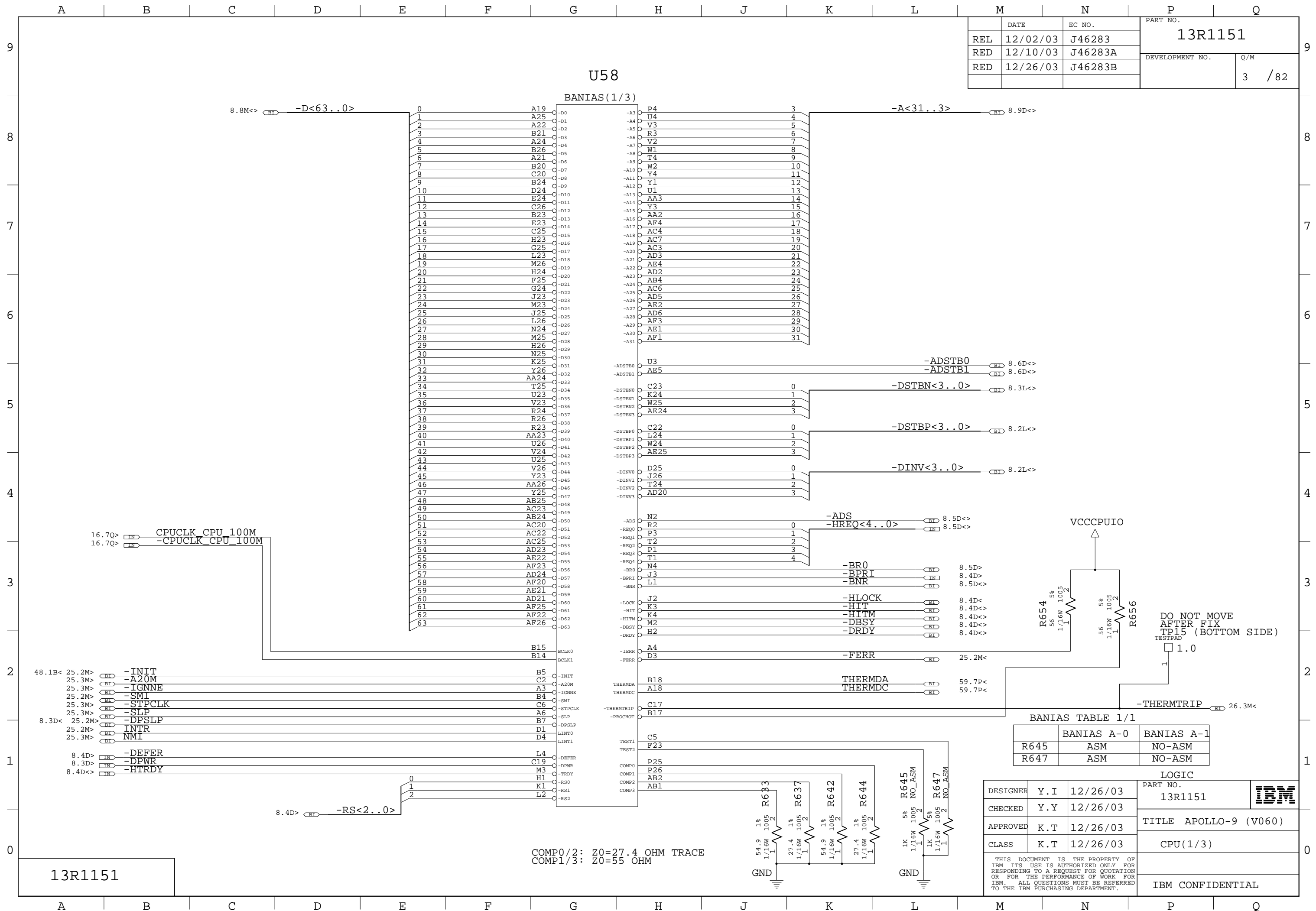
VER.0.51 09/24/2003 APPLIED AP7_EC_001
 VER.0.52 09/25/2003 APPLIED AP7_EC_002
 VER.0.53 09/26/2003 APPLIED AP7_EC_003 AND CHARACTER SIZE CHANGE.
 AP7 GERBER RELEASE ON 09/30/2003
 VER.0.54 10/03/2003 APPLIED AP7_EC_004
 VER.0.55 10/21/2003 APPLIED AP7_EC_005/006

AP9

VER.0.56 10/31/2003 APPLIED AP9_EC_001/002
 AP9 GERBER RELEASE ON 11/05/2003
 VER.0.57 11/20/2003 CHANGE R187/R197 TO 100.
 AP9 GERBER RE-RELEASE ON 12/01/2003
 VER.0.58 12/02/2003 ADD AP9 GERBER RE-RELEASE DATE.
 VER.0.59 12/10/2003 CHANGE R881 FROM 20K TO 39K.
 CHANGE C65 FROM 2200PF TO 1000PF.
 CHANGE F4 FROM 0.5 A TO 2.0A FOR M10 MODEL ONLY.
 VER.0.60 12/26/2003 CHANGE R208(PANAR ID) TO NO-ASM.
 CHANGE D100(1SS400) TO ASM FOR RK9M ONLY.
 CHANGE FL8 TO 47 OHM EXCEPT FOR RK9M(MEMASIC).

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	IBM
CHECKED	Y.Y	12/26/03	13R1151	
APPROVED	K.T	12/26/03	TITLE APOLLO-9 (V060)	
CLASS	K.T	12/26/03	HISTORY	
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL



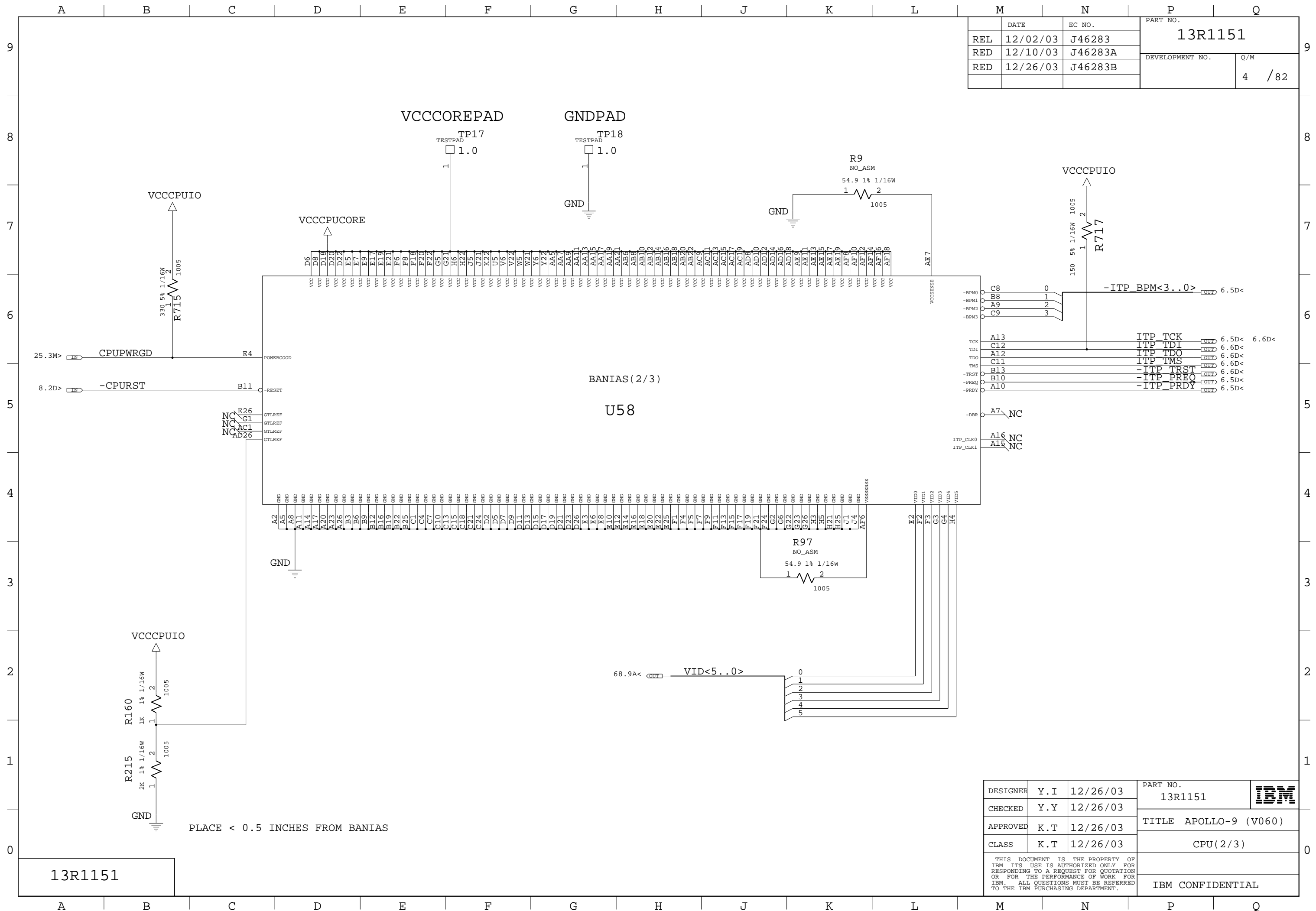
REL	DATE	EC NO.	PART NO.
REL	12/02/03	J46283	13R1151
RED	12/10/03	J46283A	DEVELOPMENT NO.
RED	12/26/03	J46283B	Q/M

3 / 82

13R1151



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

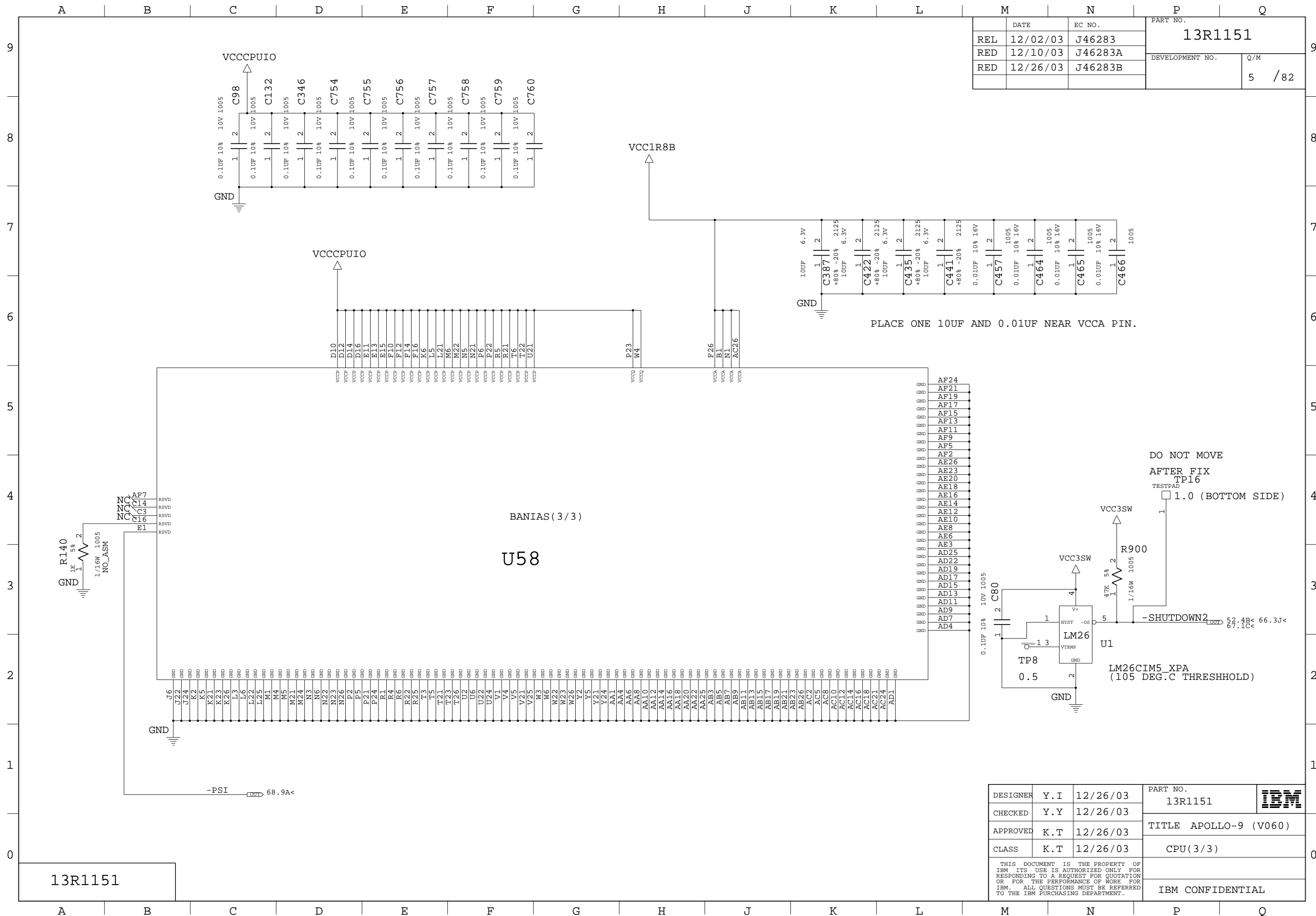


	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		4 / 82

13R1151

PLACE < 0.5 INCHES FROM BANIAS

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	
CHECKED	Y. Y	12/26/03			
APPROVED	K. T	12/26/03	TITLE APOLLO-9 (V060)		
CLASS	K. T	12/26/03	CPU(2/3)		
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL

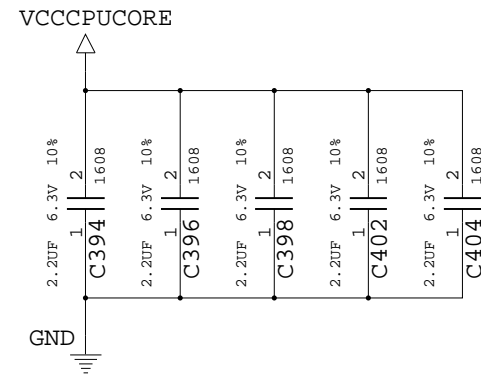
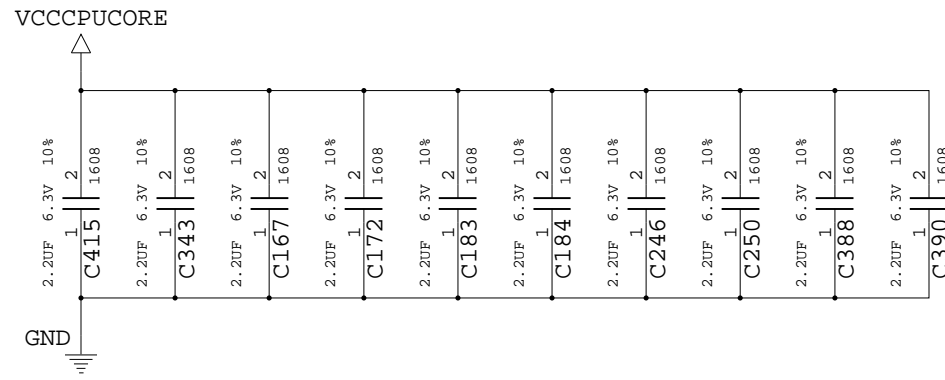


	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		5 / 82

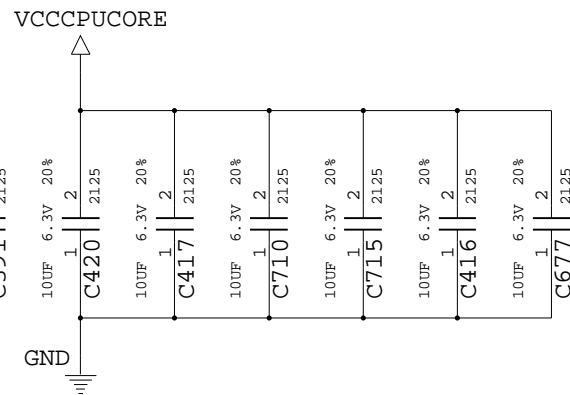
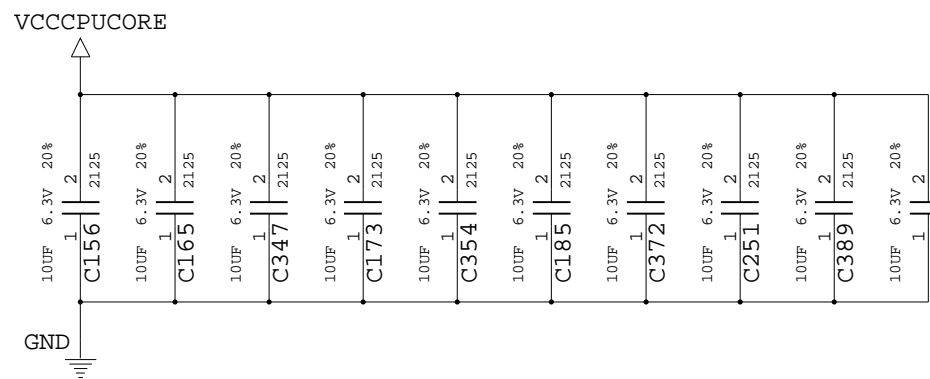
13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	CLASS	CPU(3/3)	
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	

	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		7 /82



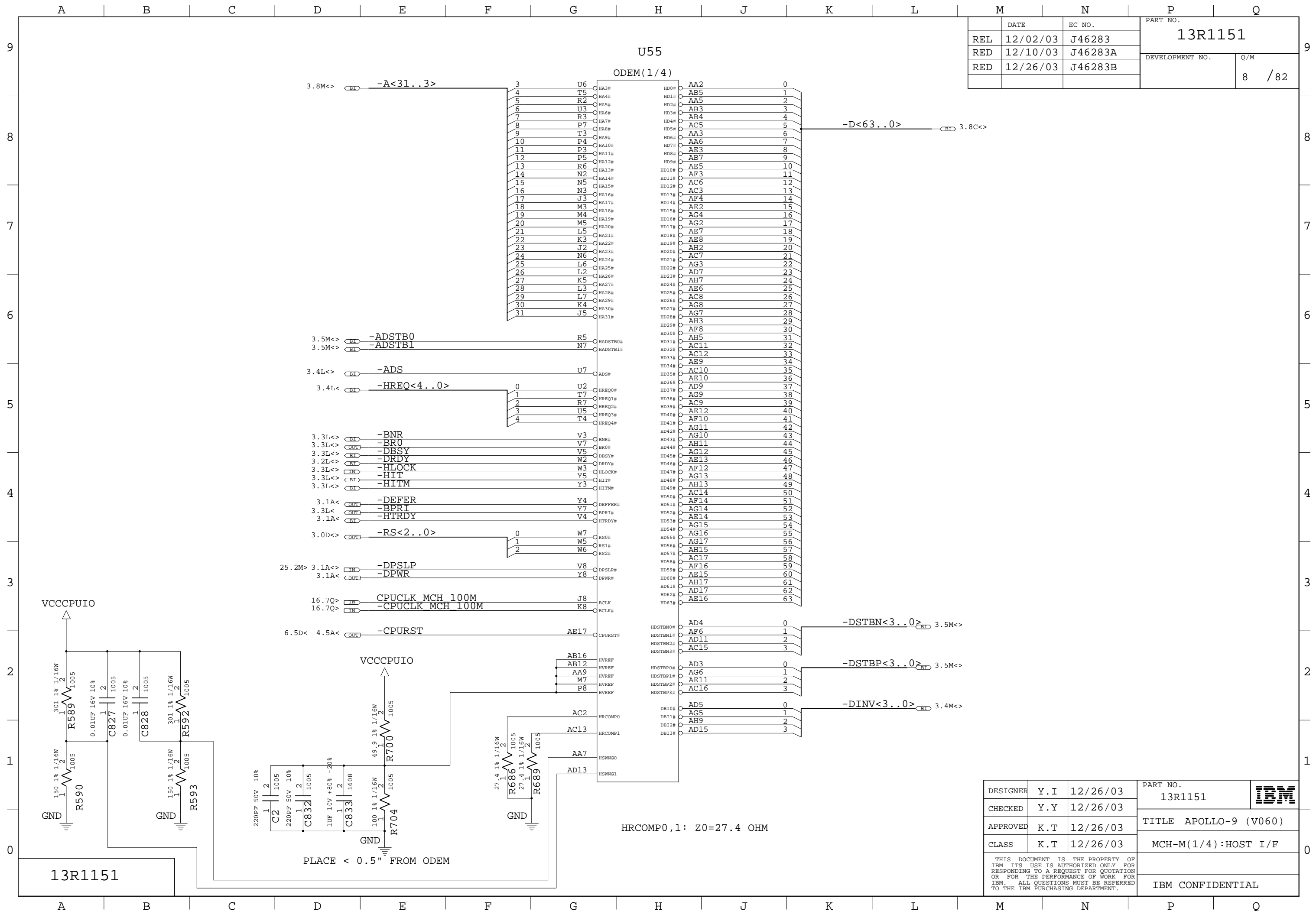
2.2UF X5R 1608 1/16W X15PCS



10UF X5R 2125 1/16W X16PCS

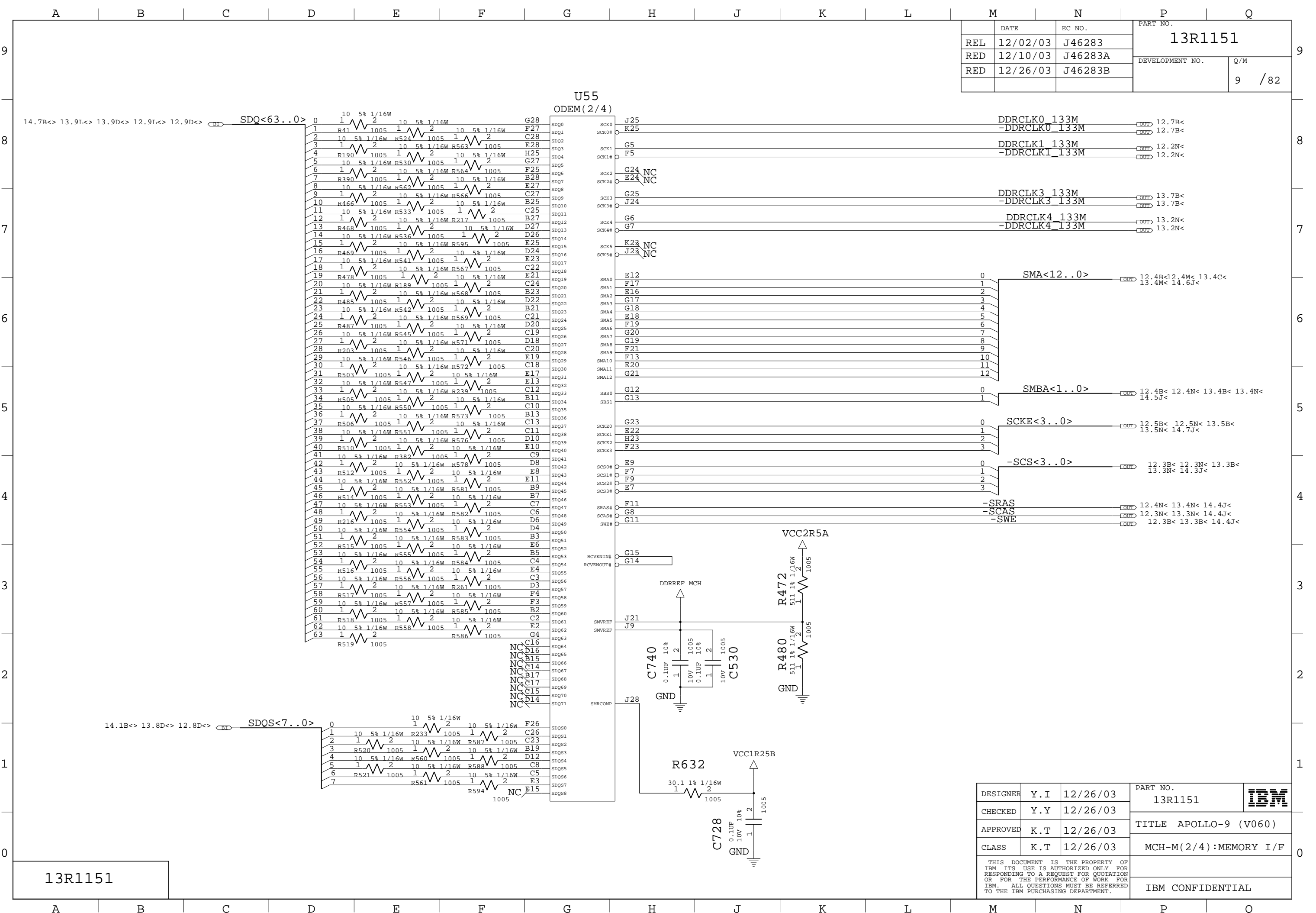
13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03			
APPROVED	K.T	12/26/03	TITLE APOLLO-9 (V060)		
CLASS	K.T	12/26/03	VCCCPUCORE DECOUPLING		
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		8 / 82

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03			
APPROVED	K.T	12/26/03	TITLE APOLLO-9 (V060)		
CLASS	K.T	12/26/03	MCH-M(1/4):HOST I/F		
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		9 / 82

U55
ODEM(2/4)

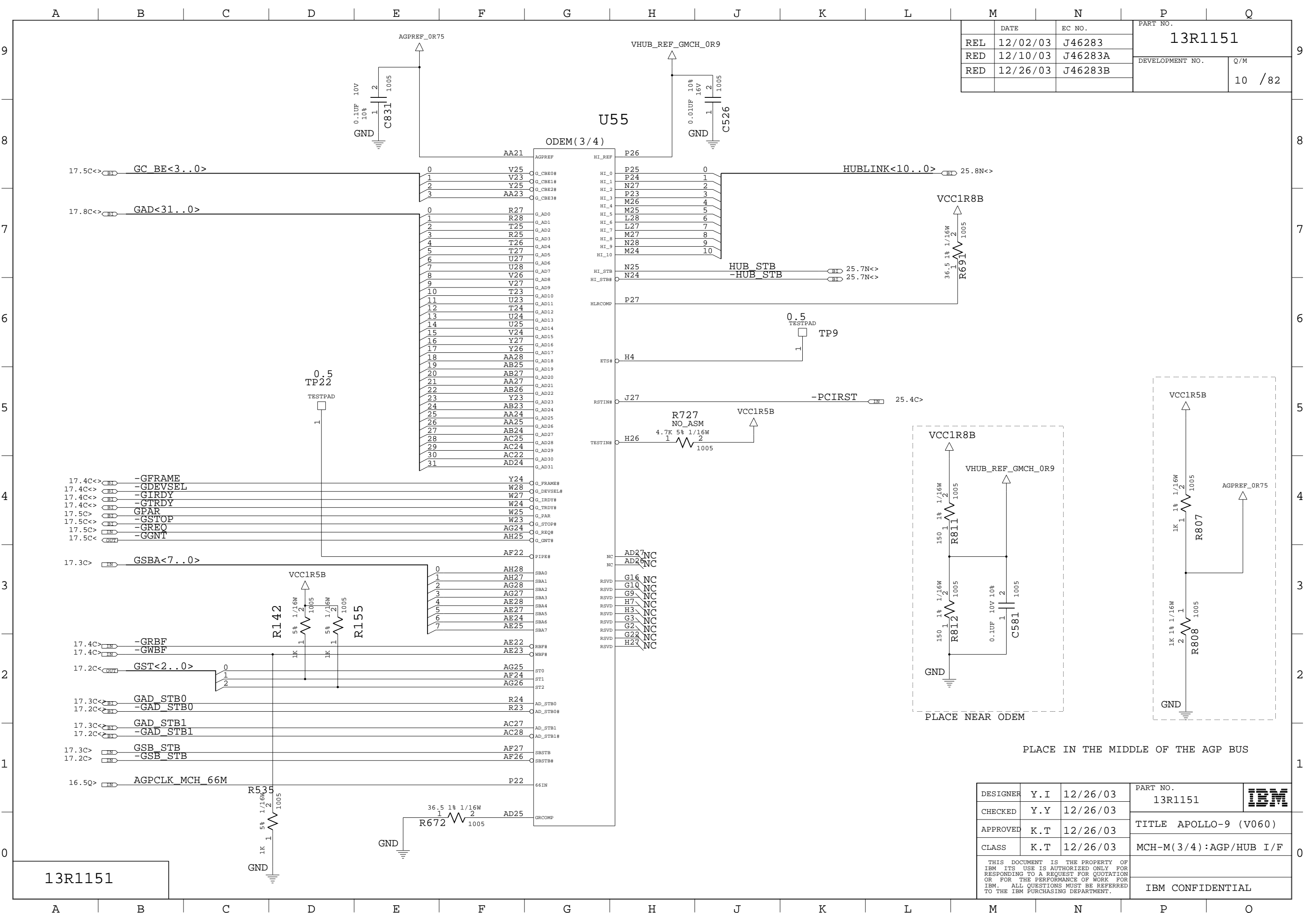
14.7B<> 13.9L<> 13.9D<> 12.9L<> 12.9D<>	0	10 5% 1/16W	2	10 5% 1/16W	G28
	1	R41	1005	1	F27
	2	10 5% 1/16W R524	1005	1	C28
	3	1	2	10 5% 1/16W R563	E28
	4	R190	1005	1	H25
	5	10 5% 1/16W R530	1005	1	G27
	6	1	2	10 5% 1/16W R564	F25
	7	R390	1005	1	B28
	8	10 5% 1/16W R562	1005	1	E27
	9	1	2	10 5% 1/16W R566	C27
	10	R466	1005	1	B25
	11	10 5% 1/16W R533	1005	1	C25
	12	1	2	10 5% 1/16W R217	B27
	13	R468	1005	1	D27
	14	10 5% 1/16W R536	1005	1	D26
	15	1	2	10 5% 1/16W R595	E25
	16	R469	1005	1	D24
	17	10 5% 1/16W R541	1005	1	E23
	18	1	2	10 5% 1/16W R567	C22
	19	R478	1005	1	E21
	20	10 5% 1/16W R189	1005	1	C24
	21	1	2	10 5% 1/16W R568	B23
	22	R485	1005	1	D22
	23	10 5% 1/16W R542	1005	1	B21
	24	1	2	10 5% 1/16W R569	C21
	25	R487	1005	1	D20
	26	10 5% 1/16W R545	1005	1	C19
	27	1	2	10 5% 1/16W R571	D18
	28	R203	1005	1	C20
	29	10 5% 1/16W R546	1005	1	E19
	30	1	2	10 5% 1/16W R572	C18
	31	R503	1005	1	E17
	32	10 5% 1/16W R547	1005	1	E13
	33	1	2	10 5% 1/16W R239	C12
	34	R505	1005	1	B11
	35	10 5% 1/16W R550	1005	1	C10
	36	1	2	10 5% 1/16W R573	B13
	37	R506	1005	1	C13
	38	10 5% 1/16W R551	1005	1	C11
	39	1	2	10 5% 1/16W R576	D10
	40	R510	1005	1	E10
	41	10 5% 1/16W R382	1005	1	C9
	42	1	2	10 5% 1/16W R578	D8
	43	R512	1005	1	E8
	44	10 5% 1/16W R552	1005	1	E11
	45	1	2	10 5% 1/16W R581	B9
	46	R514	1005	1	B7
	47	10 5% 1/16W R553	1005	1	C7
	48	1	2	10 5% 1/16W R582	C6
	49	R216	1005	1	D6
	50	10 5% 1/16W R554	1005	1	D4
	51	1	2	10 5% 1/16W R583	B3
	52	R515	1005	1	E6
	53	10 5% 1/16W R555	1005	1	B5
	54	1	2	10 5% 1/16W R584	C4
	55	R516	1005	1	E4
	56	10 5% 1/16W R556	1005	1	C3
	57	1	2	10 5% 1/16W R261	D3
	58	R517	1005	1	F4
	59	10 5% 1/16W R557	1005	1	F3
	60	1	2	10 5% 1/16W R585	B2
	61	R518	1005	1	C2
	62	10 5% 1/16W R558	1005	1	E2
	63	1	2	R586	G4
		R519	1005		C16
					D16
					B15
					C14
					B17
					C17
					C15
					D14

SDQ0	SCK0	J25	DDRCLK0_133M	12.7B<
SDQ1	SCK0#	K25	-DDRCLK0_133M	12.7B<
SDQ2				
SDQ3	SCK1	G5	DDRCLK1_133M	12.2N<
SDQ4	SCK1#	F5	-DDRCLK1_133M	12.2N<
SDQ5				
SDQ6	SCK2	G24 NC		
SDQ7	SCK2#	E24 NC		
SDQ8				
SDQ9	SCK3	G25	DDRCLK3_133M	13.7B<
SDQ10	SCK3#	J24	-DDRCLK3_133M	13.7B<
SDQ11				
SDQ12	SCK4	G6	DDRCLK4_133M	13.2N<
SDQ13	SCK4#	G7	-DDRCLK4_133M	13.2N<
SDQ14				
SDQ15	SCK5	K23 NC		
SDQ16	SCK5#	J23 NC		
SDQ17				
SDQ18				
SDQ19	SMA0	E12	SMA<12..0>	12.4B< 12.4M< 13.4C<
SDQ20	SMA1	F17		13.4M< 14.6J<
SDQ21	SMA2	E16		
SDQ22	SMA3	G17		
SDQ23	SMA4	G18		
SDQ24	SMA5	E18		
SDQ25	SMA6	F19		
SDQ26	SMA7	G20		
SDQ27	SMA8	G19		
SDQ28	SMA9	F21		
SDQ29	SMA10	F13		
SDQ30	SMA11	E20		
SDQ31	SMA12	G21		
SDQ32				
SDQ33	SBS0	G12	SMBA<1..0>	12.4B< 12.4N< 13.4B< 13.4N<
SDQ34	SBS1	G13		14.5J<
SDQ35				
SDQ36				
SDQ37	SCKE0	G23	SCKE<3..0>	12.5B< 12.5N< 13.5B<
SDQ38	SCKE1	E22		13.5N< 14.7J<
SDQ39	SCKE2	H23		
SDQ40	SCKE3	F23		
SDQ41				
SDQ42	SCS0#	E9	-SCS<3..0>	12.3B< 12.3N< 13.3B<
SDQ43	SCS1#	F7		13.3N< 14.3J<
SDQ44	SCS2#	F9		
SDQ45	SCS3#	E7		
SDQ46				
SDQ47	SRAS#	F11	-SRAS	12.4N< 13.4N< 14.4J<
SDQ48	SCAS#	G8	-SCAS	12.3N< 13.3N< 14.4J<
SDQ49	SWE#	G11	-SWE	12.3B< 13.3B< 14.4J<
SDQ50				
SDQ51				
SDQ52				
SDQ53	RCVENIN#	G15		
SDQ54	RCVENOUT#	G14		
SDQ55				
SDQ56				
SDQ57				
SDQ58				
SDQ59				
SDQ60	SMVREF	J21		
SDQ61	SMVREF	J9		
SDQ62				
SDQ63				
SDQ64				
SDQ65				
SDQ66				
SDQ67				
SDQ68				
SDQ69				
SDQ70				
SDQ71	SMRCOMP	J28		

14.1B<> 13.8D<> 12.8D<>	0	10 5% 1/16W	2	10 5% 1/16W	F26
	1	10 5% 1/16W R233	1005	1	C26
	2	1	2	10 5% 1/16W R587	C23
	3	R520	1005	1	B19
	4	10 5% 1/16W R560	1005	1	D12
	5	1	2	10 5% 1/16W R588	C8
	6	R521	1005	1	C5
	7	1	2	R561	E3
				R594	NC E15

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03			
APPROVED	K.T	12/26/03	TITLE APOLLO-9 (V060)		
CLASS	K.T	12/26/03	MCH-M(2/4):MEMORY I/F		
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL

13R1151



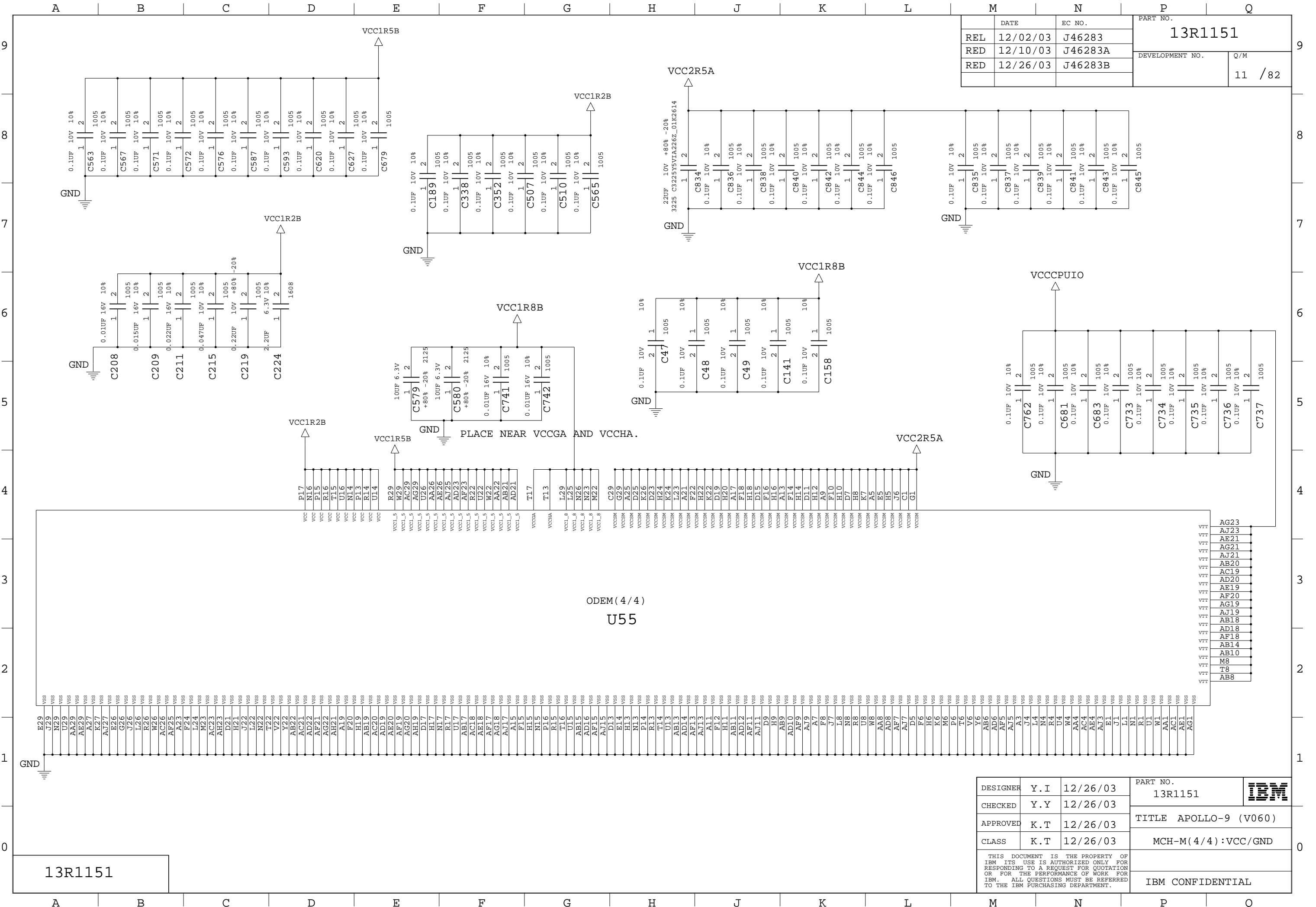
	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		10 / 82

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03	TITLE		
APPROVED	K.T	12/26/03	CLASS	MCH-M(3/4):AGP/HUB I/F	
					THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.
					IBM CONFIDENTIAL

PLACE IN THE MIDDLE OF THE AGP BUS

PLACE NEAR ODEM



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		11 / 82

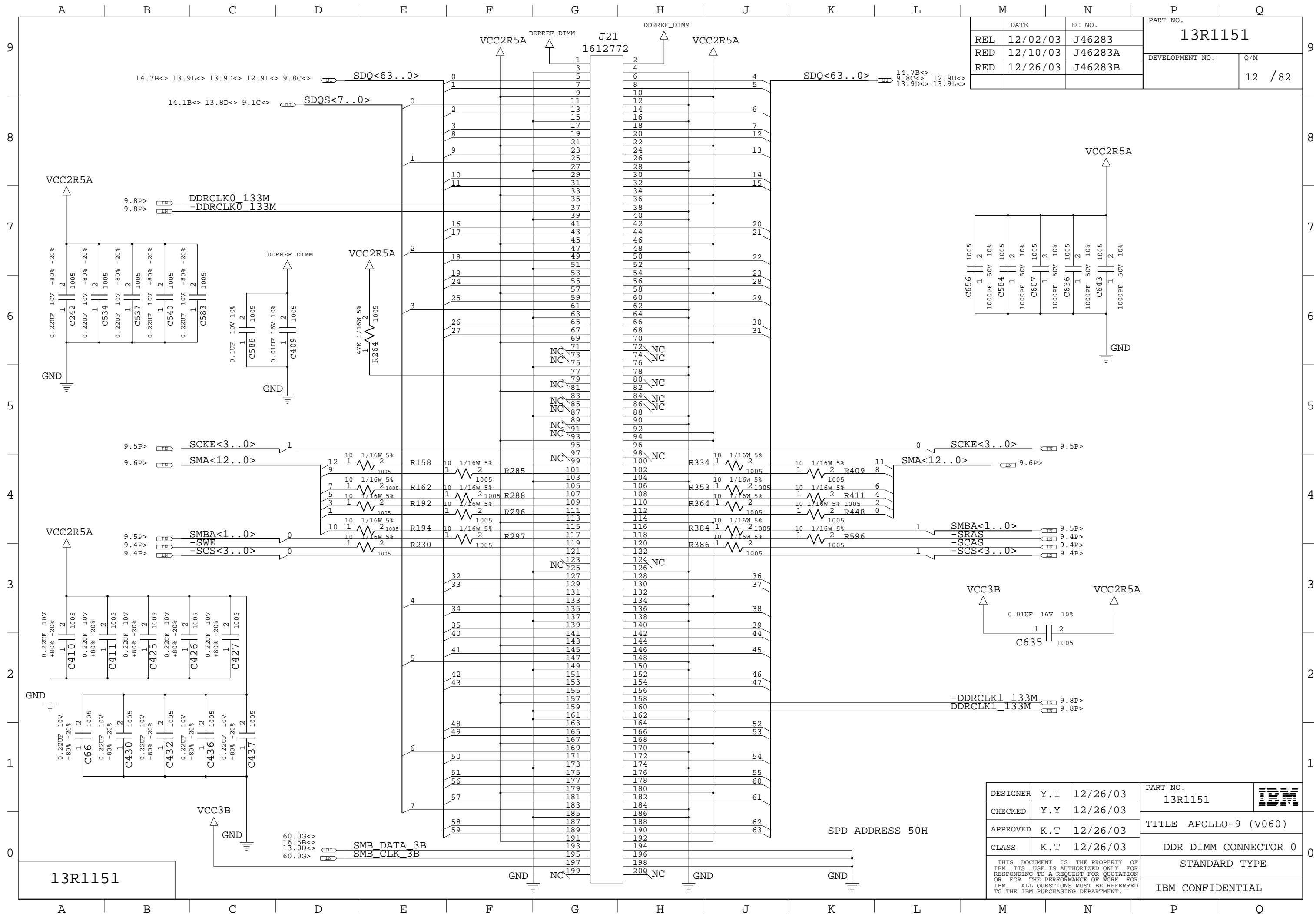
ODEM(4/4)
U55

PLACE NEAR VCCGA AND VCCHA.

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	MCH-M(4/4):VCC/GND		
CLASS	K. T	12/26/03	IBM CONFIDENTIAL		

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

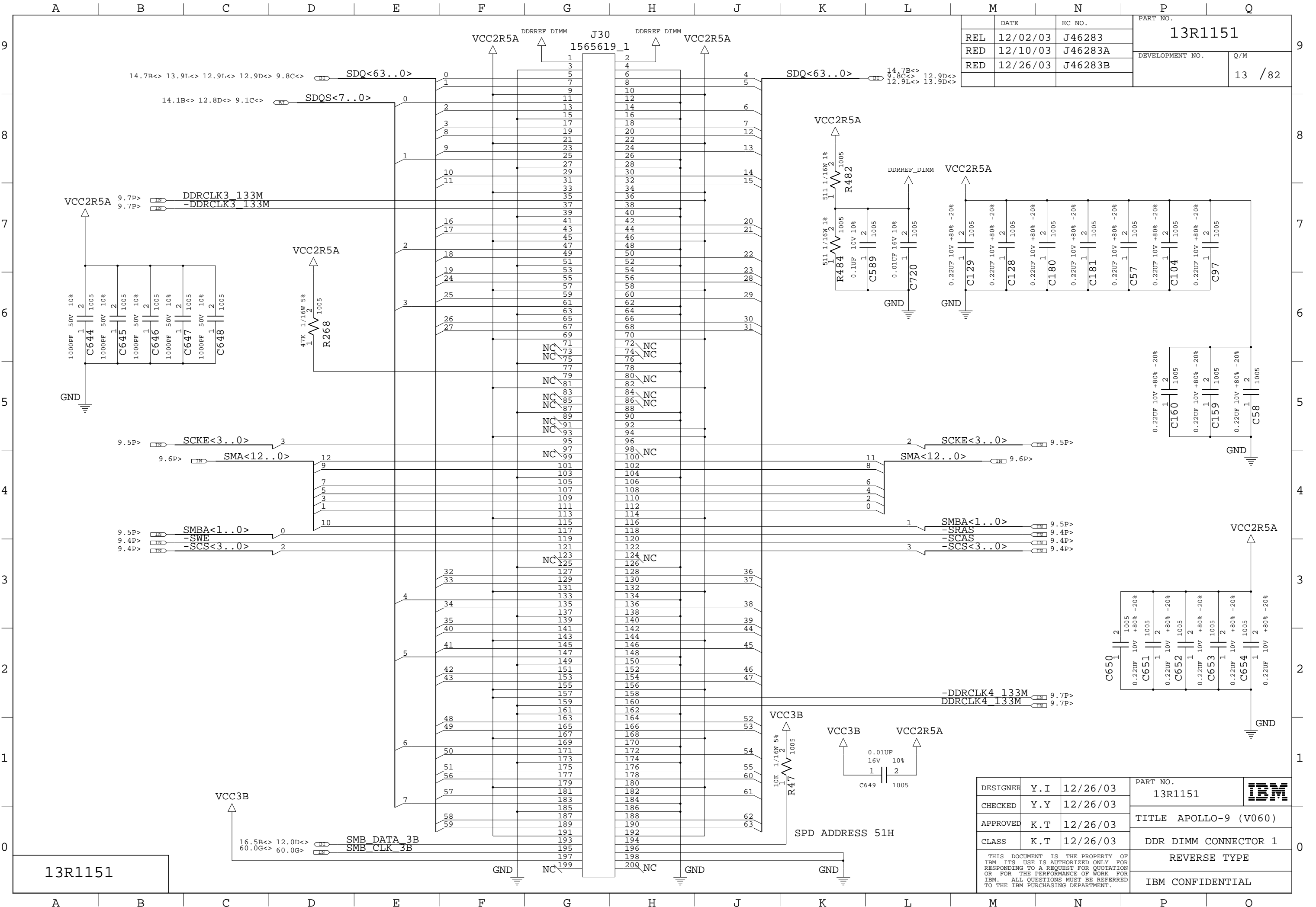


	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		12 / 82

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03	TITLE		
APPROVED	K.T	12/26/03	DDR DIMM CONNECTOR 0		
CLASS	K.T	12/26/03	STANDARD TYPE		
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL

13R1151

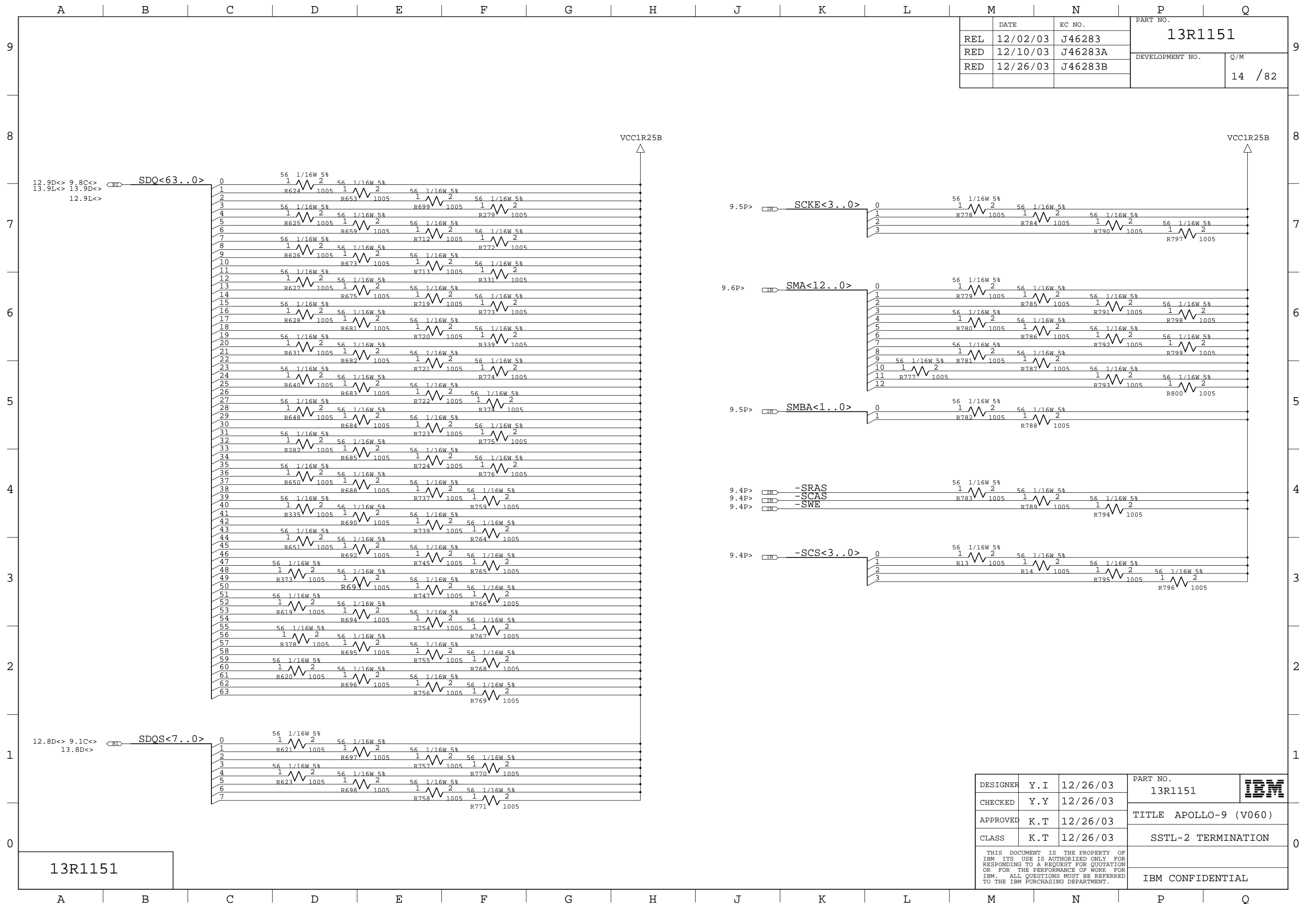
SPD ADDRESS 50H



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	
RED	12/26/03	J46283B	Q/M	
			13 / 82	

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K.T	12/26/03	DDR DIMM CONNECTOR 1		
CLASS	K.T	12/26/03	REVERSE TYPE		
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL



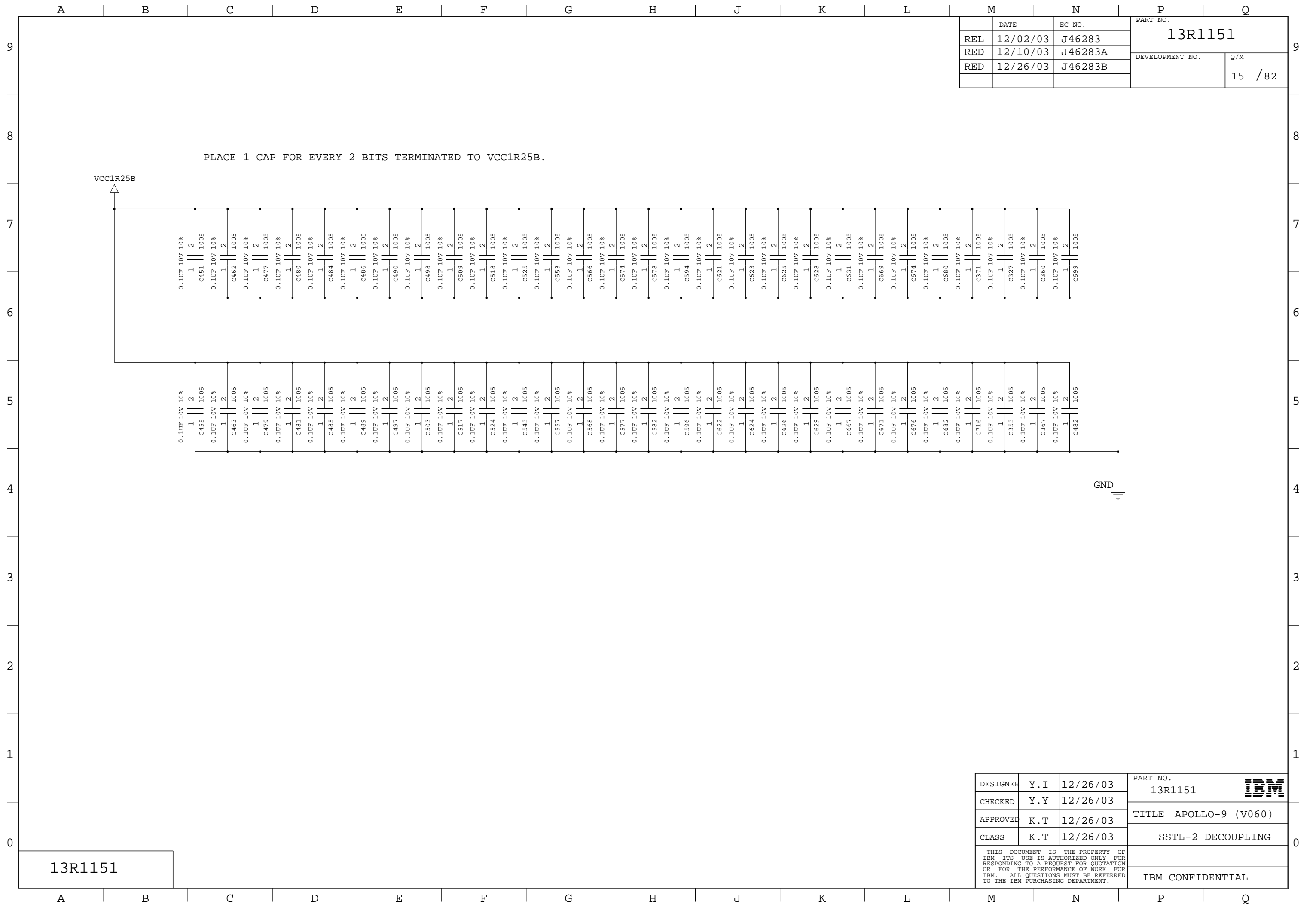
	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		14 /82

12.9D<> 9.8C<>
13.9L<> 13.9D<>
12.9L<>

12.8D<> 9.1C<>
13.8D<>

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03	TITLE		
APPROVED	K.T	12/26/03	CLASS	SSTL-2 TERMINATION	
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	



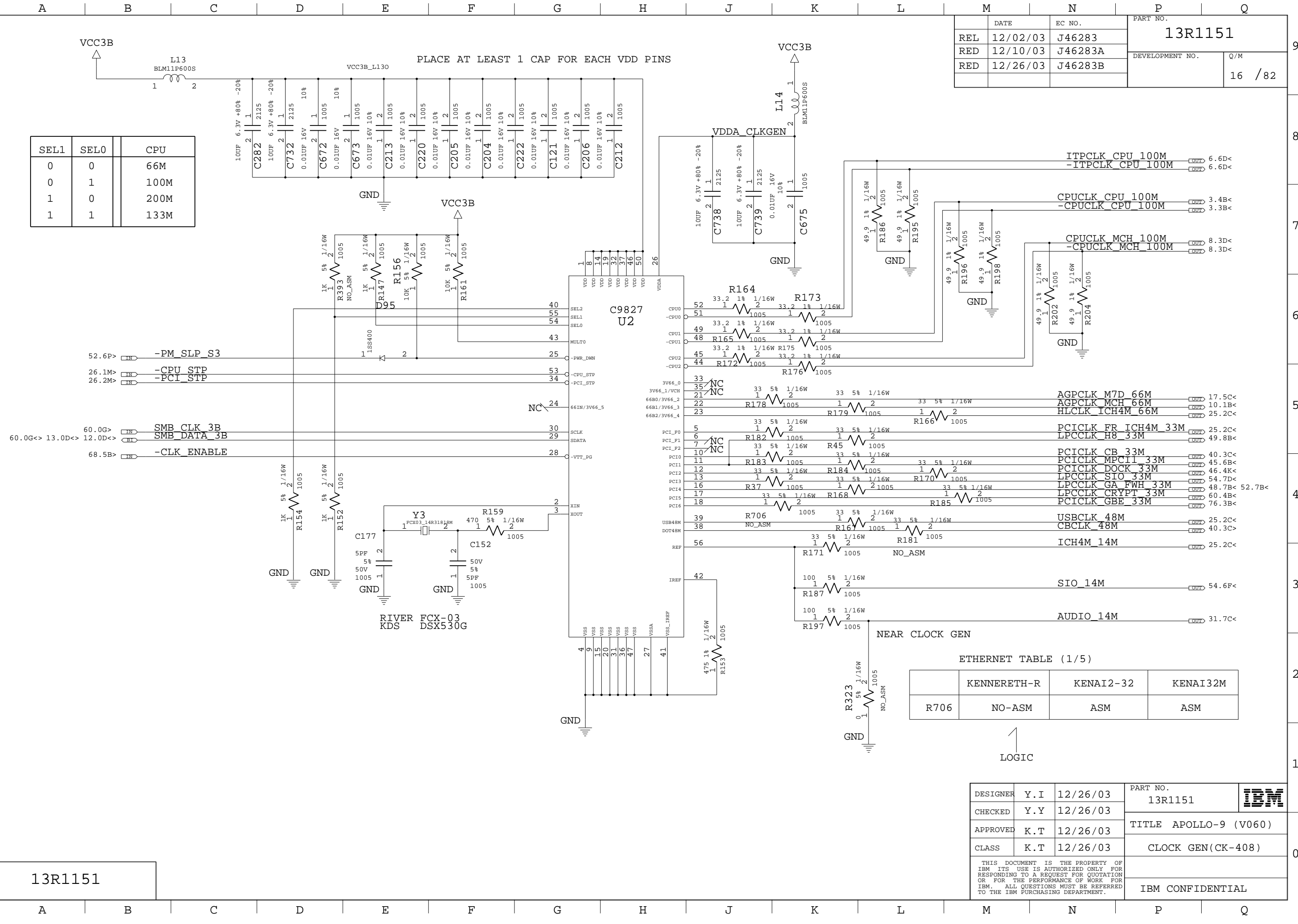
	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		15 /82

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	SSTL-2 DECOUPLING		
CLASS	K. T	12/26/03	THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.		
			IBM CONFIDENTIAL		

DATE	EC NO.	PART NO.
REL 12/02/03	J46283	13R1151
RED 12/10/03	J46283A	DEVELOPMENT NO.
RED 12/26/03	J46283B	Q/M
		16 / 82

SEL1	SEL0	CPU
0	0	66M
0	1	100M
1	0	200M
1	1	133M



ETHERNET TABLE (1/5)

	KENNERETH-R	KENAI2-32	KENAI32M
R706	NO-ASM	ASM	ASM

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K.T	12/26/03	CLOCK GEN(CK-408)		
CLASS	K.T	12/26/03	IBM CONFIDENTIAL		

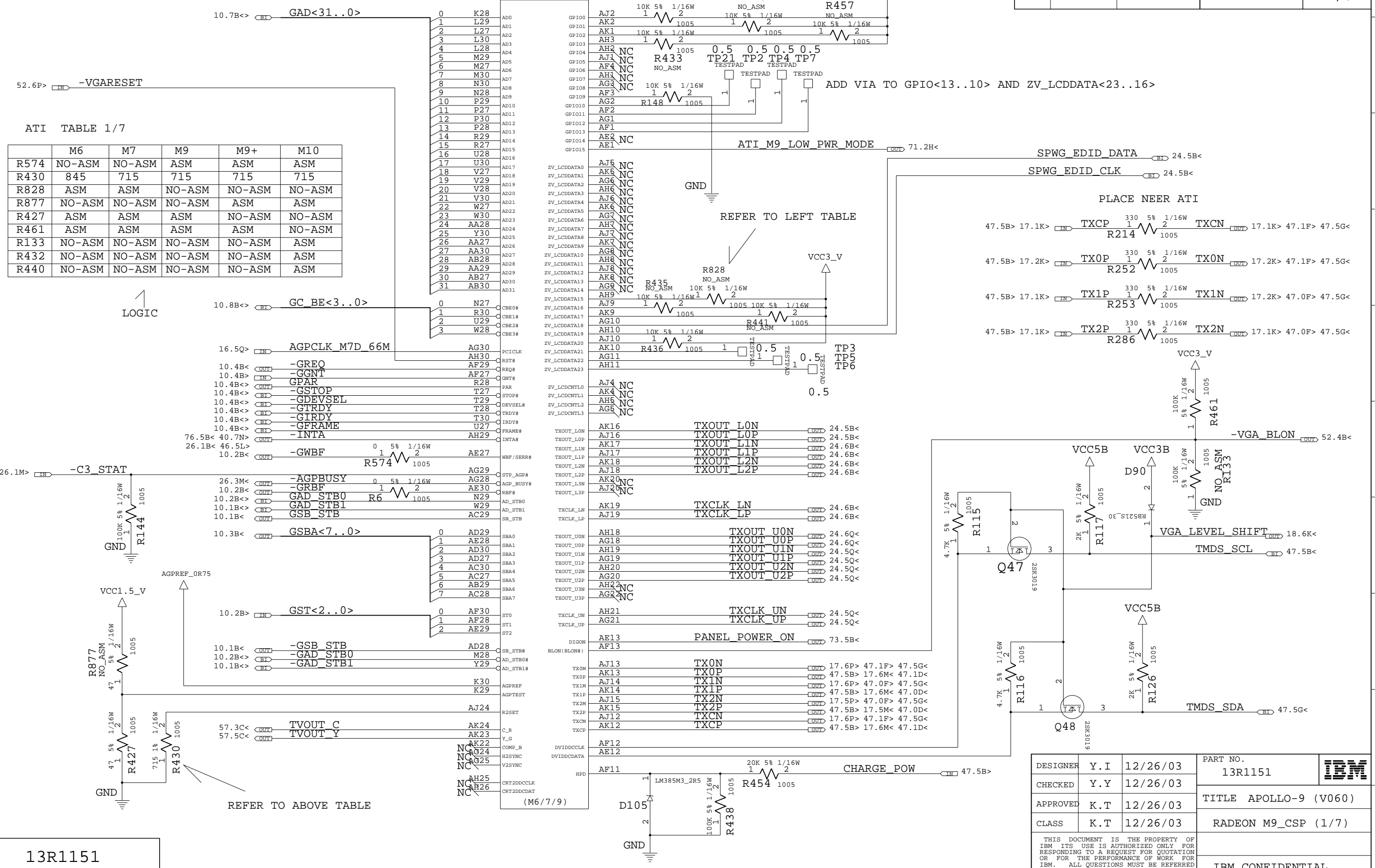
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.

13R1151

REL	12/02/03	J46283	PART NO. 13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		17 / 82

U47

M10_CSP64_56(1/7)



ATI TABLE 1/7

	M6	M7	M9	M9+	M10
R574	NO-ASM	NO-ASM	ASM	ASM	ASM
R430	845	715	715	715	715
R828	ASM	ASM	NO-ASM	NO-ASM	NO-ASM
R877	NO-ASM	NO-ASM	NO-ASM	ASM	ASM
R427	ASM	ASM	ASM	NO-ASM	NO-ASM
R461	ASM	ASM	ASM	ASM	NO-ASM
R133	NO-ASM	NO-ASM	NO-ASM	NO-ASM	ASM
R432	NO-ASM	NO-ASM	NO-ASM	NO-ASM	ASM
R440	NO-ASM	NO-ASM	NO-ASM	NO-ASM	ASM

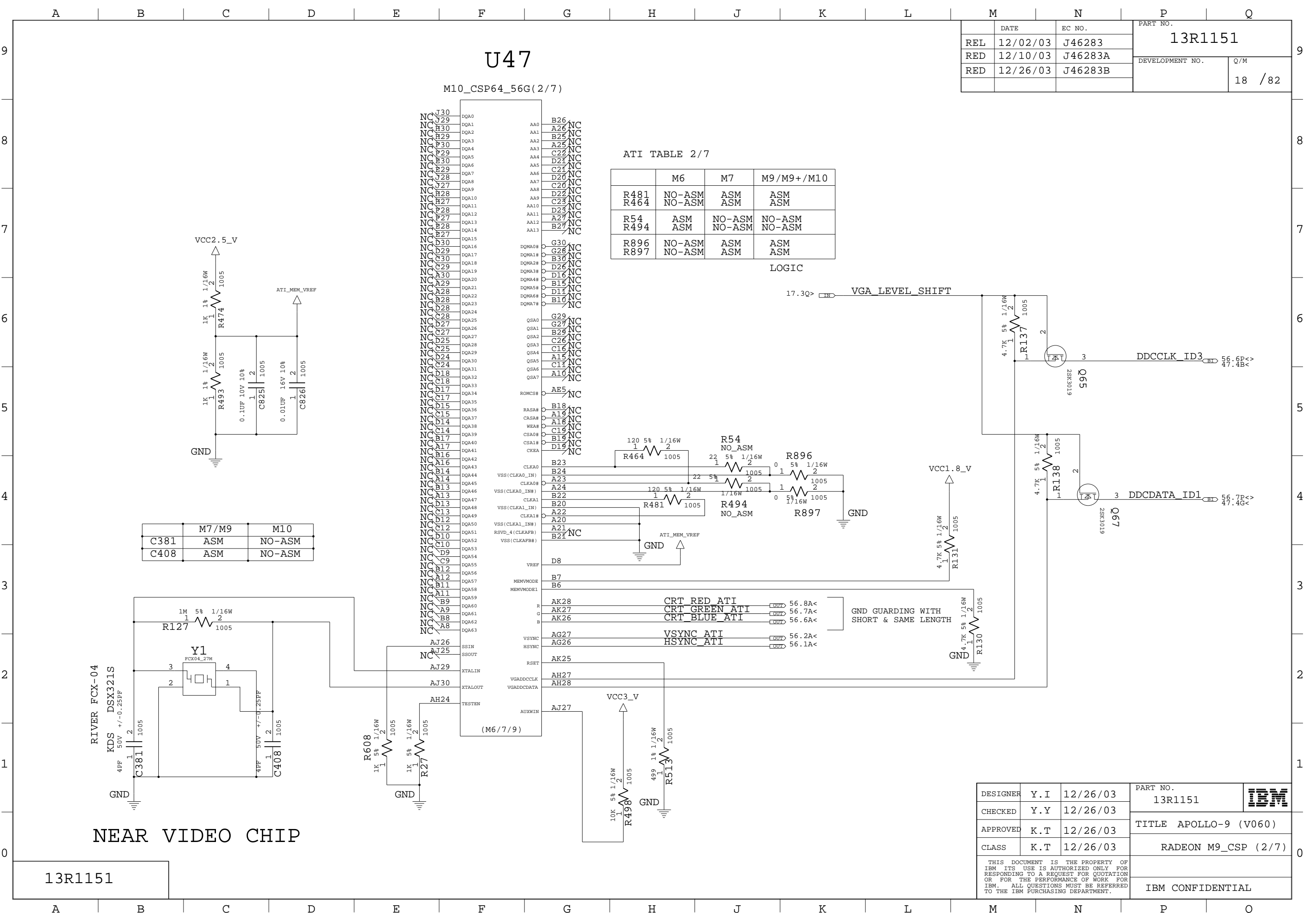
LOGIC

Signal	Value	Resistor	Pin
10.7B<>	10.7B<>		K28
10.8B<>	10.8B<>		N27
16.5Q>	16.5Q>		AG30
10.4B<	-GREQ		AH30
10.4B<	-GCNT		AF29
10.4B<	-GPAR		AF27
10.4B<>	-GSTOP		R28
10.4B<>	-GDEVSEL		T27
10.4B<>	-GTRDY		T29
10.4B<>	-GIRDY		T28
10.4B<>	-GIRDY		T30
10.4B<>	-GFRAME		U27
10.4B<>	-GFRAME		U27
76.5B< 40.7N>	-INTA		AH29
26.1B< 46.5L>	-INTA#		AH29
10.2B<	-GWBFB	R574	AE27
10.2B<>	-AGPBUSY		AG28
10.2B<>	-GRBF		AE30
10.2B<>	GAD_STB0	R6	N29
10.1B<>	GAD_STB1		W29
10.1B<>	GSB_STB		AC29
10.3B<	GSBA<7..0>		AD29
10.2B>	GST<2..0>		AF30
10.1B<	-GSB_STB		AD28
10.2B<>	-GAD_STB0		M28
10.1B<>	-GAD_STB1		Y29
57.3C<	TVOUT_C		AK24
57.5C<	TVOUT_Y		AK23

REFER TO ABOVE TABLE

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03	TITLE	APOLLO-9 (V060)	
APPROVED	K.T	12/26/03	CLASS	RADEON M9_CSP (1/7)	
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		18 /82

U47

M10_CSP64_56G(2/7)

ATI TABLE 2/7

	M6	M7	M9/M9+/M10
R481 R464	NO-ASM NO-ASM	ASM ASM	ASM ASM
R54 R494	ASM ASM	NO-ASM NO-ASM	NO-ASM NO-ASM
R896 R897	NO-ASM NO-ASM	ASM ASM	ASM ASM

LOGIC

	M7/M9	M10
C381	ASM	NO-ASM
C408	ASM	NO-ASM

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03			
APPROVED	K.T	12/26/03	TITLE APOLLO-9 (V060)		
CLASS	K.T	12/26/03	RADEON M9_CSP (2/7)		
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL

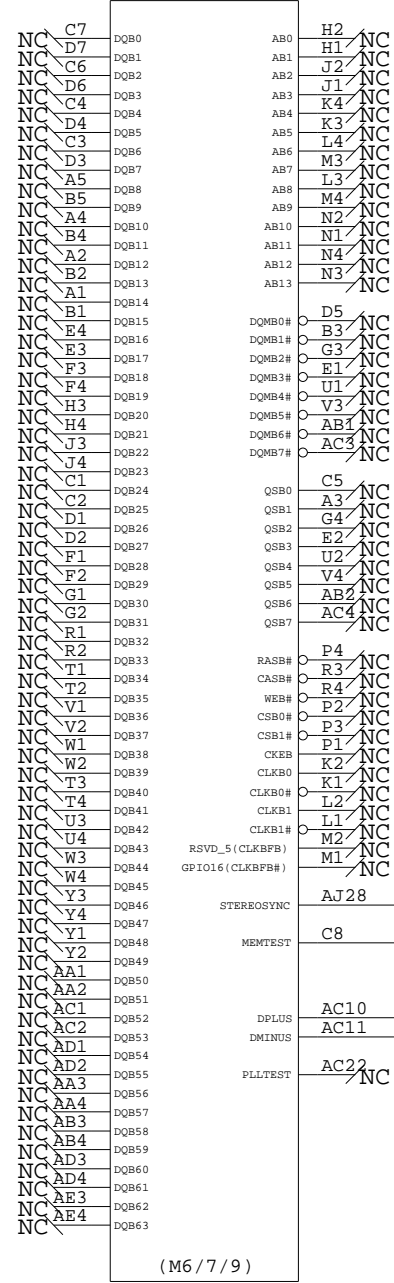
13R1151

NEAR VIDEO CHIP

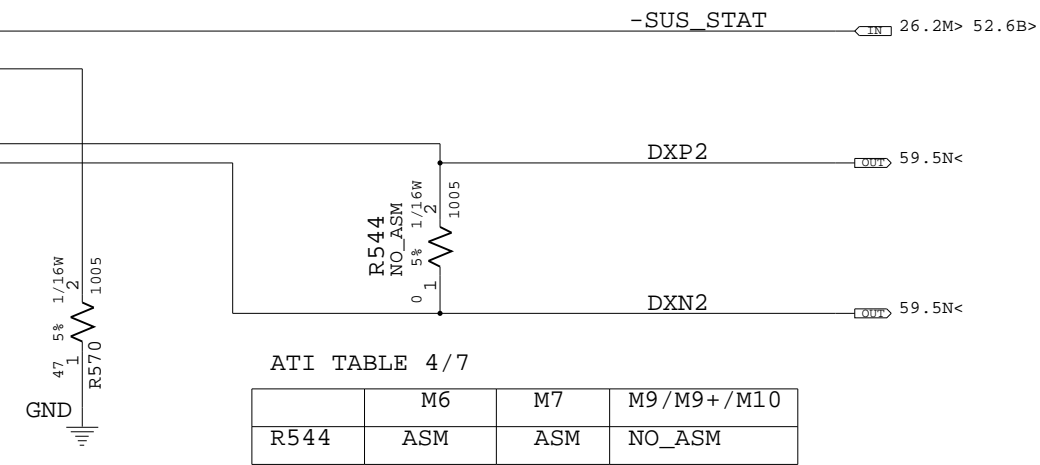
	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		19 /82

U47

M10_CSP64_56G(3/7)



(M6/7/9)



ATI TABLE 4/7

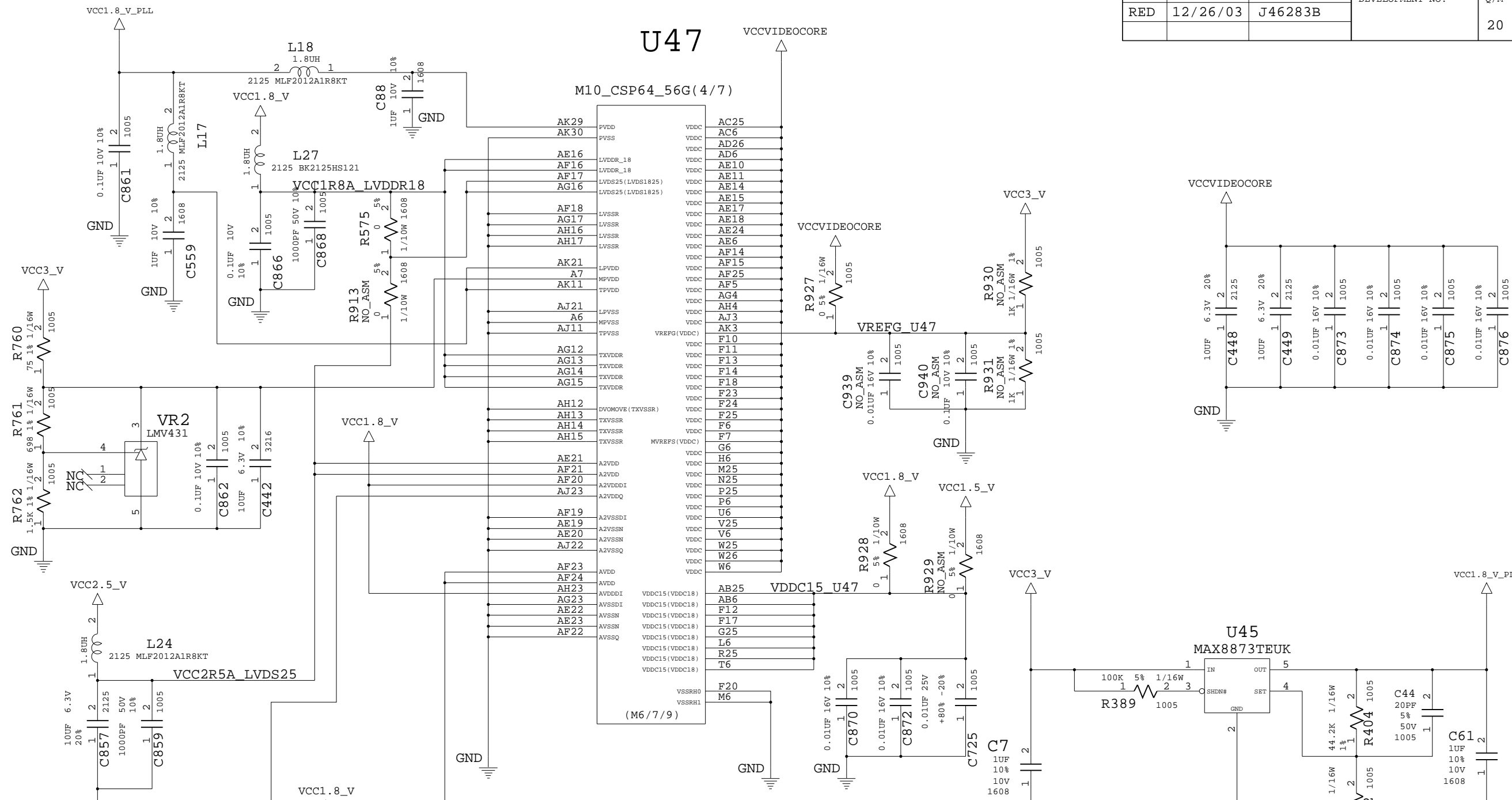
	M6	M7	M9/M9+/M10
R544	ASM	ASM	NO_ASM

LOGIC

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	CLASS	RADEON M9_CSP (3/7)	
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	

	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		20 / 82



ATI TABLE 7/7

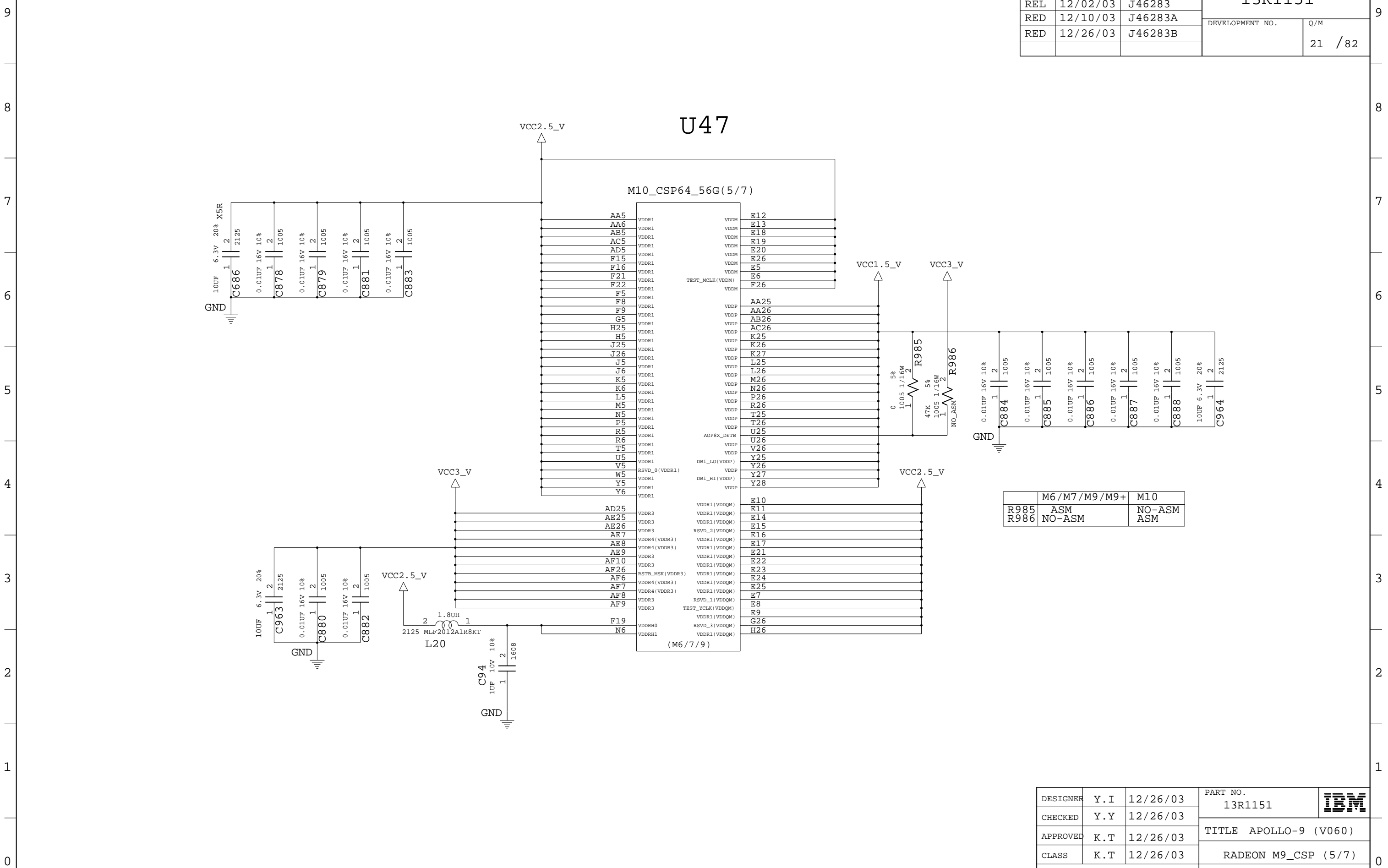
	M6/M7/M9/M9+	M10
R575	ASM	NO-ASM
R913	NO-ASM	ASM
R928	ASM	NO-ASM
R929	NO-ASM	ASM
R927	ASM	NO-ASM
R930	NO-ASM	ASM
R931	NO-ASM	ASM
C939	NO-ASM	ASM
C940	NO-ASM	ASM
L24	MLF2012A1R8KT	BK2125HS121
L27	BK2125HS121	MLF2012A1R8KT

LOGIC

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K.T	12/26/03	RADEON M9_CSP (4/7)		
CLASS	K.T	12/26/03			
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL

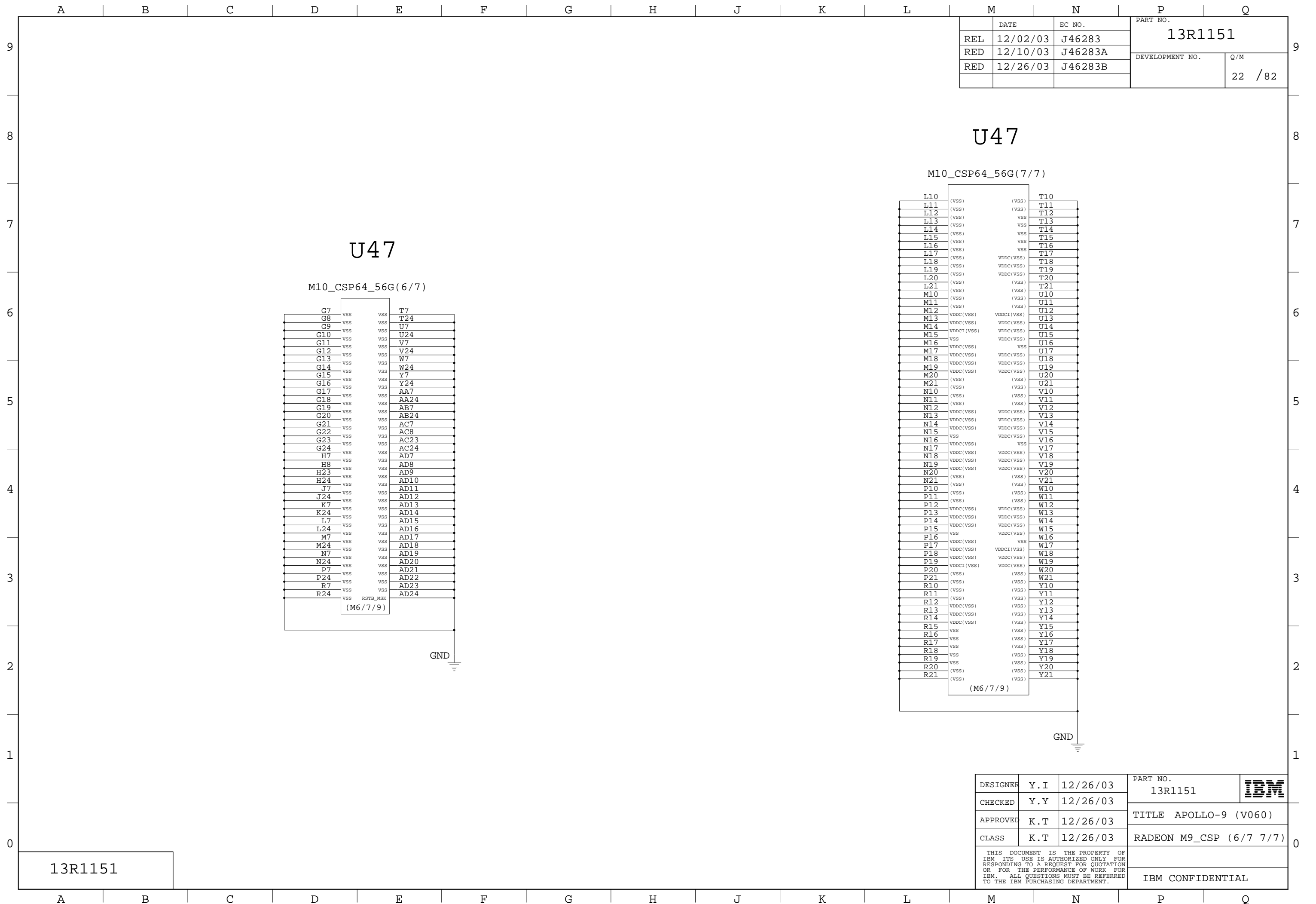
	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		21 / 82



	M6/M7/M9/M9+	M10
R985	ASM	NO-ASM
R986	NO-ASM	ASM

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K. T	12/26/03	RADEON M9_CSP (5/7)		
CLASS	K. T	12/26/03	THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.		IBM CONFIDENTIAL



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		22 /82

U47

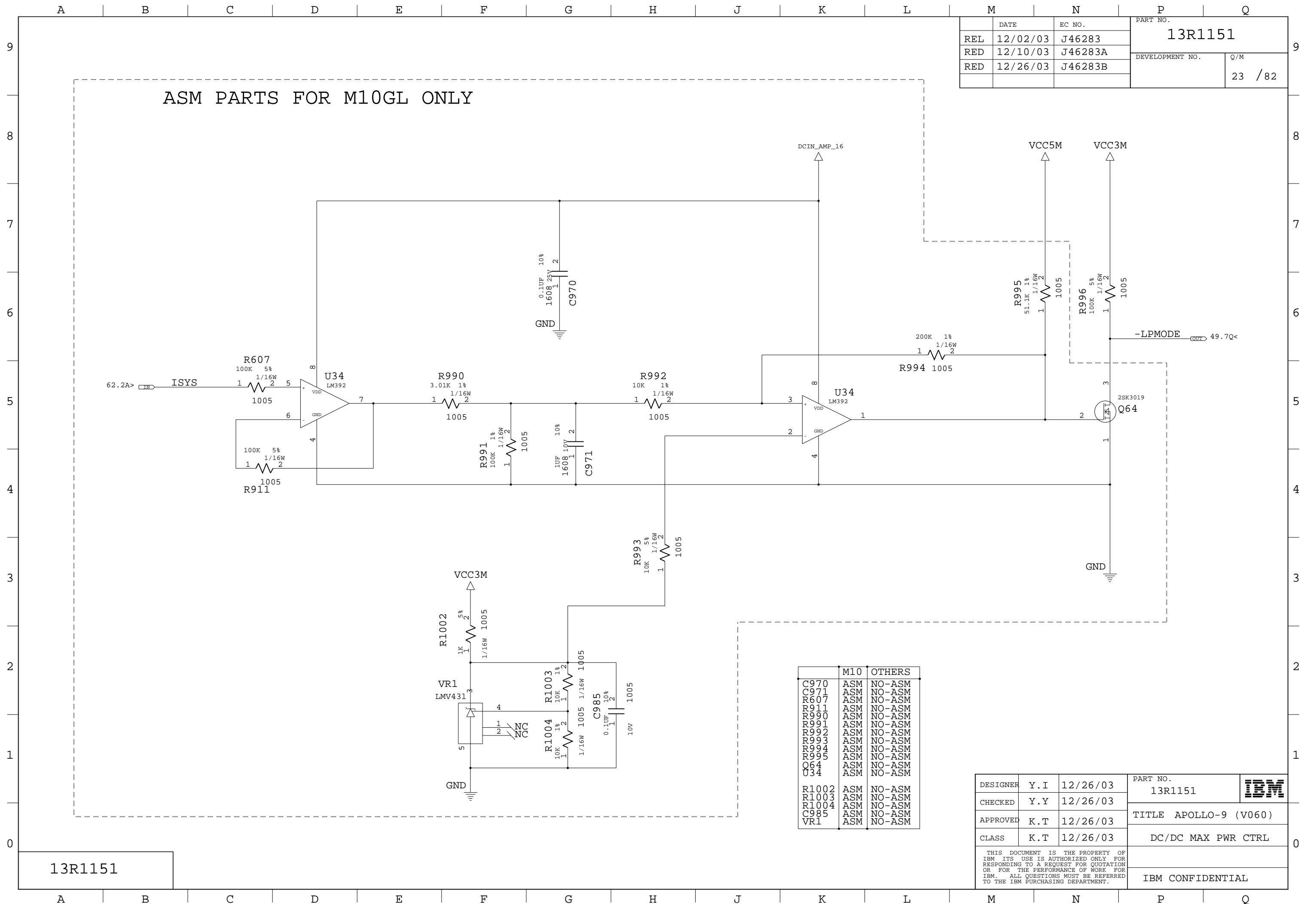
M10_CSP64_56G(6/7)

U47

M10_CSP64_56G(7/7)

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	CLASS	RADEON M9_CSP (6/7 7/7)	
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	



ASM PARTS FOR M10GL ONLY

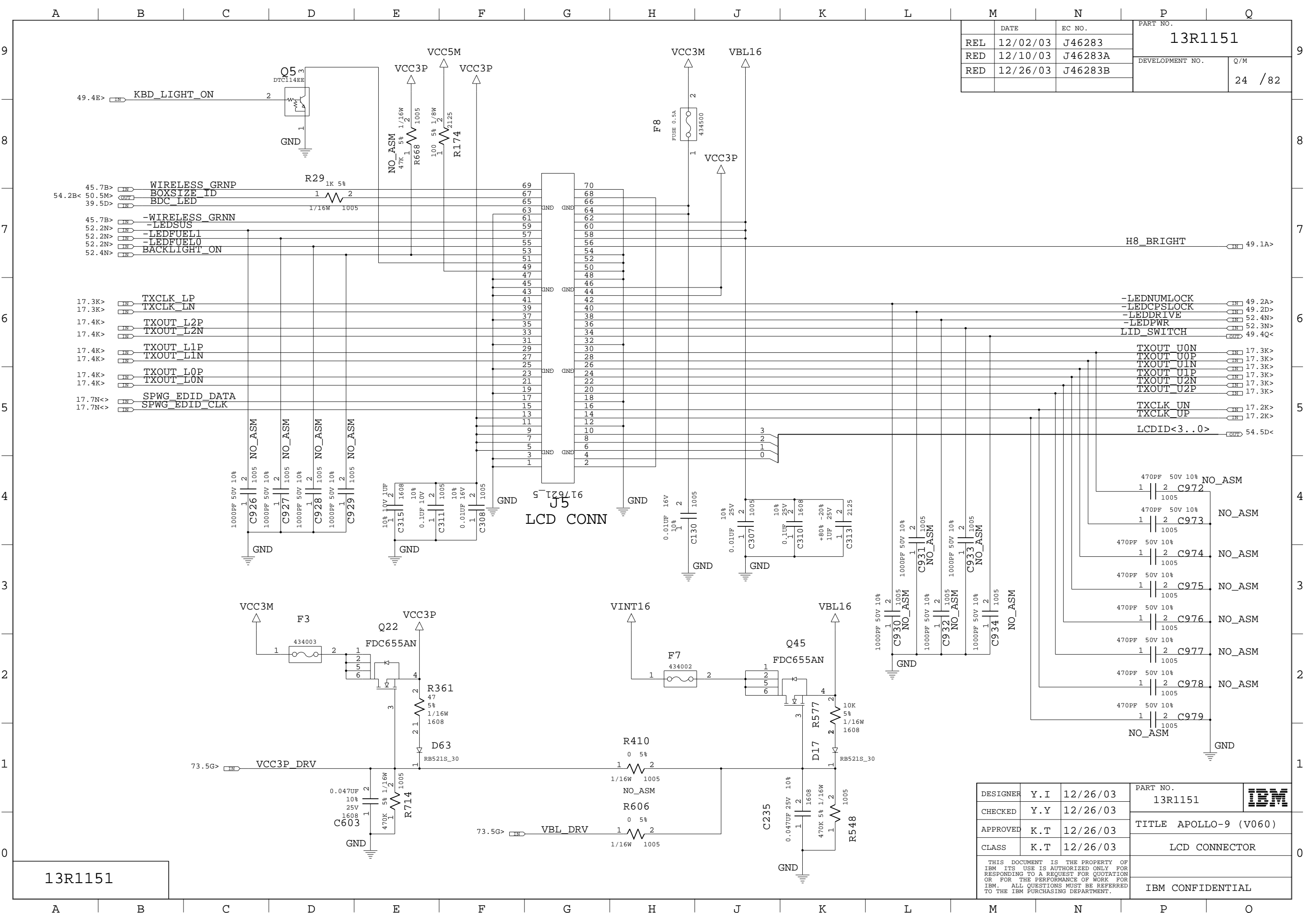
	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		23 /82

	M10	OTHERS
C970	ASM	NO-ASM
C971	ASM	NO-ASM
R607	ASM	NO-ASM
R911	ASM	NO-ASM
R990	ASM	NO-ASM
R991	ASM	NO-ASM
R992	ASM	NO-ASM
R993	ASM	NO-ASM
R994	ASM	NO-ASM
R995	ASM	NO-ASM
Q64	ASM	NO-ASM
U34	ASM	NO-ASM
R1002	ASM	NO-ASM
R1003	ASM	NO-ASM
R1004	ASM	NO-ASM
C985	ASM	NO-ASM
VR1	ASM	NO-ASM

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K. T	12/26/03	DC/DC MAX PWR CTRL		
CLASS	K. T	12/26/03	IBM CONFIDENTIAL		

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

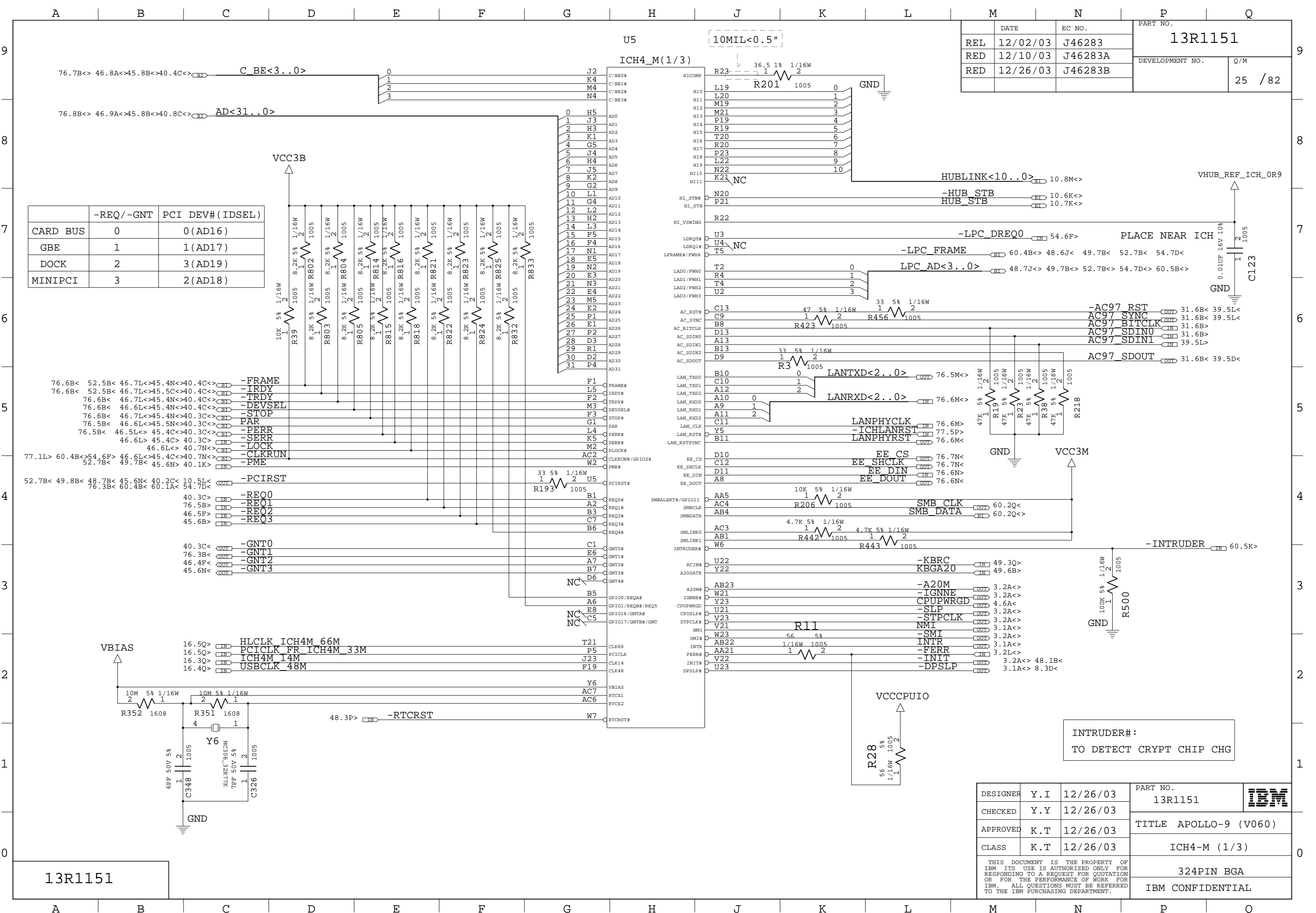
13R1151



	DATE	EC NO.	PART NO.
REL	12/02/03	J46283	13R1151
RED	12/10/03	J46283A	
RED	12/26/03	J46283B	
			DEVELOPMENT NO.
			Q/M
			24 / 82

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE		
APPROVED	K.T	12/26/03		LCD CONNECTOR	
CLASS	K.T	12/26/03			
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL



	DATE	EC NO.	PART NO.
REL	12/02/03	J46283	13R1151
RED	12/10/03	J46283A	DEVELOPMENT NO.
RED	12/26/03	J46283B	Q/M
			25 / 82

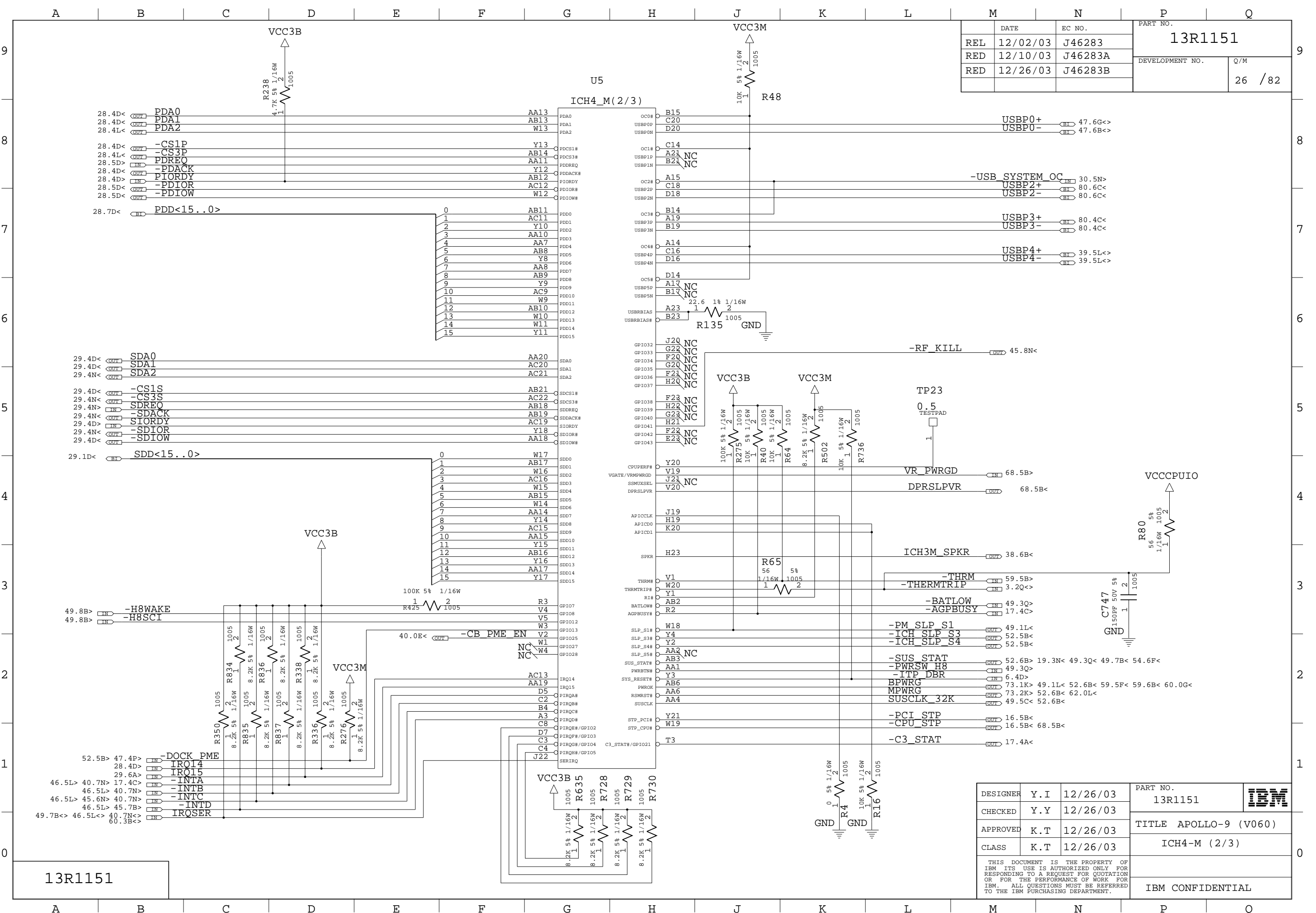
	-REQ/-GNT	PCI DEV#(IDSEL)
CARD BUS	0	0 (AD16)
GBE	1	1 (AD17)
DOCK	2	3 (AD19)
MINIPCI	3	2 (AD18)

76.6B<	52.5B<	46.7L<>45.4N<>40.4C<>	-FRAME			
76.6B<	52.5B<	46.7L<>45.5C<>40.4C<>	-IRDY			
76.6B<	46.7L<>45.4N<>40.4C<>	-TRDY				
76.6B<	46.6L<>45.4N<>40.4C<>	-DEVSEL				
76.6B<	46.7L<>45.4N<>40.3C<>	-STOP				
76.5B<	46.6L<>45.5N<>40.3C<>	PAR				
76.5B<	46.5L<>45.4C<>40.3C<>	-PERR				
46.6L<	45.4C<	-SERR				
46.6L<	40.7N<	-LOCK				
77.1L>	60.4B<>54.6F>	46.6L<>45.4C<>40.7N<>	-CLKRUN			
52.7B<	49.8B<	49.7B<	45.6N>	40.1K>	-PME	
52.7B<	49.8B<	48.7B<	45.6N<	40.2C<	10.5L<	-PCIRST
76.3B<	60.4B<	60.1A<	54.7D<			
40.3C<						-REQ0
76.5B>						-REQ1
46.5F>						-REQ2
45.6B>						-REQ3
40.3C<						-GNT0
76.3B<						-GNT1
46.4F<						-GNT2
45.6N<						-GNT3

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE	APOLLO-9 (V060)	
APPROVED	K.T	12/26/03		ICH4-M (1/3)	
CLASS	K.T	12/26/03		324PIN BGA	
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL

INTRUDER#:
TO DETECT CRYPT CHIP CHG

13R1151

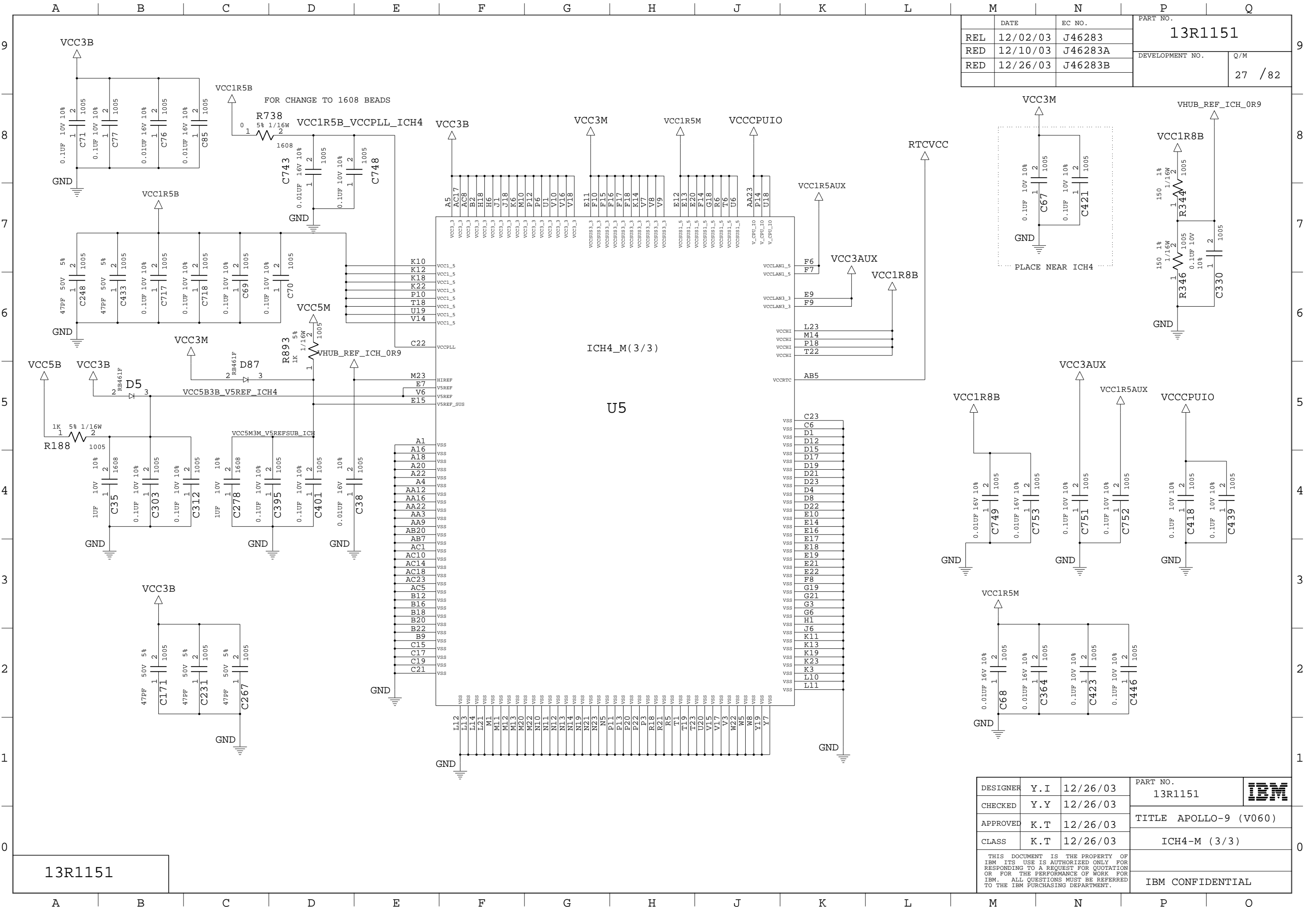


	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		26 / 82

13R1151

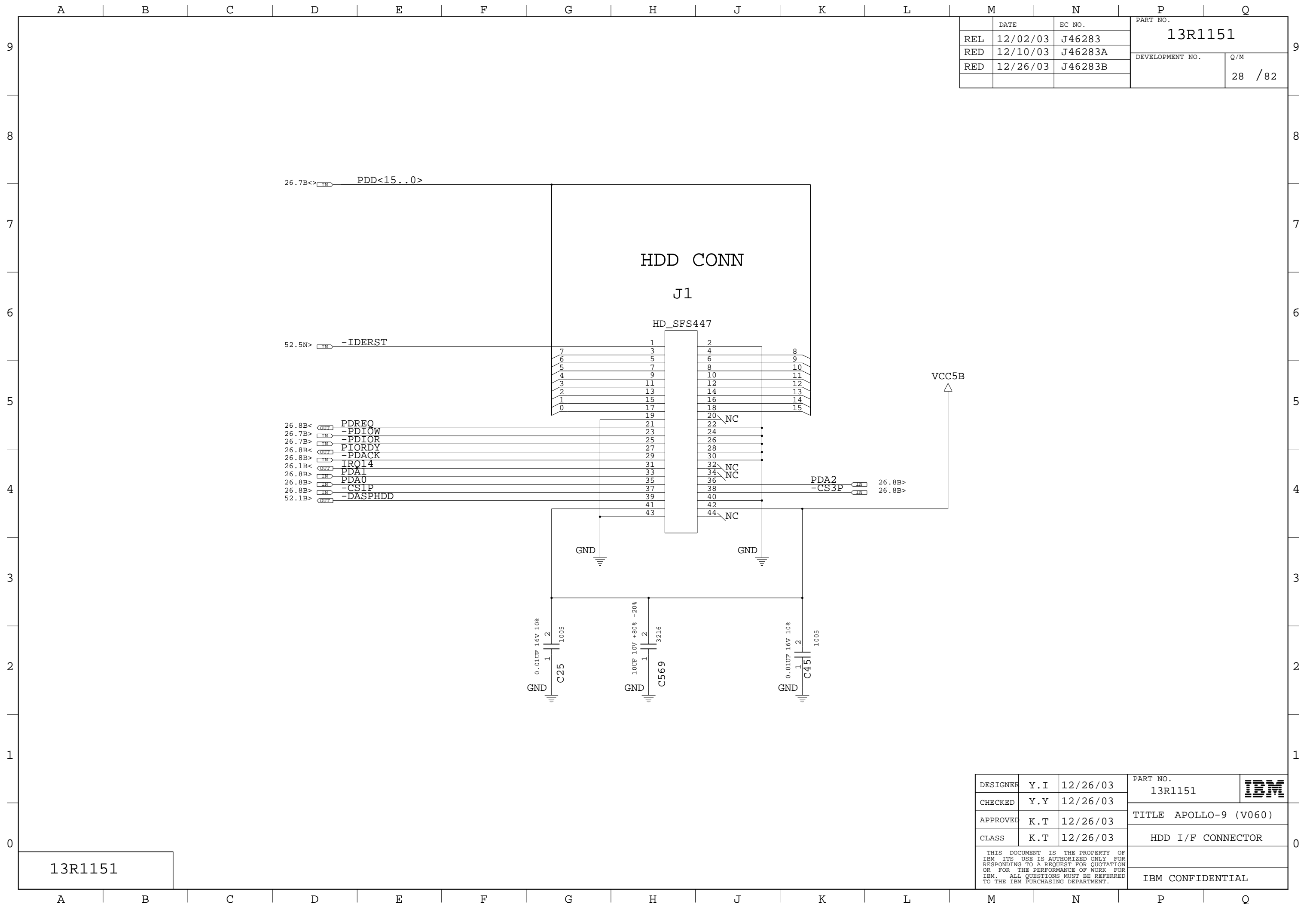
DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE	APOLLO-9 (V060)	
APPROVED	K.T	12/26/03		ICH4-M (2/3)	
CLASS	K.T	12/26/03			
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL

	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		27 / 82



13R1151

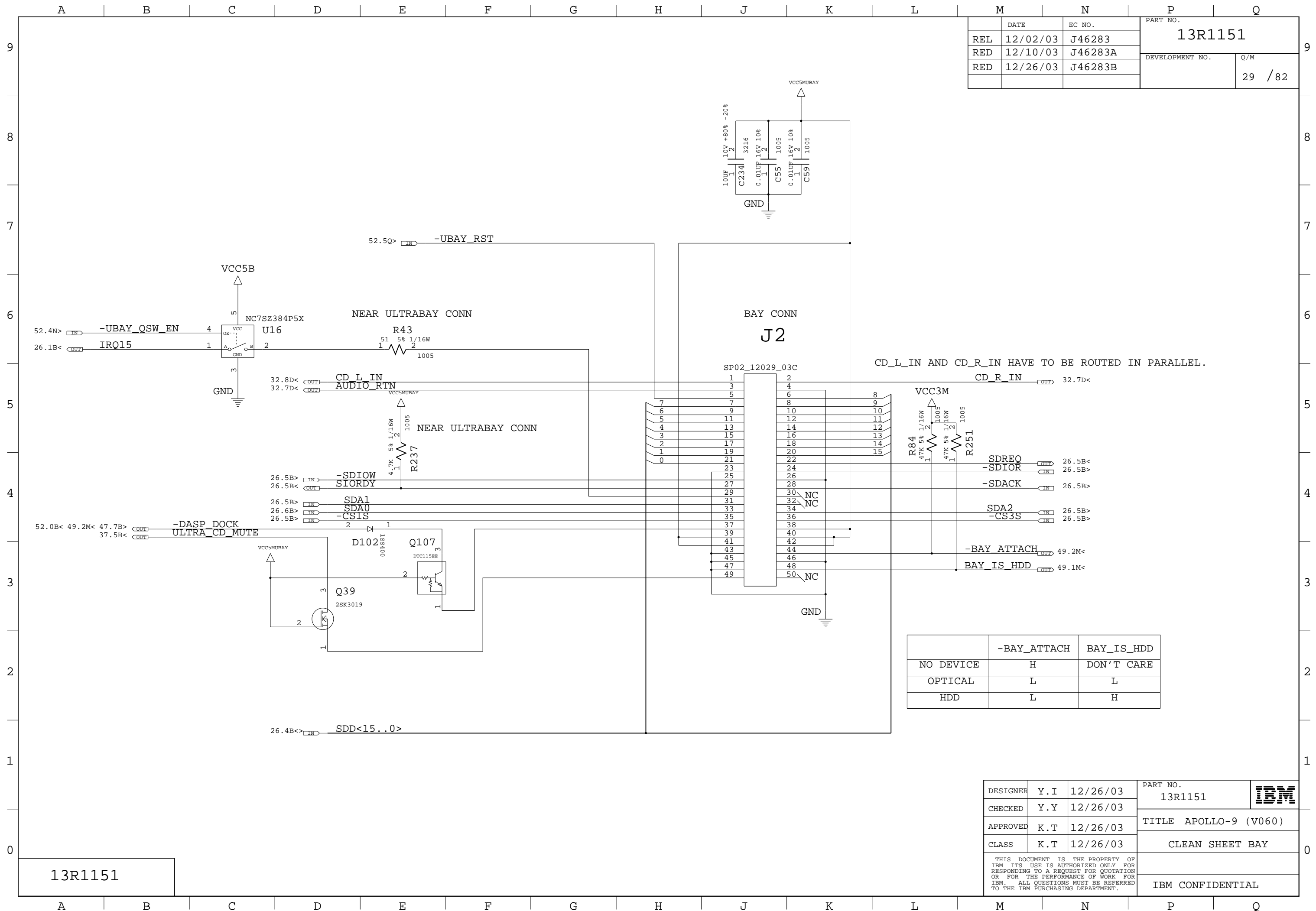
DESIGNER	Y. I	12/26/03	PART NO.	13R1151	
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03		ICH4-M (3/3)	
CLASS	K. T	12/26/03	THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.		
				IBM CONFIDENTIAL	



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		28 /82

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03			
APPROVED	K.T	12/26/03	TITLE APOLLO-9 (V060)		
CLASS	K.T	12/26/03	HDD I/F CONNECTOR		
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL

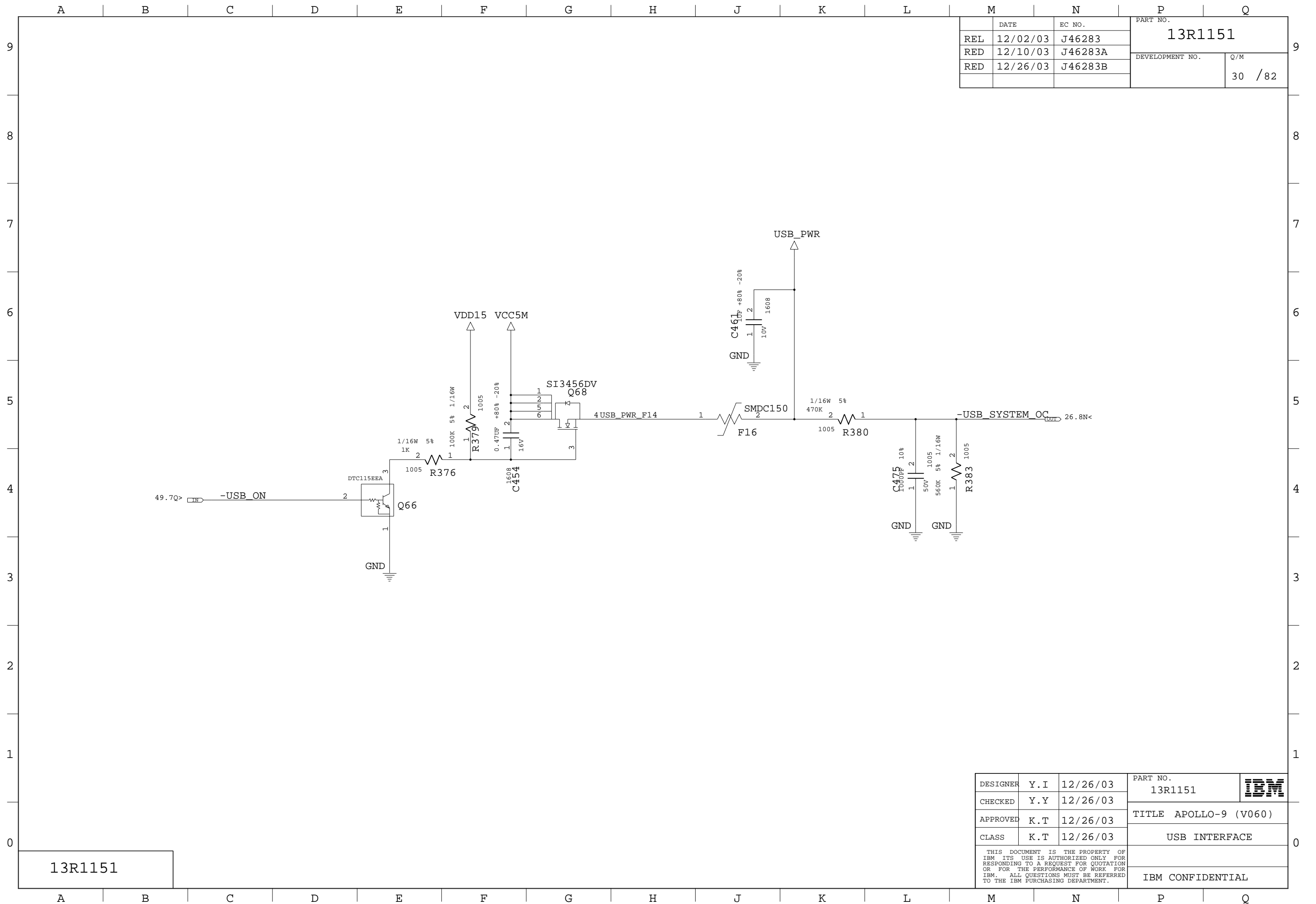


REL	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		29 / 82

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K.T	12/26/03	CLEAN SHEET BAY		
CLASS	K.T	12/26/03	IBM CONFIDENTIAL		

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



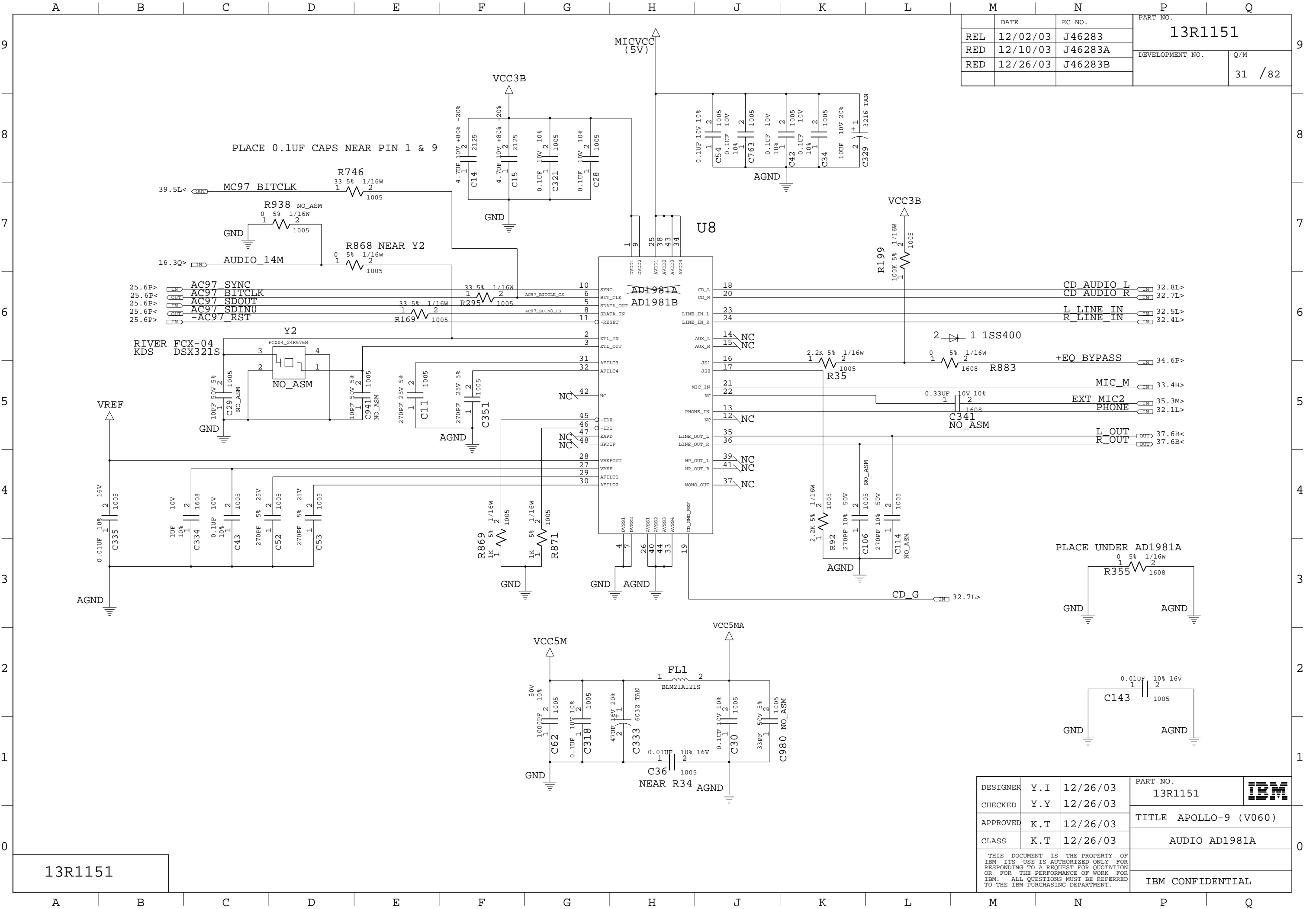
	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		30 /82

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	USB INTERFACE		
CLASS	K. T	12/26/03	IBM CONFIDENTIAL		

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

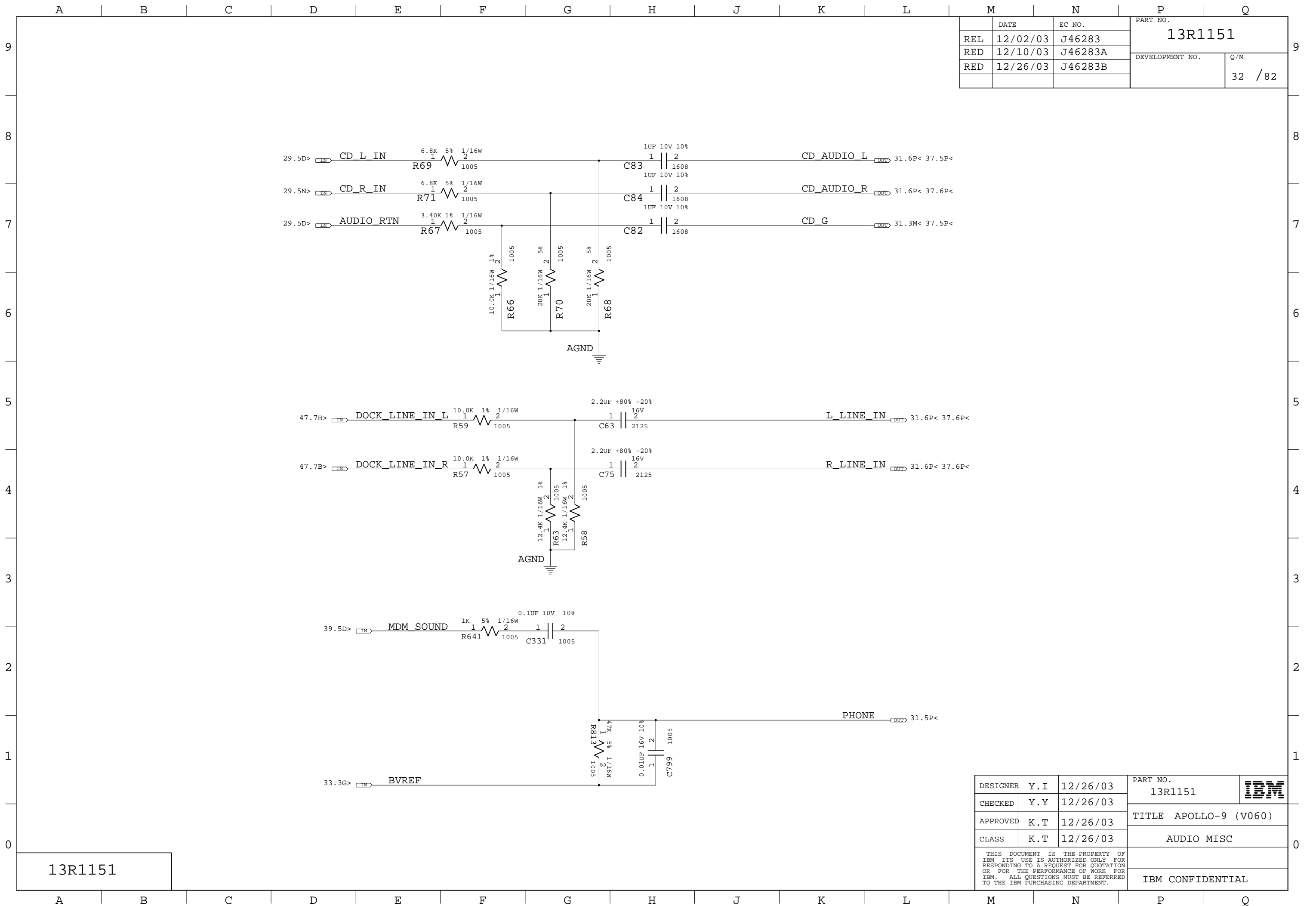
	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		31 / 82



13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K.T	12/26/03	AUDIO AD1981A		
CLASS	K.T	12/26/03	IBM CONFIDENTIAL		

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

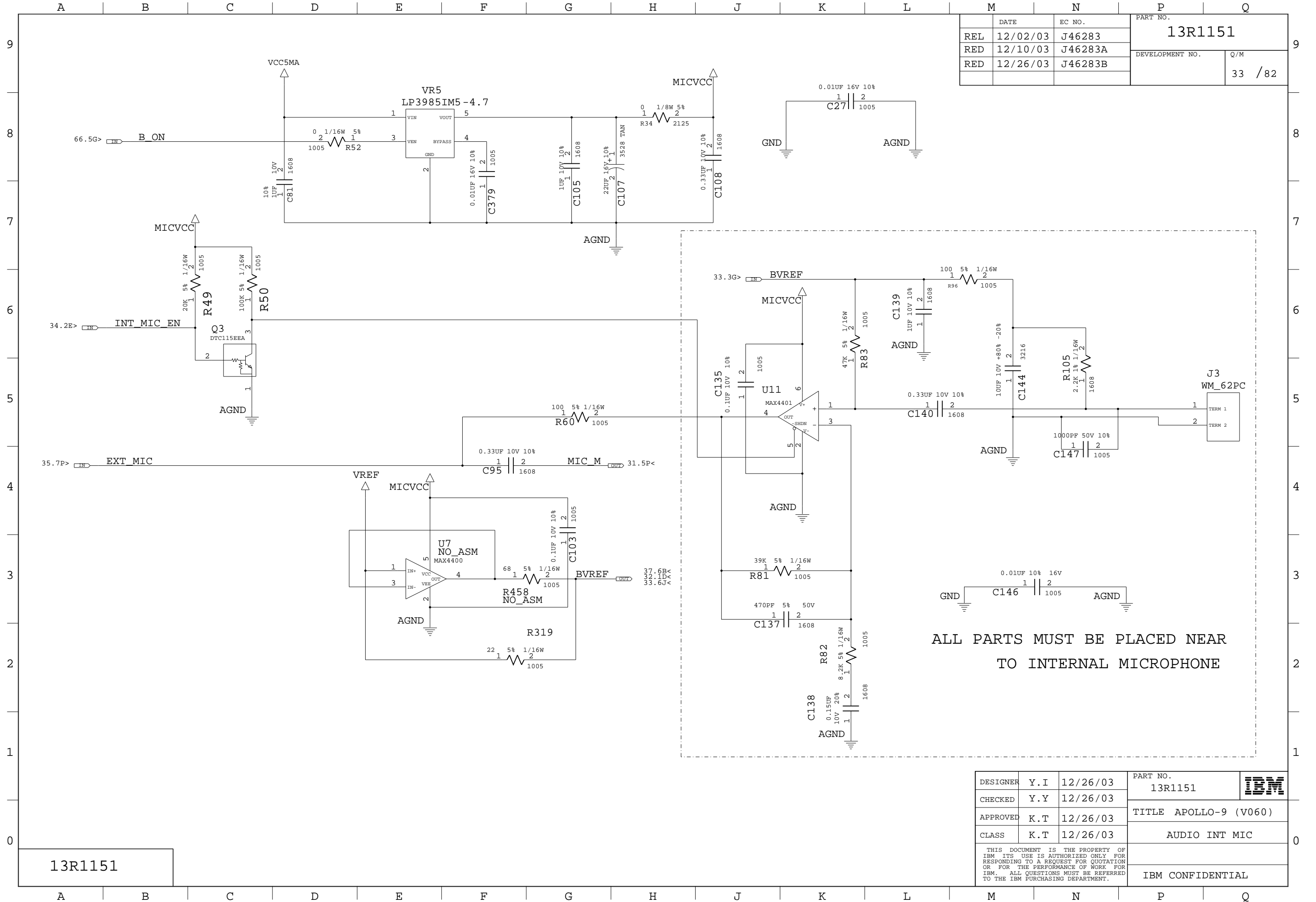


	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		32 / 82

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	CLASS	AUDIO MISC	
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL

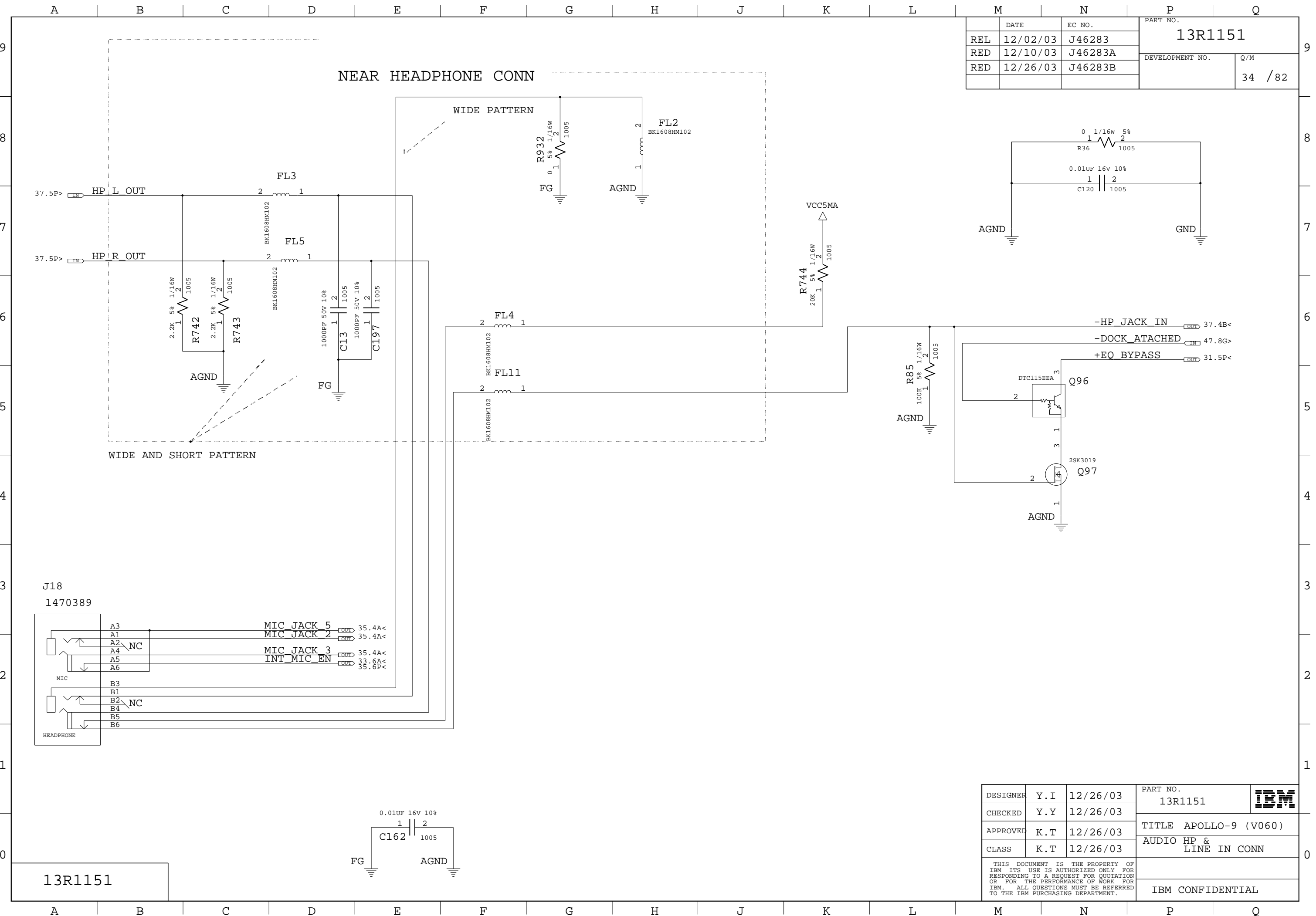
	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		33 / 82



13R1151

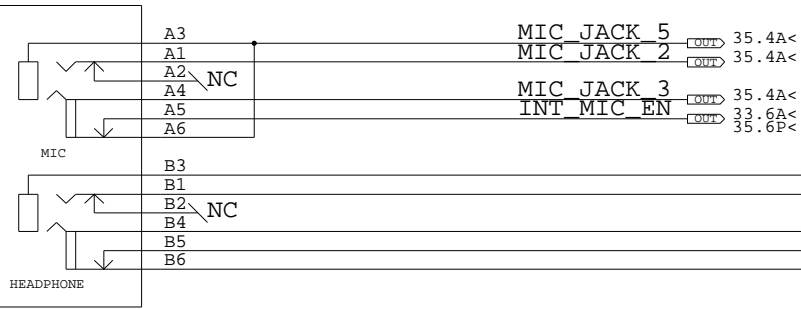
DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K.T	12/26/03	AUDIO INT MIC		
CLASS	K.T	12/26/03	IBM CONFIDENTIAL		

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



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		34 / 82

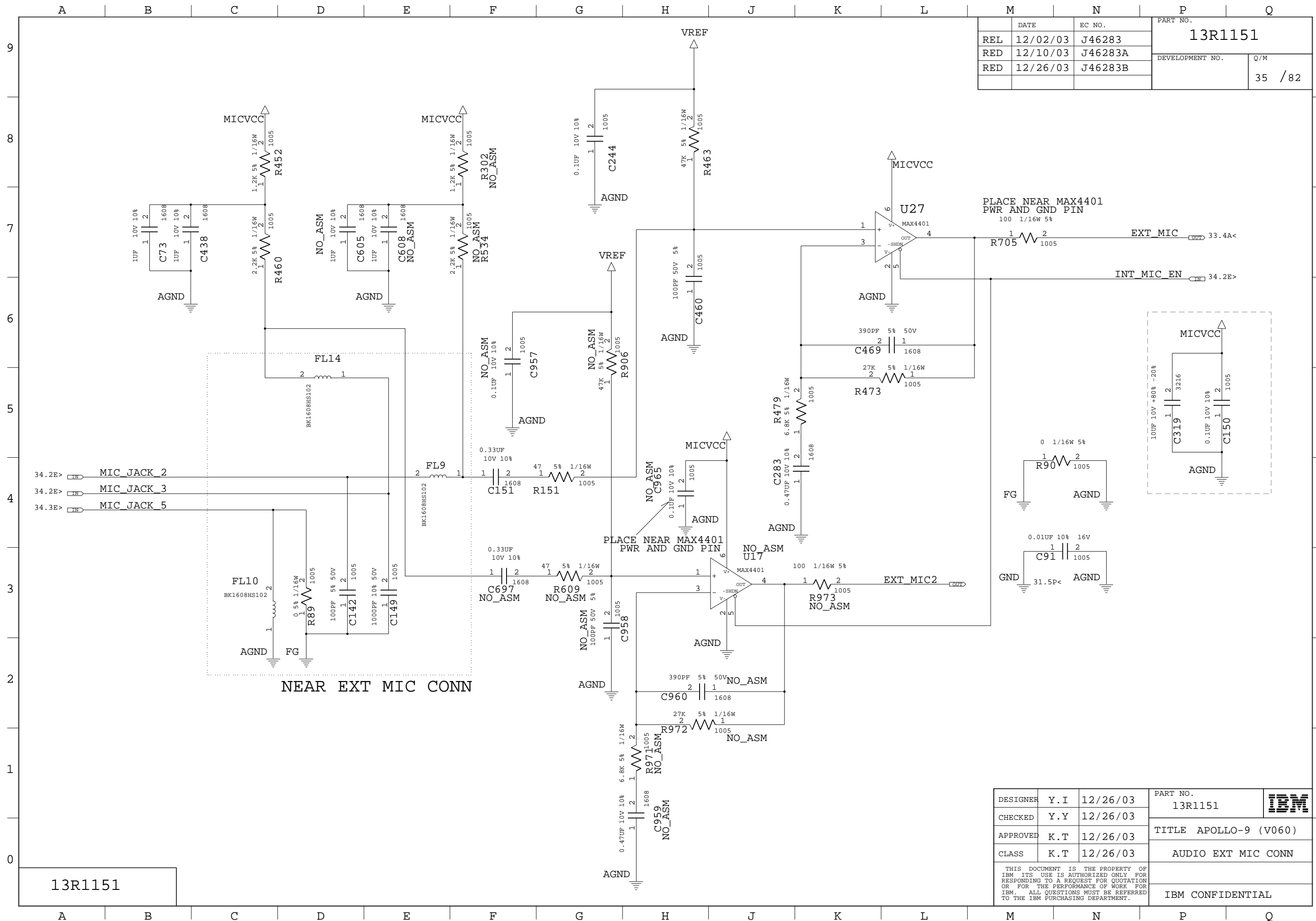
J18
1470389



13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	AUDIO HP & LINE IN CONN		
CLASS	K. T	12/26/03	IBM CONFIDENTIAL		

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

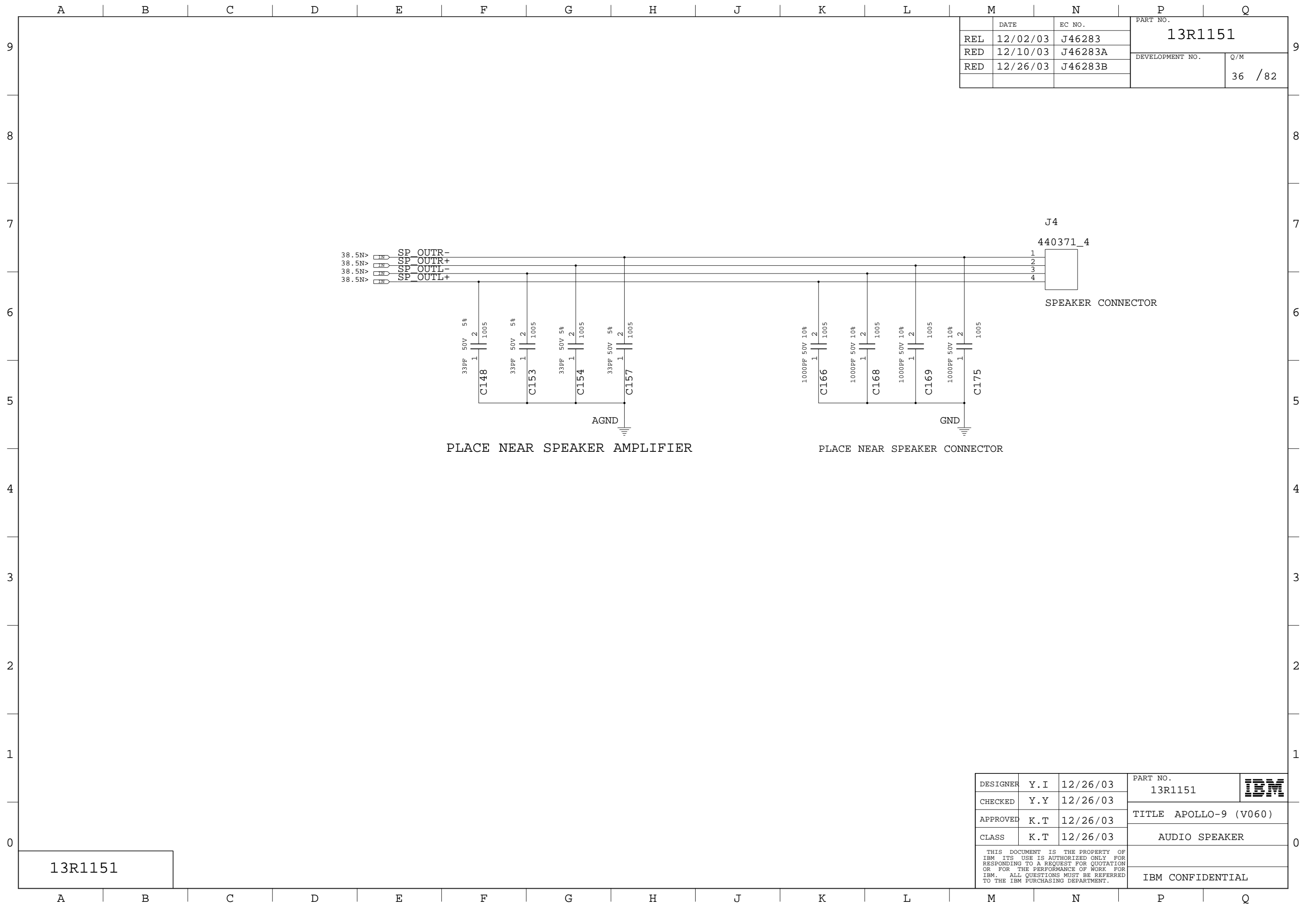


	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		35 / 82

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE		
APPROVED	K.T	12/26/03	AUDIO EXT MIC CONN		
CLASS	K.T	12/26/03	IBM CONFIDENTIAL		

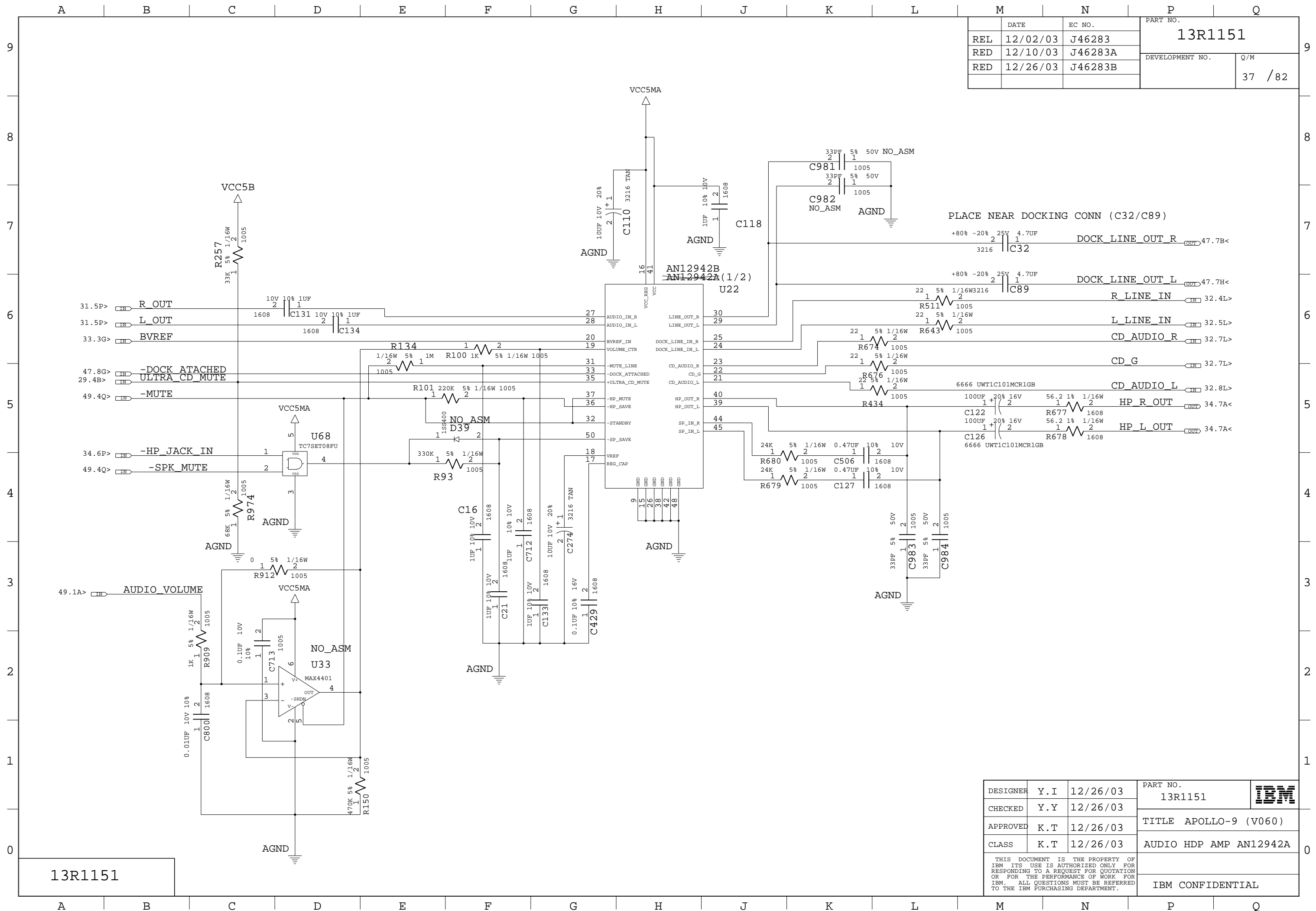
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		36 /82

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03			
APPROVED	K. T	12/26/03	TITLE APOLLO-9 (V060)		
CLASS	K. T	12/26/03	AUDIO SPEAKER		
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	

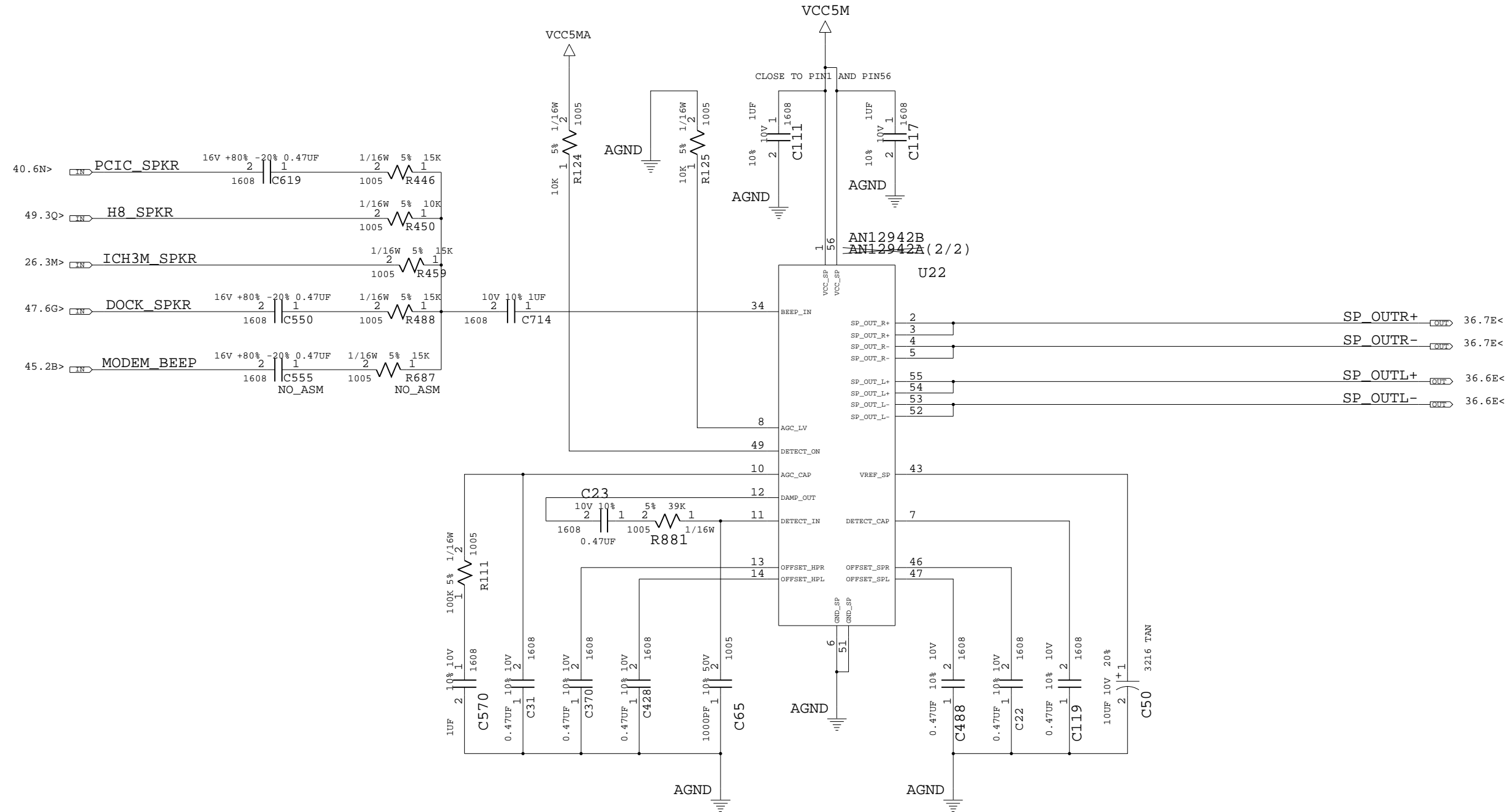


	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		37 / 82

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE		
APPROVED	K.T	12/26/03	CLASS	AUDIO HDP AMP AN12942A	
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	

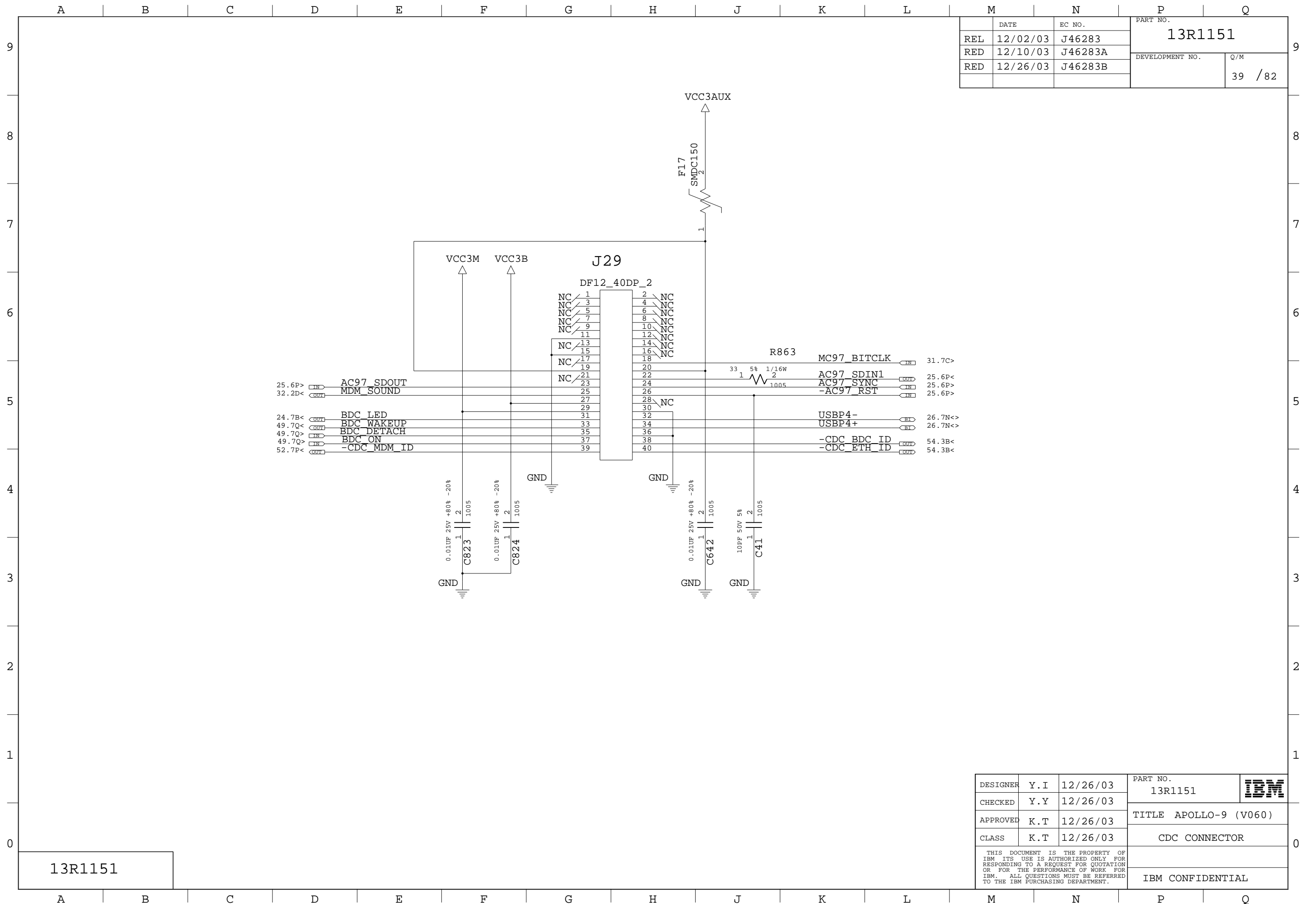
13R1151

	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		38 / 82



13R1151

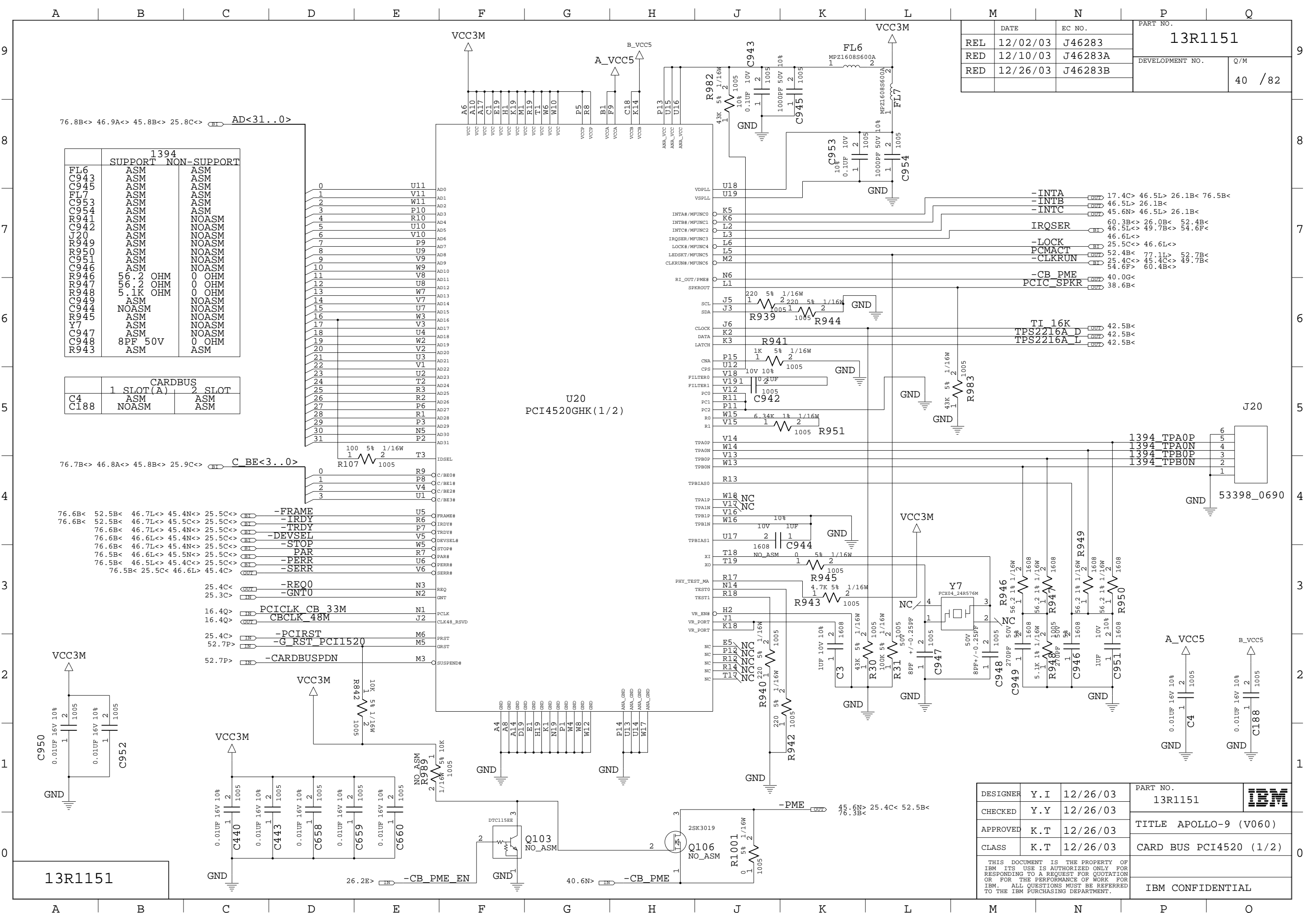
DESIGNER	Y. I	12/26/03	PART NO.	13R1151	
CHECKED	Y. Y	12/26/03			
APPROVED	K. T	12/26/03	TITLE APOLLO-9 (V060)		
CLASS	K. T	12/26/03	AUDIO HDP AMP AN12942A		
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		39 / 82

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03			
APPROVED	K. T	12/26/03	TITLE APOLLO-9 (V060)		
CLASS	K. T	12/26/03	CDC CONNECTOR		
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL



	DATE	EC NO.	PART NO.
REL	12/02/03	J46283	13R1151
RED	12/10/03	J46283A	DEVELOPMENT NO.
RED	12/26/03	J46283B	Q/M
			40 / 82

	1394 SUPPORT	NON-SUPPORT
FL6	ASM	ASM
C943	ASM	ASM
C944	ASM	ASM
FL7	ASM	ASM
C953	ASM	ASM
C954	ASM	ASM
R941	ASM	NOASM
C942	ASM	NOASM
J20	ASM	NOASM
R949	ASM	NOASM
R950	ASM	NOASM
C951	ASM	NOASM
C952	ASM	NOASM
R946	56.2 OHM	0 OHM
R947	56.2 OHM	0 OHM
R948	5.1K OHM	0 OHM
C949	ASM	NOASM
C944	NOASM	NOASM
R945	ASM	NOASM
Y7	ASM	NOASM
C947	ASM	NOASM
C948	8PF 50V	0 OHM
R943	ASM	ASM

	1 SLOT (A)	2 SLOT
C4	ASM	ASM
C188	NOASM	ASM

76.7B<> 46.8A<> 45.8B<> 25.9C<>	C BE<3..0>	
76.6B<	52.5B<	46.7L<> 45.4N<> 25.5C<>
76.6B<	52.5B<	46.7L<> 45.5C<> 25.5C<>
76.6B<	46.7L<>	45.4N<> 25.5C<>
76.6B<	46.6L<>	45.4N<> 25.5C<>
76.6B<	46.7L<>	45.4N<> 25.5C<>
76.5B<	46.6L<>	45.5N<> 25.5C<>
76.5B<	46.5L<>	45.4C<> 25.5C<>
76.5B<	26.2E>	45.4C>
25.4C<		-FRAME# U5
25.3C>		-IRDY# R6
		-TRDY# P7
		-DEVSEL# V5
		-STOP# W5
		PAR# R7
		-PERR# U6
		-SERR# V6
		REQ# N3
		GNT# N2
		PCCLK CB 33M N1
		CBCLK 48M J2
		CLK48_BSV# J2
		PRST# M6
		G_RST PCI1520 M5
		GRST# M5
		-CARDBUSPDN M3
		SUSPEND# M3

76.7B<> 46.8A<> 45.8B<> 25.9C<>	C BE<3..0>	
76.6B<	52.5B<	46.7L<> 45.4N<> 25.5C<>
76.6B<	52.5B<	46.7L<> 45.5C<> 25.5C<>
76.6B<	46.7L<>	45.4N<> 25.5C<>
76.6B<	46.6L<>	45.4N<> 25.5C<>
76.6B<	46.7L<>	45.4N<> 25.5C<>
76.5B<	46.6L<>	45.5N<> 25.5C<>
76.5B<	46.5L<>	45.4C<> 25.5C<>
76.5B<	26.2E>	45.4C>
25.4C<		-FRAME# U5
25.3C>		-IRDY# R6
		-TRDY# P7
		-DEVSEL# V5
		-STOP# W5
		PAR# R7
		-PERR# U6
		-SERR# V6
		REQ# N3
		GNT# N2
		PCCLK CB 33M N1
		CBCLK 48M J2
		CLK48_BSV# J2
		PRST# M6
		G_RST PCI1520 M5
		GRST# M5
		-CARDBUSPDN M3
		SUSPEND# M3

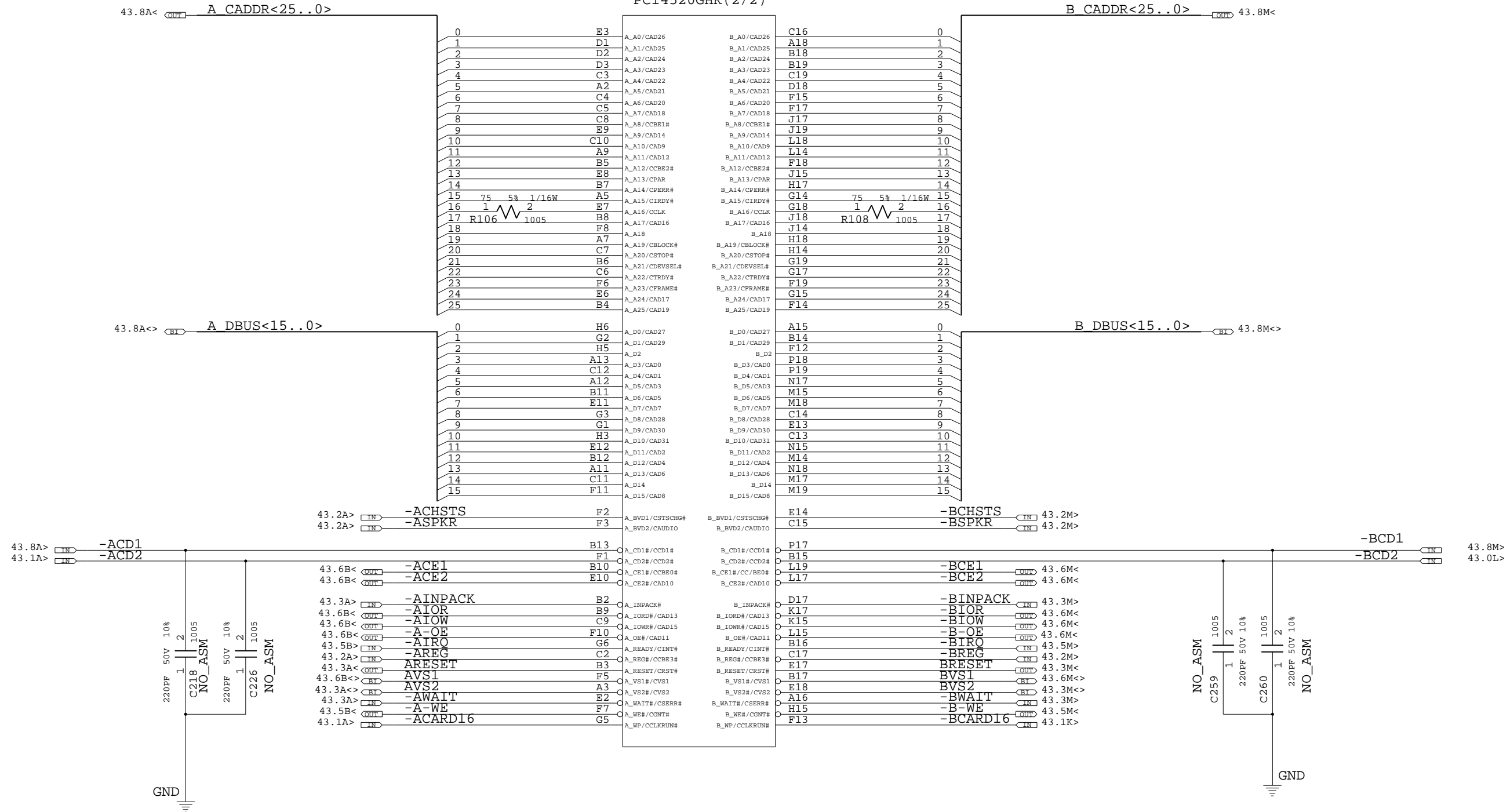
13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03	TITLE	APOLLO-9 (V060)	
APPROVED	K.T	12/26/03	CARD BUS	PCI4520 (1/2)	
CLASS	K.T	12/26/03	THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.		
					IBM CONFIDENTIAL

	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		41 / 82

U20

PCI4520GHK (2/2)

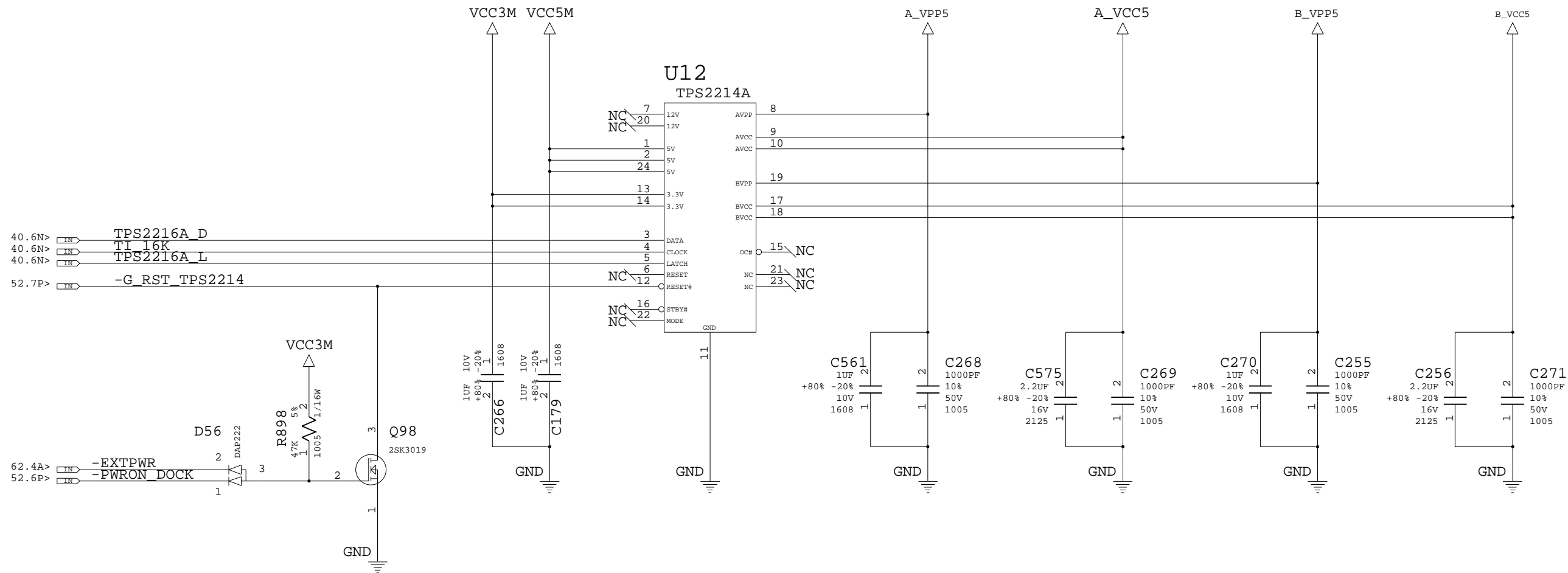


	CARDBUS	
	1 SLOT	2 SLOTS
R106	ASM	ASM
C218	NOASM	NOASM
C226	NOASM	NOASM
R108	NOASM	ASM
C259	NOASM	NOASM
C260	NOASM	NOASM

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K.T	12/26/03	CARD BUS PCI4520 (2/2)		
CLASS	K.T	12/26/03	THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.		IBM CONFIDENTIAL

	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		42 / 82

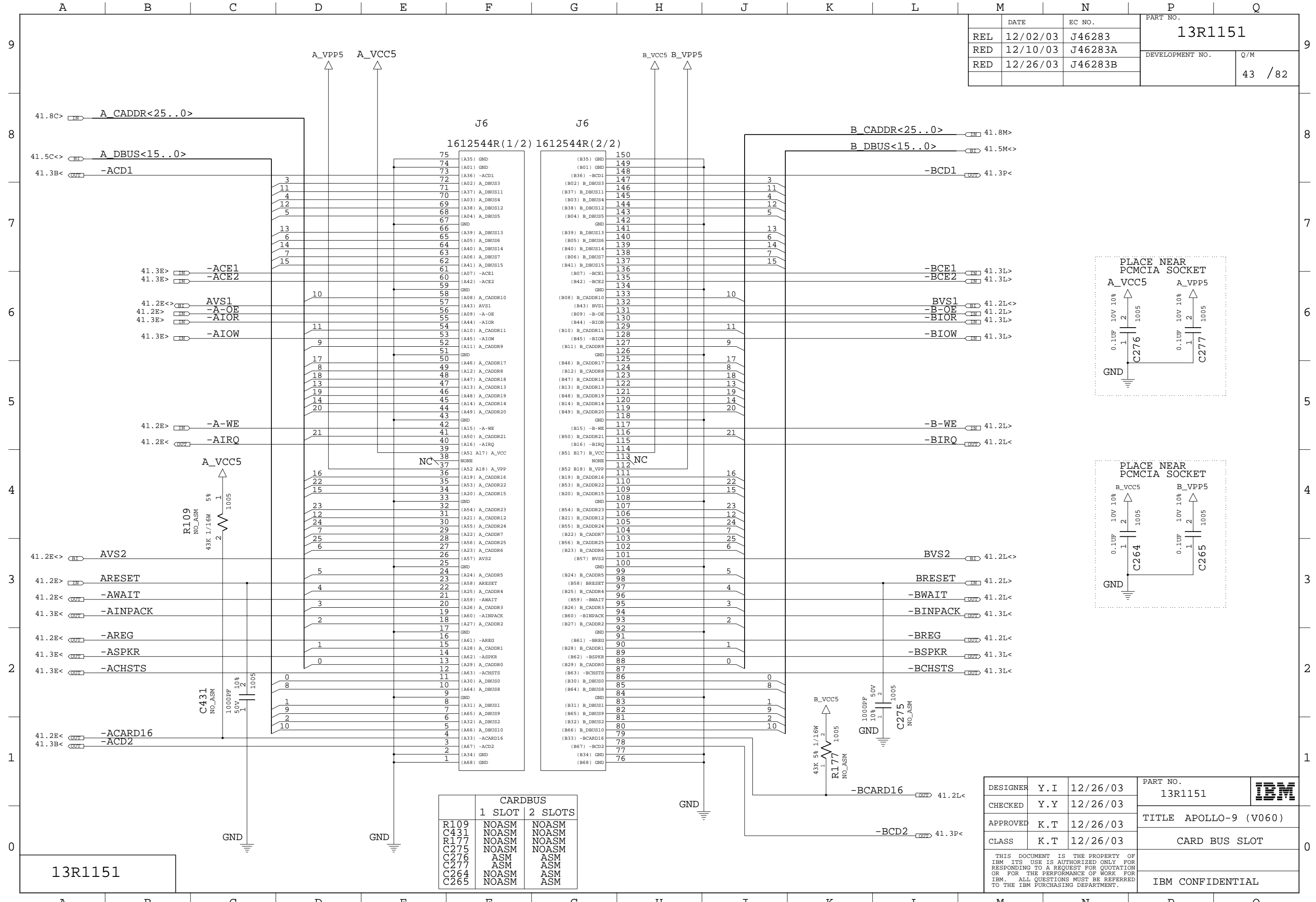


	CARDBUS	
	1 SLOT	2 SLOTS
C561	ASM	ASM
C268	ASM	ASM
C575	ASM	ASM
C269	ASM	ASM
C270	NOASM	ASM
C255	NOASM	ASM
C256	NOASM	ASM
C271	NOASM	ASM

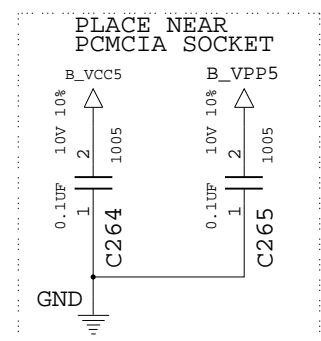
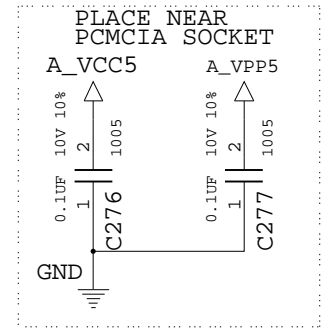
13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K. T	12/26/03	CARD BUS POWER CONTROL		
CLASS	K. T	12/26/03	THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.		IBM CONFIDENTIAL

	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B	43 / 82	



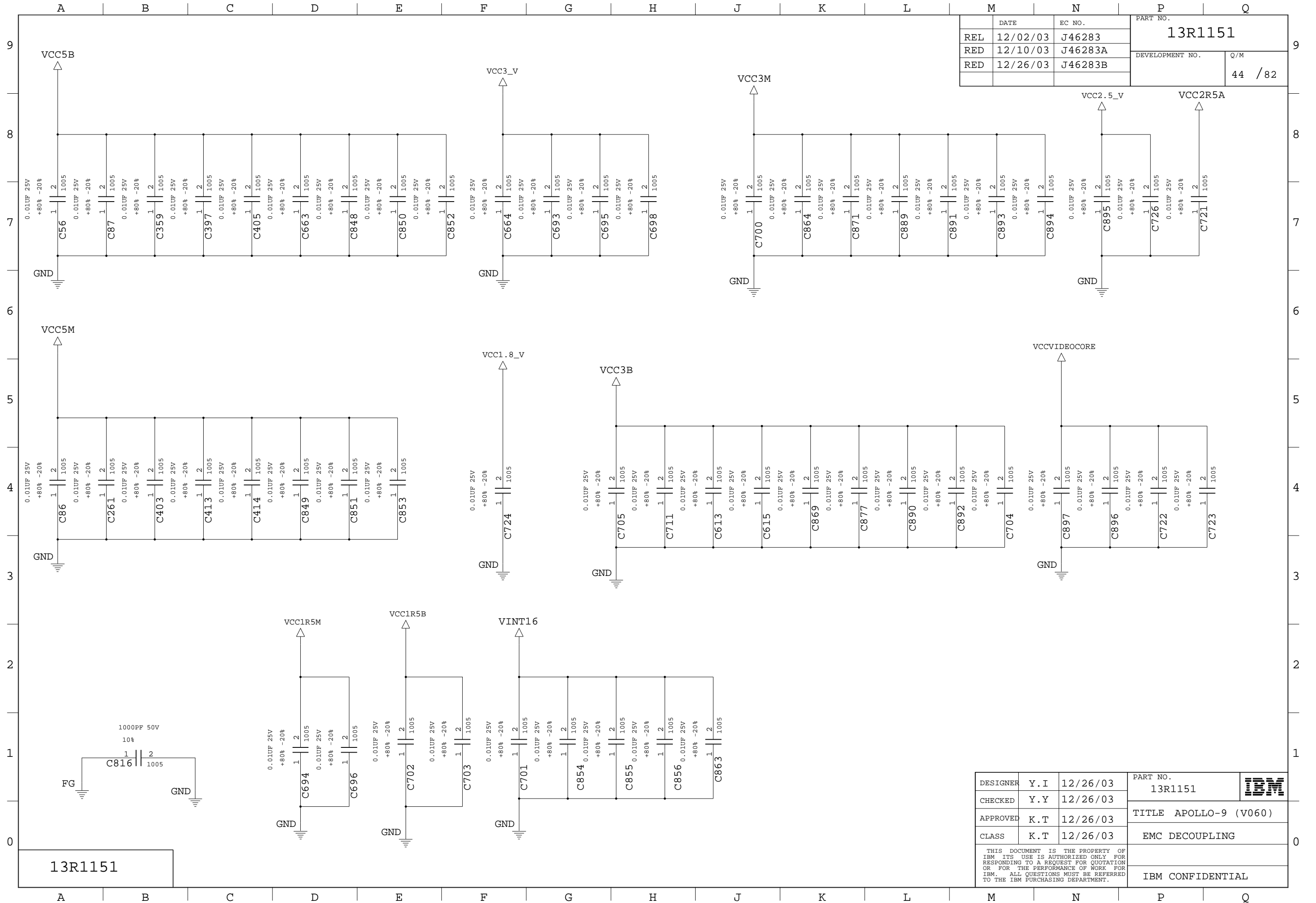
CARBUS		
	1 SLOT	2 SLOTS
R109	NOASM	NOASM
C431	NOASM	NOASM
R177	NOASM	NOASM
C275	NOASM	NOASM
C276	ASM	ASM
C277	ASM	ASM
C264	NOASM	ASM
C265	NOASM	ASM



13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE		
APPROVED	K.T	12/26/03	CARD BUS SLOT		
CLASS	K.T	12/26/03	IBM CONFIDENTIAL		

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

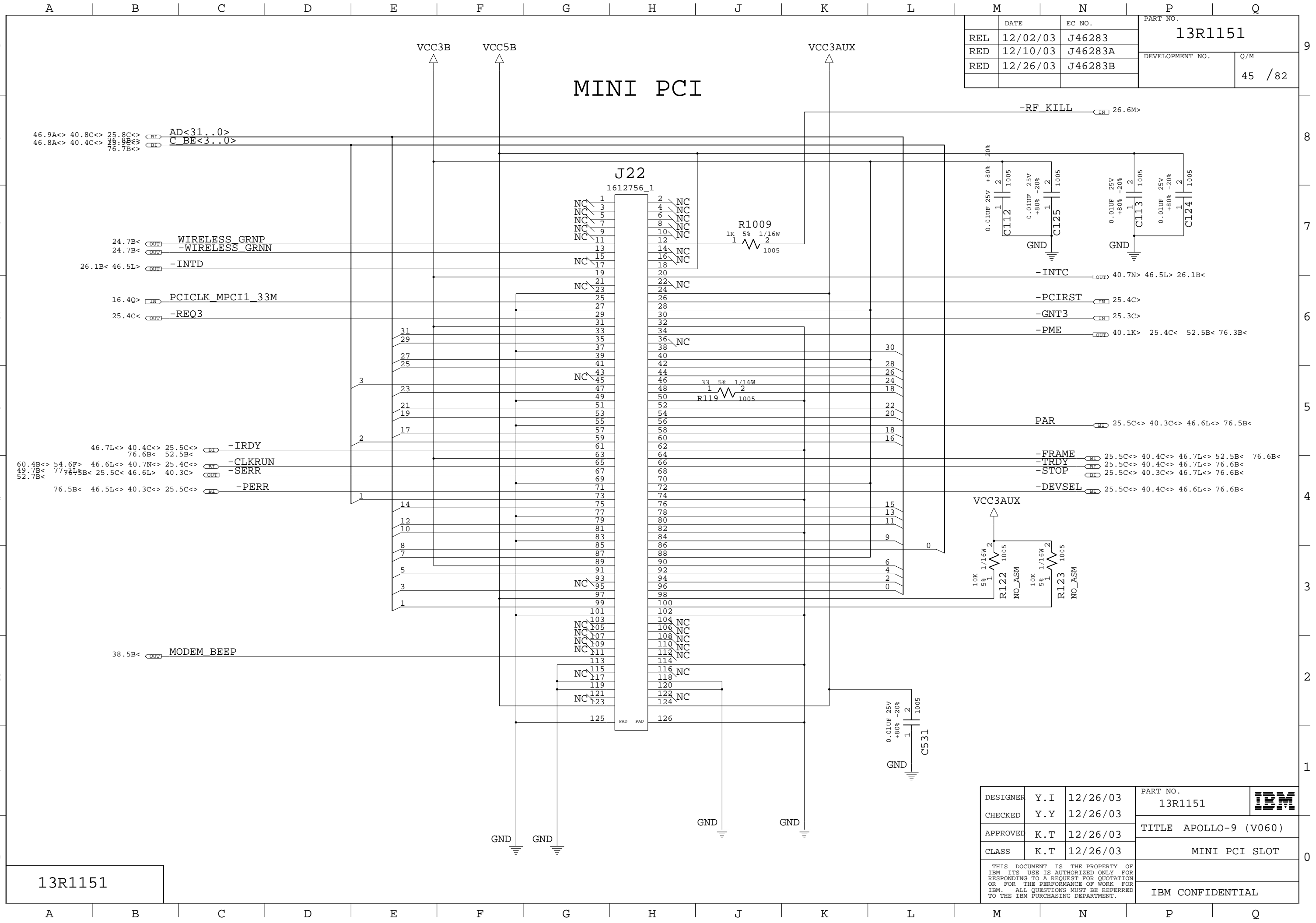


	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		44 / 82

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE		
APPROVED	K.T	12/26/03	EMC DECOUPLING		
CLASS	K.T	12/26/03	IBM CONFIDENTIAL		

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



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B	45 / 82	

MINI PCI

J22

1612756_1

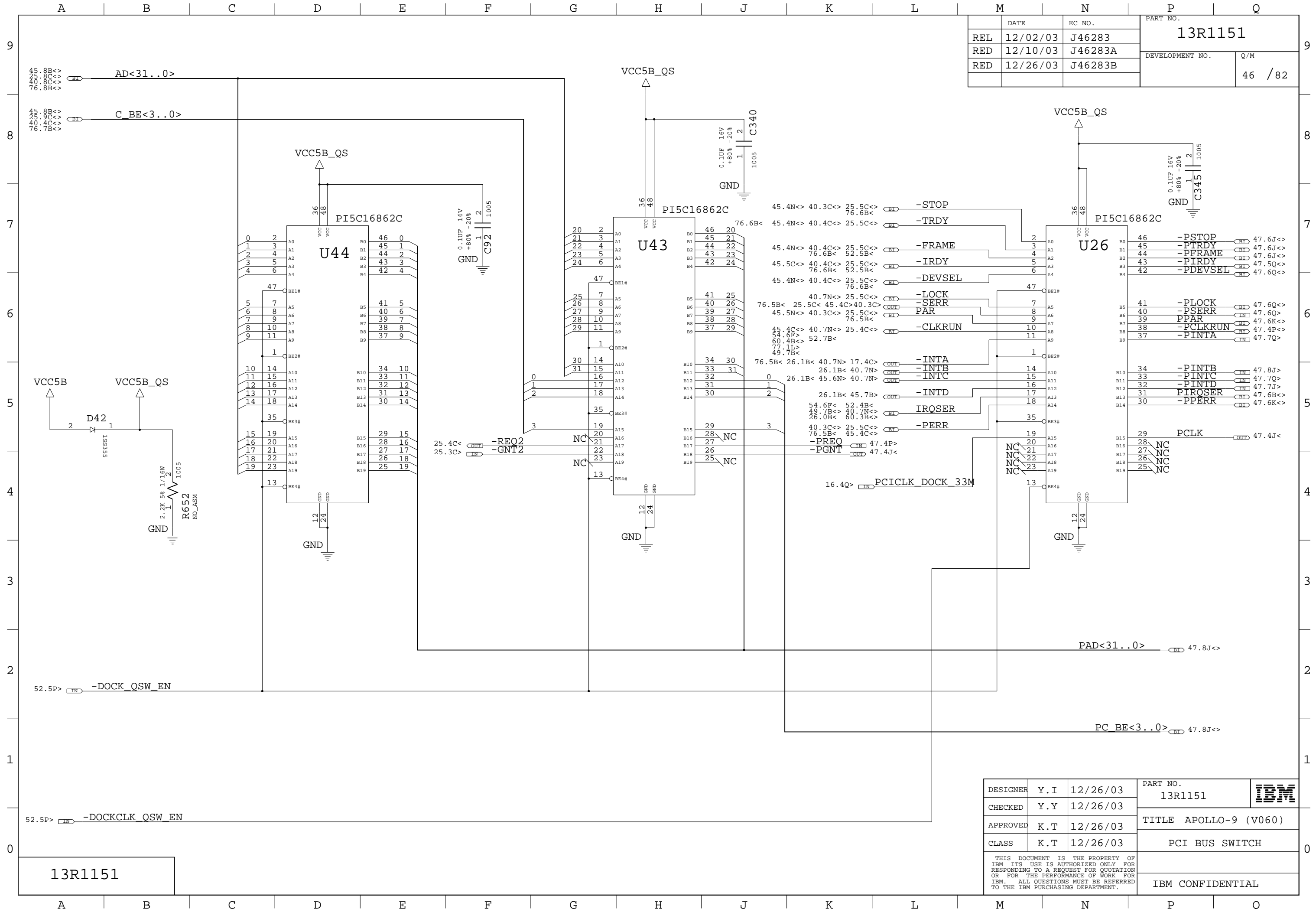
- 1 NC
- 2 NC
- 3 NC
- 4 NC
- 5 NC
- 6 NC
- 7 NC
- 8 NC
- 9 NC
- 10 NC
- 11 NC
- 12 NC
- 13 NC
- 14 NC
- 15 NC
- 16 NC
- 17 NC
- 18 NC
- 19 NC
- 20 NC
- 21 NC
- 22 NC
- 23 NC
- 24 NC
- 25 NC
- 26 NC
- 27 NC
- 28 NC
- 29 NC
- 30 NC
- 31 NC
- 32 NC
- 33 NC
- 34 NC
- 35 NC
- 36 NC
- 37 NC
- 38 NC
- 39 NC
- 40 NC
- 41 NC
- 42 NC
- 43 NC
- 44 NC
- 45 NC
- 46 NC
- 47 NC
- 48 NC
- 49 NC
- 50 NC
- 51 NC
- 52 NC
- 53 NC
- 54 NC
- 55 NC
- 56 NC
- 57 NC
- 58 NC
- 59 NC
- 60 NC
- 61 NC
- 62 NC
- 63 NC
- 64 NC
- 65 NC
- 66 NC
- 67 NC
- 68 NC
- 69 NC
- 70 NC
- 71 NC
- 72 NC
- 73 NC
- 74 NC
- 75 NC
- 76 NC
- 77 NC
- 78 NC
- 79 NC
- 80 NC
- 81 NC
- 82 NC
- 83 NC
- 84 NC
- 85 NC
- 86 NC
- 87 NC
- 88 NC
- 89 NC
- 90 NC
- 91 NC
- 92 NC
- 93 NC
- 94 NC
- 95 NC
- 96 NC
- 97 NC
- 98 NC
- 99 NC
- 100 NC
- 101 NC
- 102 NC
- 103 NC
- 104 NC
- 105 NC
- 106 NC
- 107 NC
- 108 NC
- 109 NC
- 110 NC
- 111 NC
- 112 NC
- 113 NC
- 114 NC
- 115 NC
- 116 NC
- 117 NC
- 118 NC
- 119 NC
- 120 NC
- 121 NC
- 122 NC
- 123 NC
- 124 NC
- 125 PAD
- 126 PAD

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE		
APPROVED	K.T	12/26/03	MINI PCI SLOT		
CLASS	K.T	12/26/03	THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.		
			IBM CONFIDENTIAL		

13R1151

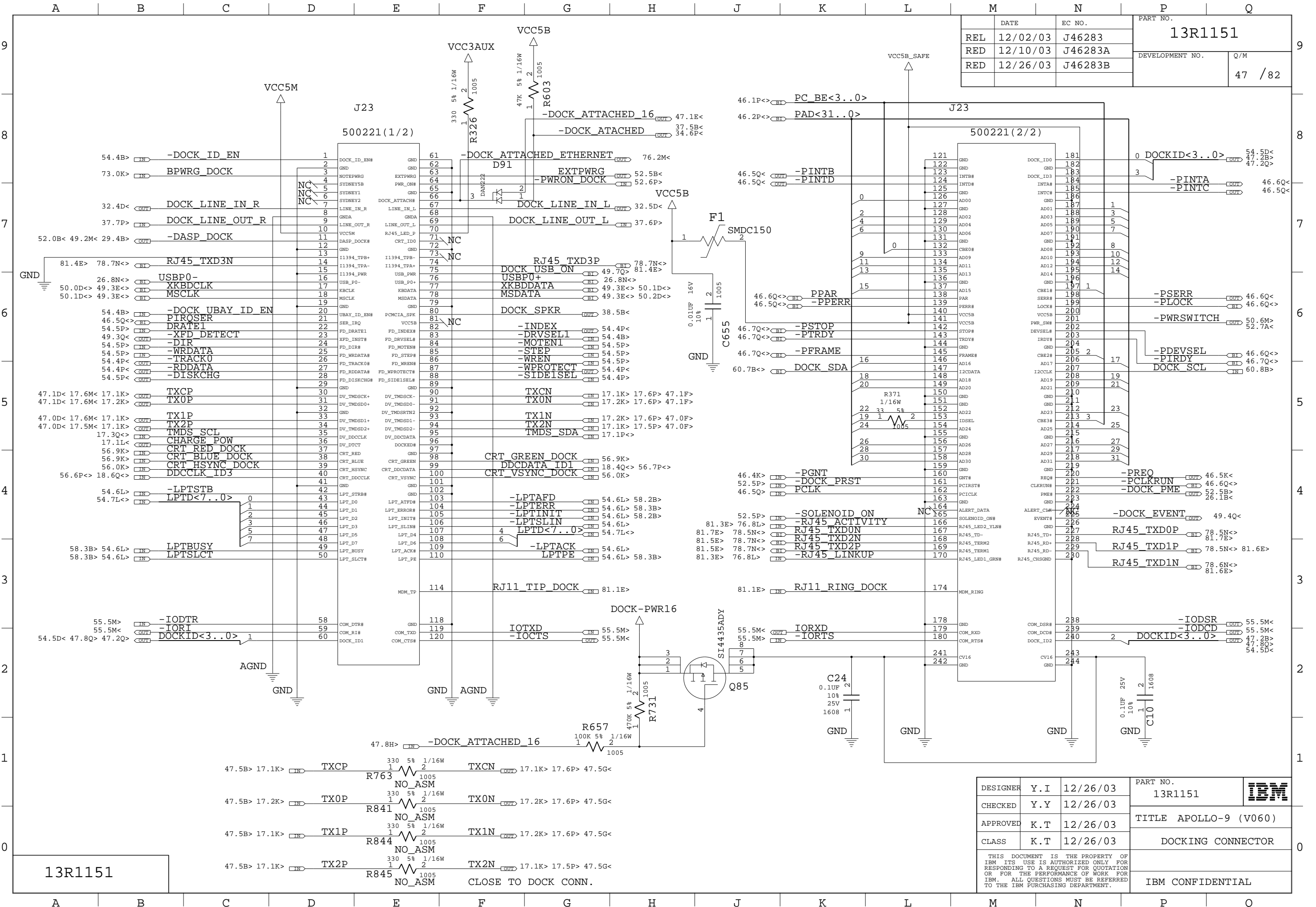


	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B	46 / 82	



13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03	TITLE		
APPROVED	K.T	12/26/03	CLASS	PCI BUS SWITCH	
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	



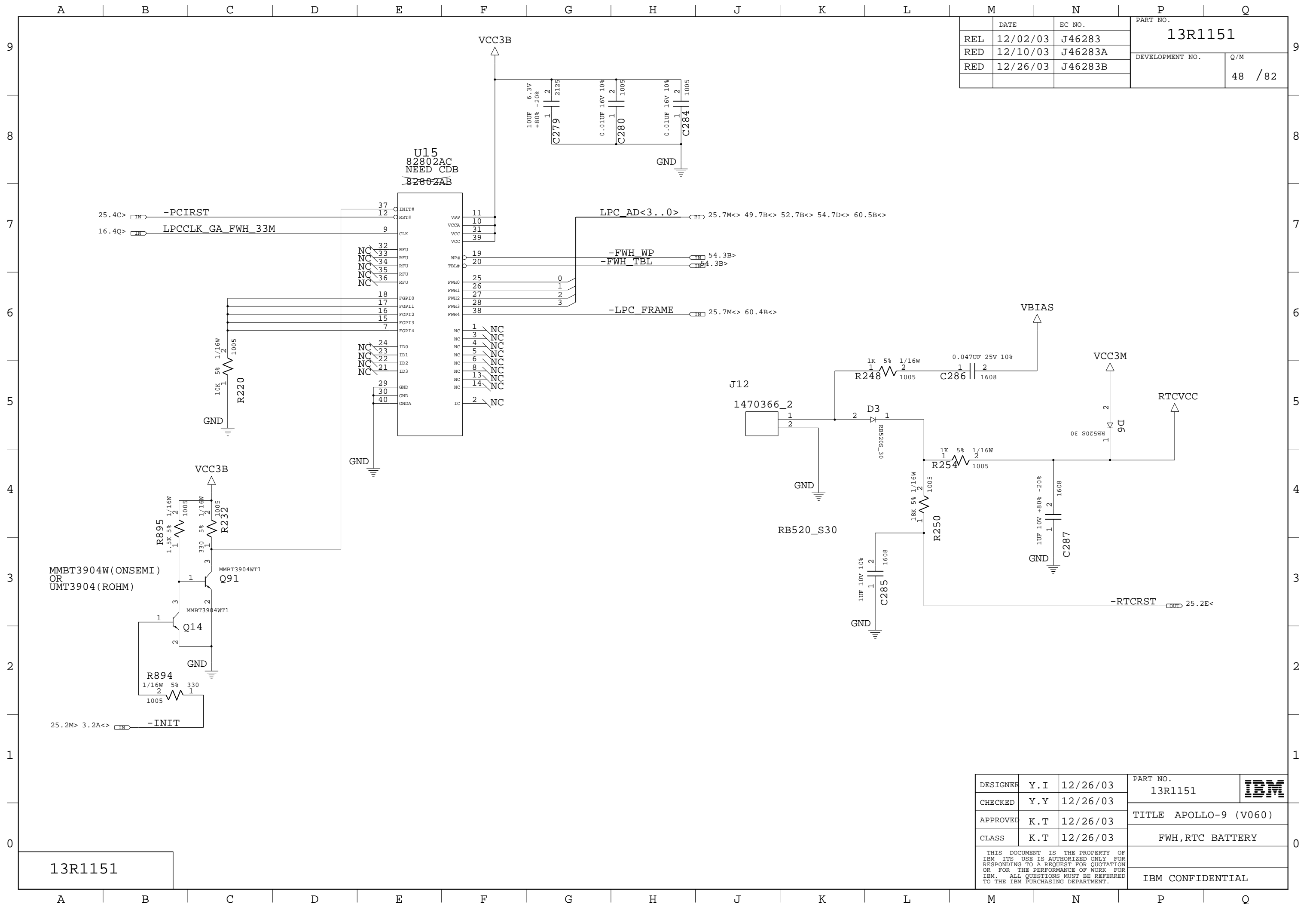
REL	12/02/03	J46283	PART NO.	
RED	12/10/03	J46283A	13R1151	
RED	12/26/03	J46283B	DEVELOPMENT NO.	Q/M
				47 / 82

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03	TITLE		
APPROVED	K.T	12/26/03	DOCKING CONNECTOR		
CLASS	K.T	12/26/03	IBM CONFIDENTIAL		

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

13R1151

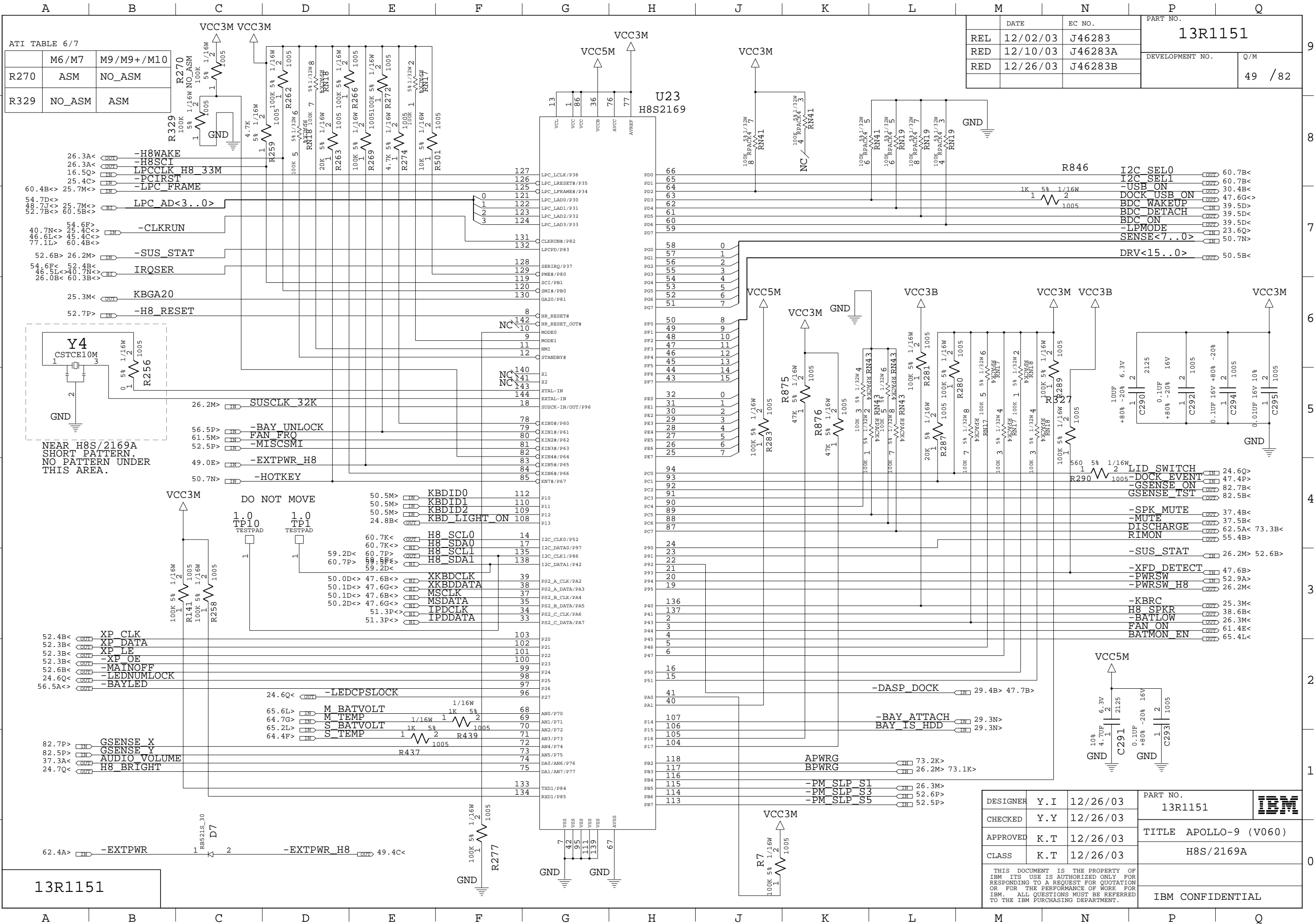
CLOSE TO DOCK CONN.



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		48 / 82

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	CLASS	FWH, RTC BATTERY	
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL



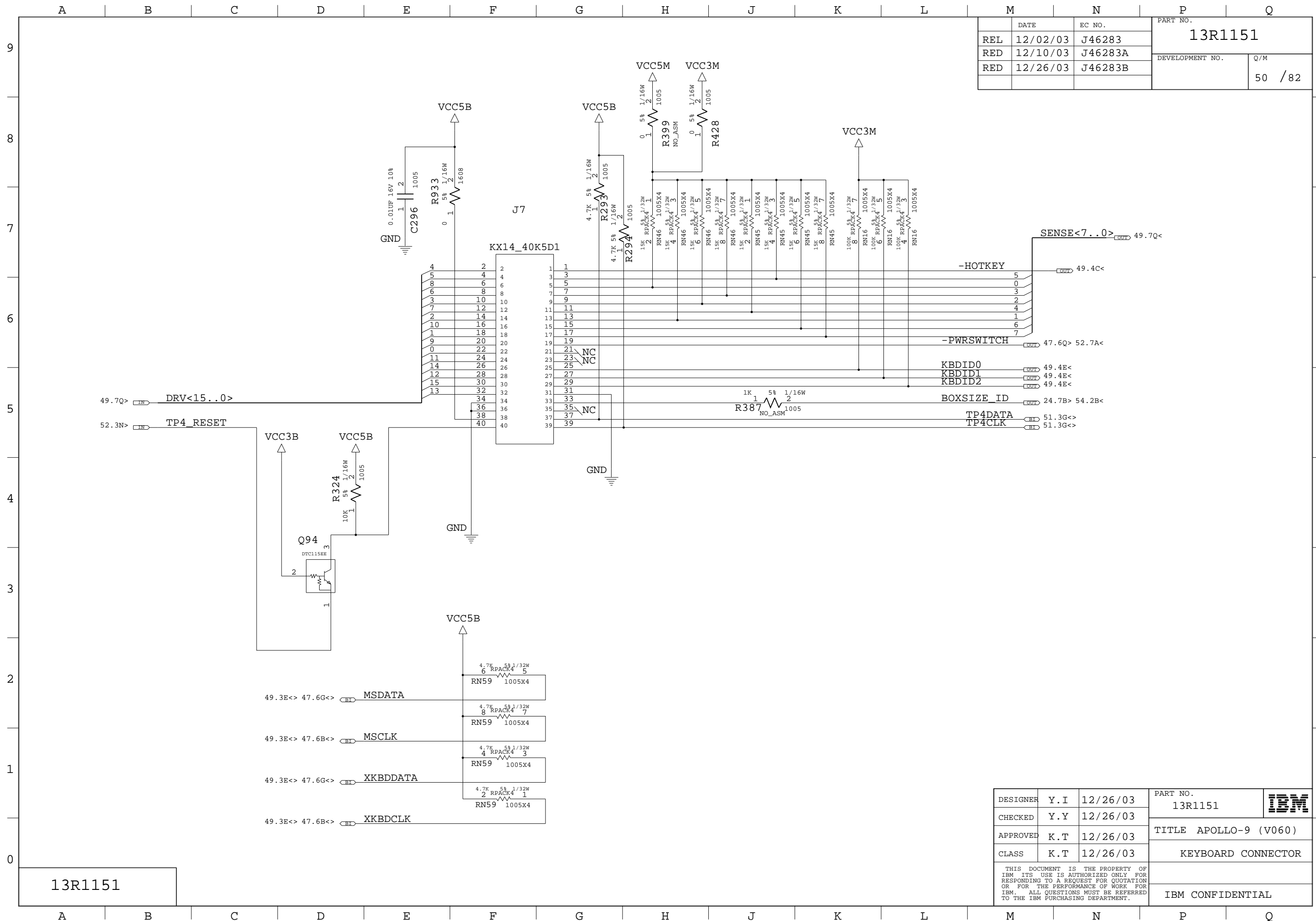
ATI TABLE 6/7

	M6/M7	M9/M9+/M10
R270	ASM	NO_ASM
R329	NO_ASM	ASM

	DATE	EC NO.	PART NO.
REL	12/02/03	J46283	13R1151
RED	12/10/03	J46283A	DEVELOPMENT NO.
RED	12/26/03	J46283B	Q/M
			49 / 82

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE	APOLLO-9 (V060)	
APPROVED	K.T	12/26/03		H8S/2169A	
CLASS	K.T	12/26/03			
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL

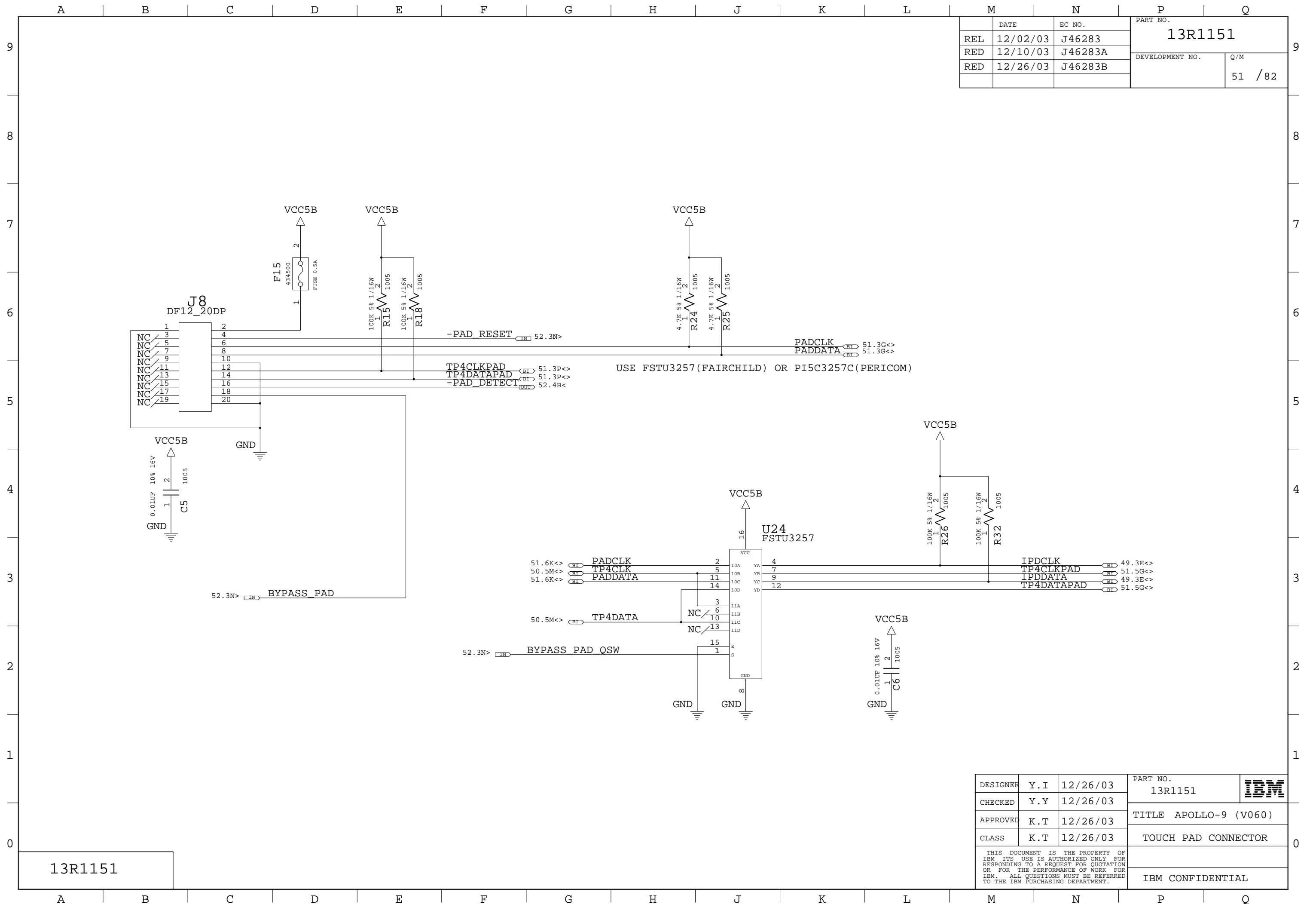


	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		50 / 82

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE		
APPROVED	K.T	12/26/03	KEYBOARD CONNECTOR		
CLASS	K.T	12/26/03	IBM CONFIDENTIAL		

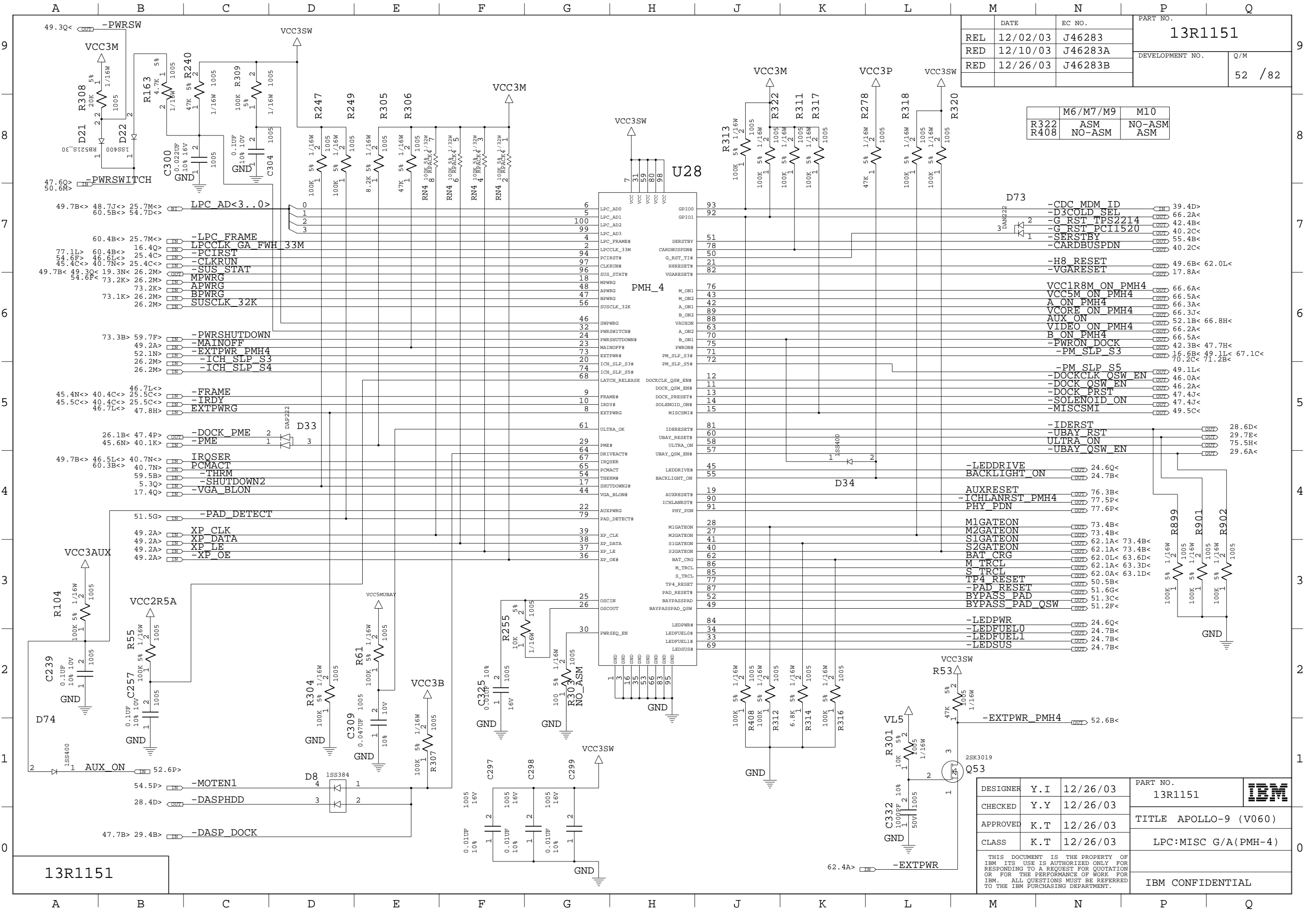
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		51 / 82

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	CLASS	TOUCH PAD CONNECTOR	
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	



	DATE	EC NO.	PART NO.
REL	12/02/03	J46283	13R1151
RED	12/10/03	J46283A	
RED	12/26/03	J46283B	
			DEVELOPMENT NO. Q/M
			52 / 82

	M6/M7/M9	M10
R322	ASM	NO-ASM
R408	NO-ASM	ASM

D73	-CDC MDM ID	39.4D>
	-D3COLD_SEL	66.2A<
	-G_RST TPS2214	42.4B<
	-G_RST PCI1520	40.2C<
	-SERSTBY	55.4B<
	-CARDBUSPDN	40.2C<
	-H8 RESET	49.6B< 62.0L<
	-VGARESET	17.8A<
	VCC1R8M ON PMH4	66.6A<
	VCC5M ON PMH4	66.5A<
	A ON PMH4	66.3A<
	VCORE ON PMH4	66.3J<
	AUX ON	52.1B< 66.8H<
	VIDEO ON PMH4	66.2A<
	B ON PMH4	66.5A<
	-PWRON DOCK	42.3B< 47.7H<
	-PM_SLP_S3	16.6B< 49.1L< 67.1C<
	-PM_SLP_S5	49.1L<
	-DOCKCLK_QSW_EN	46.0A<
	-DOCK_QSW_EN	46.2A<
	-DOCK_PRST	47.4J<
	-SOLENOID_ON	47.4J<
	-MISCSMI	49.5C<
	-IDERST	28.6D<
	-UBAY_RST	29.7E<
	ULTRA_ON	75.5H<
	-UBAY_QSW_EN	29.6A<

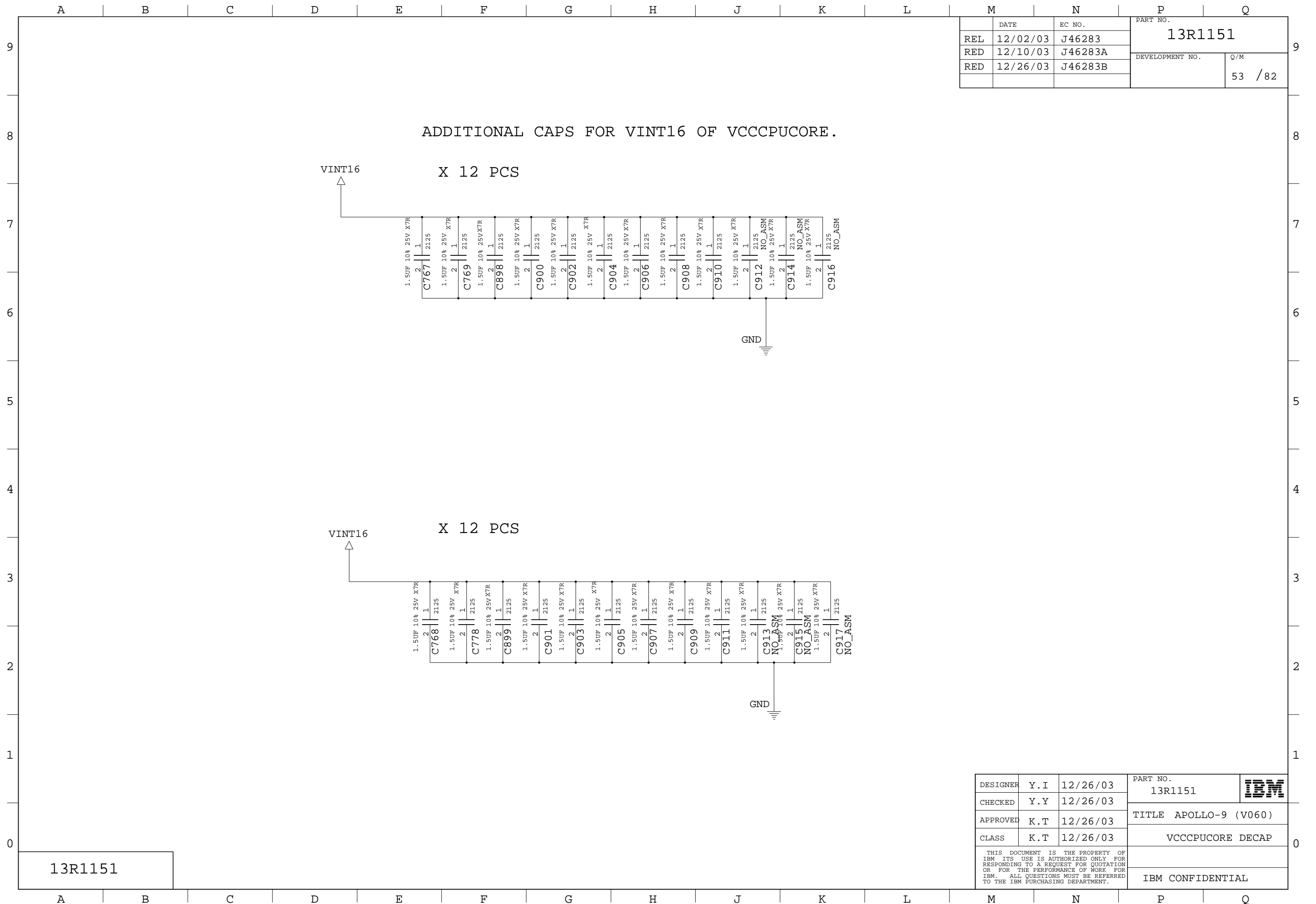
D34	-LEDDRIVE	24.6Q<
	BACKLIGHT_ON	24.7B<
	AUXRESET	76.3B<
	-ICHLANRST PMH4	77.5P<
	PHY_PDN	77.6P<
	M1GATEON	73.4B<
	M2GATEON	73.4B<
	S1GATEON	62.1A< 73.4B<
	S2GATEON	62.1A< 73.4B<
	BAT_CRG	62.0I< 63.6D<
	M_TRCL	62.1A< 63.3D<
	S_TRCL	62.0A< 63.1D<
	TP4_RESET	50.5B<
	-PAD_RESET	51.6G<
	BYPASS_PAD	51.3C<
	BYPASS_PAD_QSW	51.2F<
	-LEDPWR	24.6Q<
	-LEDFUELO	24.7B<
	-LEDFUELI	24.7B<
	-LEDSUS	24.7B<

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03			
APPROVED	K.T	12/26/03	TITLE	APOLLO-9 (V060)	
CLASS	K.T	12/26/03		LPC:MISC G/A(PMH-4)	

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

IBM CONFIDENTIAL

13R1151



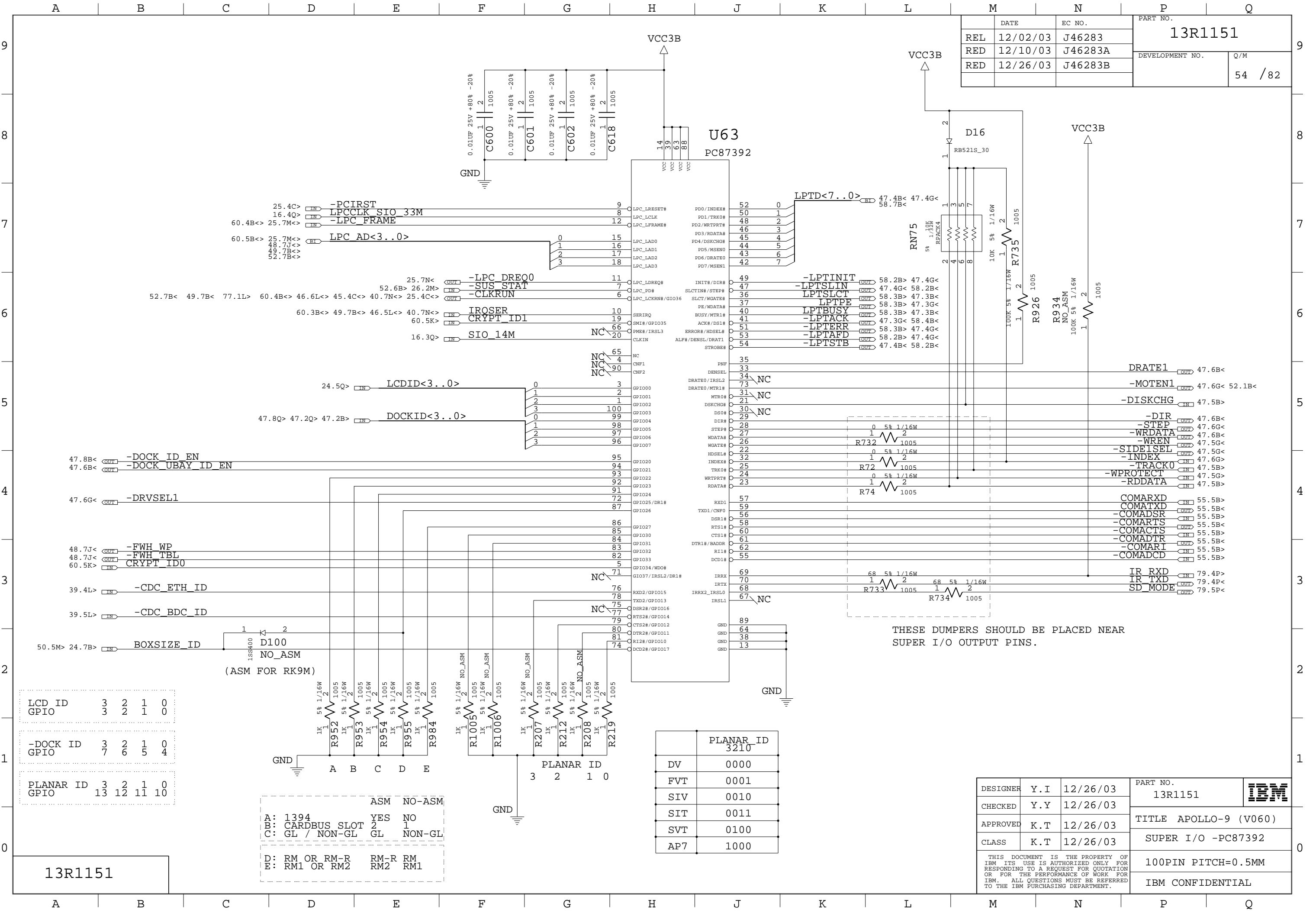
	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		53 /82

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	VCCCPUCORE DECAP		
CLASS	K. T	12/26/03	IBM CONFIDENTIAL		

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

DATE	EC NO.	PART NO.
REL 12/02/03	J46283	13R1151
RED 12/10/03	J46283A	DEVELOPMENT NO.
RED 12/26/03	J46283B	Q/M
		54 / 82



(ASM FOR RK9M)

LCD ID	3	2	1	0
GPIO	3	2	1	0
-DOCK ID	3	2	1	0
GPIO	7	6	5	4
PLANAR ID	3	2	1	0
GPIO	13	12	11	10

A:	1394	YES	NO
B:	CARDBUS SLOT	2	1
C:	GL / NON-GL	GL	NON-GL
D:	RM OR RM-R	RM-R	RM
E:	RM1 OR RM2	RM2	RM1

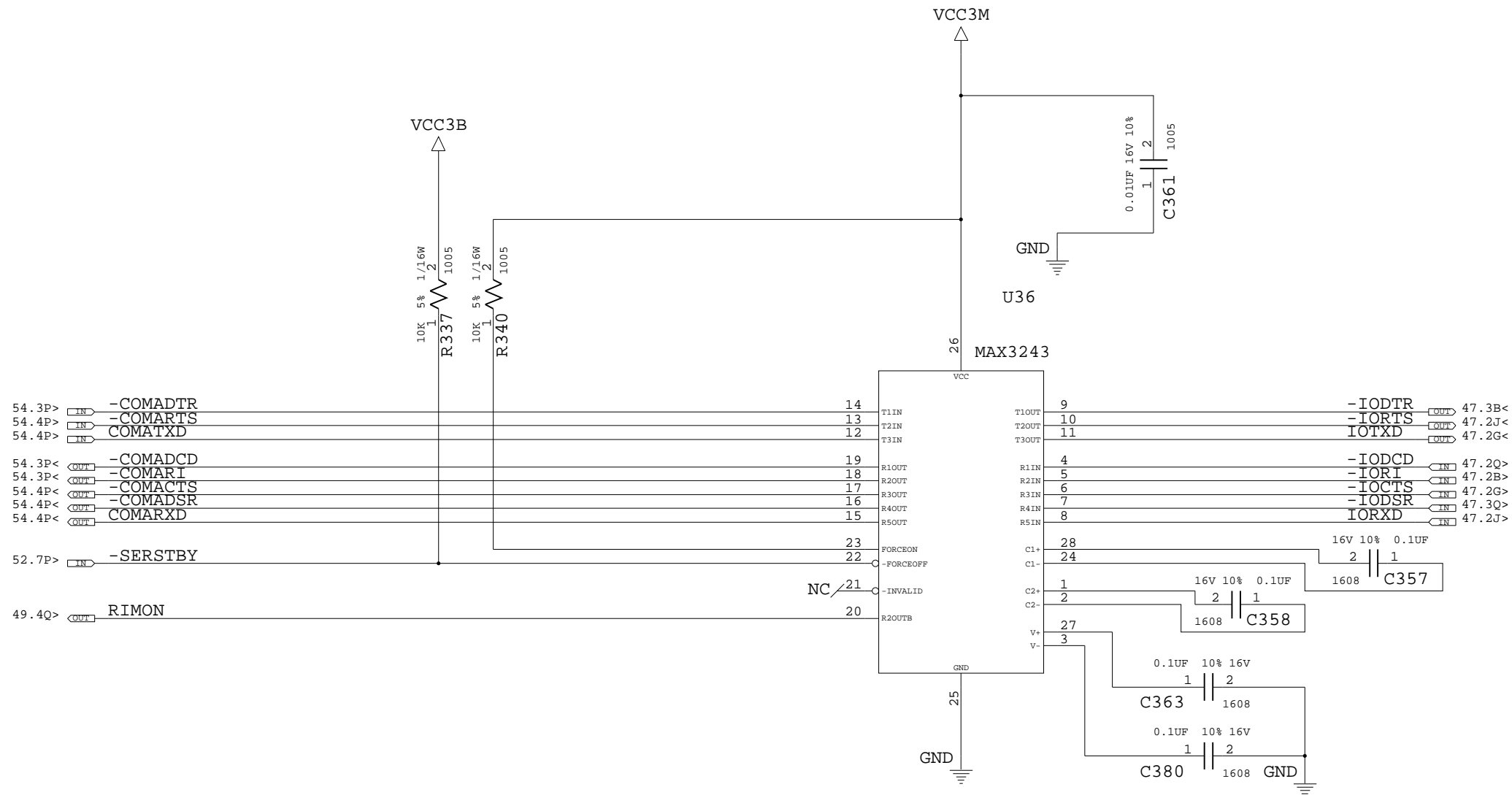
PLANAR ID	
DV	0000
FVT	0001
SIV	0010
SIT	0011
SVT	0100
AP7	1000

THESE DUMPERS SHOULD BE PLACED NEAR SUPER I/O OUTPUT PINS.

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K.T	12/26/03	SUPER I/O -PC87392		
CLASS	K.T	12/26/03	100PIN PITCH=0.5MM		
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL

	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		55 /82

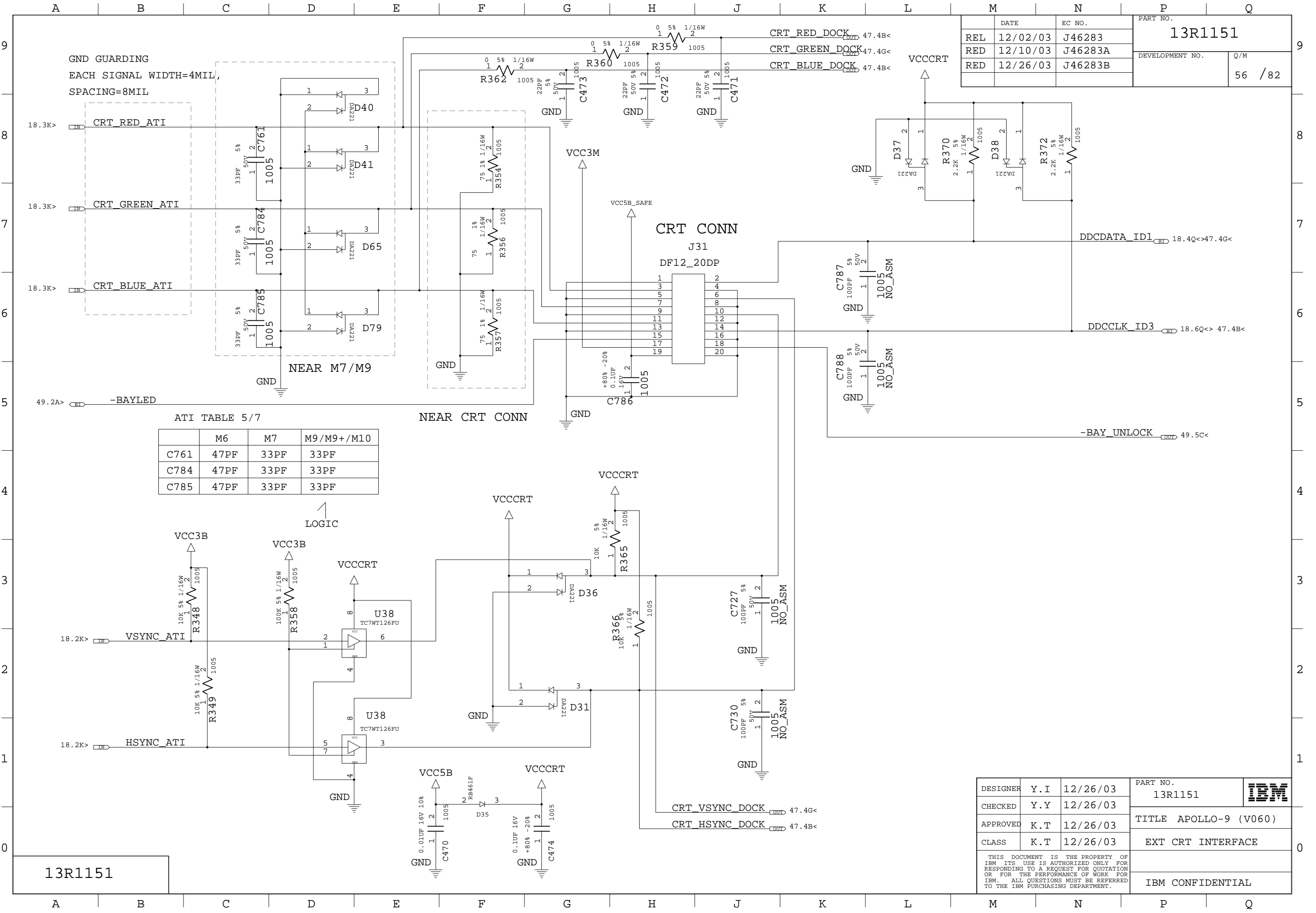


R1IN/R2IN/R3IN/R5IN HAVE INTERNAL PULLDOWN(5K OHM).
DO NOT WIRE SIGNALS UNDER PINS (1/2/3/24/25/26/27/28)
CHARGE PUMP CAPACITOR SHOULD BE PLACED NEAR PINS(1/2/3/24/27/28)
ADD GND SHILED UNDER CHARGE PUMP CIRCUIT TO
PROTECT POWER LINE NOISE
CAPACITORS FOR CHARGE PUMP SHOULD BE USED TYPE B AND LOW ESR TYPE.

	NORMAL MODE	POWER DOWN MODE	AUTO POWER DOWN MODE
FORCEON	HIGH	DO NOT CARE	LOW
FOCEOFF	HIGH	LOW	HIGH

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03			
APPROVED	K.T	12/26/03	TITLE APOLLO-9 (V060)		
CLASS	K.T	12/26/03	SERIAL INTERFACE		
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	



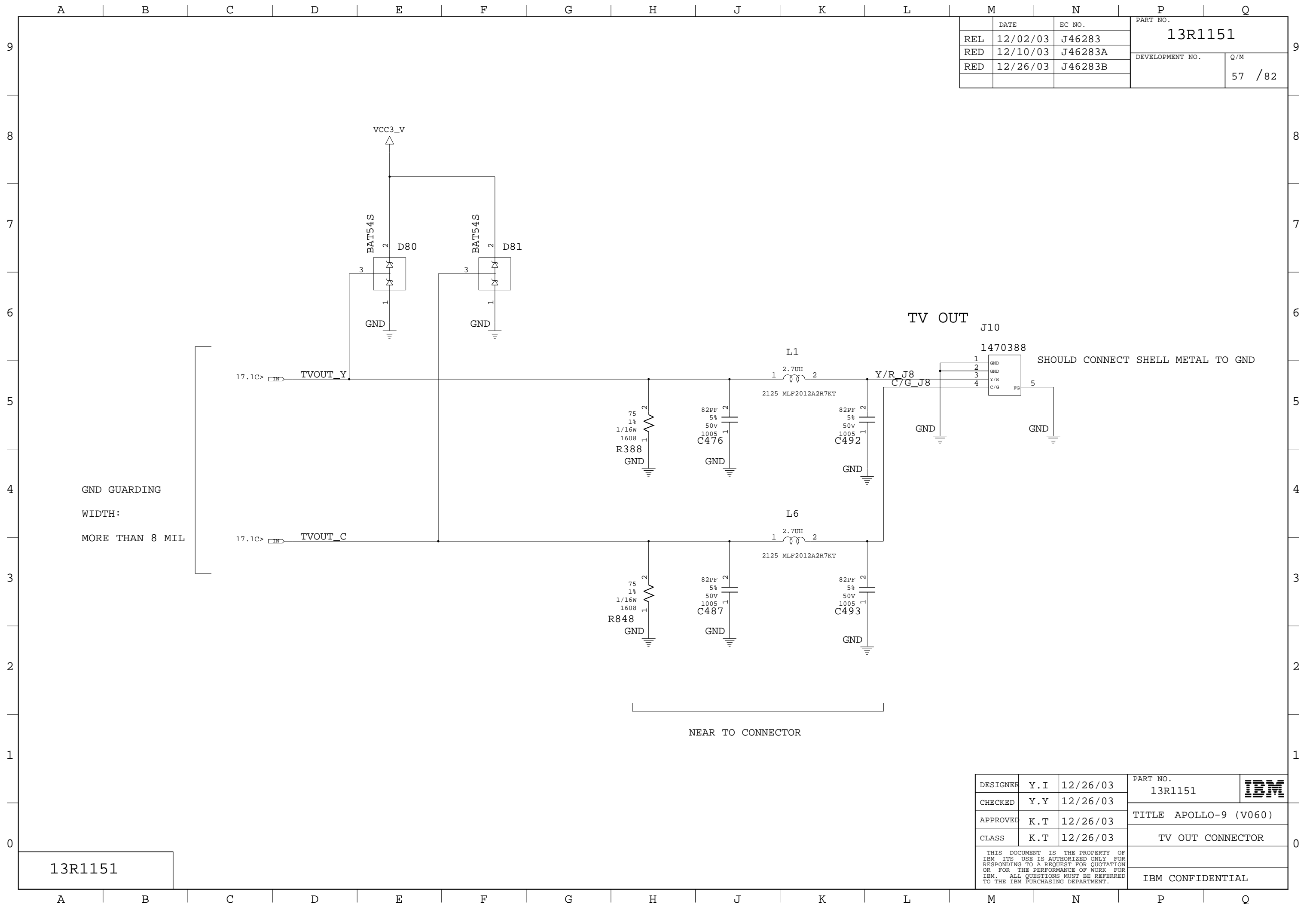
	DATE	EC NO.	PART NO.
REL	12/02/03	J46283	13R1151
RED	12/10/03	J46283A	
RED	12/26/03	J46283B	
	DEVELOPMENT NO.		Q/M
			56 / 82

ATI TABLE 5/7

	M6	M7	M9/M9+/M10
C761	47PF	33PF	33PF
C784	47PF	33PF	33PF
C785	47PF	33PF	33PF

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE		
APPROVED	K.T	12/26/03	EXT CRT INTERFACE		
CLASS	K.T	12/26/03	IBM CONFIDENTIAL		
<small>THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.</small>					

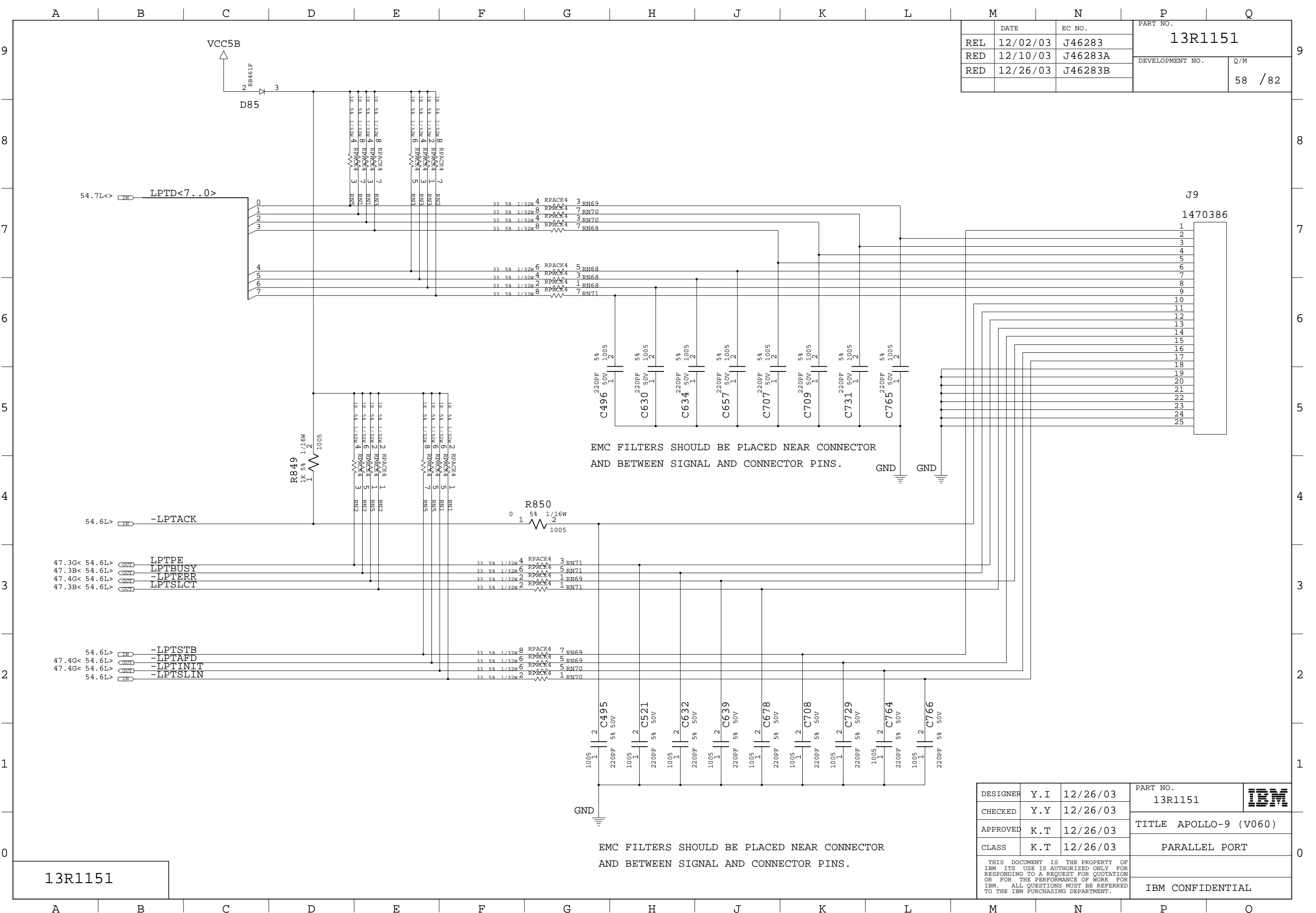
13R1151



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		57 /82

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	TV OUT CONNECTOR		
CLASS	K. T	12/26/03	THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.		
			IBM CONFIDENTIAL		



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		58 / 82

13R1151

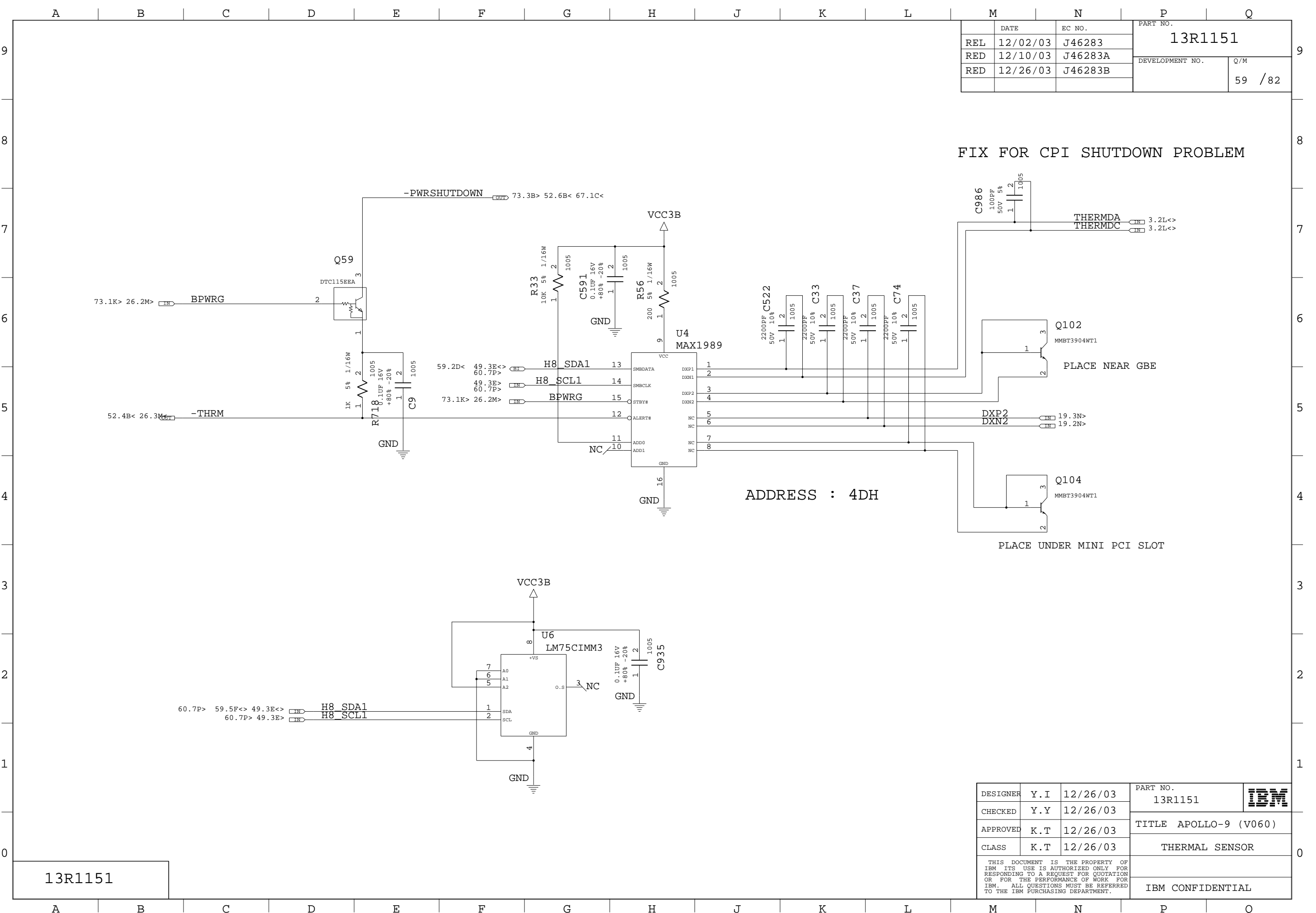
EMC FILTERS SHOULD BE PLACED NEAR CONNECTOR AND BETWEEN SIGNAL AND CONNECTOR PINS.

EMC FILTERS SHOULD BE PLACED NEAR CONNECTOR AND BETWEEN SIGNAL AND CONNECTOR PINS.

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03			
APPROVED	K.T	12/26/03	TITLE APOLLO-9 (V060)		
CLASS	K.T	12/26/03	PARALLEL PORT		
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL

	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B	59 / 82	

FIX FOR CPI SHUTDOWN PROBLEM



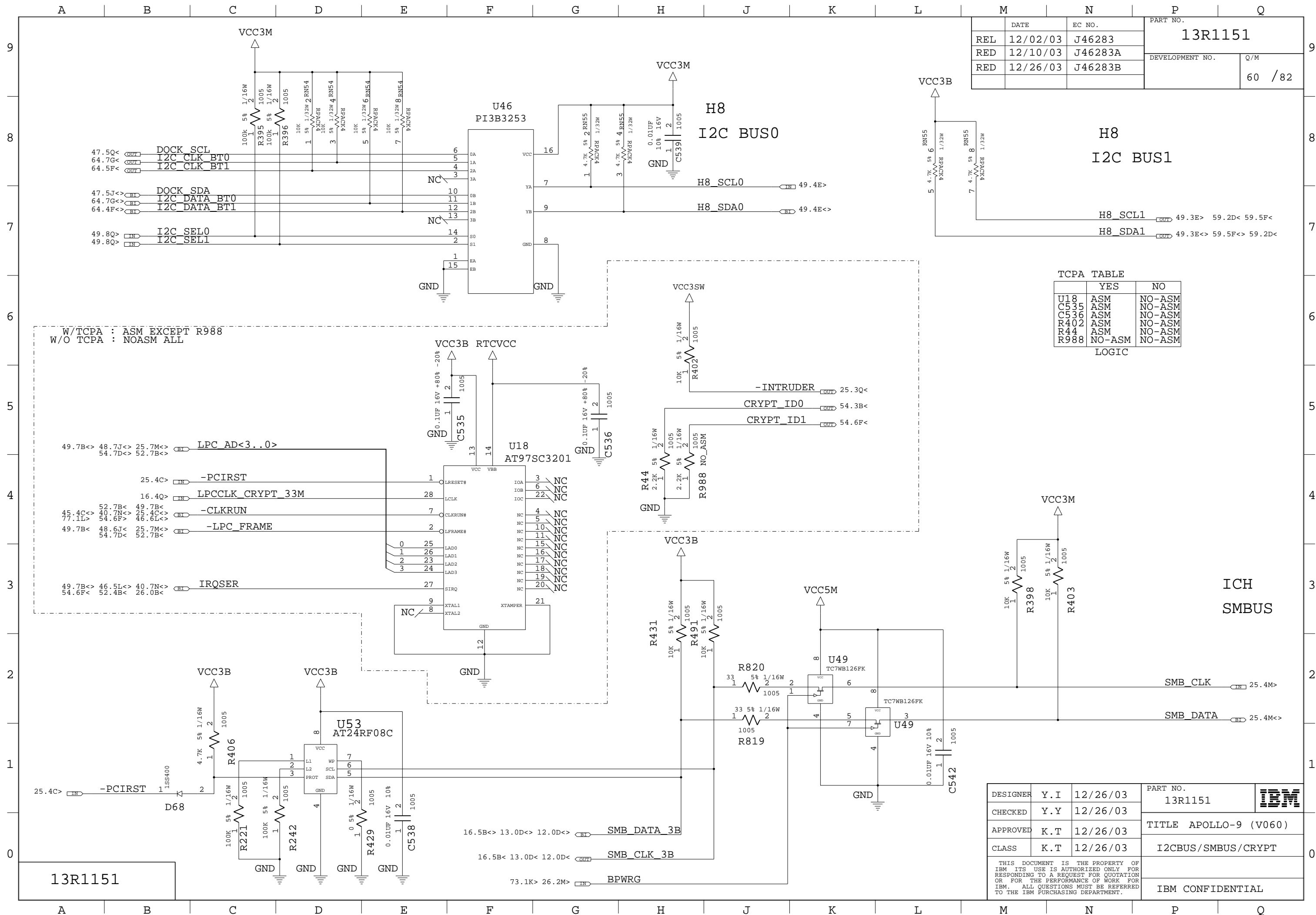
ADDRESS : 4DH

PLACE NEAR GBE

PLACE UNDER MINI PCI SLOT

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	CLASS	THERMAL SENSOR	
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B	60 / 82	

TCPA TABLE

	YES	NO
U18	ASM	NO-ASM
C535	ASM	NO-ASM
C536	ASM	NO-ASM
R402	ASM	NO-ASM
R44	ASM	NO-ASM
R988	NO-ASM	NO-ASM

LOGIC

W/TCPA : ASM EXCEPT R988
W/O TPCA : NOASM ALL

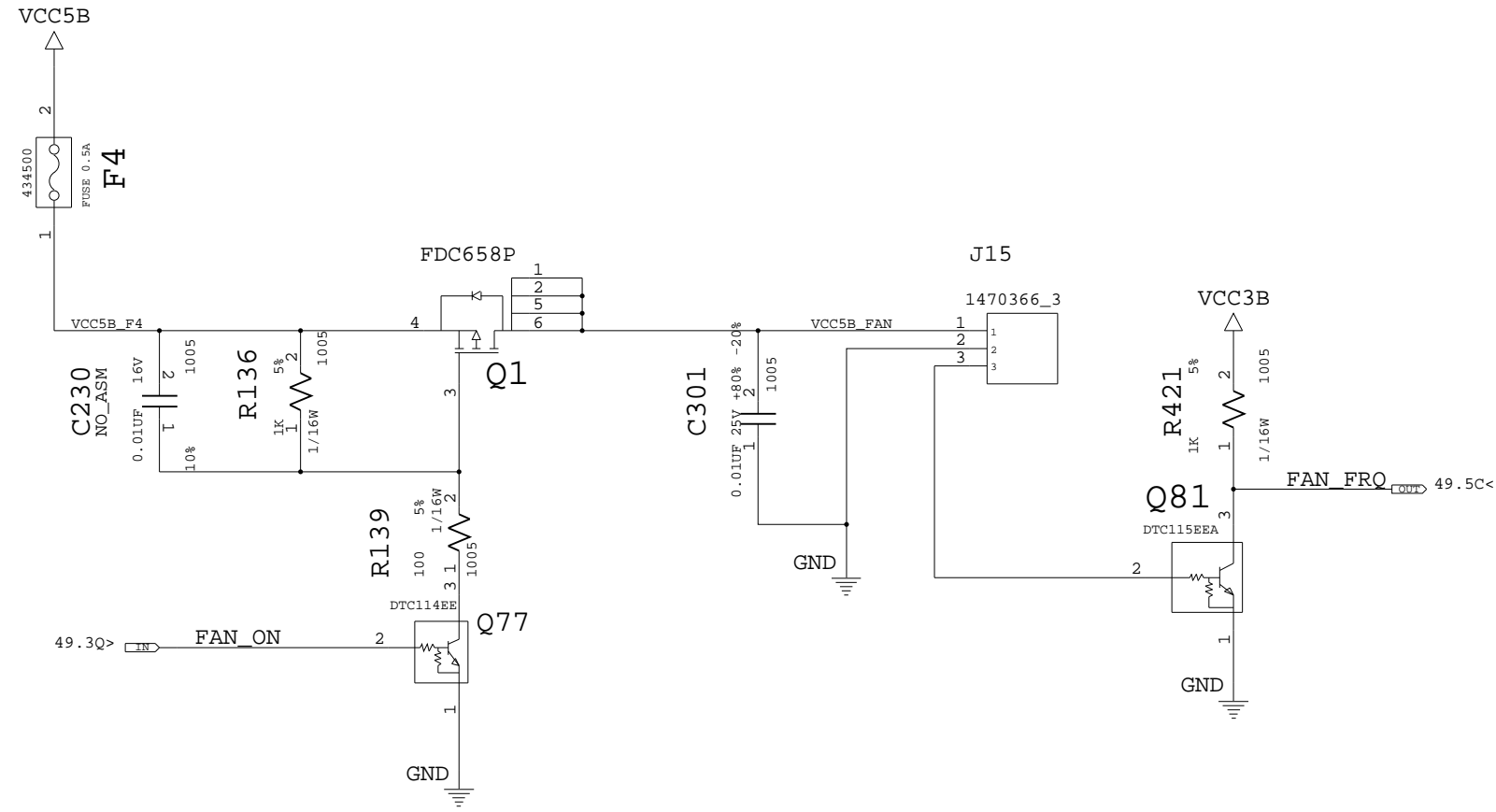
13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K.T	12/26/03	CLASS I2CBUS/SMBUS/CRYPT		THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.
				IBM CONFIDENTIAL	

	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		61 /82

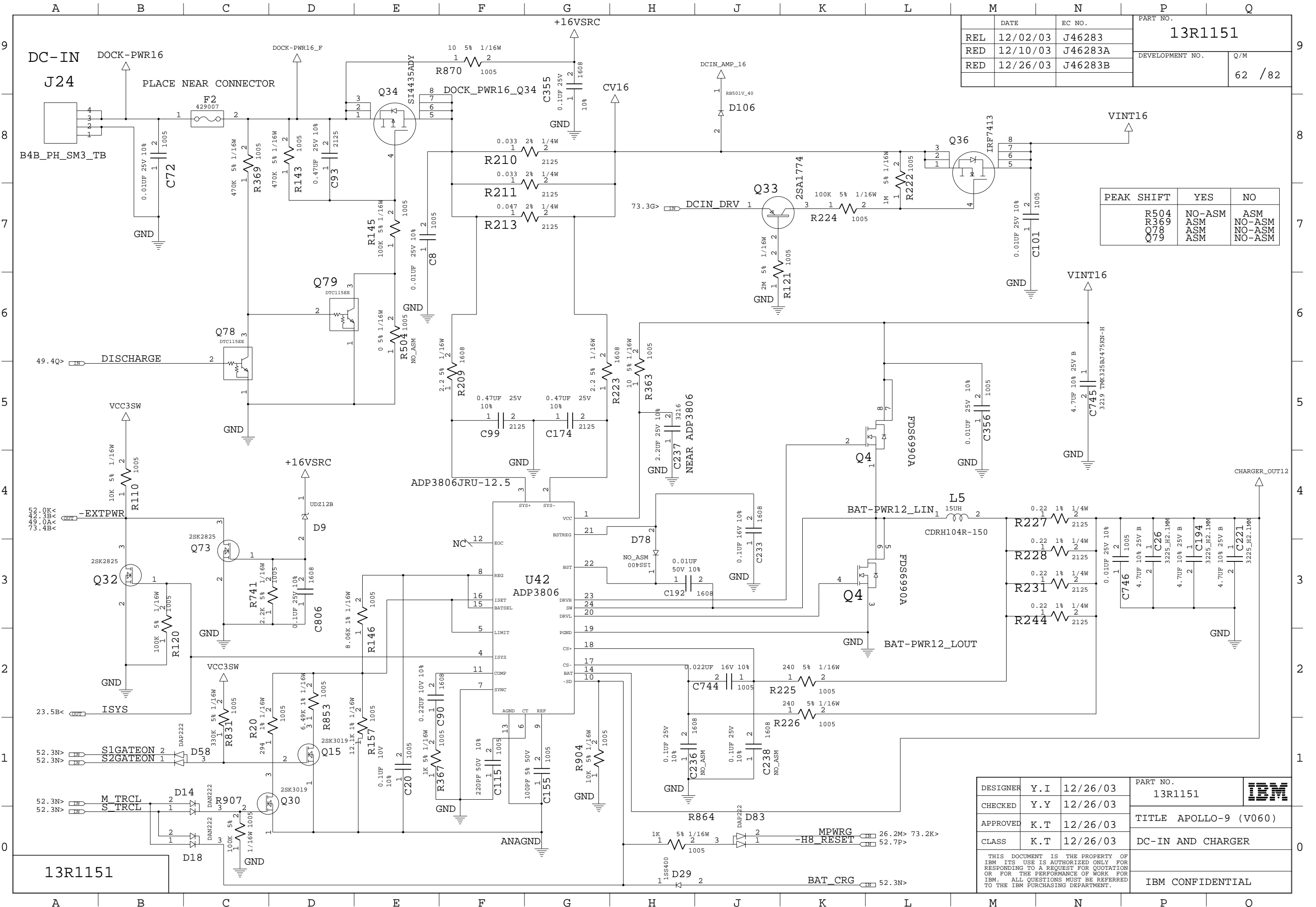
FAN FUSE TABLE 1/1

	M7/M9	M10
F4	0.5 A	2.0 A



13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03			
APPROVED	K. T	12/26/03	TITLE APOLLO-9 (V060)		
CLASS	K. T	12/26/03	FAN CONNECTOR		
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	



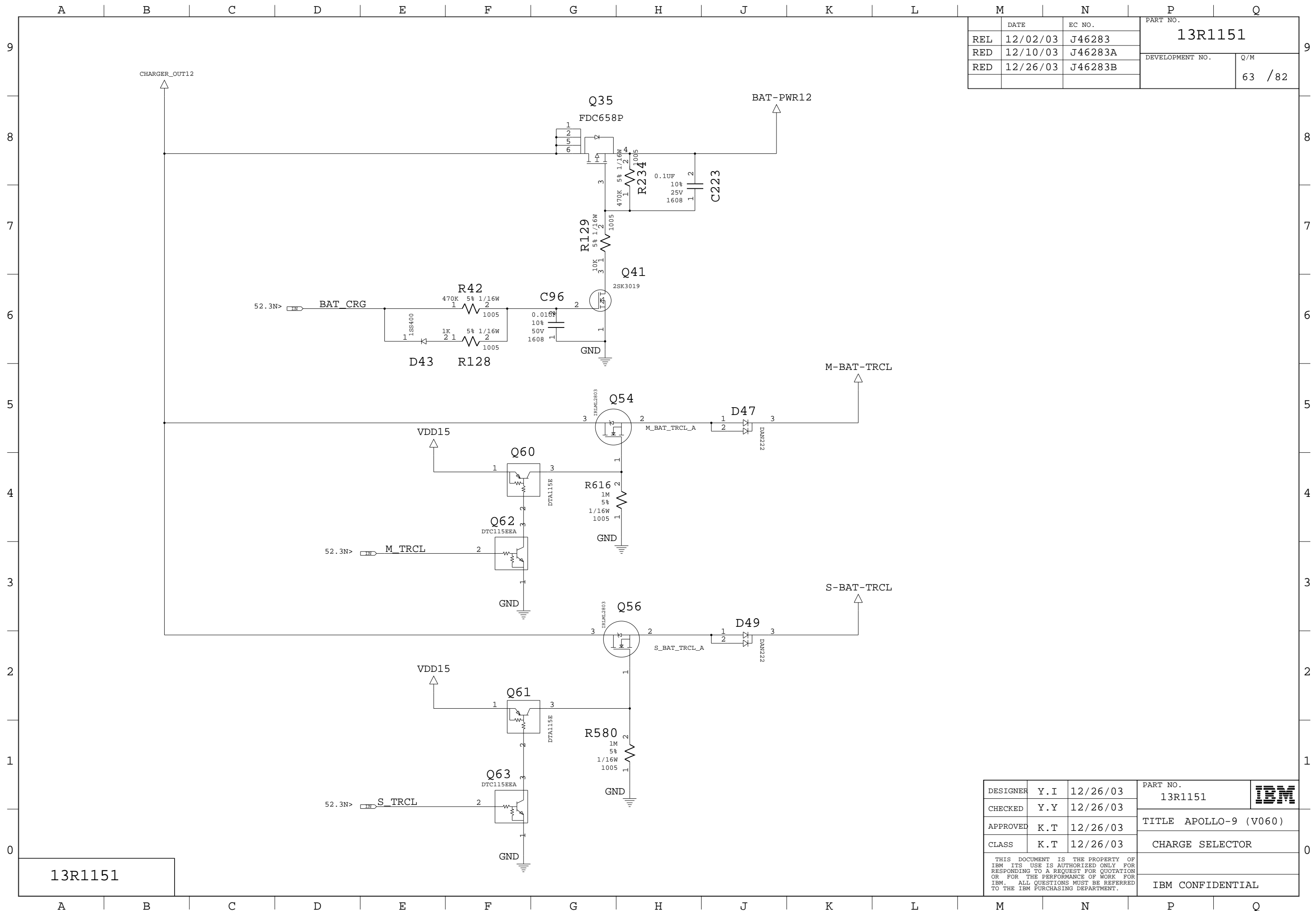
REL	12/02/03	J46283	PART NO. 13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO. Q/M	
RED	12/26/03	J46283B	62 / 82	

PEAK SHIFT	YES	NO
R504	NO-ASM	ASM
R369	ASM	NO-ASM
Q78	ASM	NO-ASM
Q79	ASM	NO-ASM

DESIGNER	Y.I	12/26/03	PART NO. 13R1151	
CHECKED	Y.Y	12/26/03	TITLE APOLLO-9 (V060)	
APPROVED	K.T	12/26/03	DC-IN AND CHARGER	
CLASS	K.T	12/26/03	IBM CONFIDENTIAL	

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

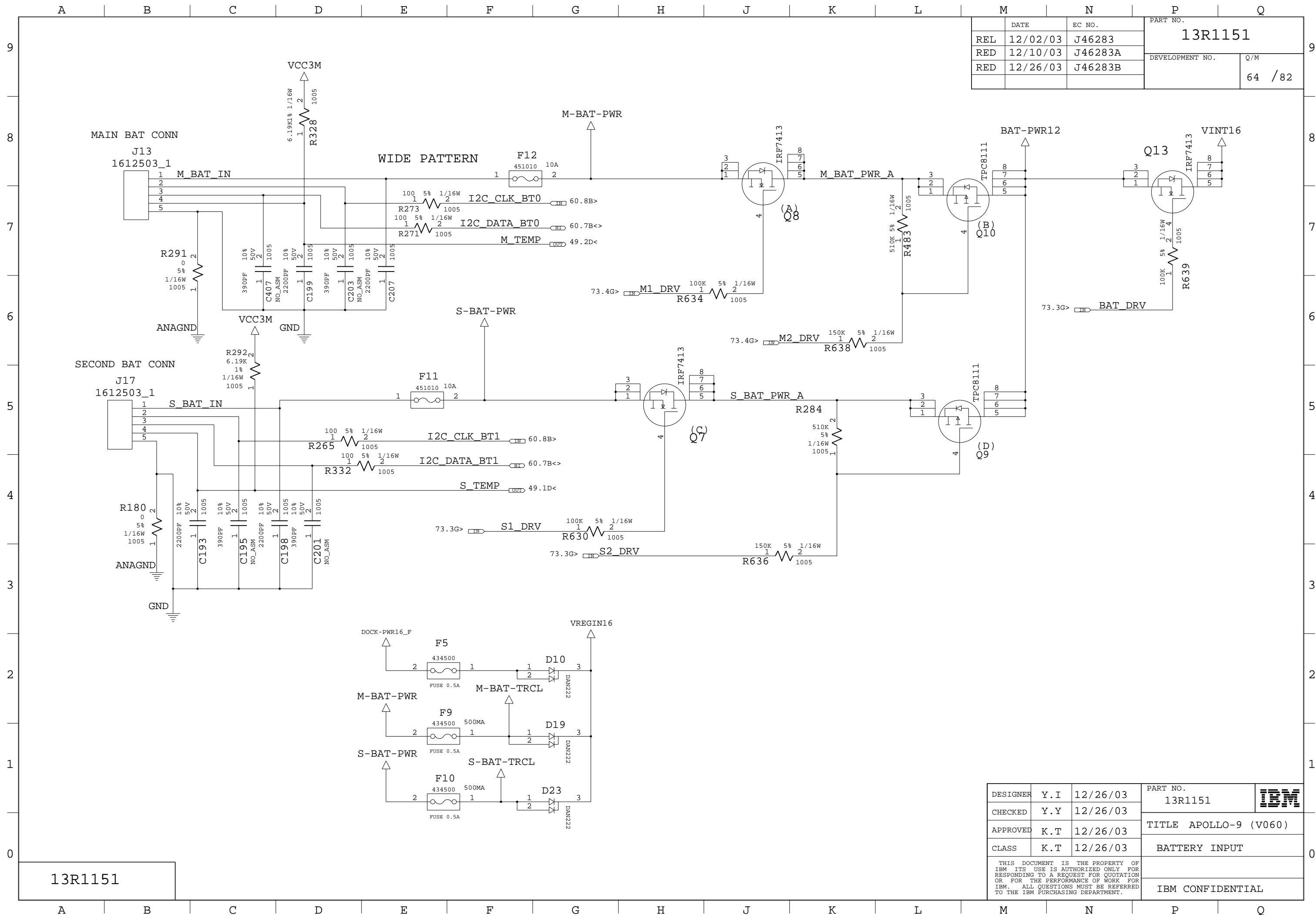
13R1151



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		63 / 82

13R1151

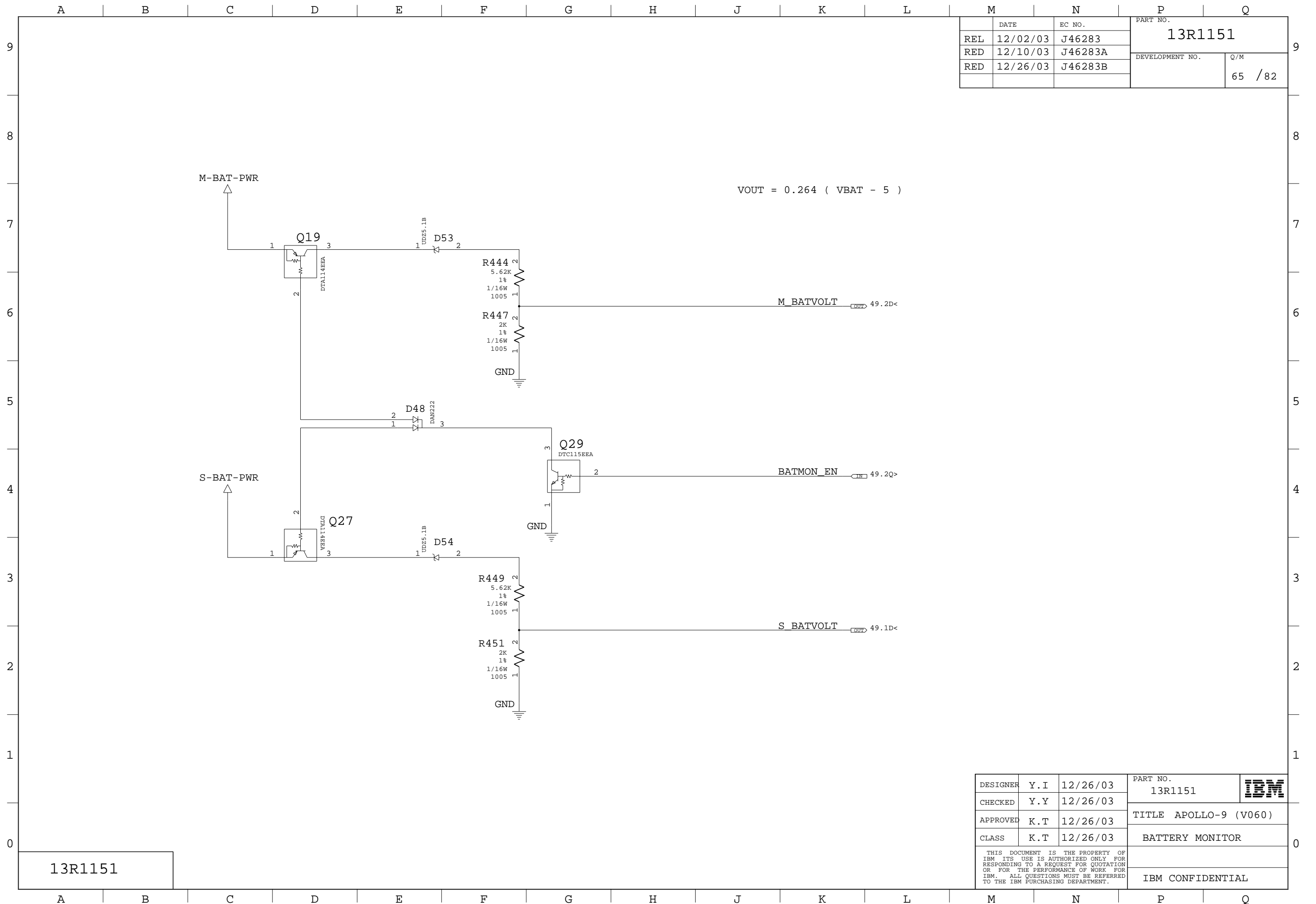
DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K. T	12/26/03	CHARGE SELECTOR		
CLASS	K. T	12/26/03	IBM CONFIDENTIAL		
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		64 / 82

13R1151

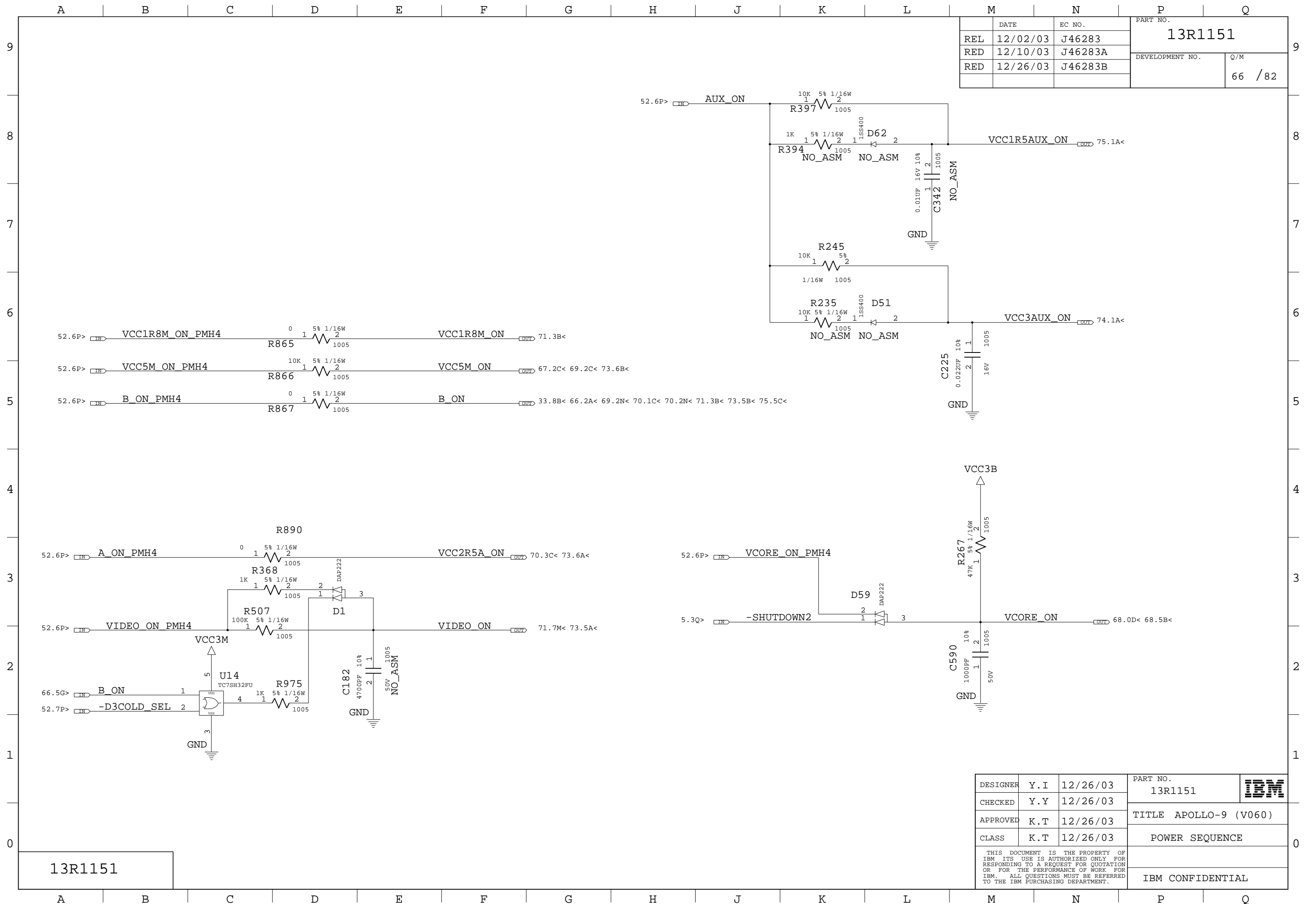
DESIGNER	Y. I	12/26/03	PART NO.	13R1151	
CHECKED	Y. Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K. T	12/26/03	BATTERY INPUT		
CLASS	K. T	12/26/03	THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.		IBM CONFIDENTIAL



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		65 /82

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	CLASS	BATTERY MONITOR	
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		66 /82

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y.Y	12/26/03			
APPROVED	K.T	12/26/03	TITLE APOLLO-9 (V060)		
CLASS	K.T	12/26/03	POWER SEQUENCE		
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL

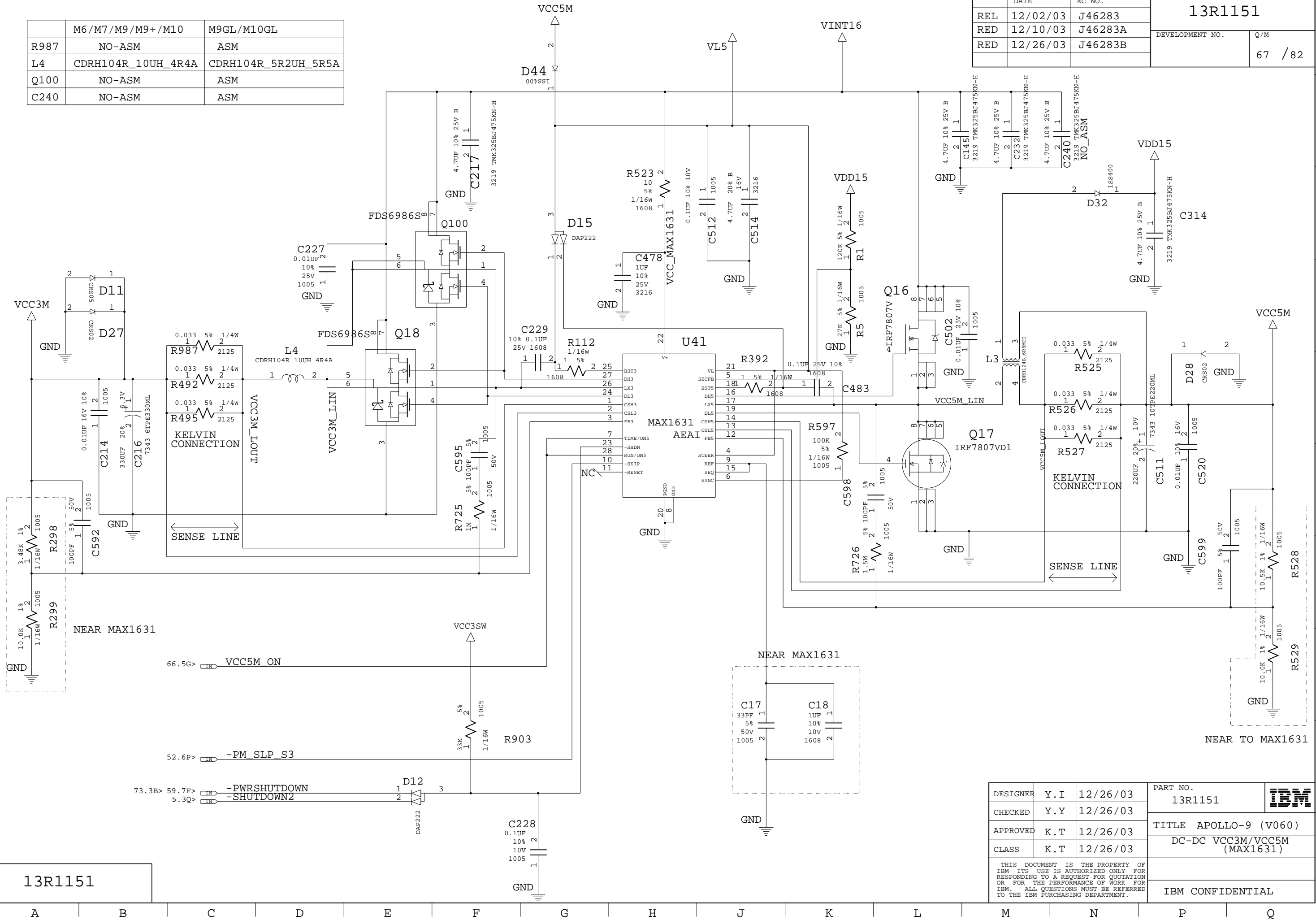
A B C D E F G H J K L M N P Q

	M6/M7/M9/M9+/M10	M9GL/M10GL
R987	NO-ASM	ASM
L4	CDRH104R_10UH_4R4A	CDRH104R_5R2UH_5R5A
Q100	NO-ASM	ASM
C240	NO-ASM	ASM

	DATE	EC NO.	PART NO.
REL	12/02/03	J46283	13R1151
RED	12/10/03	J46283A	DEVELOPMENT NO.
RED	12/26/03	J46283B	Q/M
			67 / 82

9
8
7
6
5
4
3
2
1
0

9
8
7
6
5
4
3
2
1
0

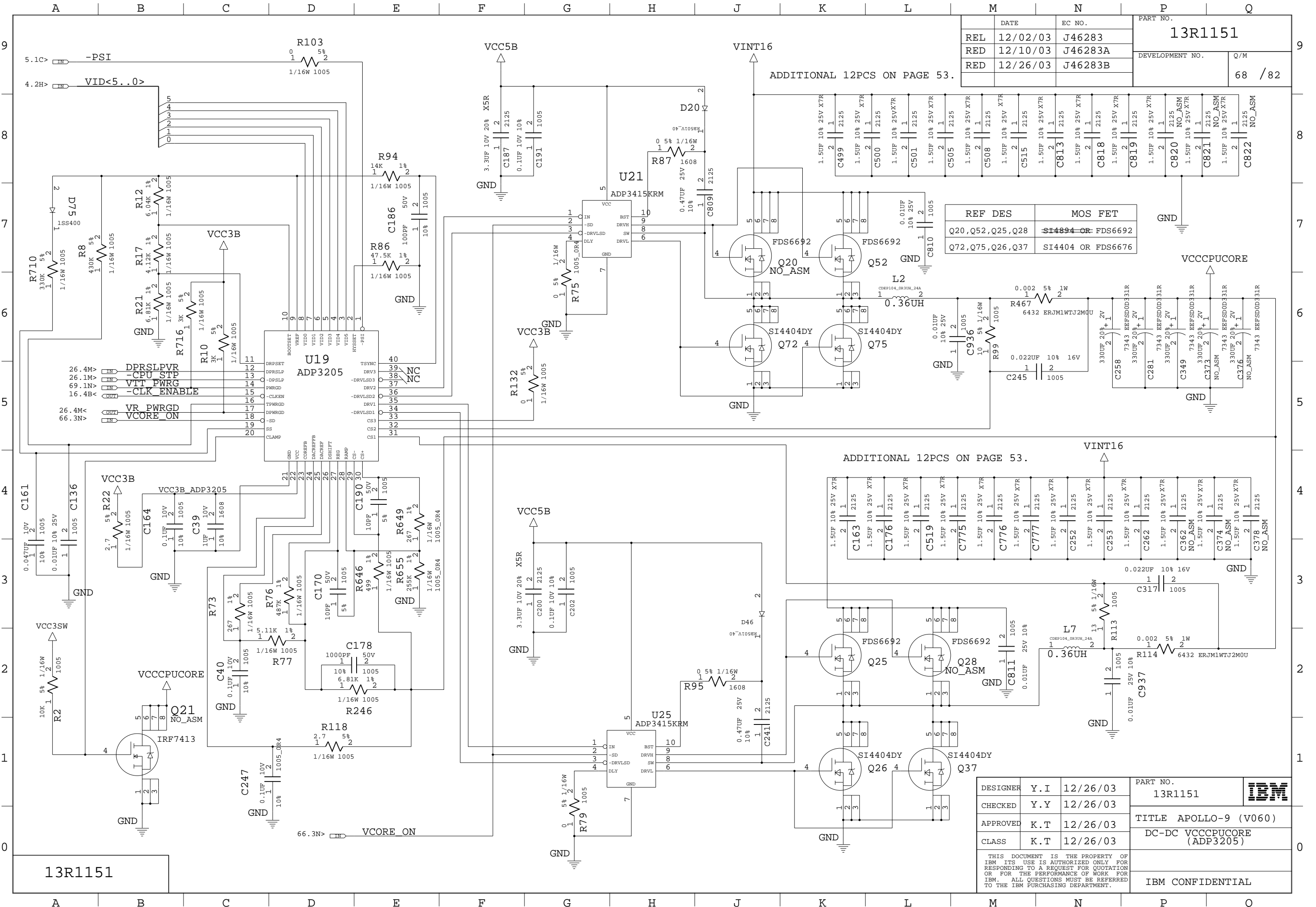


13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE	APOLLO-9 (V060)	
APPROVED	K.T	12/26/03	DC-DC VCC3M/VCC5M (MAX1631)		
CLASS	K.T	12/26/03	IBM CONFIDENTIAL		

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

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



REL	12/02/03	J46283	PART NO. 13R1151
RED	12/10/03	J46283A	
RED	12/26/03	J46283B	
DEVELOPMENT NO.			Q/M 68 / 82

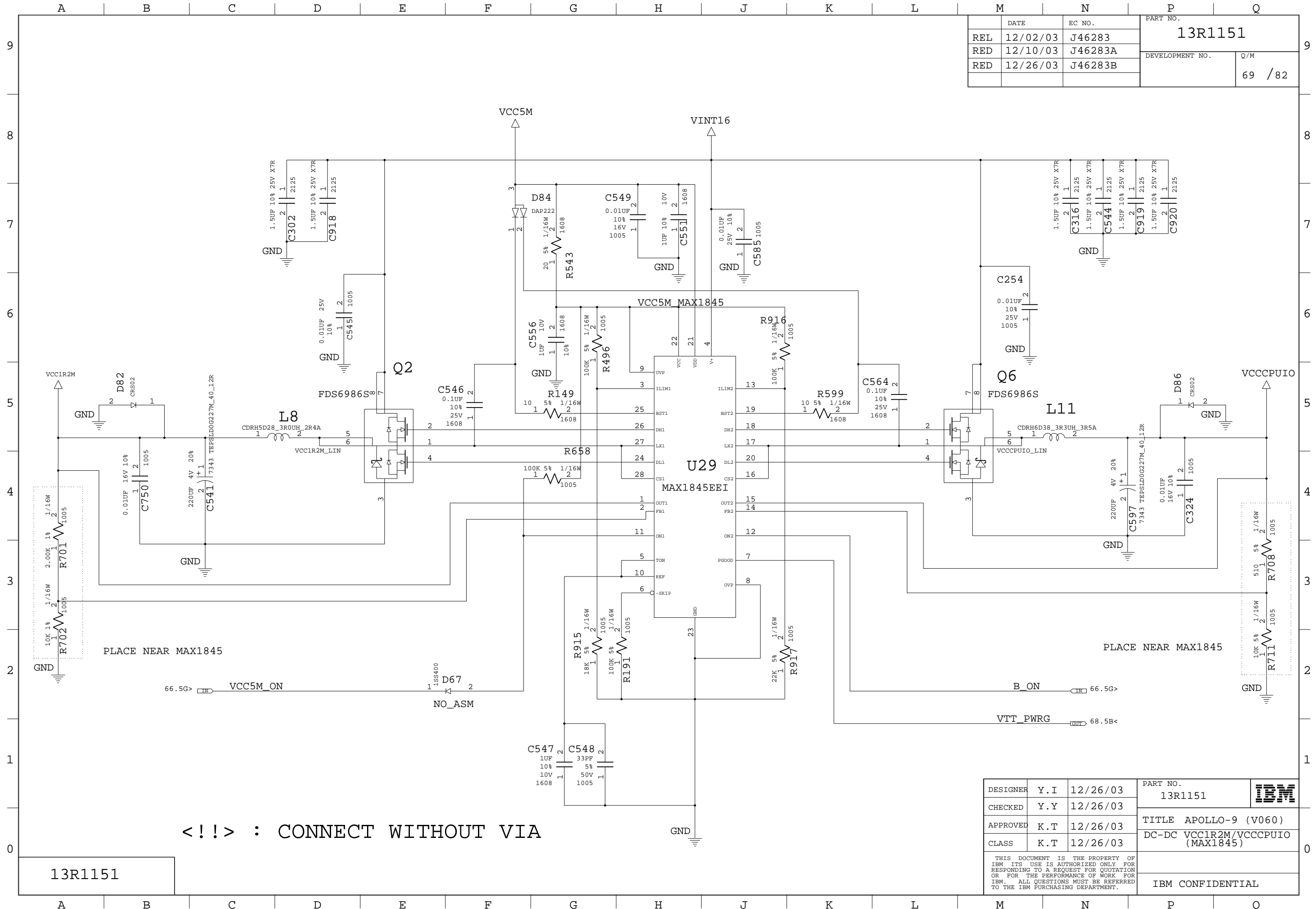
REF DES	MOS FET
Q20, Q52, Q25, Q28	SI4894 OR FDS6692
Q72, Q75, Q26, Q37	SI4404 OR FDS6676

REF DES	MOS FET
Q20, Q52, Q25, Q28	SI4894 OR FDS6692
Q72, Q75, Q26, Q37	SI4404 OR FDS6676

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K.T	12/26/03	DC-DC VCCCPUCORE (ADP3205)		IBM CONFIDENTIAL
CLASS	K.T	12/26/03	THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.		

13R1151

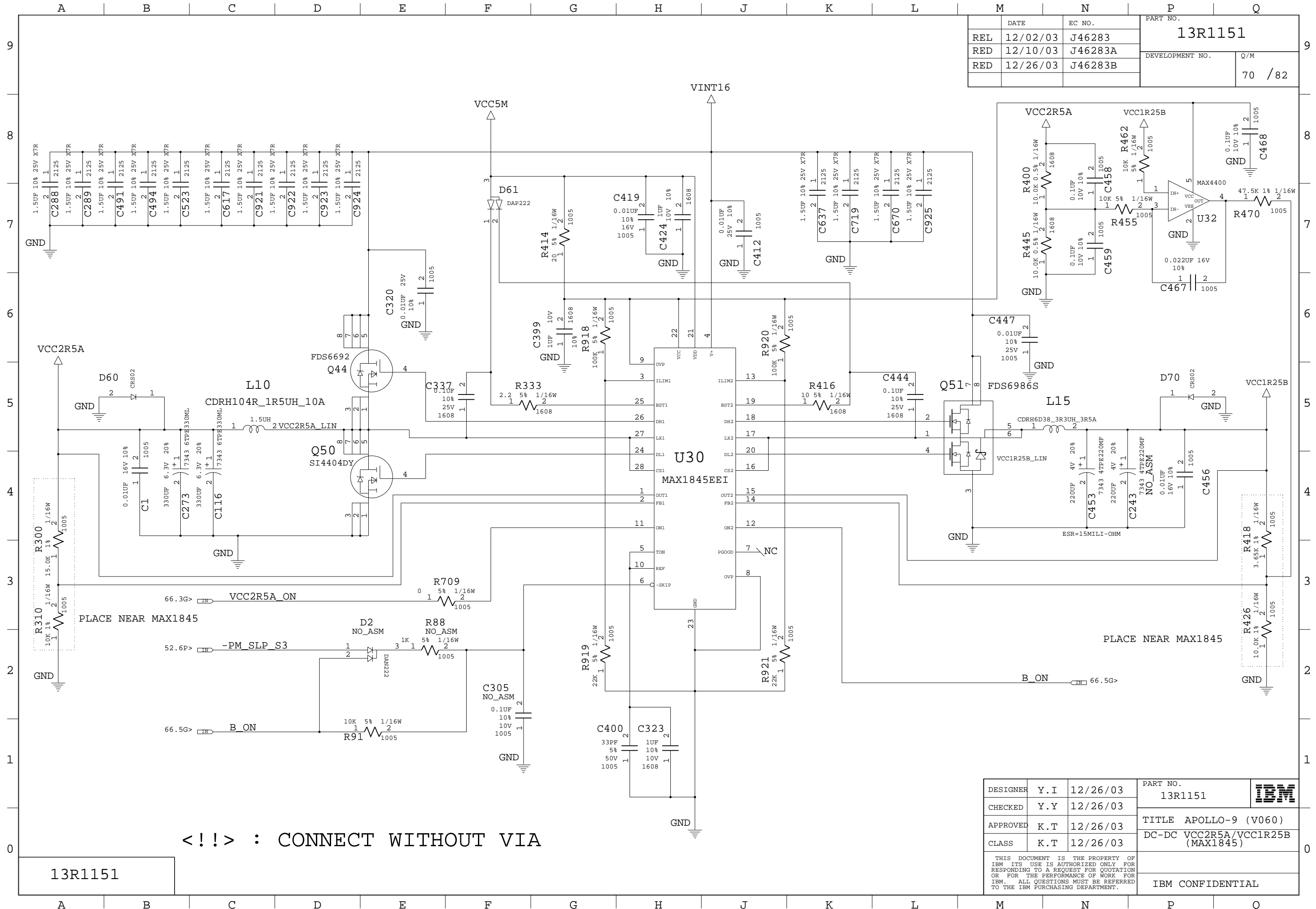
	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		69 / 82



<!!!> : CONNECT WITHOUT VIA

13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	
CHECKED	Y. Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K. T	12/26/03	DC-DC VCC1R2M/VCCCPUIO (MAX1845)		
CLASS	K. T	12/26/03			
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL



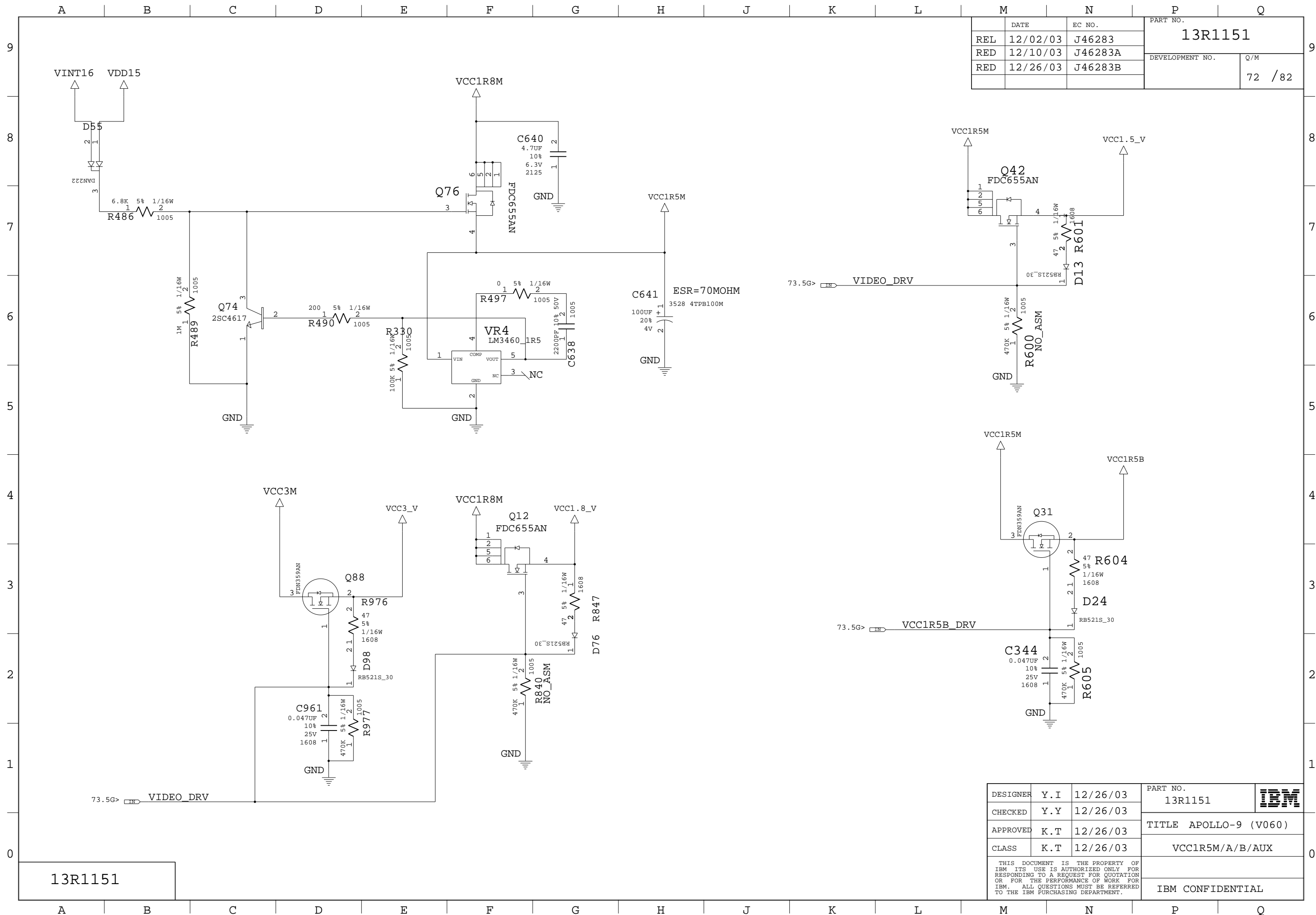
	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		70 / 82

<!!!> : CONNECT WITHOUT VIA

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE		
APPROVED	K.T	12/26/03	DC-DC VCC2R5A/VCC1R25B (MAX1845)		
CLASS	K.T	12/26/03	IBM CONFIDENTIAL		

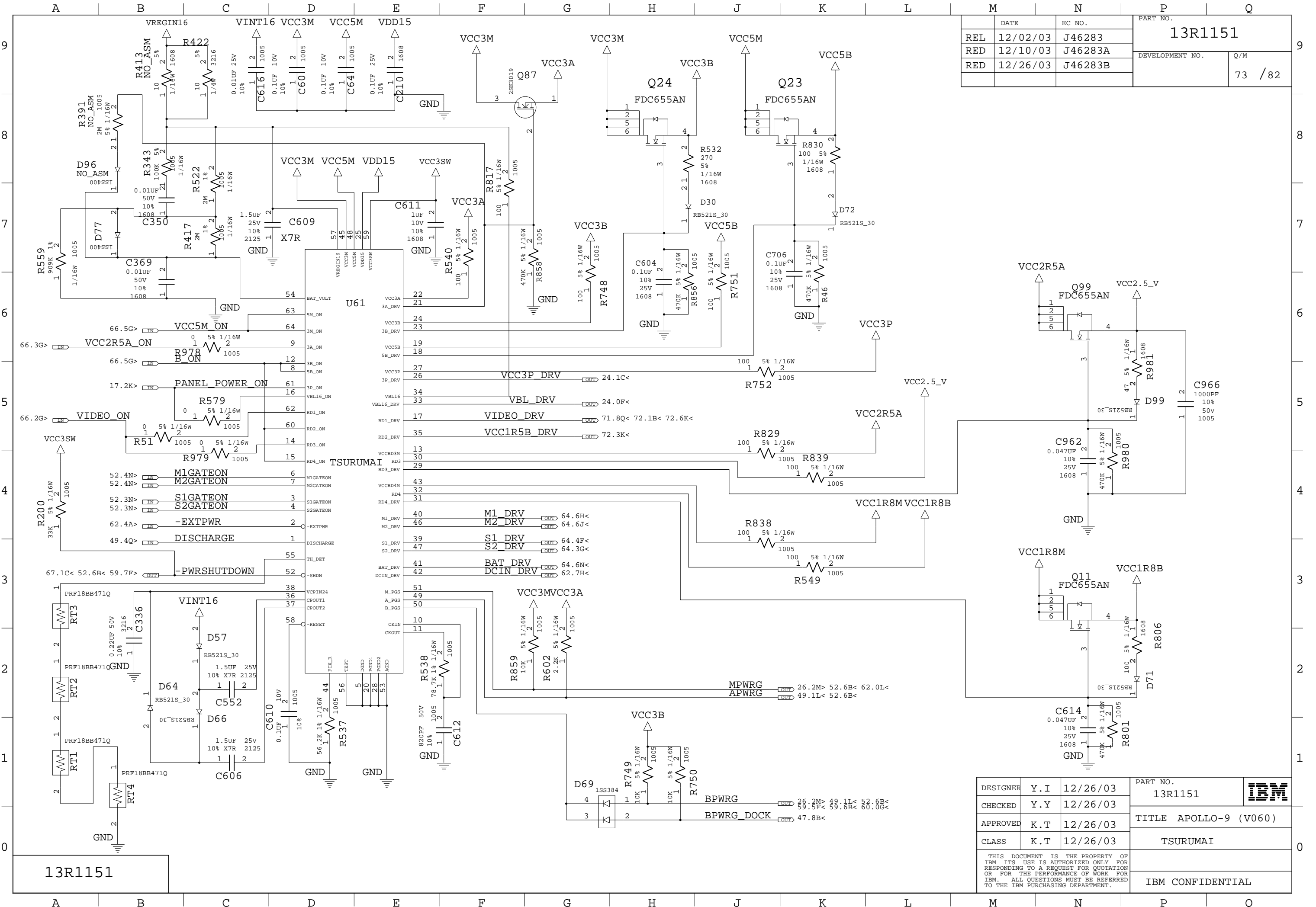
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		72 / 82

13R1151

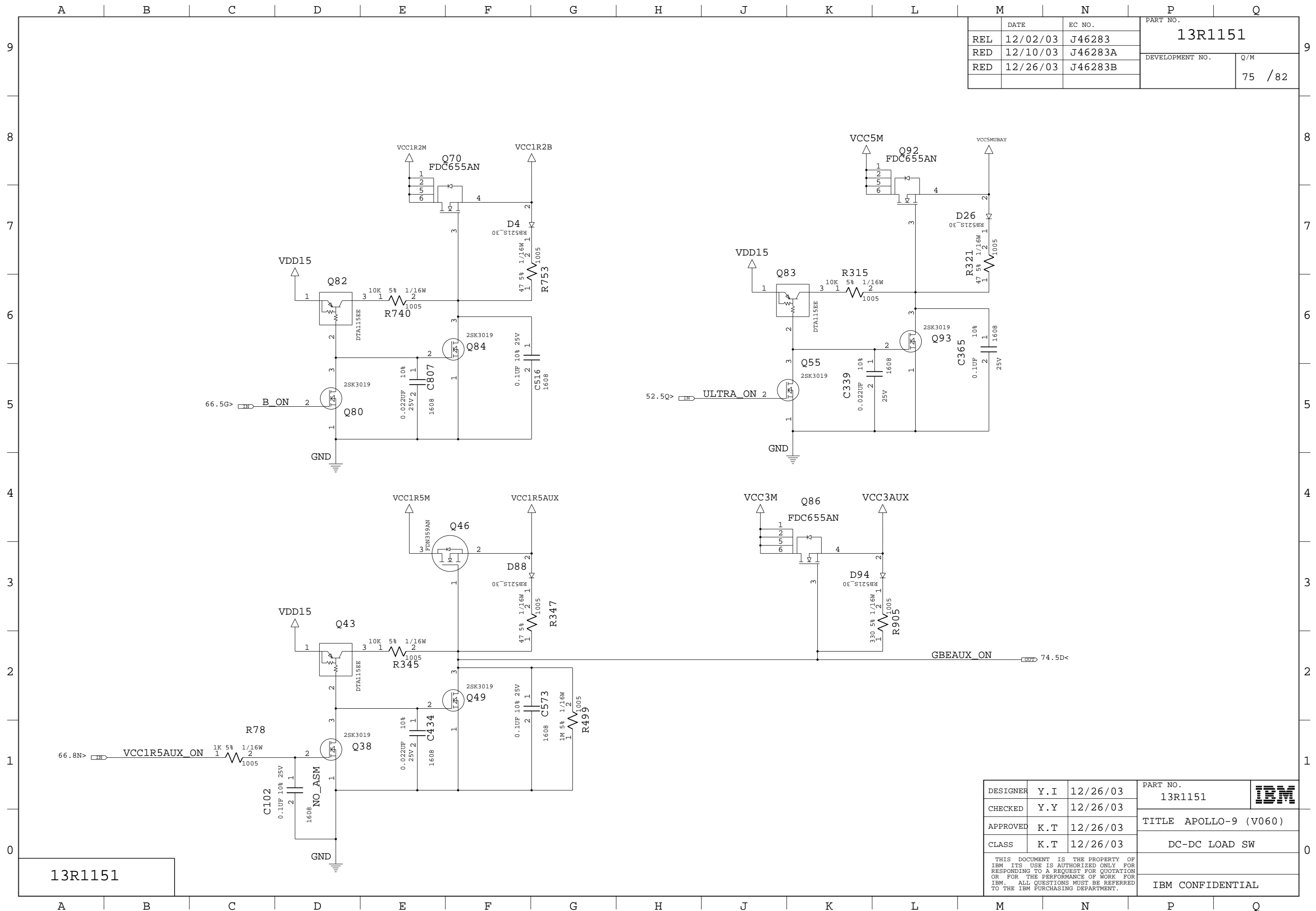
DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	VCC1R5M/A/B/AUX		
CLASS	K. T	12/26/03	THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.		
			IBM CONFIDENTIAL		



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		73 / 82

13R1151

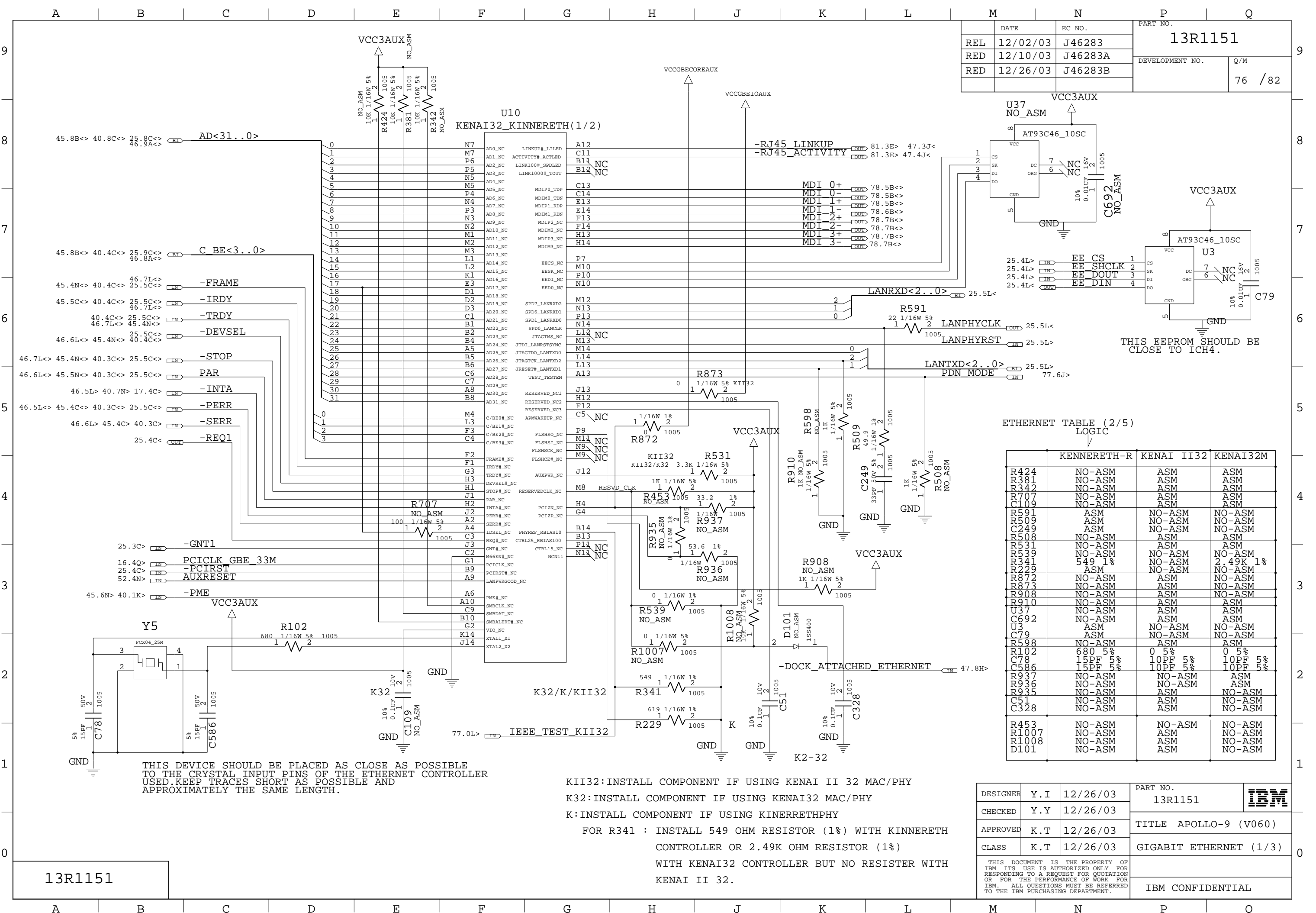
DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE	APOLLO-9 (V060)	
APPROVED	K.T	12/26/03		TSURUMAI	
CLASS	K.T	12/26/03			
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		75 / 82

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE		
APPROVED	K.T	12/26/03	CLASS	DC-DC LOAD SW	
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.					IBM CONFIDENTIAL



REL	12/02/03	J46283	PART NO. 13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B	76 / 82	

ETHERNET TABLE (2/5)
LOGIC

	KENNERETH-R	KENAI II32	KENAI32M
R424	NO-ASM	ASM	ASM
R381	NO-ASM	ASM	ASM
R342	NO-ASM	ASM	ASM
R707	NO-ASM	ASM	ASM
C109	NO-ASM	ASM	ASM
R591	ASM	NO-ASM	NO-ASM
R509	ASM	NO-ASM	NO-ASM
C249	ASM	NO-ASM	NO-ASM
R508	NO-ASM	ASM	ASM
R531	NO-ASM	ASM	ASM
R539	NO-ASM	NO-ASM	NO-ASM
R341	549 1%	NO-ASM	2.49K 1%
R229	ASM	NO-ASM	NO-ASM
R872	NO-ASM	ASM	NO-ASM
R873	NO-ASM	ASM	NO-ASM
R908	NO-ASM	ASM	NO-ASM
R910	NO-ASM	ASM	ASM
U37	NO-ASM	ASM	ASM
C692	NO-ASM	ASM	ASM
U3	ASM	NO-ASM	NO-ASM
C79	ASM	NO-ASM	NO-ASM
R598	NO-ASM	ASM	ASM
R102	680 5%	0 5%	0 5%
C78	15PF	10PF 5%	10PF 5%
C586	15PF 5%	10PF 5%	10PF 5%
R937	NO-ASM	NO-ASM	ASM
R936	NO-ASM	NO-ASM	ASM
R935	NO-ASM	ASM	NO-ASM
C51	NO-ASM	ASM	NO-ASM
C328	NO-ASM	ASM	NO-ASM
R453	NO-ASM	NO-ASM	NO-ASM
R1007	NO-ASM	ASM	NO-ASM
R1008	NO-ASM	ASM	NO-ASM
D101	NO-ASM	ASM	NO-ASM

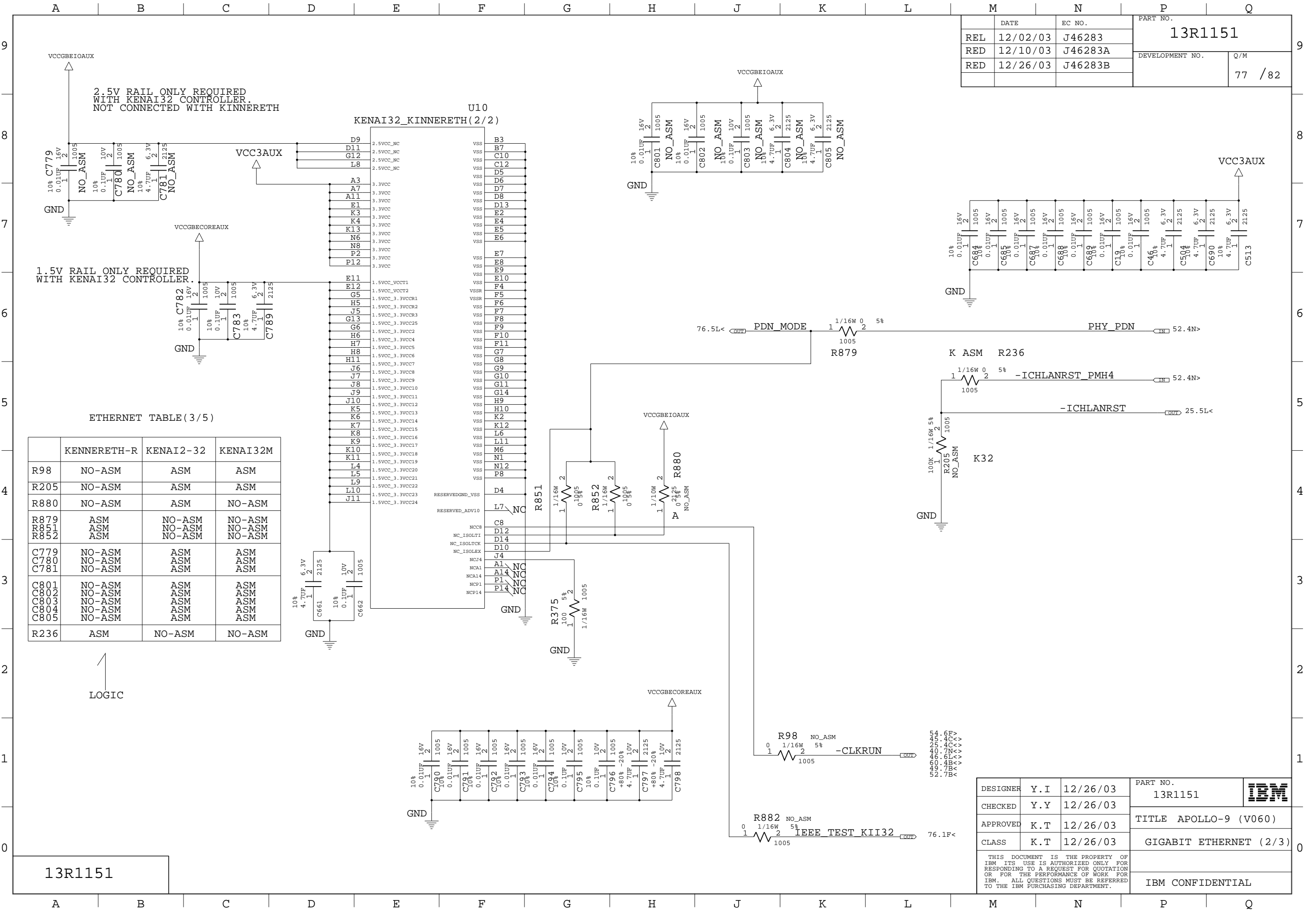
THIS DEVICE SHOULD BE PLACED AS CLOSE AS POSSIBLE TO THE CRYSTAL INPUT PINS OF THE ETHERNET CONTROLLER USED. KEEP TRACES SHORT AS POSSIBLE AND APPROXIMATELY THE SAME LENGTH.

KII32: INSTALL COMPONENT IF USING KENAI II 32 MAC/PHY
 K32: INSTALL COMPONENT IF USING KENAI32 MAC/PHY
 K: INSTALL COMPONENT IF USING KINNERETHPHY
 FOR R341 : INSTALL 549 OHM RESISTOR (1%) WITH KINNERETH CONTROLLER OR 2.49K OHM RESISTOR (1%) WITH KENAI32 CONTROLLER BUT NO RESISTOR WITH KENAI II 32.

DESIGNER	Y.I	12/26/03	PART NO. 13R1151	
CHECKED	Y.Y	12/26/03	TITLE APOLLO-9 (V060)	
APPROVED	K.T	12/26/03	GIGABIT ETHERNET (1/3)	
CLASS	K.T	12/26/03	IBM CONFIDENTIAL	

13R1151

	DATE	EC NO.	PART NO.
REL	12/02/03	J46283	13R1151
RED	12/10/03	J46283A	DEVELOPMENT NO.
RED	12/26/03	J46283B	Q/M
			77 / 82



2.5V RAIL ONLY REQUIRED WITH KENAI32 CONTROLLER. NOT CONNECTED WITH KINNERETH

1.5V RAIL ONLY REQUIRED WITH KENAI32 CONTROLLER.

ETHERNET TABLE (3/5)

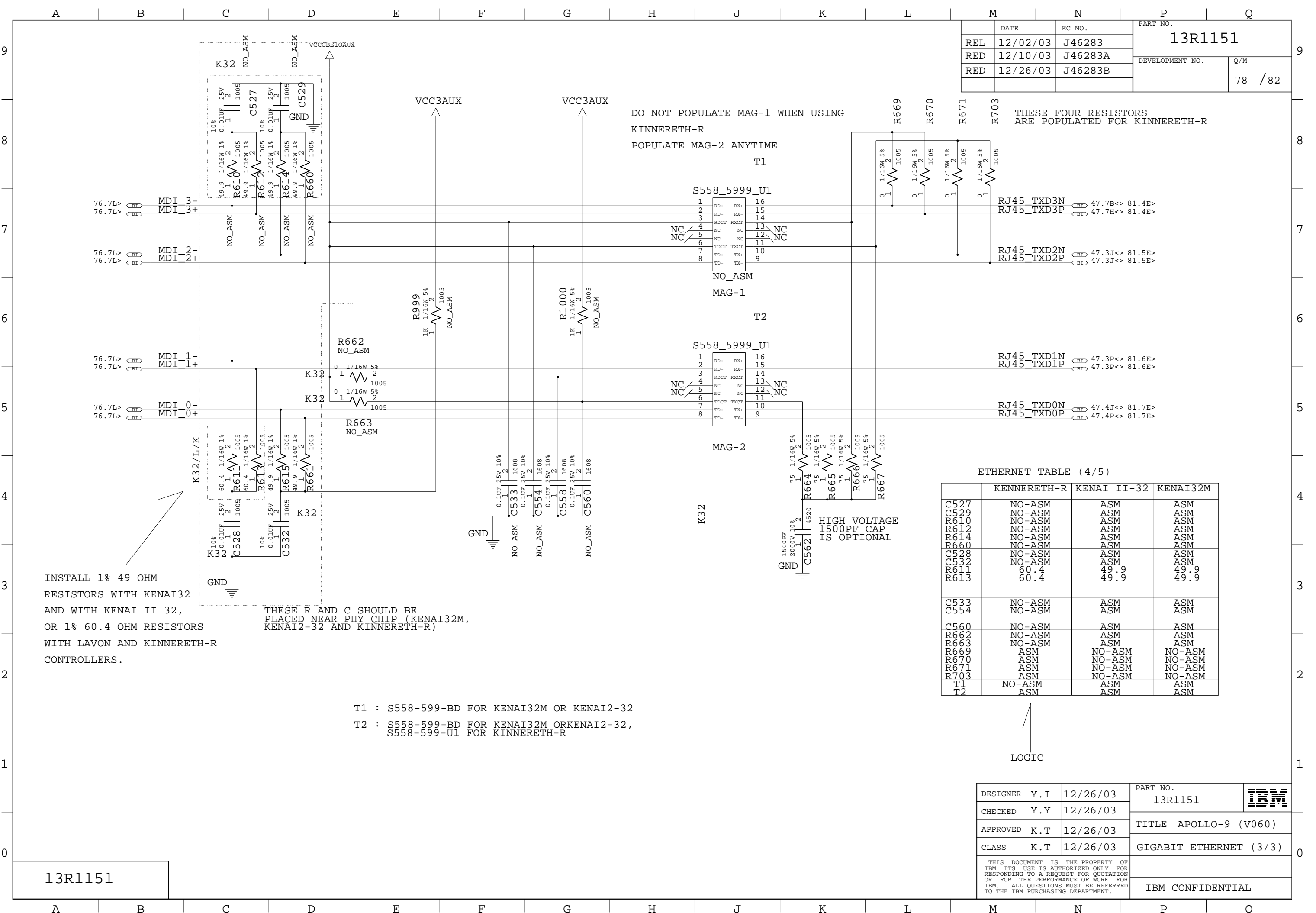
	KENNERETH-R	KENAI2-32	KENAI32M
R98	NO-ASM	ASM	ASM
R205	NO-ASM	ASM	ASM
R880	NO-ASM	ASM	NO-ASM
R879	ASM	NO-ASM	NO-ASM
R851	ASM	NO-ASM	NO-ASM
R852	ASM	NO-ASM	NO-ASM
C779	NO-ASM	ASM	ASM
C780	NO-ASM	ASM	ASM
C781	NO-ASM	ASM	ASM
C801	NO-ASM	ASM	ASM
C802	NO-ASM	ASM	ASM
C803	NO-ASM	ASM	ASM
C804	NO-ASM	ASM	ASM
C805	NO-ASM	ASM	ASM
R236	ASM	NO-ASM	NO-ASM

LOGIC

13R1151

DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE	APOLLO-9 (V060)	
APPROVED	K.T	12/26/03	GIGABIT ETHERNET (2/3)		
CLASS	K.T	12/26/03	IBM CONFIDENTIAL		

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



	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		78 / 82

THESE FOUR RESISTORS ARE POPULATED FOR KINNERETH-R

DO NOT POPULATE MAG-1 WHEN USING KINNERETH-R
POPULATE MAG-2 ANYTIME

ETHERNET TABLE (4/5)

	KENNERETH-R	KENAI II-32	KENAI32M
C527	NO-ASM	ASM	ASM
C529	NO-ASM	ASM	ASM
R610	NO-ASM	ASM	ASM
R612	NO-ASM	ASM	ASM
R614	NO-ASM	ASM	ASM
R660	NO-ASM	ASM	ASM
C528	NO-ASM	ASM	ASM
C532	NO-ASM	ASM	ASM
R611	60.4	49.9	49.9
R613	60.4	49.9	49.9
C533	NO-ASM	ASM	ASM
C554	NO-ASM	ASM	ASM
C560	NO-ASM	ASM	ASM
R662	NO-ASM	ASM	ASM
R663	NO-ASM	ASM	ASM
R669	ASM	NO-ASM	NO-ASM
R670	ASM	NO-ASM	NO-ASM
R671	ASM	NO-ASM	NO-ASM
R703	ASM	NO-ASM	NO-ASM
T1	NO-ASM	ASM	ASM
T2	ASM	ASM	ASM

INSTALL 1% 49 OHM RESISTORS WITH KENAI32 AND WITH KENAI II 32, OR 1% 60.4 OHM RESISTORS WITH LAVON AND KINNERETH-R CONTROLLERS.

THESE R AND C SHOULD BE PLACED NEAR PHY CHIP (KENAI32M, KENAI2-32 AND KINNERETH-R)

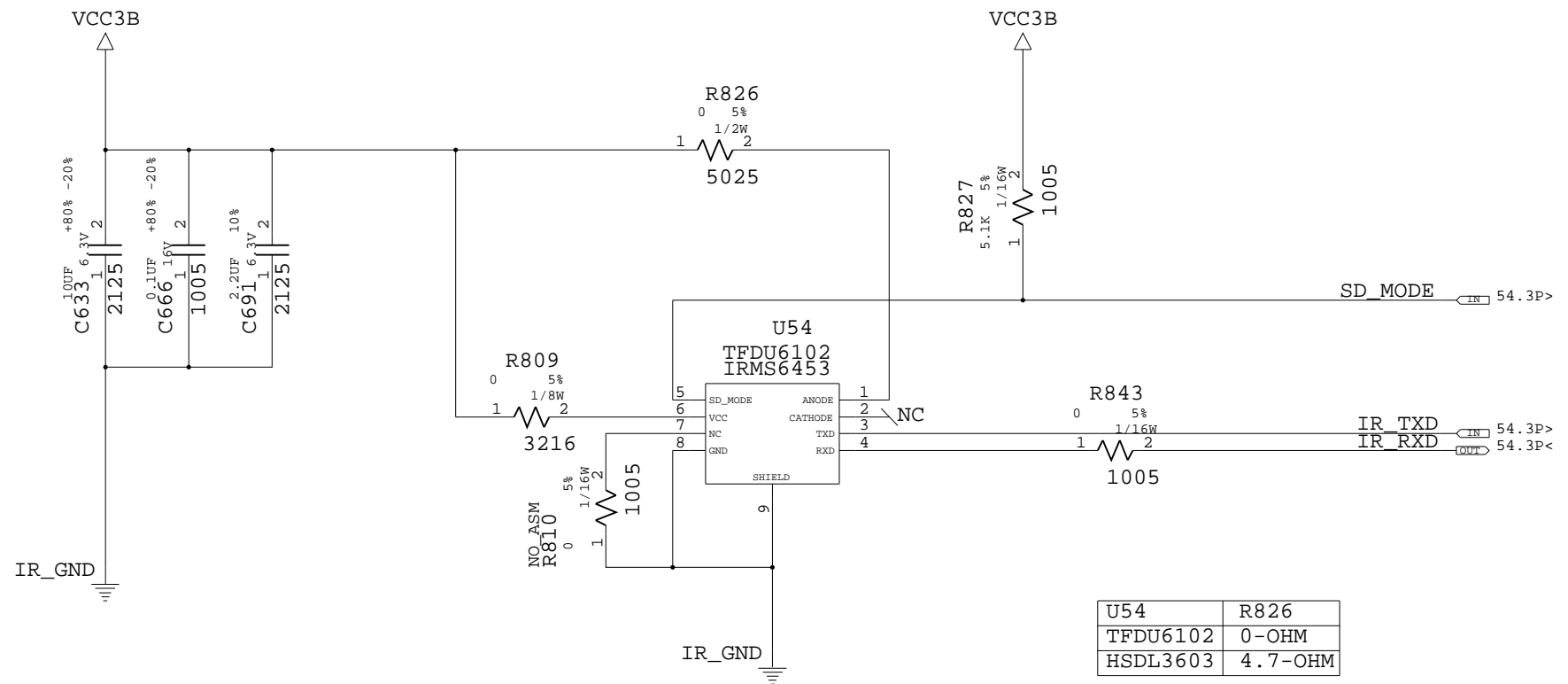
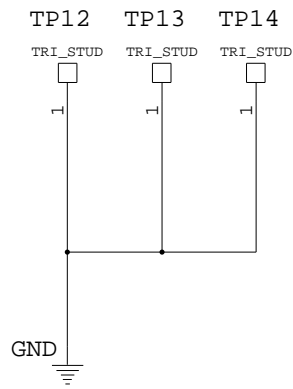
T1 : S558-599-BD FOR KENAI32M OR KENAI2-32
T2 : S558-599-BD FOR KENAI32M OR KENAI2-32, S558-599-U1 FOR KINNERETH-R

HIGH VOLTAGE 1500PF CAP IS OPTIONAL

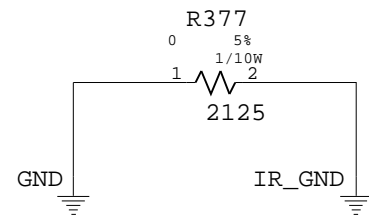
DESIGNER	Y.I	12/26/03	PART NO.	13R1151	
CHECKED	Y.Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K.T	12/26/03	GIGABIT ETHERNET (3/3)		
CLASS	K.T	12/26/03	THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.		IBM CONFIDENTIAL

13R1151

LARGE PTH HOLE



U54	R826
TFDU6102	0-OHM
HSDL3603	4.7-OHM



DESIGNER	Y. I	12/26/03	PART NO.	13R1151	IBM
CHECKED	Y. Y	12/26/03	TITLE APOLLO-9 (V060)		
APPROVED	K. T	12/26/03	IR MODULE		IBM CONFIDENTIAL
CLASS	K. T	12/26/03	THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.		

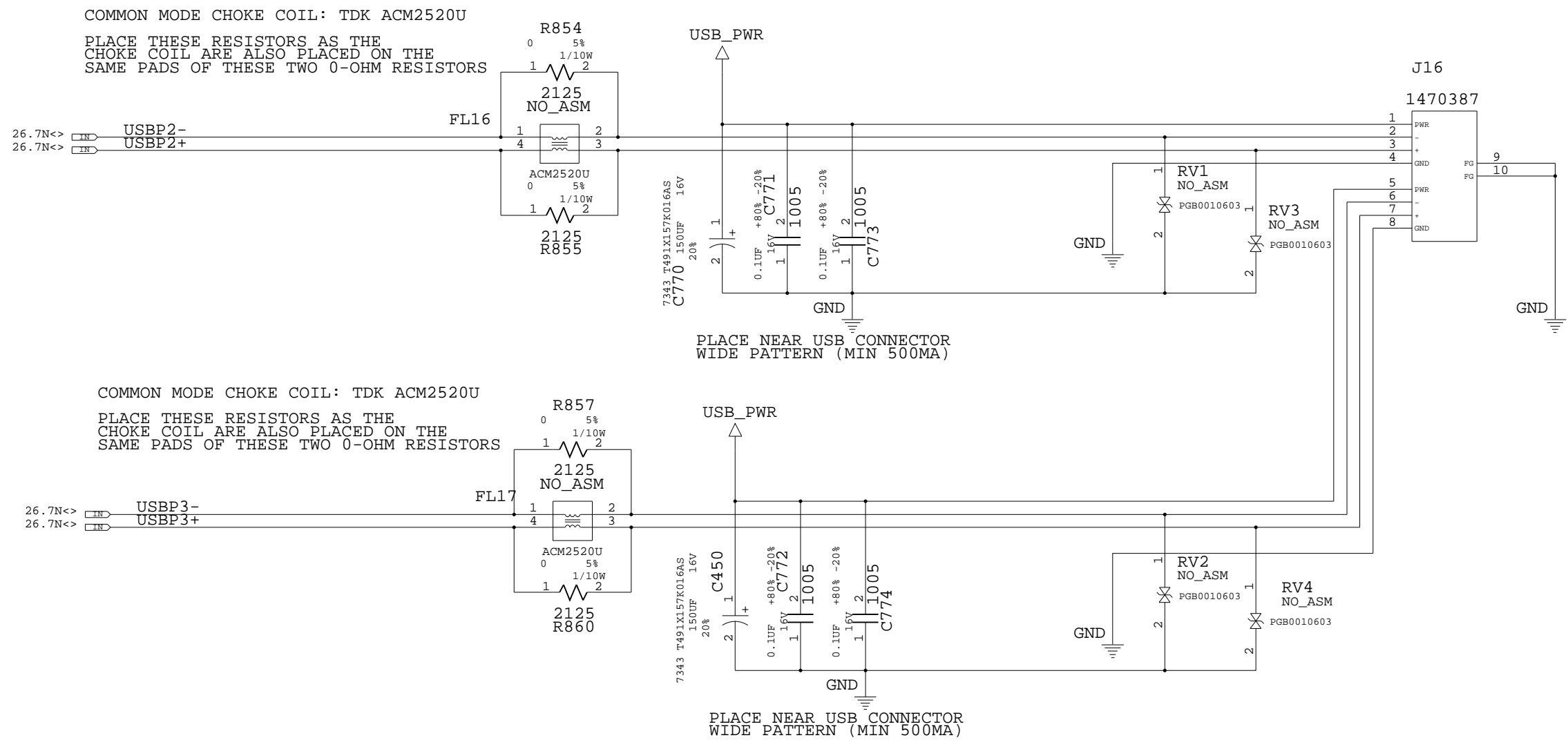
	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		79 /82

13R1151

	DATE	EC NO.	PART NO.	
REL	12/02/03	J46283	13R1151	
RED	12/10/03	J46283A	DEVELOPMENT NO.	Q/M
RED	12/26/03	J46283B		80 / 82

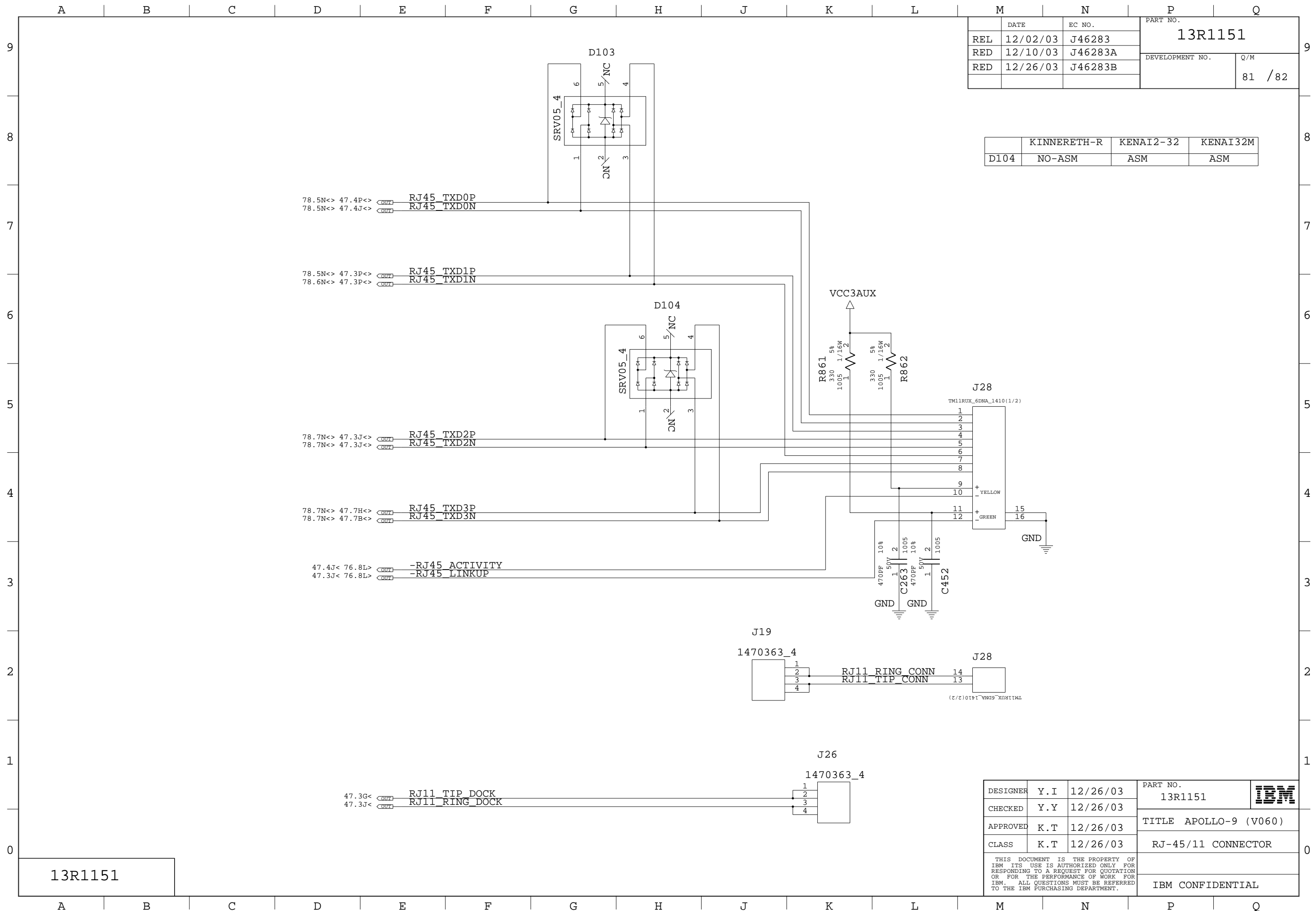
9
8
7
6
5
4
3
2
1
0

9
8
7
6
5
4
3
2
1
0



13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	
CHECKED	Y. Y	12/26/03			
APPROVED	K. T	12/26/03	TITLE APOLLO-9 (V060)		
CLASS	K. T	12/26/03	USB CONNECTOR		
THIS DOCUMENT IS THE PROPERTY OF IBM ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	



13R1151

DESIGNER	Y. I	12/26/03	PART NO.	13R1151	
CHECKED	Y. Y	12/26/03	TITLE		
APPROVED	K. T	12/26/03	CLASS	RJ-45/11 CONNECTOR	
THIS DOCUMENT IS THE PROPERTY OF IBM. ITS USE IS AUTHORIZED ONLY FOR RESPONDING TO A REQUEST FOR QUOTATION OR FOR THE PERFORMANCE OF WORK FOR IBM. ALL QUESTIONS MUST BE REFERRED TO THE IBM PURCHASING DEPARTMENT.				IBM CONFIDENTIAL	

