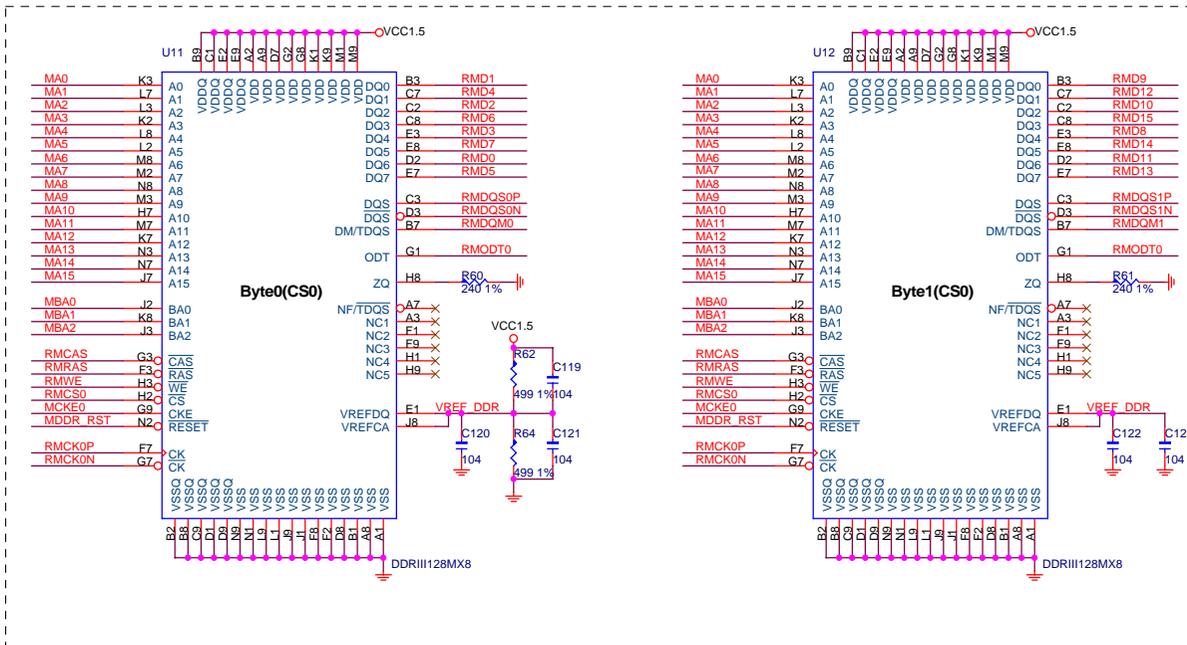
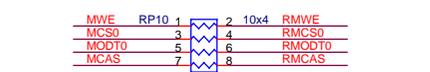
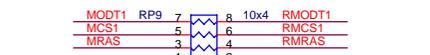


Total Trace length under 1000mils with space 2W and line to line variance under 20mils



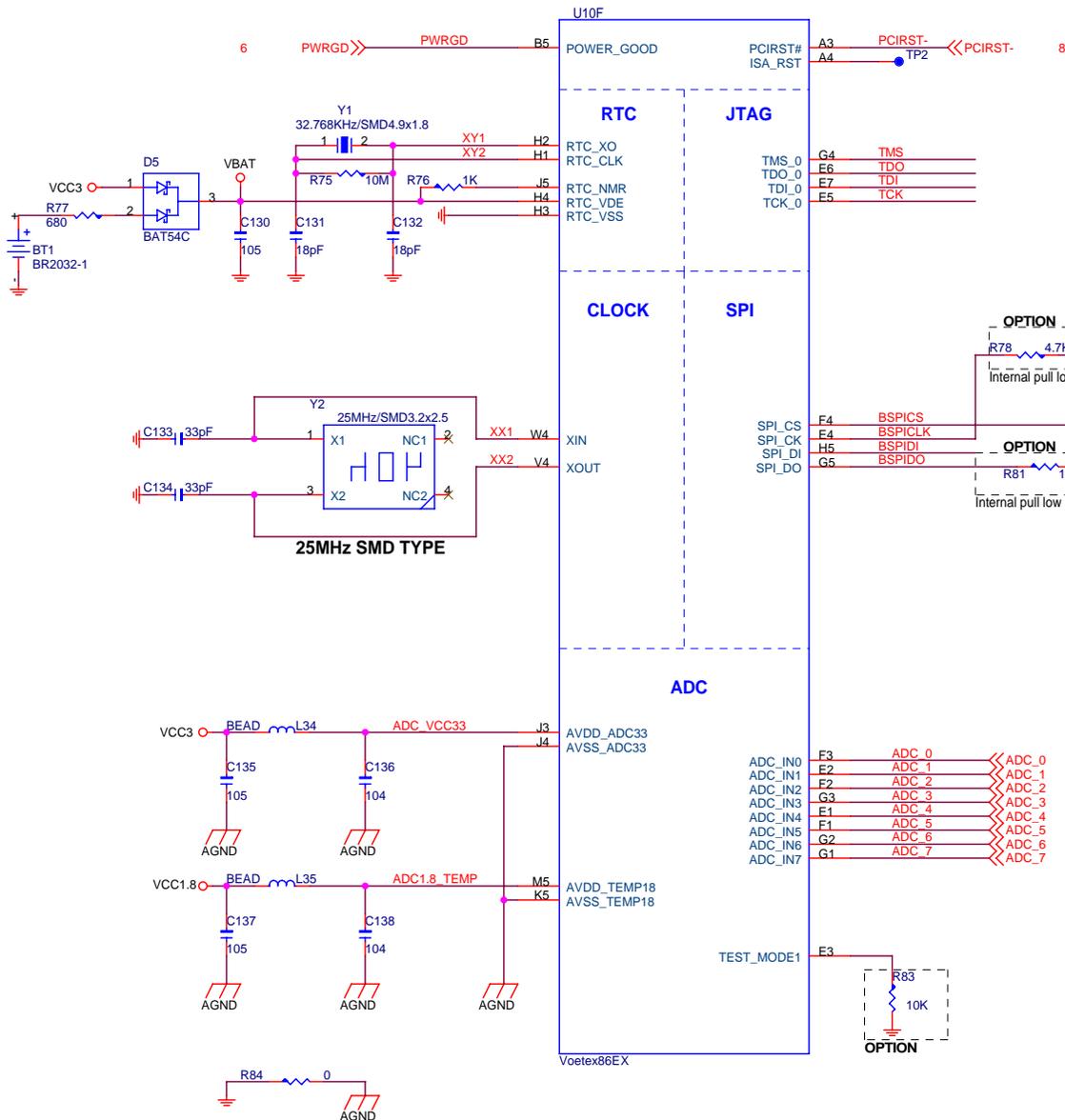
Bank0
TOP

Bank1
BOT

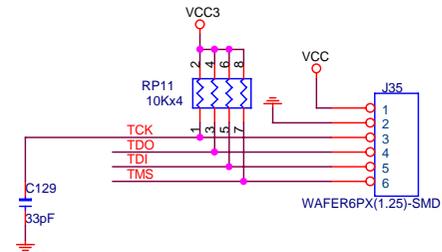
2013/10/28
VEX-6290-KIT

PCB NO. DM221A
Votex86EX EVB
VER:1.2

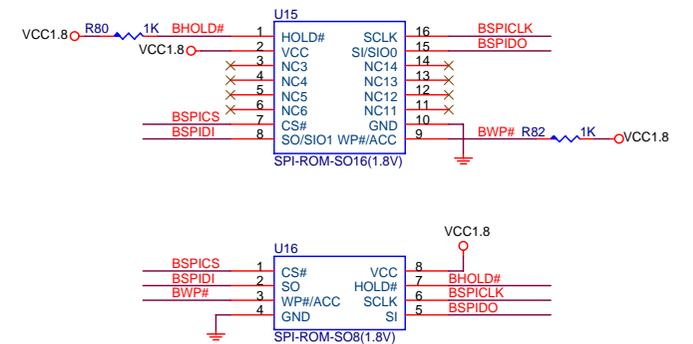
DMP ELECTRONICS INC.		
Title: Votex86EX DDR-III Memory		
Size: Document Number	DM221A	Rev: 1.2
Date: Monday, October 28, 2013	Sheet: 1	of 14



JTAG



SPI FLASH



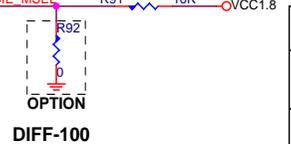
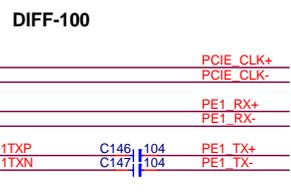
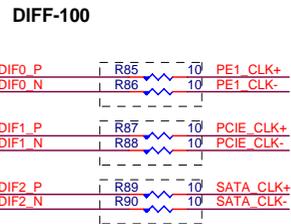
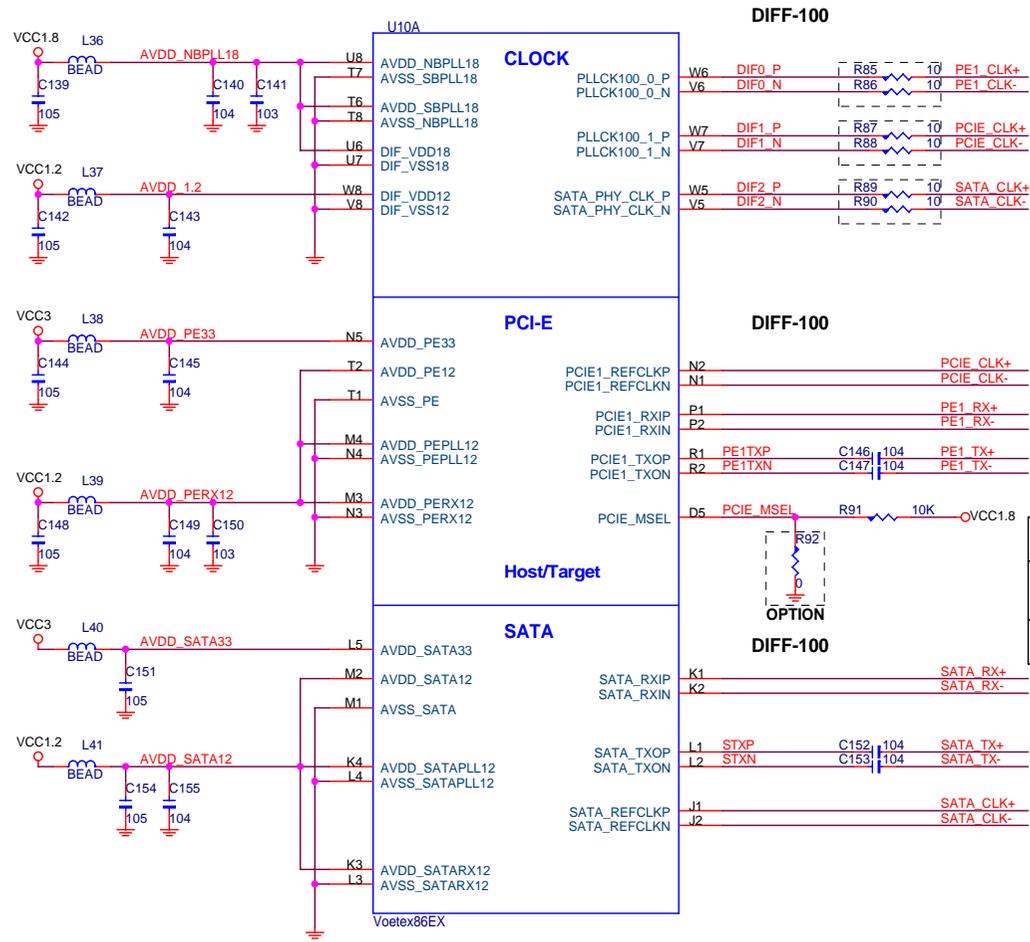
strap pin

SPIDO	Boot Flash select	SPICS	Boot Mode Select
1 (High)	Hardware default	0 (Low)	Normal boot (default) Internal pull low
0 (Low) (default)	from FLASH	1 (High)	Fast boot

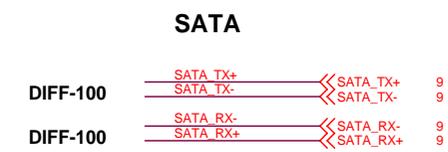
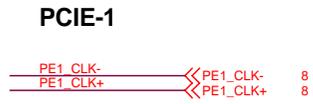
DMP ELECTRONICS INC.

Title PWGOOD,RTC,SATA,CLOCK,SPI,ADC		
Size	Document Number DM221A	Rev 1.2
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PCIE_MSEL	PCie select
1 (High) (default)	PCie Host
0 (Low)	PCie Target

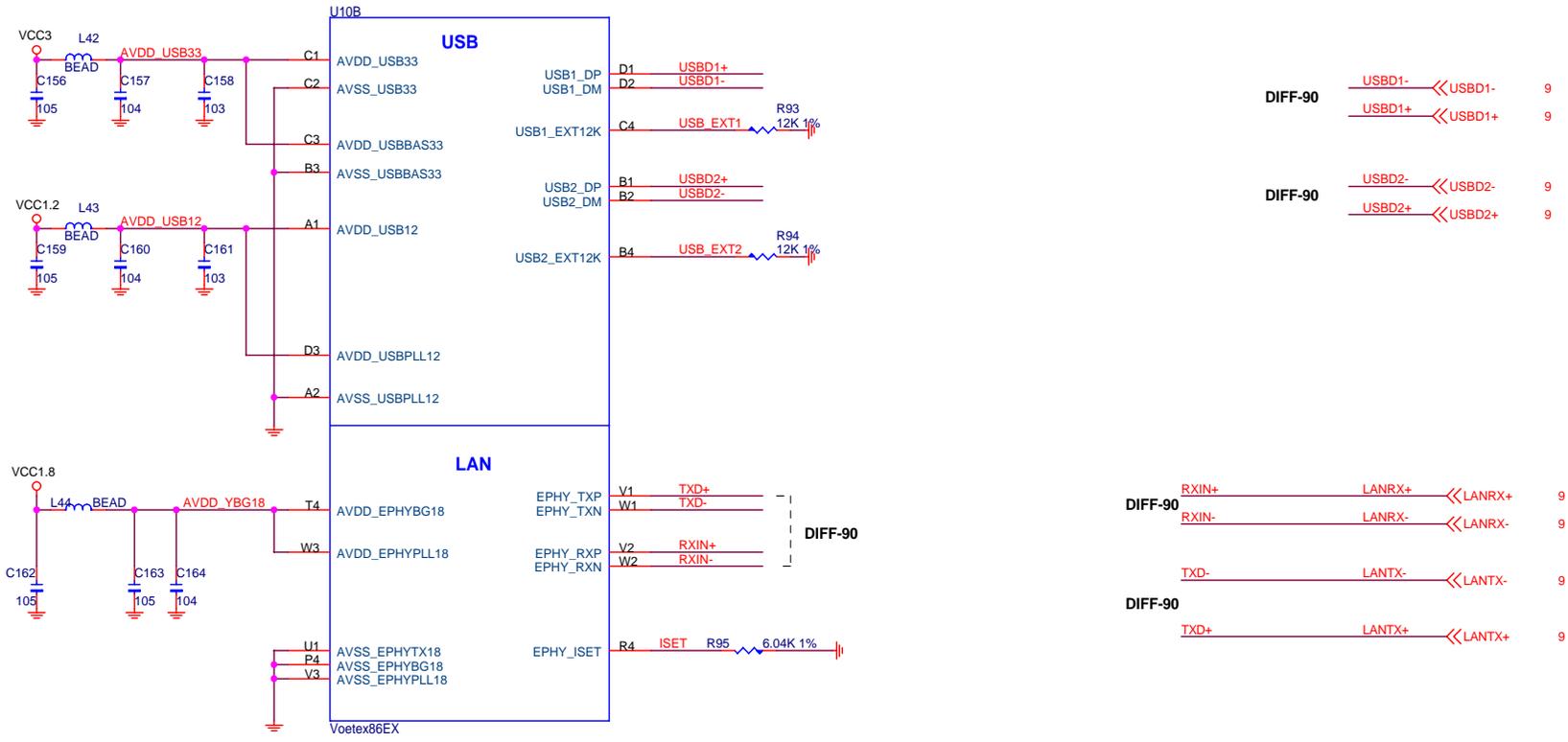


DMP ELECTRONICS INC.

Title: CLOCK , PCI-e , SATA

Size: Document Number DM221A Rev: 1.2

Date: Monday, October 28, 2013 Sheet 3 of 14



DIFF-90
 USBD1- << USBD1- 9
 USBD1+ << USBD1+ 9

DIFF-90
 USBD2- << USBD2- 9
 USBD2+ << USBD2+ 9

DIFF-90
 RXIN+ << LANRX+ << LANRX+ 9
 RXIN- << LANRX- << LANRX- 9

DIFF-90
 TXD- << LANTX- << LANTX- 9
 TXD+ << LANTX+ << LANTX+ 9

DMP ELECTRONICS INC.		
Title USB , LAN		
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		U10E						
P0	-10,11	GP00	GP00 C8	GP00/AP00/RP00/DCD1#	DCD6#/RP50/AP50/GP50	D14 GP50	GP50	8,10
	10,11	GP01	GP01 D7	GP01/AP01/RP01/SOUT1	SOUT6#/RP51/AP51/GP51	A15 GP51	GP51	8,10
	10,11	GP02	GP02 B8	GP02/AP02/RP02/RTS1#	RTS6#/RP52/AP52/GP52	B14 GP52	GP52	8,10
	10,11	GP03	GP03 A8	GP03/AP03/RP03/RI1	RI6#/RP53/AP53/GP53	A14 GP53	GP53	8,10
	10,11	GP04	GP04 C9	GP04/AP04/RP04/SIN1	SIN6#/RP54/AP54/GP54	D13 GP54	GP54	10,12
	10,11	GP05	GP05 E9	GP05/AP05/RP05/DTR1#	DTR6#/RP55/AP55/GP55	E12 GP55	GP55	10,12
	10,11	GP06	GP06 D8	GP06/AP06/RP06/DSR1#	DSR6#/RP56/AP56/GP56	C13 GP56	GP56	8,10
	-10,11	GP07	GP07 E8	GP07/AP07/RP07/CTS1#	CTS6#/RP57/AP57/GP57	D12 GP57	GP57	8,10
P1	-10,11	GP10	GP10 H19	GP10/AP10/RP10/DCD2#	DCD7#/RP60/AP60/GP60	B13 GP60	GP60	10,12
	10,11	GP11	GP11 H18	GP11/AP11/RP11/SOUT2	SOUT7#/RP61/AP61/GP61	A13 GP61	GP61	10,12
	10,11	GP12	GP12 H16	GP12/AP12/RP12/RTS2#	RTS7#/RP62/AP62/GP62	A12 GP62	GP62	10,12
	10,11	GP13	GP13 G19	GP13/AP13/RP13/RI2#	RI7#/RP63/AP63/GP63	E11 GP63	GP63	10,12
	10,11	GP14	GP14 G18	GP14/AP14/RP14/SIN2	SIN7#/RP64/AP64/GP64	B12 GP64	GP64	10,12
	10,11	GP15	GP15 G17	GP15/AP15/RP15/DTR2#	DTR7#/RP65/AP65/GP65	C12 GP65	GP65	10,12
	10,11	GP16	GP16 H15	GP16/AP16/RP16/DSR2#	DSR7#/RP66/AP66/GP66	D11 GP66	GP66	10,12
	-10,11	GP17	GP17 G16	GP17/AP17/RP17/CTS2#	CTS7#/RP67/AP67/GP67	C11 GP67	GP67	10,12
P2	9,10	GP20	GP20 F19	GP20/AP20/RP20/DCD3#	DCD8#/RP70/AP70/GP70	A11 GP70	GP70	10,12
	9,10	GP21	GP21 E19	GP21/AP21/RP21/SOUT3#	SOUT8#/RP71/AP71/GP71	B11 GP71	GP71	10,12
	10	GP22	GP22 F17	GP22/AP22/RP22/RTS3#	RTS8#/RP72/AP72/GP72	A9 GP72	GP72	10,12
	10	GP23	GP23 E18	GP23/AP23/RP23/RI3#	RI8#/RP73/AP73/GP73	A10 GP73	GP73	10,12
	10	GP24	GP24 F16	GP24/AP24/RP24/SIN3	SIN8#/RP74/AP74/GP74	B9 GP74	GP74	10,12
	10	GP25	GP25 E16	GP25/AP25/RP25/DTR3#	DTR8#/RP75/AP75/GP75	B10 GP75	GP75	10,12
	-10	GP26	GP26 E15	GP26/AP26/RP26/DSR3#	DSR8#/RP76/AP76/GP76	D10 GP76	GP76	10,12
	10	GP27	GP27 F15	GP27/AP27/RP27/CTS3#	CTS8#/RP77/AP77/GP77	D9 GP77	GP77	10,12
P3	-10,12	GP30	GP30 D19	GP30/AP30/RP30/DCD4#	DCD9#/RP80/AP80/GP80	L15 GP80	GP80	10,12
	10,12	GP31	GP31 C19	GP31/AP31/RP31/SOUT4#	SOUT9#/RP81/AP81/GP81	K16 GP81	GP81	10,12
	10,12	GP32	GP32 D18	GP32/AP32/RP32/RTS4#	RTS9#/RP82/AP82/GP82	K17 GP82	GP82	10,12
	10,12	GP33	GP33 B19	GP33/AP33/RP33/RI4#	RI9#/RP83/AP83/GP83	J19 GP83	GP83	10,12
	10,12	GP34	GP34 D17	GP34/AP34/RP34/SIN4	SIN9#/RP84/AP84/GP84	J18 GP84	GP84	10,12
	10,12	GP35	GP35 D16	GP35/AP35/RP35/DTR4#	DTR9#/RP85/AP85/GP85	J16 GP85	GP85	10,12
	10,12	GP36	GP36 C17	GP36/AP36/RP36/DSR4#	DSR9#/RP86/AP86/GP86	J15 GP86	GP86	9,10
	-10,12	GP37	GP37 C16	GP37/AP37/RP37/CTS4#	CTS9#/RP87/AP87/GP87	J17 GP87	GP87	9,10
P4	-9,10	GP40	GP40 D15	GP40/AP40/RP40/DCD5#	DCD10#/RP90/AP90/GP90	C6 GP90	GP90	7,10
	9,10	GP41	GP41 E14	GP41/AP41/RP41/SOUT5	SOUT10#/RP91/AP91/GP91	B7 GP91	GP91	7,10
	10,12	GP42	GP42 B18	GP42/AP42/RP42/RTS5#	RTS10#/RP92/AP92/GP92	D6 GP92	GP92	7,10
	7,10,13	GP43	GP43 A18	GP43/AP43/RP43/RI5#	RI10#/RP93/AP93/GP93	B6 GP93	GP93	7,10
	7,10	GP44	GP44 C15	GP44/AP44/RP44/SIN5	SIN10#/RP94/AP94/GP94	C5 GP94	GP94	7,10
	7,10	GP45	GP45 A17	GP45/AP45/RP45/DTR5#	DTR10#/RP95/AP95/GP95	A7 GP95	GP95	7,10
	7,10	GP46	GP46 B16	GP46/AP46/RP46/DSR5#	DSR10#/RP96/AP96/GP96	A6 GP96	GP96	7,10
	-7,10	GP47	GP47 A16	GP47/AP47/RP47/CTS5#	CTS10#/RP97/AP97/GP97	A5 GP97	GP97	7,10

Port 0 - Part 9

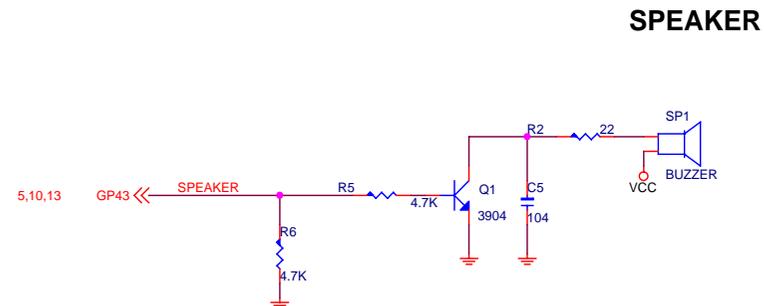
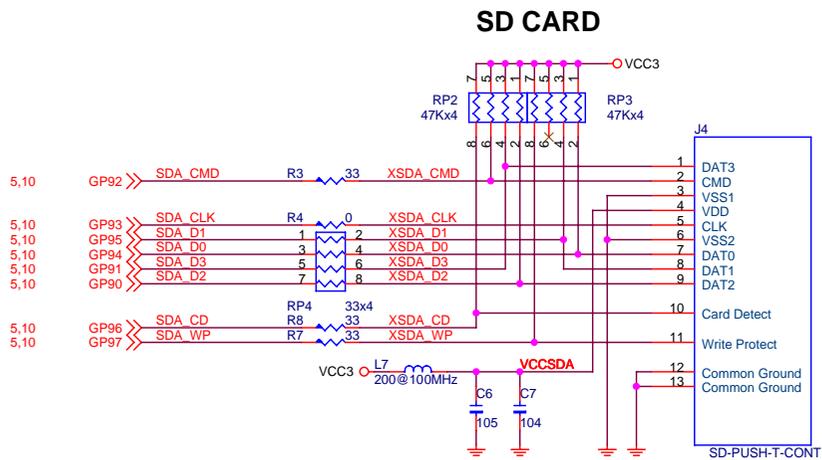
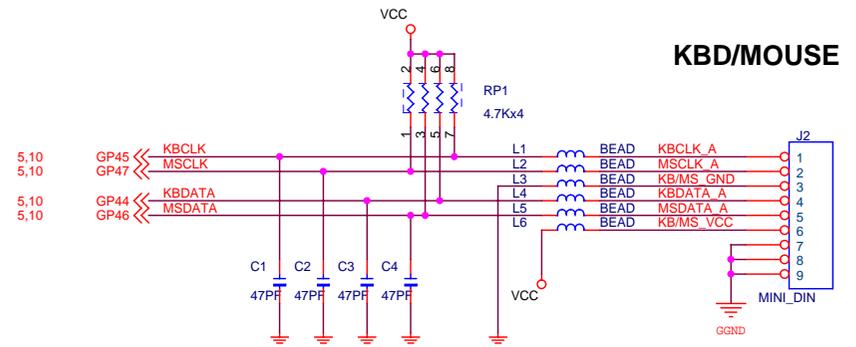
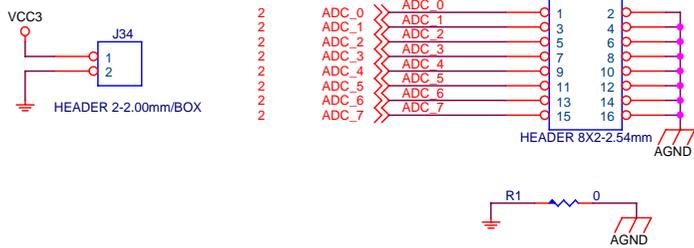
Voetex86EX

DMP ELECTRONICS INC.

Title: GPIO, RICH IO, COM

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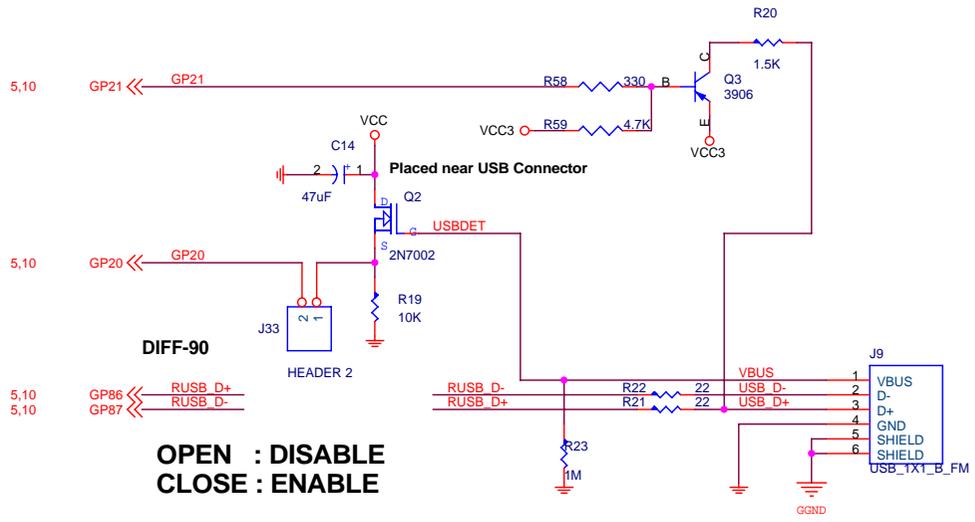


DMP ELECTRONICS INC.

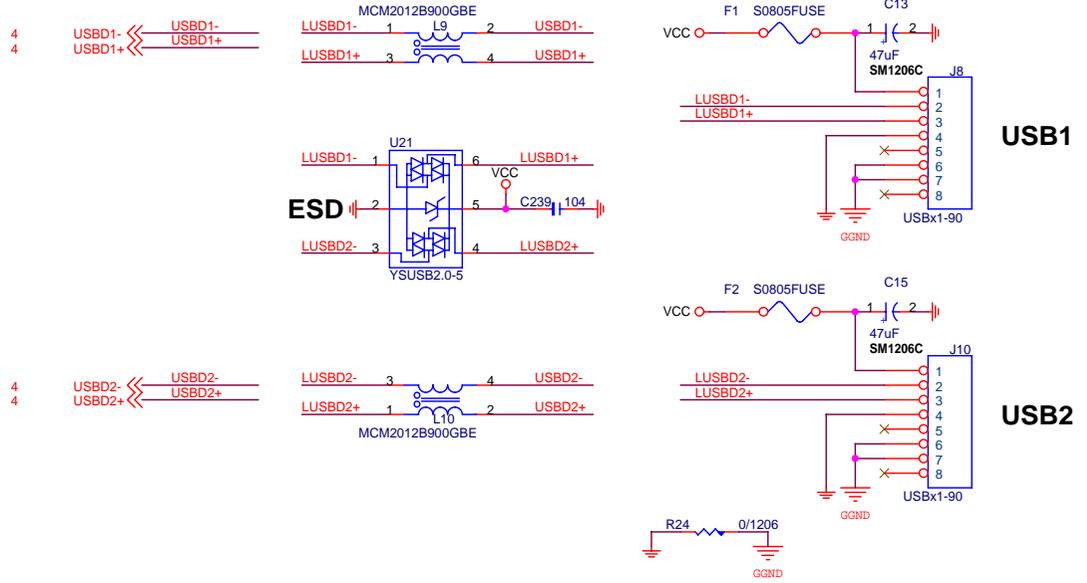


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Size	Document Number	Rev
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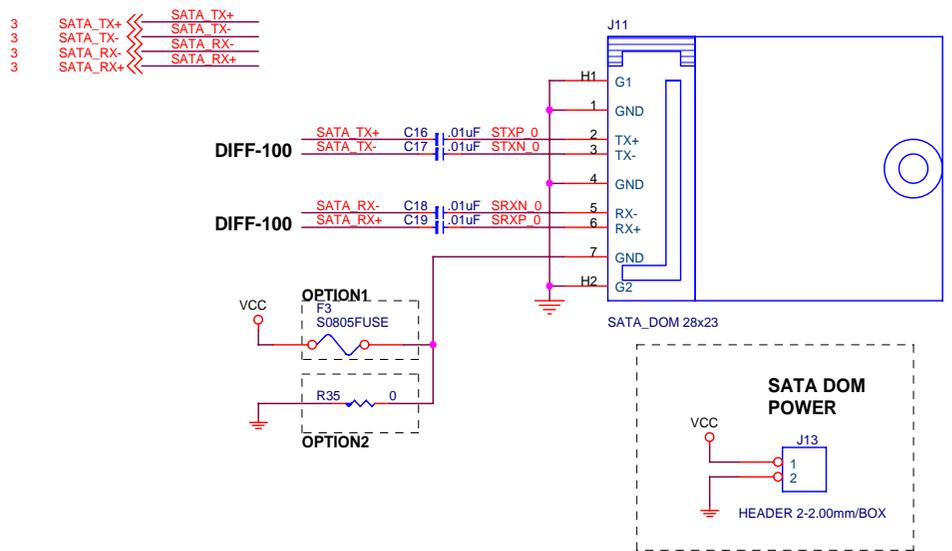
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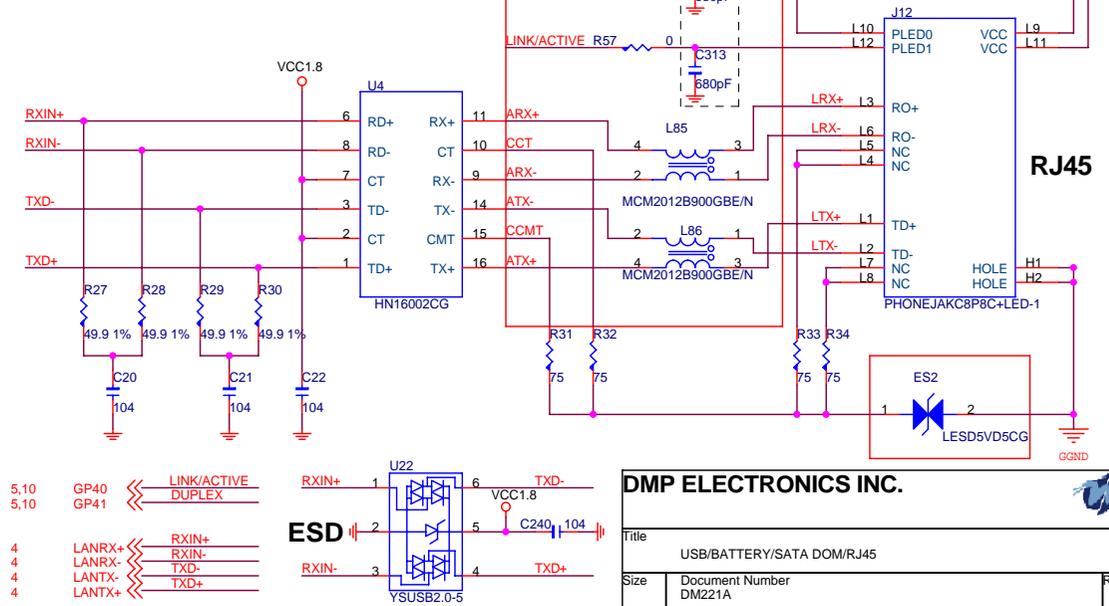
DIFF-90



SATA DOM



DIFF-90



DMP ELECTRONICS INC.

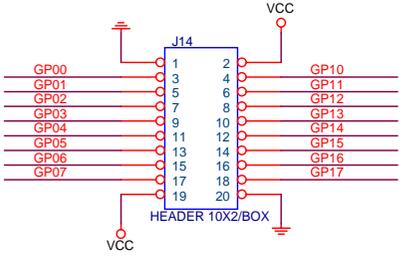
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Size	Document Number DM221A	Rev 1.2
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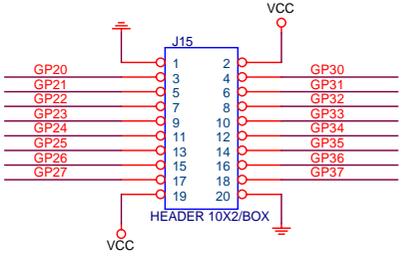
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GP0	5,11	GP00	GP00
	5,11	GP01	GP01
	5,11	GP02	GP02
	5,11	GP03	GP03
	5,11	GP04	GP04
	5,11	GP05	GP05
	5,11	GP06	GP06
	5,11	GP07	GP07
GP1	5,11	GP10	GP10
	5,11	GP11	GP11
	5,11	GP12	GP12
	5,11	GP13	GP13
	5,11	GP14	GP14
	5,11	GP15	GP15
	5,11	GP16	GP16
	5,11	GP17	GP17
GP2	5,9	GP20	GP20
	5,9	GP21	GP21
	5	GP22	GP22
	5	GP23	GP23
	5	GP24	GP24
	5	GP25	GP25
	5	GP26	GP26
	5	GP27	GP27
GP3	5,12	GP30	GP30
	5,12	GP31	GP31
	5,12	GP32	GP32
	5,12	GP33	GP33
	5,12	GP34	GP34
	5,12	GP35	GP35
	5,12	GP36	GP36
	5,12	GP37	GP37
GP4	5,9	GP40	GP40
	5,9	GP41	GP41
	5,12	GP42	GP42
	5,7,13	GP43	GP43
	5,7	GP44	GP44
	5,7	GP45	GP45
	5,7	GP46	GP46
	5,7	GP47	GP47
GP5	5,8	GP50	GP50
	5,8	GP51	GP51
	5,8	GP52	GP52
	5,8	GP53	GP53
	5,12	GP54	GP54
	5,12	GP55	GP55
	5,8	GP56	GP56
	5,8	GP57	GP57
GP6	5,12	GP60	GP60
	5,12	GP61	GP61
	5,12	GP62	GP62
	5,12	GP63	GP63
	5,12	GP64	GP64
	5,12	GP65	GP65
	5,12	GP66	GP66
	5,12	GP67	GP67
GP7	5,12	GP70	GP70
	5,12	GP71	GP71
	5,12	GP72	GP72
	5,12	GP73	GP73
	5,12	GP74	GP74
	5,12	GP75	GP75
	5,12	GP76	GP76
	5,12	GP77	GP77
GP8	5,13	GP80	GP80
	5,13	GP81	GP81
	5,13	GP82	GP82
	5,13	GP83	GP83
	5,13	GP84	GP84
	5,12	GP85	GP85
	5,9	GP86	GP86
	5,9	GP87	GP87
GP9	5,7	GP90	GP90
	5,7	GP91	GP91
	5,7	GP92	GP92
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	5,7	GP95	GP95
	5,7	GP96	GP96
	5,7	GP97	GP97

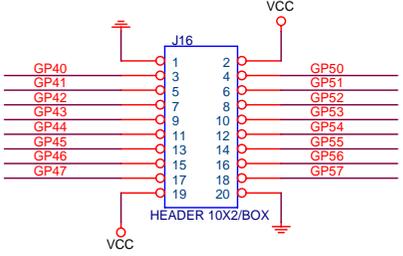
P0/P1



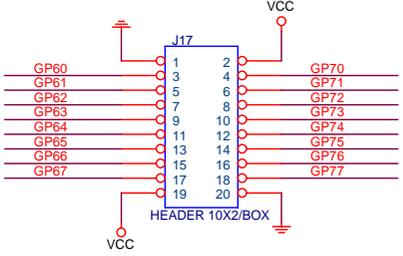
P2/P3



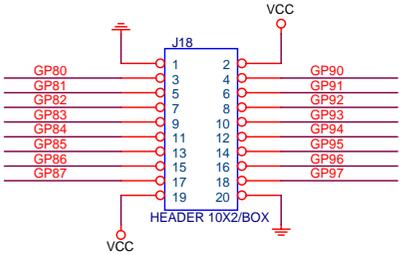
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P6/P7



P8/P9



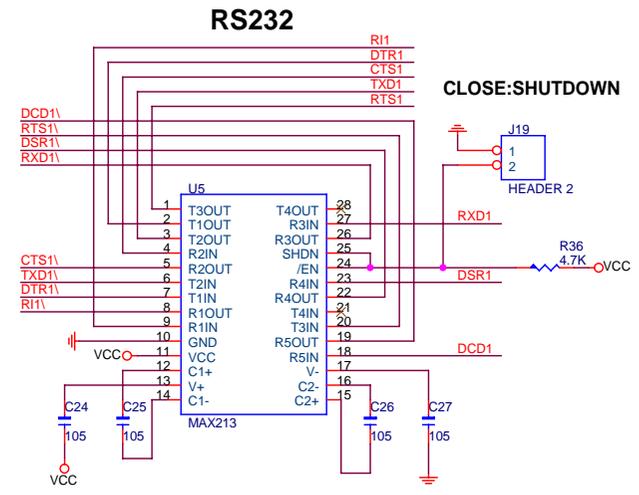
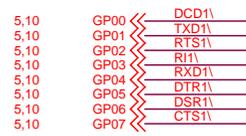
DMP ELECTRONICS INC.

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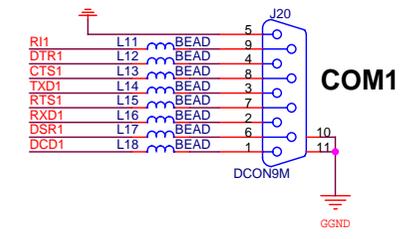
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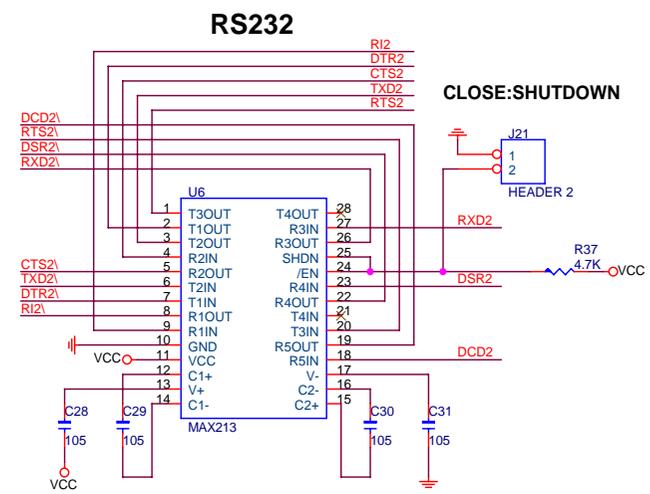
COM1



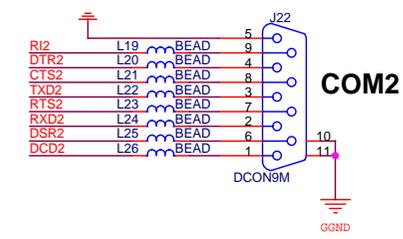
COM1 RS232/P0



COM2



COM2 RS232/P1



DMP ELECTRONICS INC.

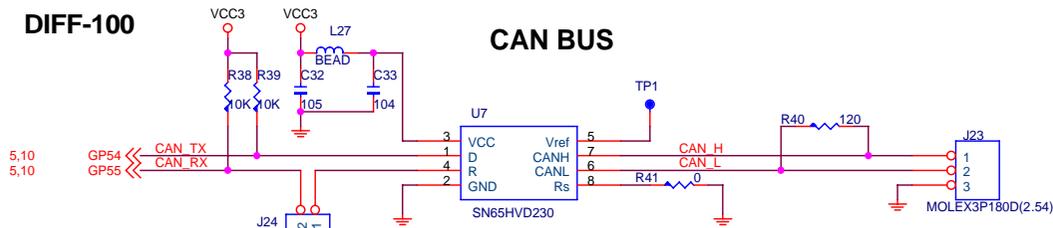
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Size	Document Number DM221A	Rev 1.2
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DIFF-100

CAN BUS

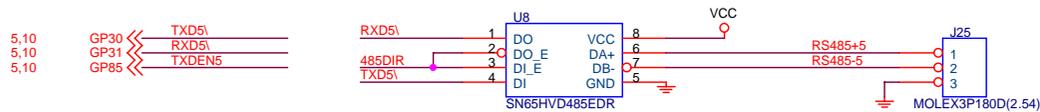


OPEN : DISABLE
CLOSE : ENABLE

TRANSCEIVER MODE SELECTION

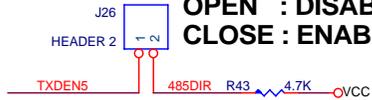
V(Rs) pin 8	OPERATION MODE
V(Rs) > 0.75Vcc	Standby
to ground (0V)	Slop Control
V(Rs) < 1V	High Speed

COM5 RS485

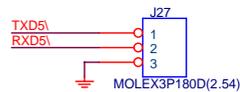


RS485 SETUP

OPEN : DISABLE
CLOSE : ENABLE



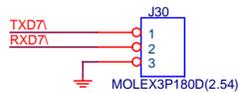
COM5 RS232/TTL



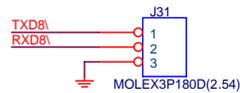
COM6,7,8 RS232/TTL



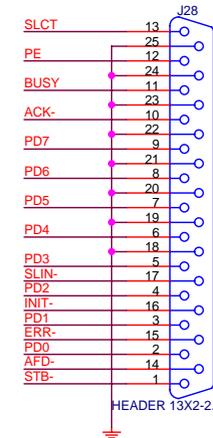
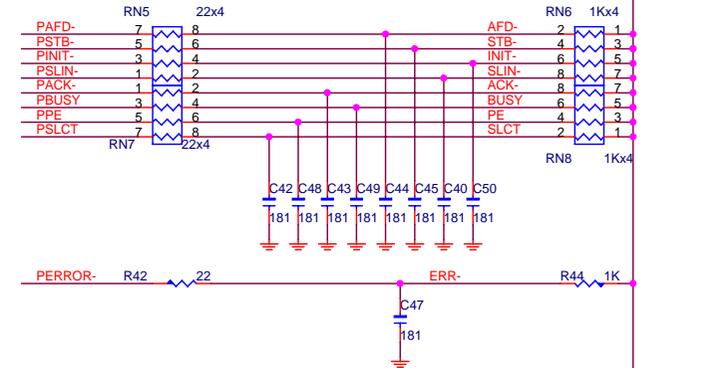
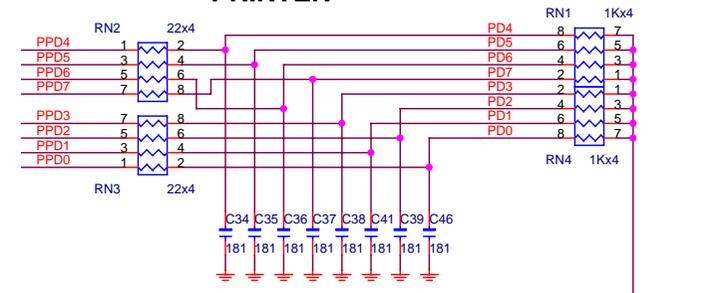
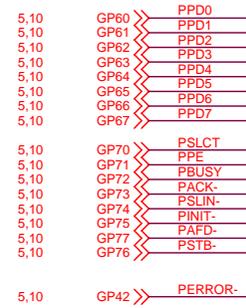
COM7



COM8



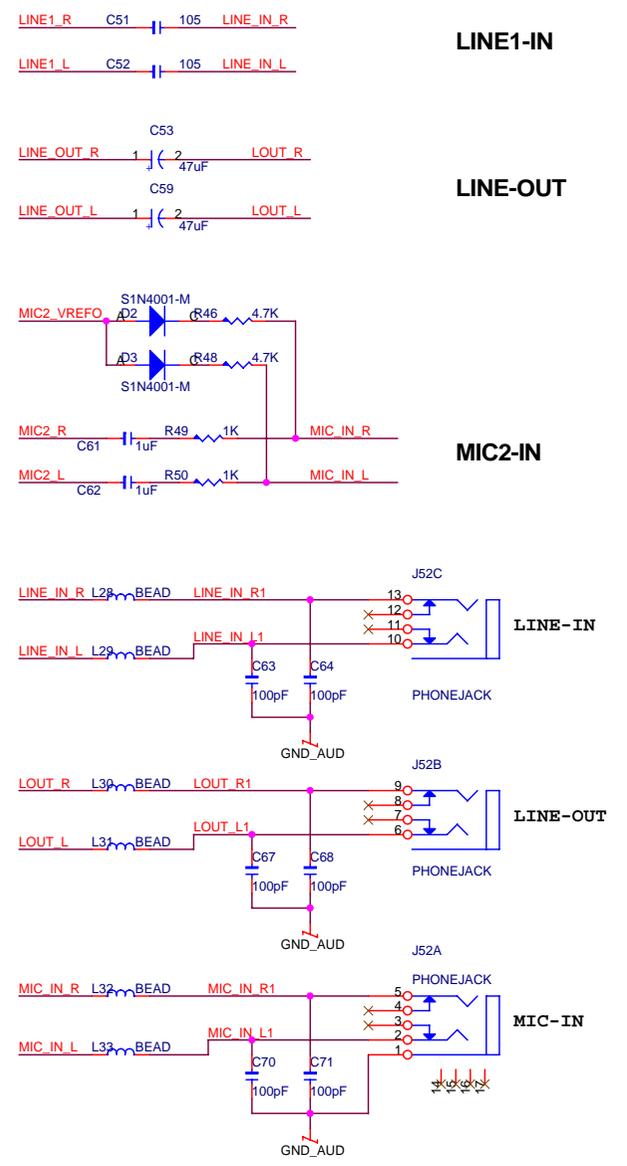
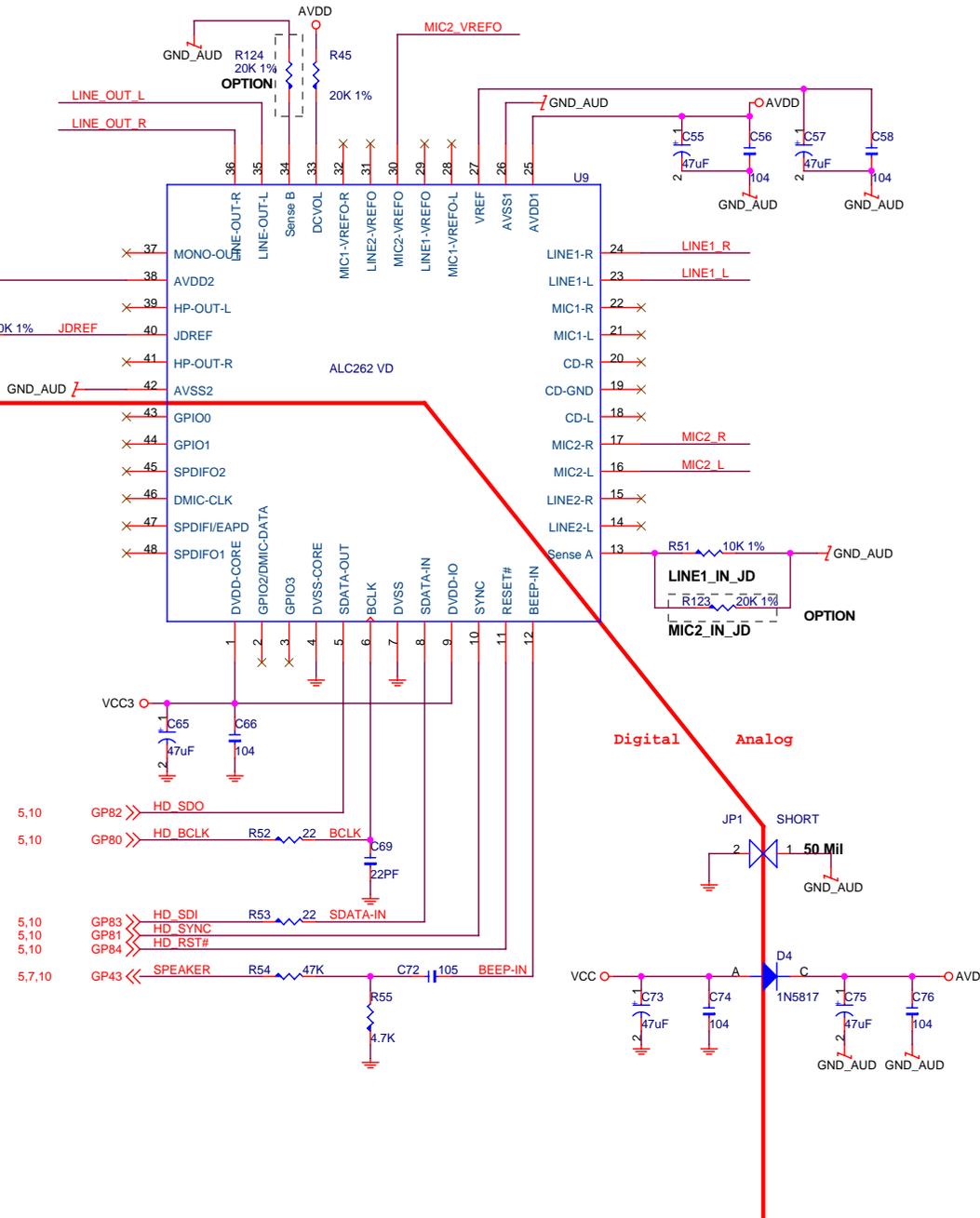
PRINTER



DMP ELECTRONICS INC.

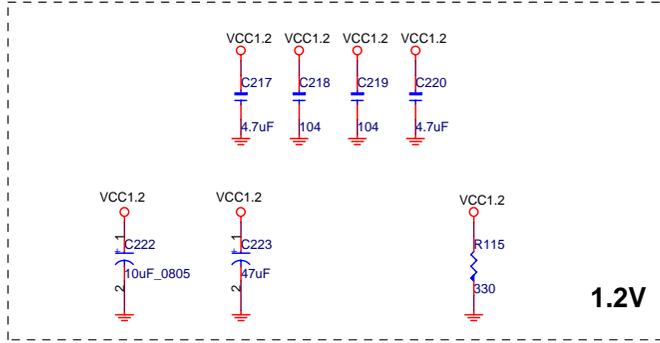
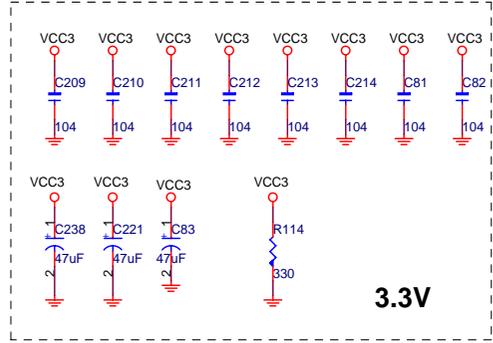
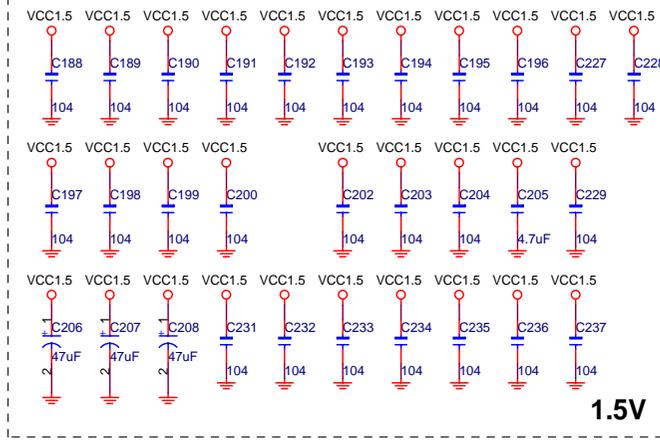
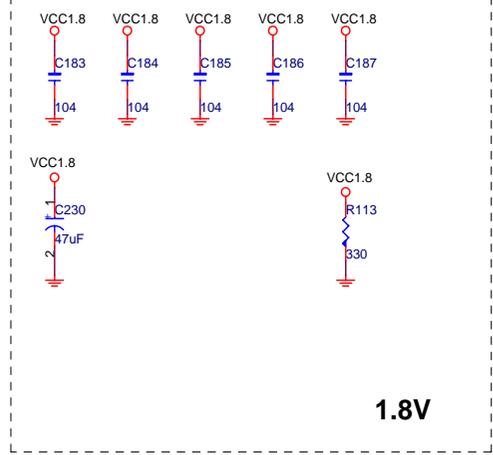
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HD AUDIO

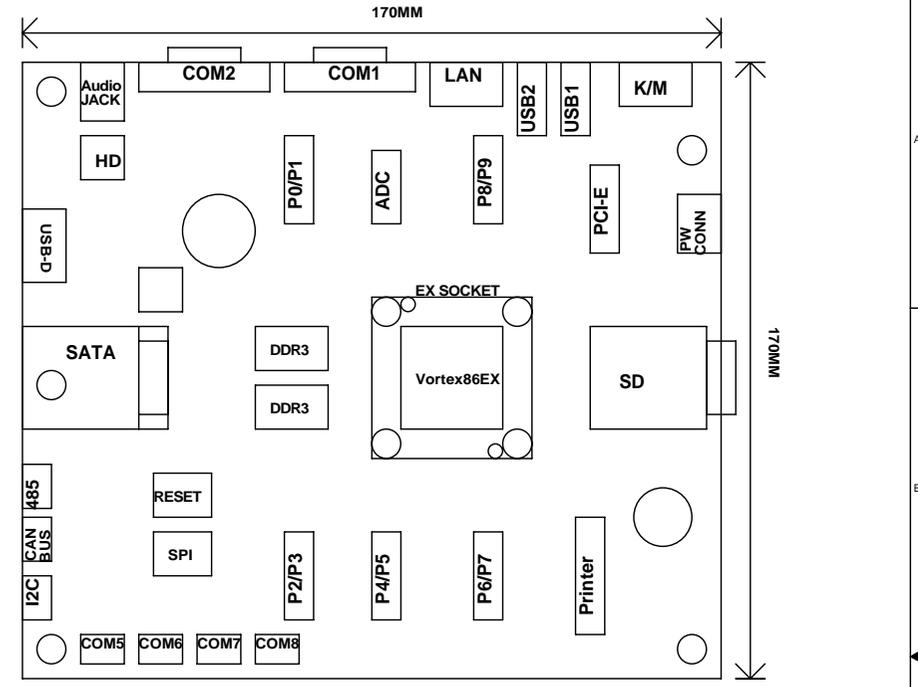
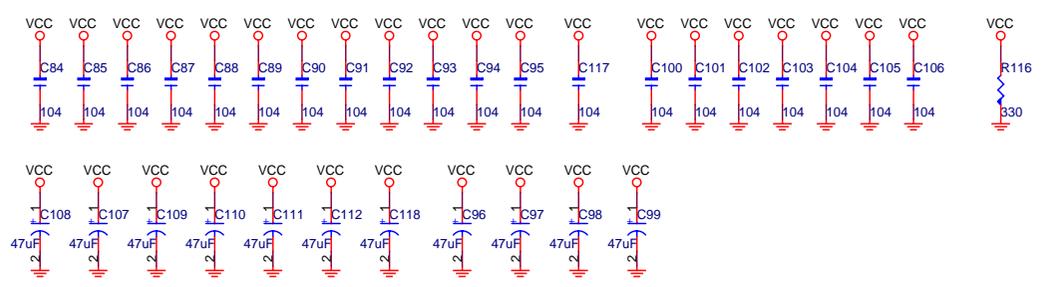


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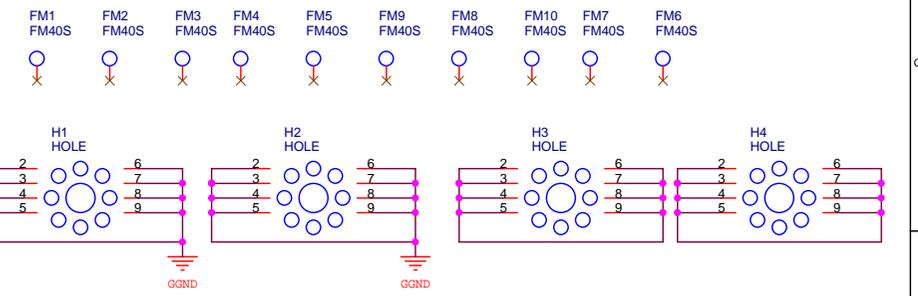
BYPASS



VCC



Vortex86EX Mini-ITX EVB



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