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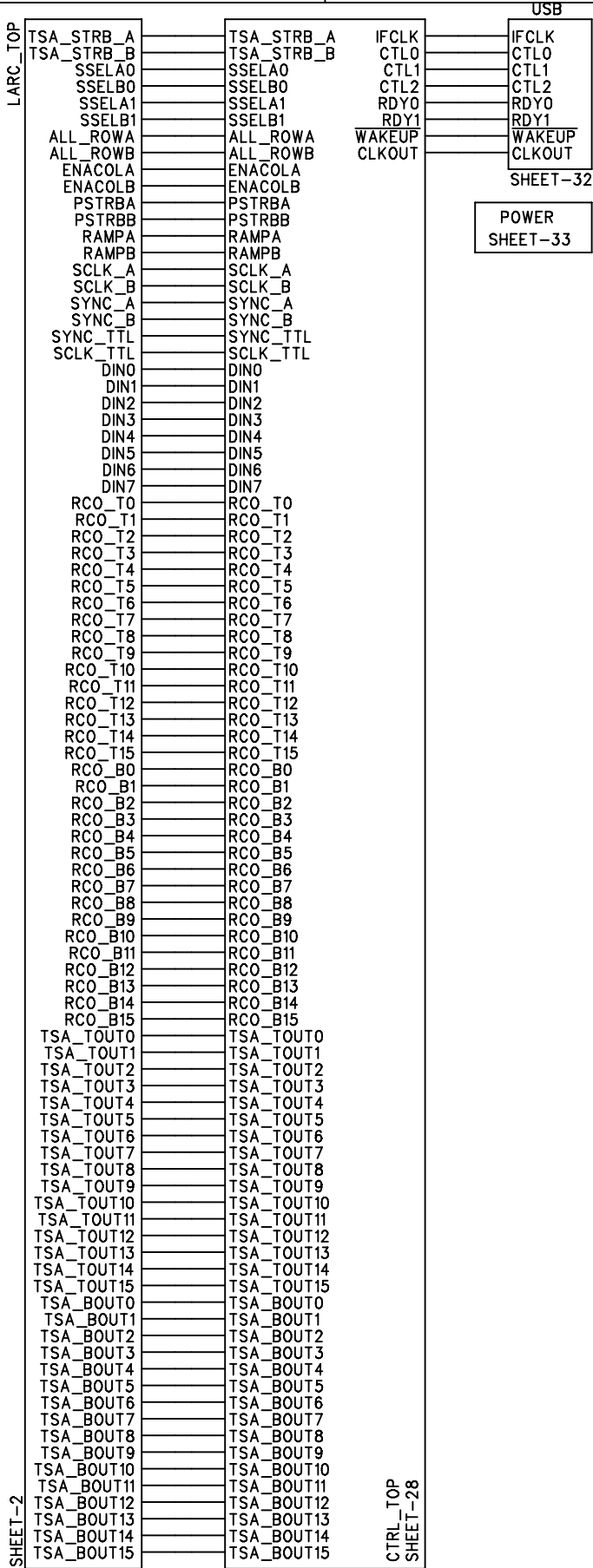
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Univ. of Hawai'i -- Instr. Dev. Lab.

TITLE: LARC_USB



Design:
LLR

Page Description:
Top Level Sheet

REV:
B

DATED: 30-JUNE-2008

[TOP]

SHEET: 1 OF 33

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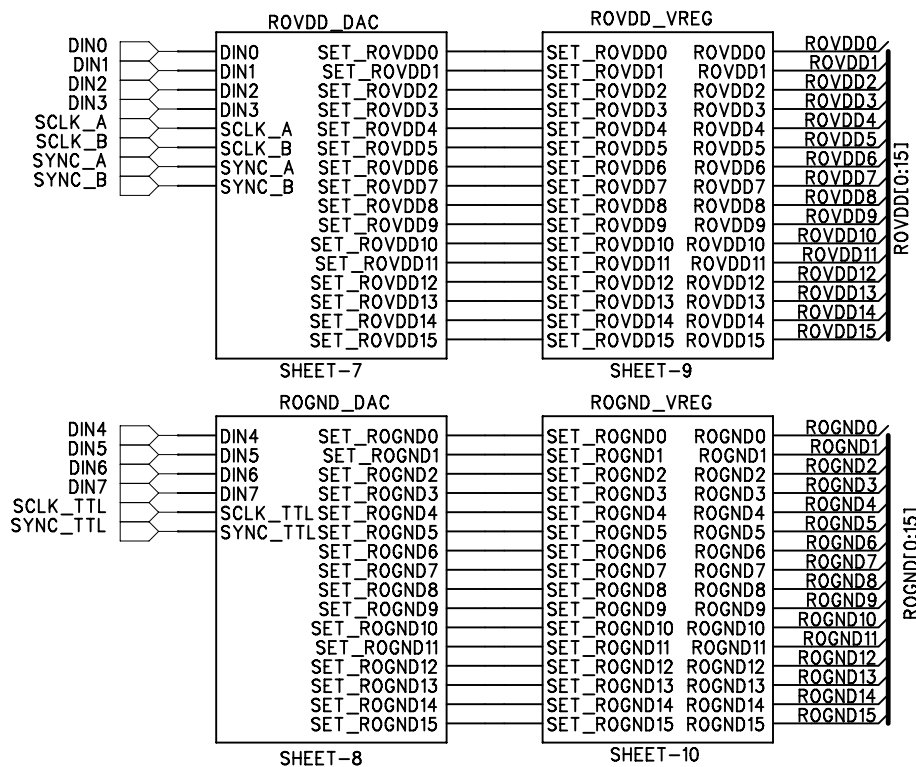
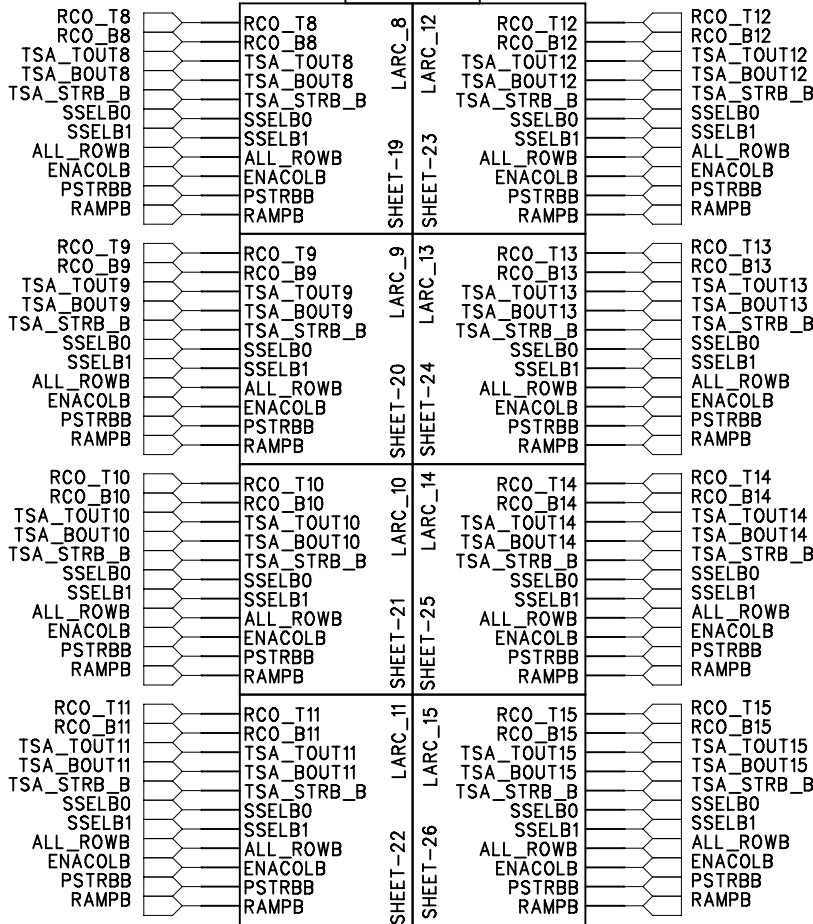
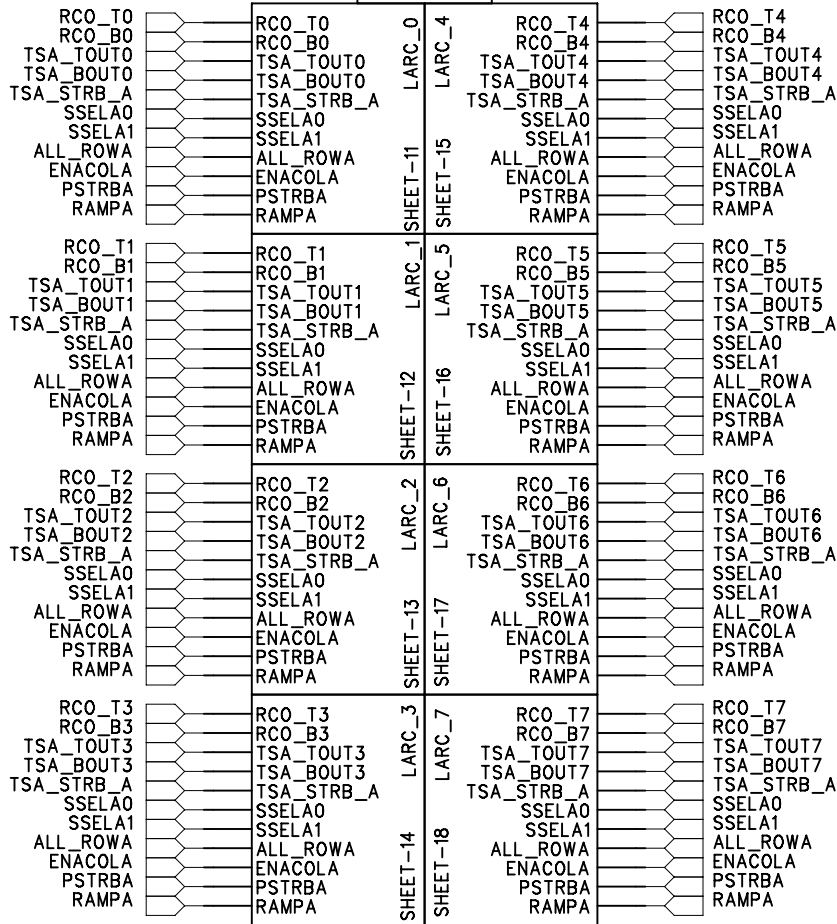
SENSOR_A
SHEET-3

SENSOR_B
SHEET-4

SENSOR_C
SHEET-5

SENSOR_D
SHEET-6

A_PWR
SHEET-27



Univ. of Hawai'i -- Instr. Dev. Lab.

TITLE: LARC_USB



Design:

LLR

Page Description:

LARC TOP Block

REV:

B

DATED: 15-JAN-2008

[LARC_TOP]

SHEET: 2 OF 33

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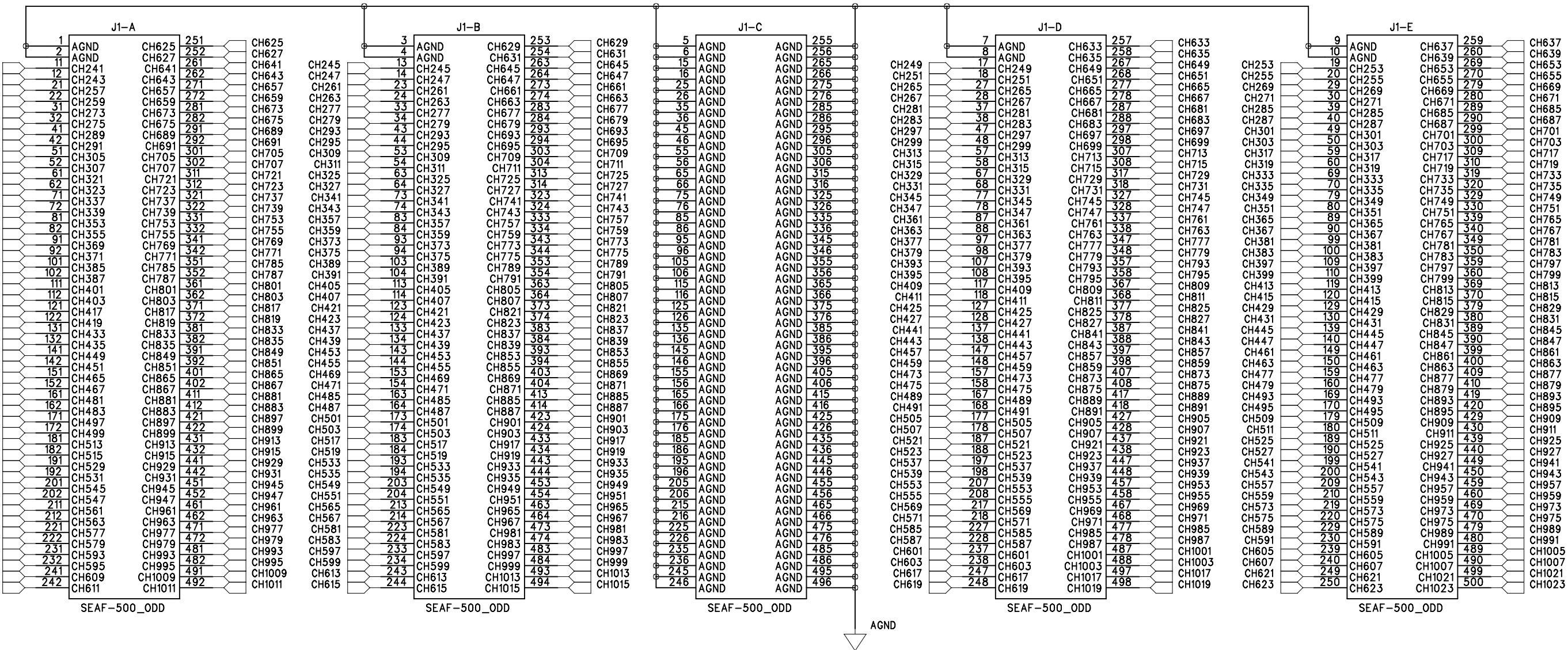
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Univ. of Hawai'i -- Instr. Dev. Lab.

TITLE: LARC_USB



Design:

LLR

Page Description:

Sensor CONN Block A

REV:

B

DATED: 15-JAN-2008

[SENSOR_A]

SHEET: 3 OF 33

6

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J3-A

J3-B

J3-C

J3-D

J3-E

SEAF-500_EVEN

SEAF-500_EVEN

SEAF-500_EVEN

SEAF-500_EVEN

SEAF-500_EVEN

AGND

Univ. of Hawai'i -- Instr. Dev. Lab.

TITLE: LARC_USB



Design:

LLR

Page Description:

Sensor CONN Block C

REV:

B

DATED: 15-JAN-2008

[SENSOR_C]

SHEET: 5 OF 33

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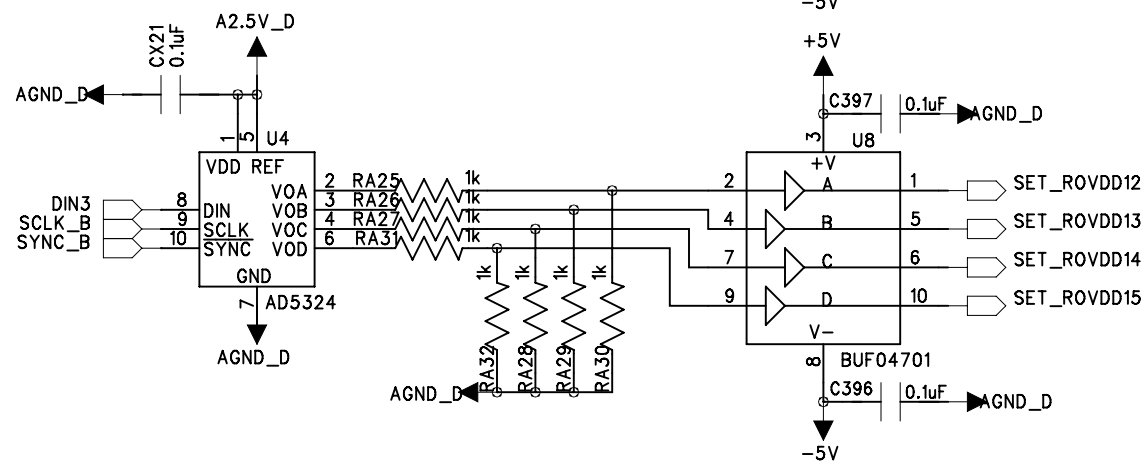
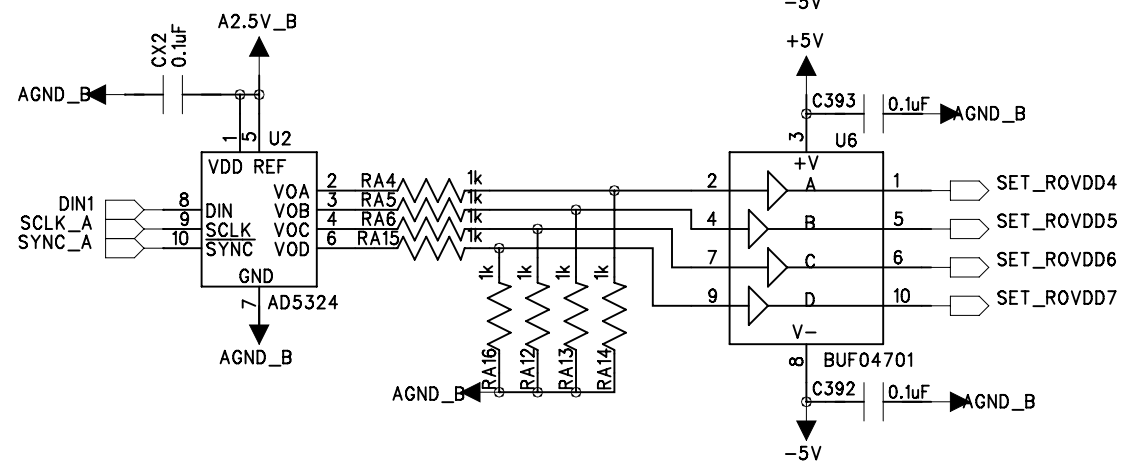
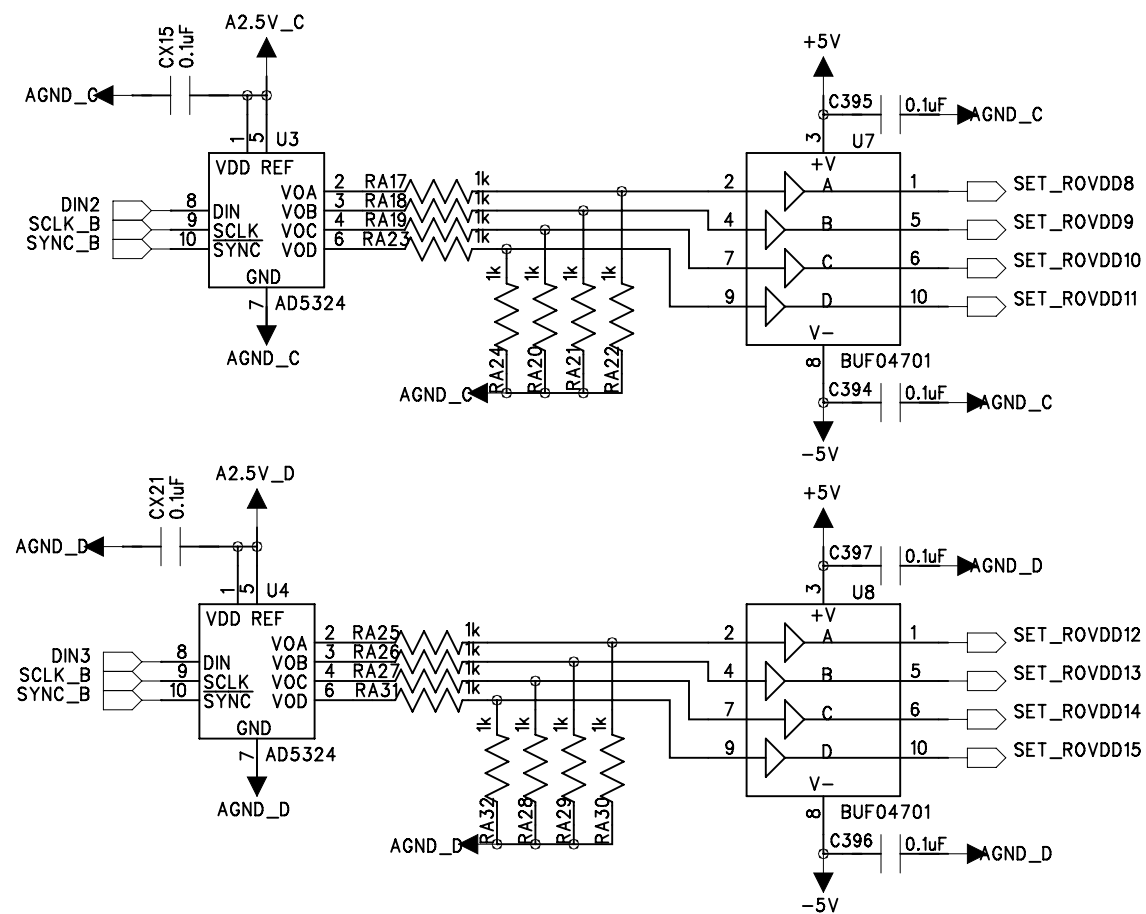
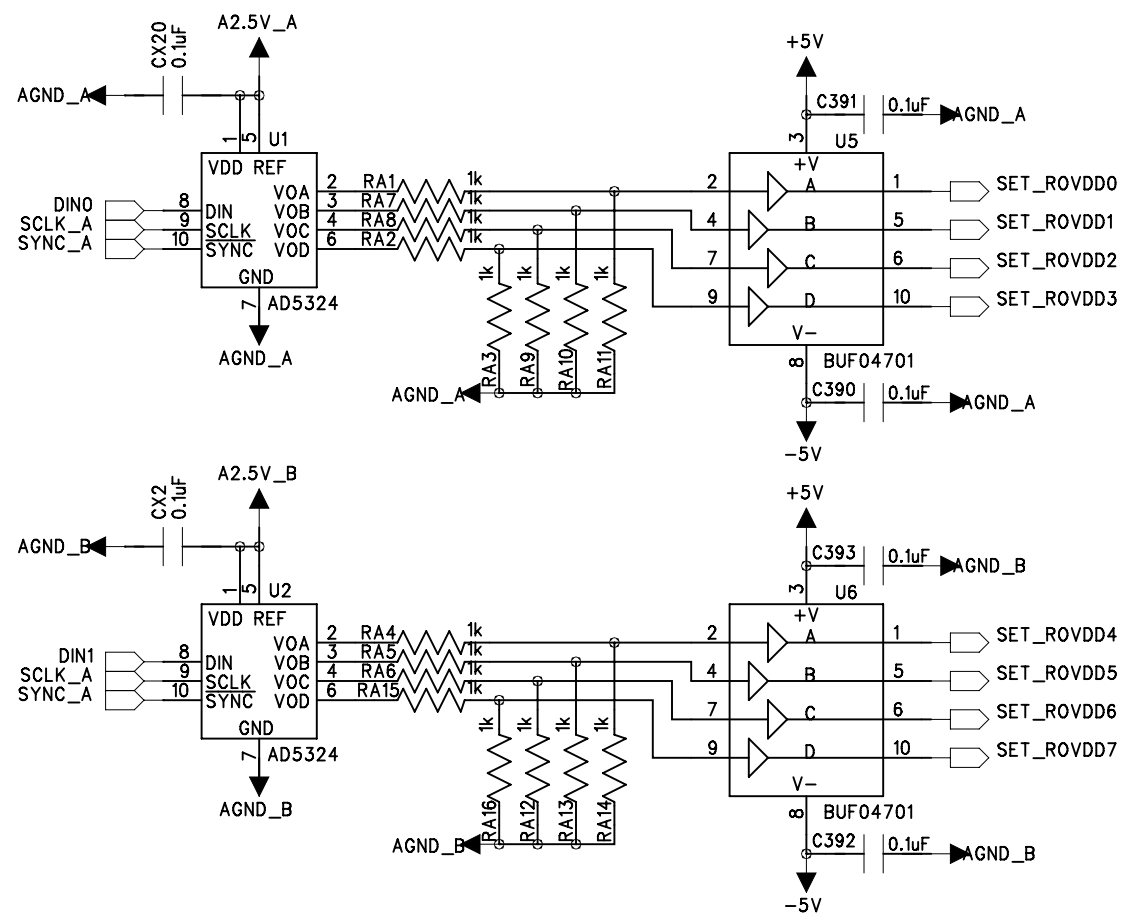
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TITLE: LARC_USB



Design:

LLR

Page Description:

ROVDD DAC Block

REV:

B

DATED: 30-JUNE-2008

[ROVDD_DAC]

SHEET: 7 OF 33

6

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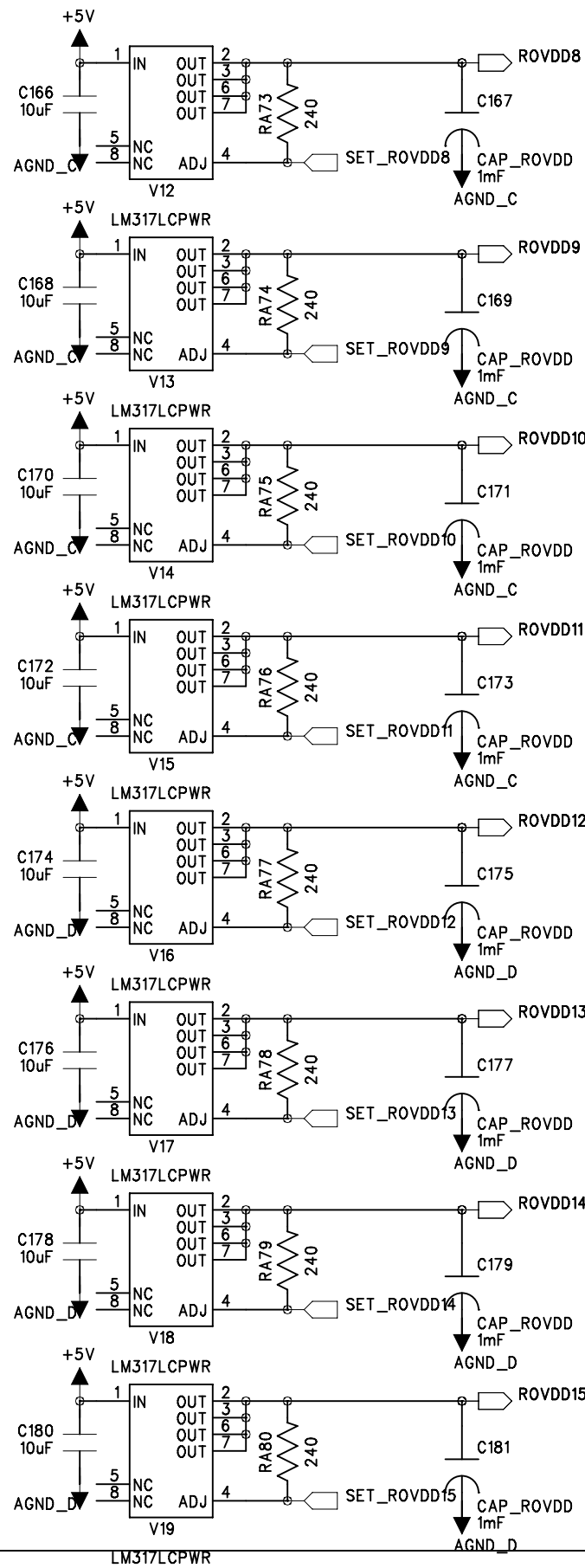
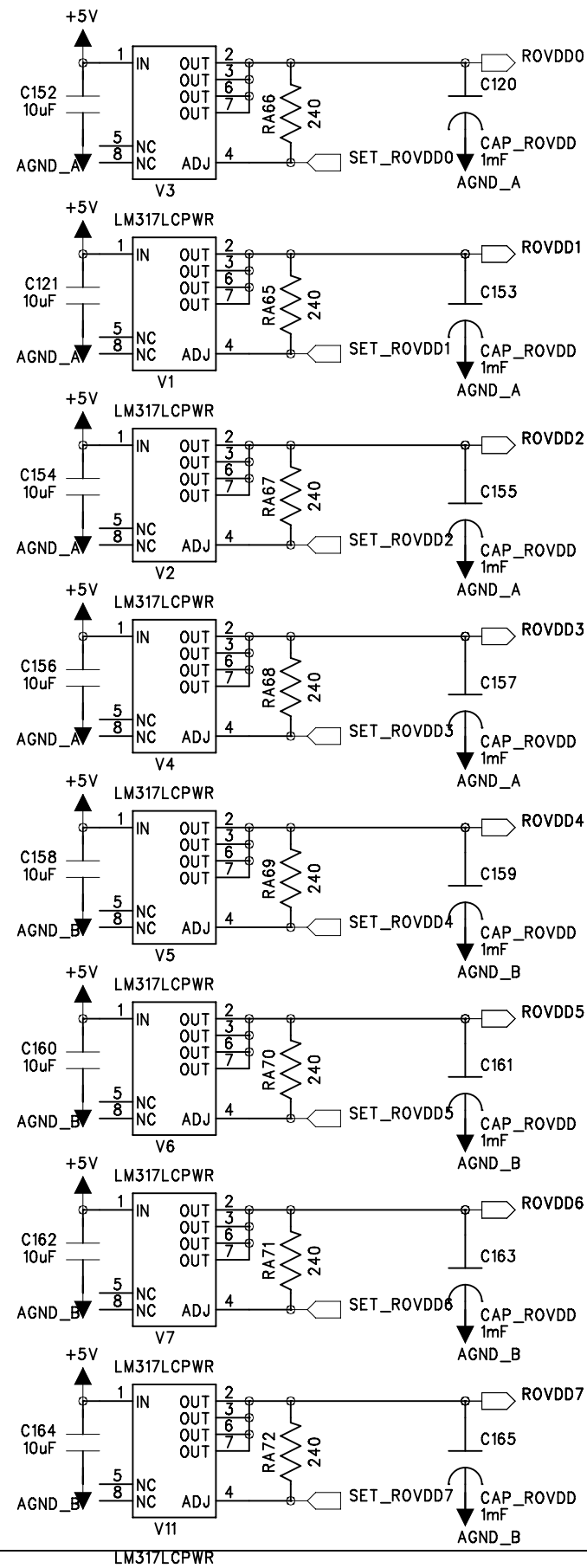
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Univ. of Hawai'i -- Instr. Dev. Lab.

TITLE: LARC_USB



Design:

LLR

Page Description:

ROVDD VREG Block

REV:

B

DATED: 30-JUNE-2008 [ROVDD_VREG] SHEET: 9 OF 33

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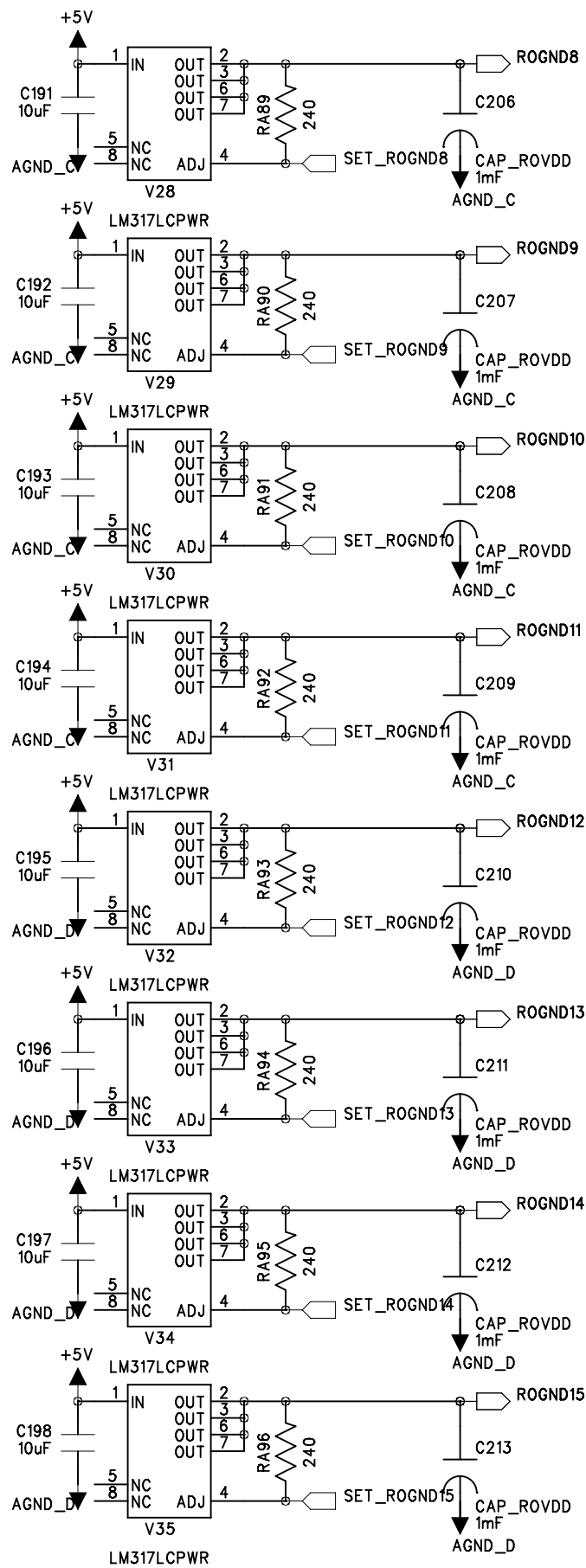
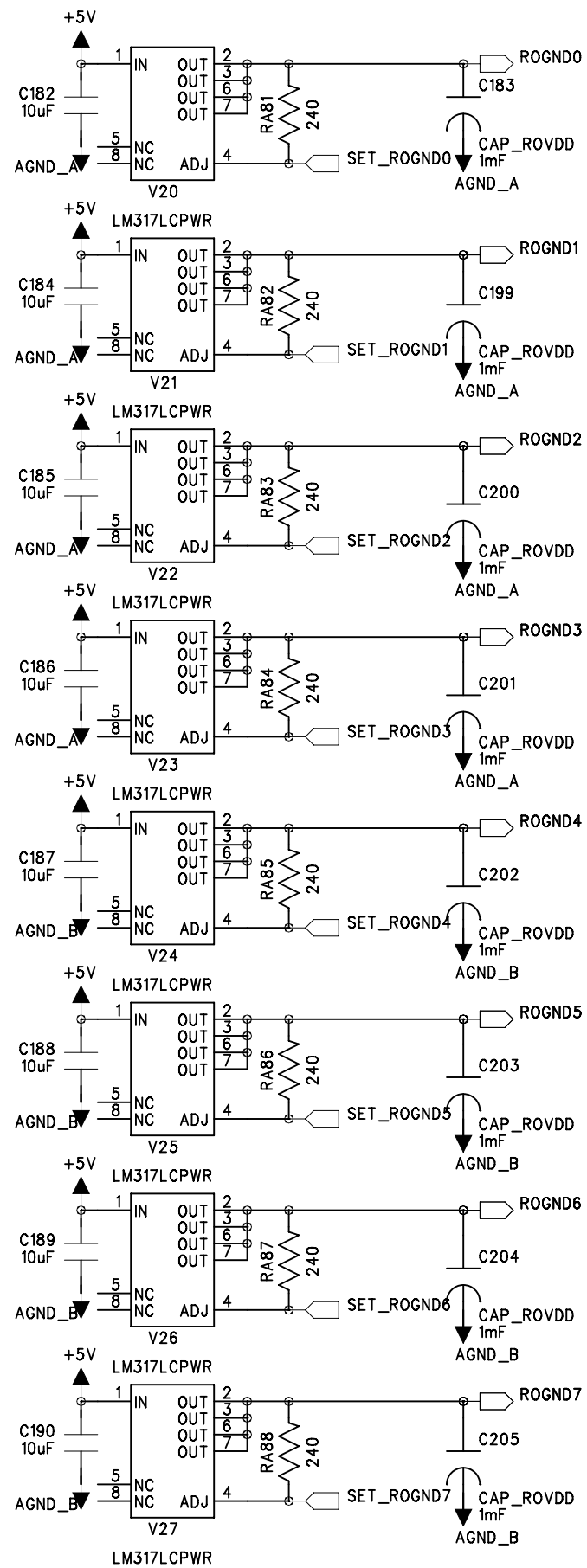
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TITLE: LARC_USB



Design:

LLR

Page Description:

ROGND VREG Block

REV:

B

DATED: 30-JUNE-2008 [ROGND_VREG]

SHEET: 10 OF 33

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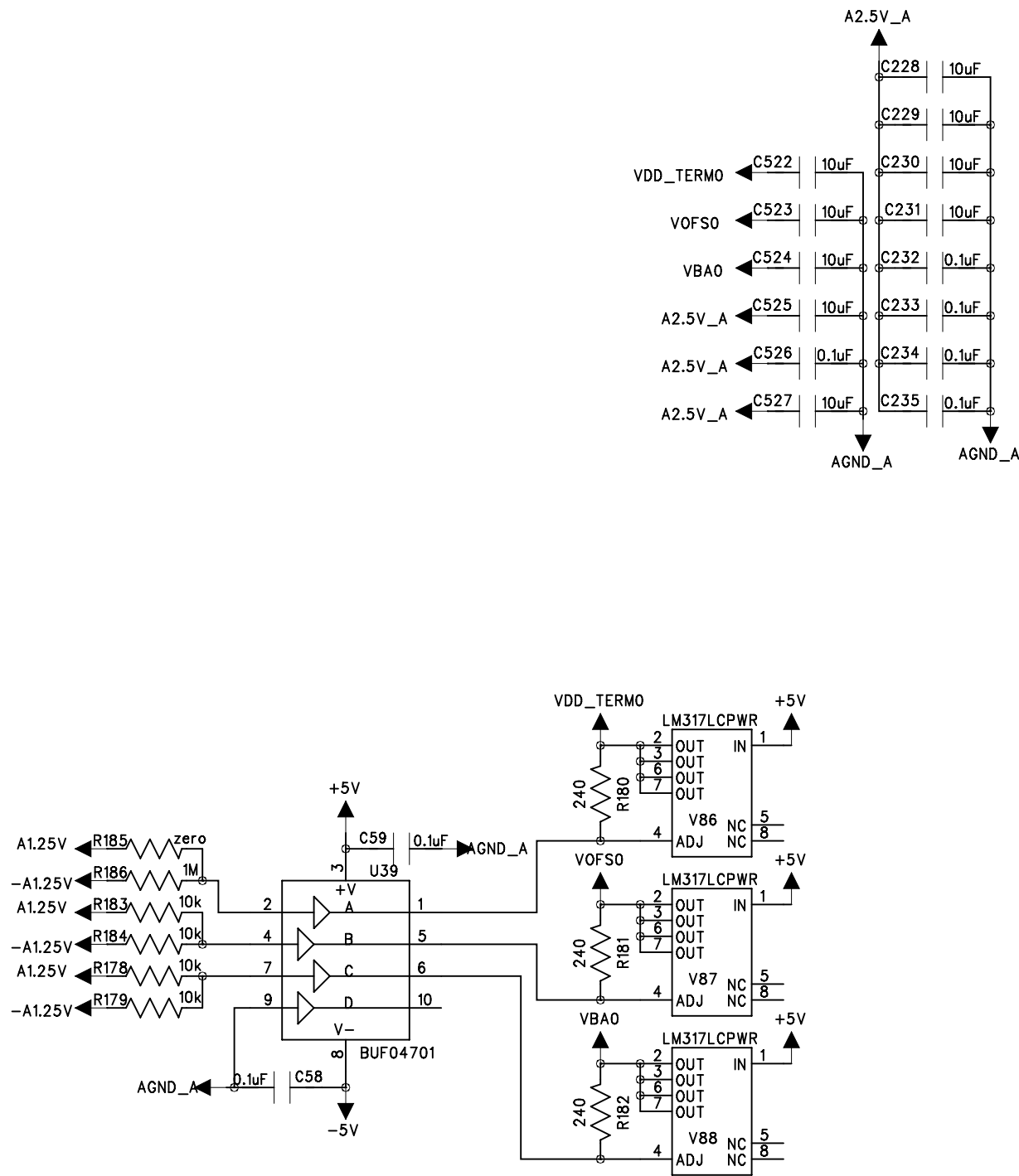
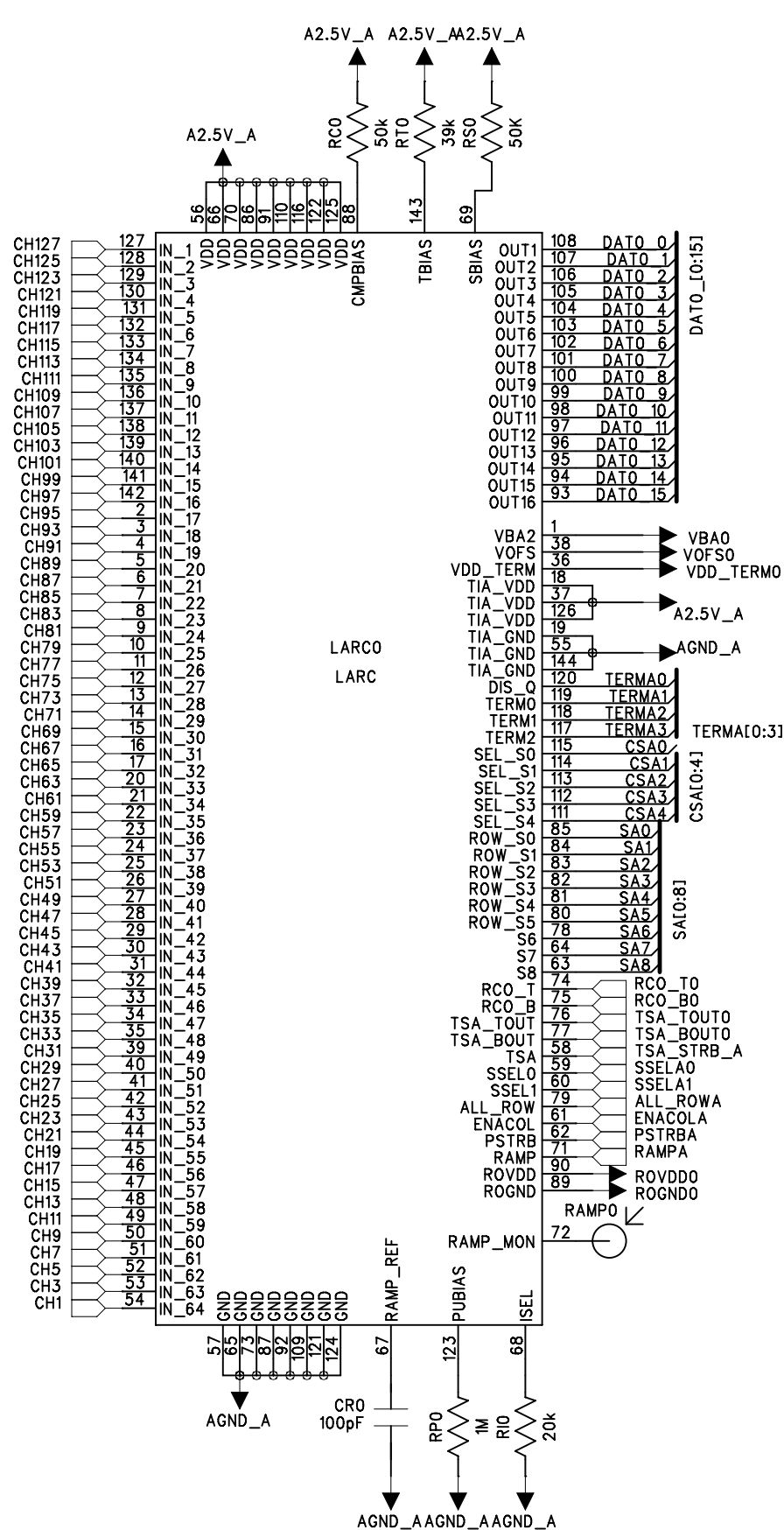
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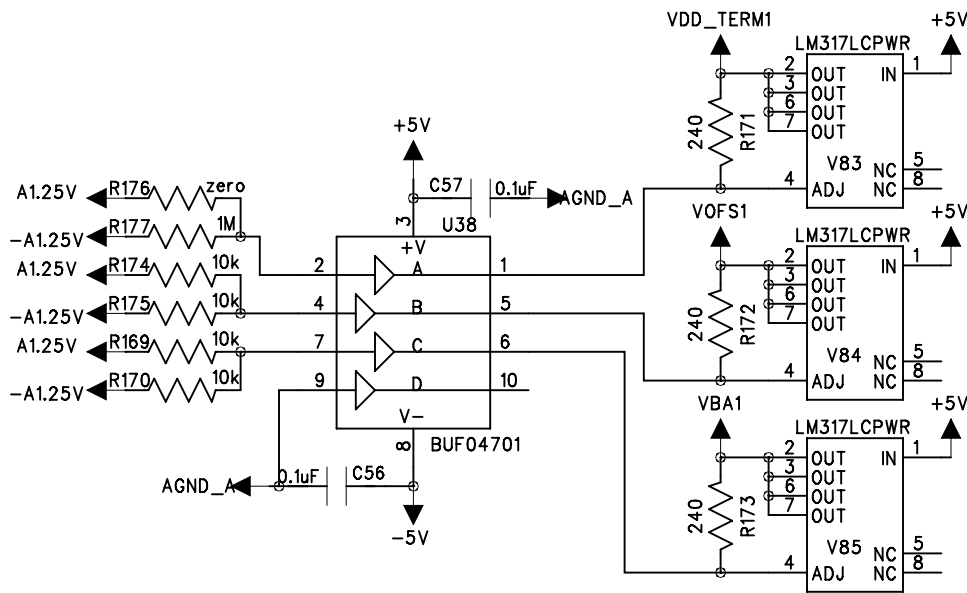
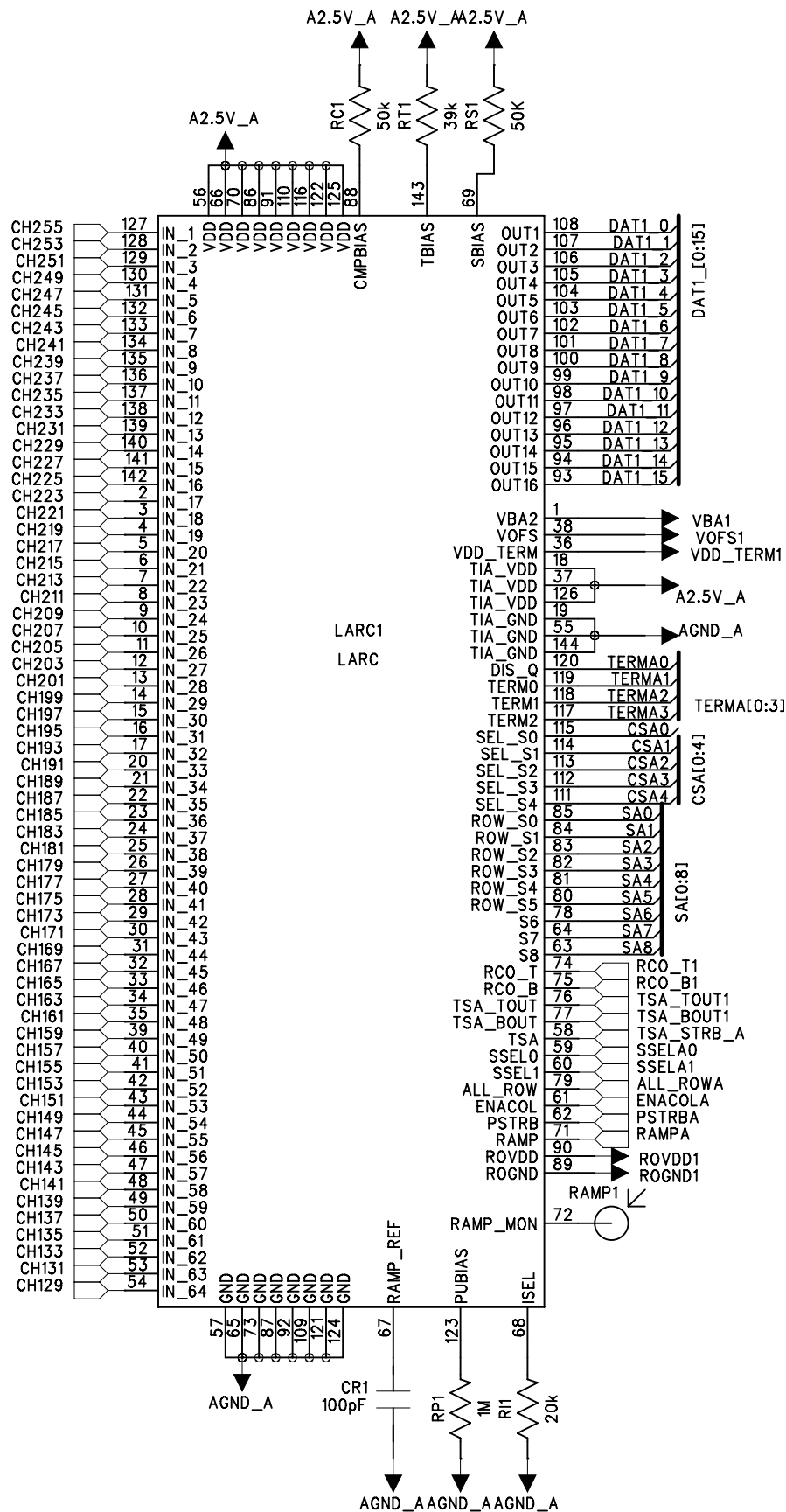
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TITLE: LARC_USB



Design:

LLR

Page Description:

LARC BLOCK 1

REV:

B

DATED: 30-JUNE-2008

[LARC_1]

SHEET: 12 OF 33

6

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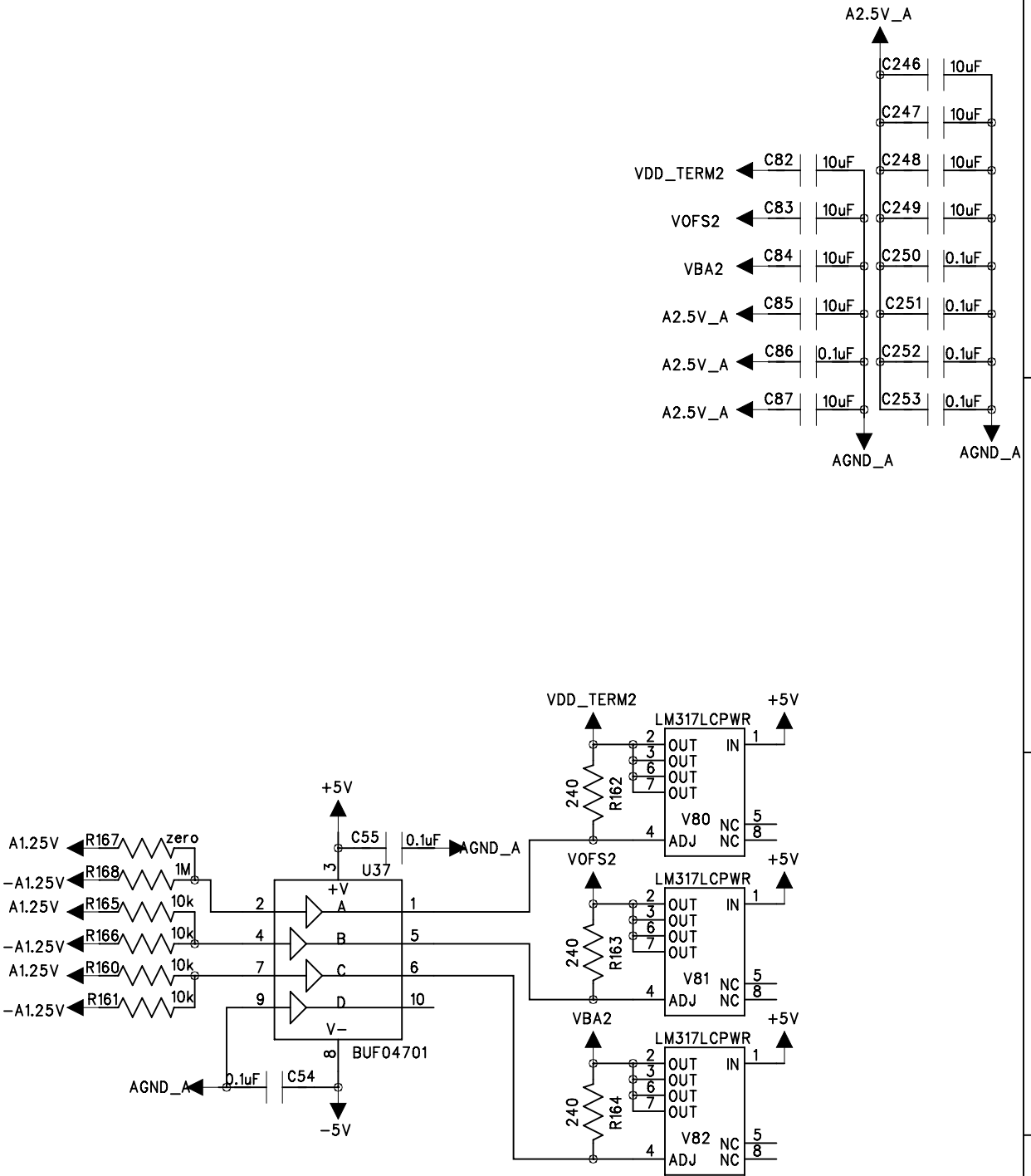
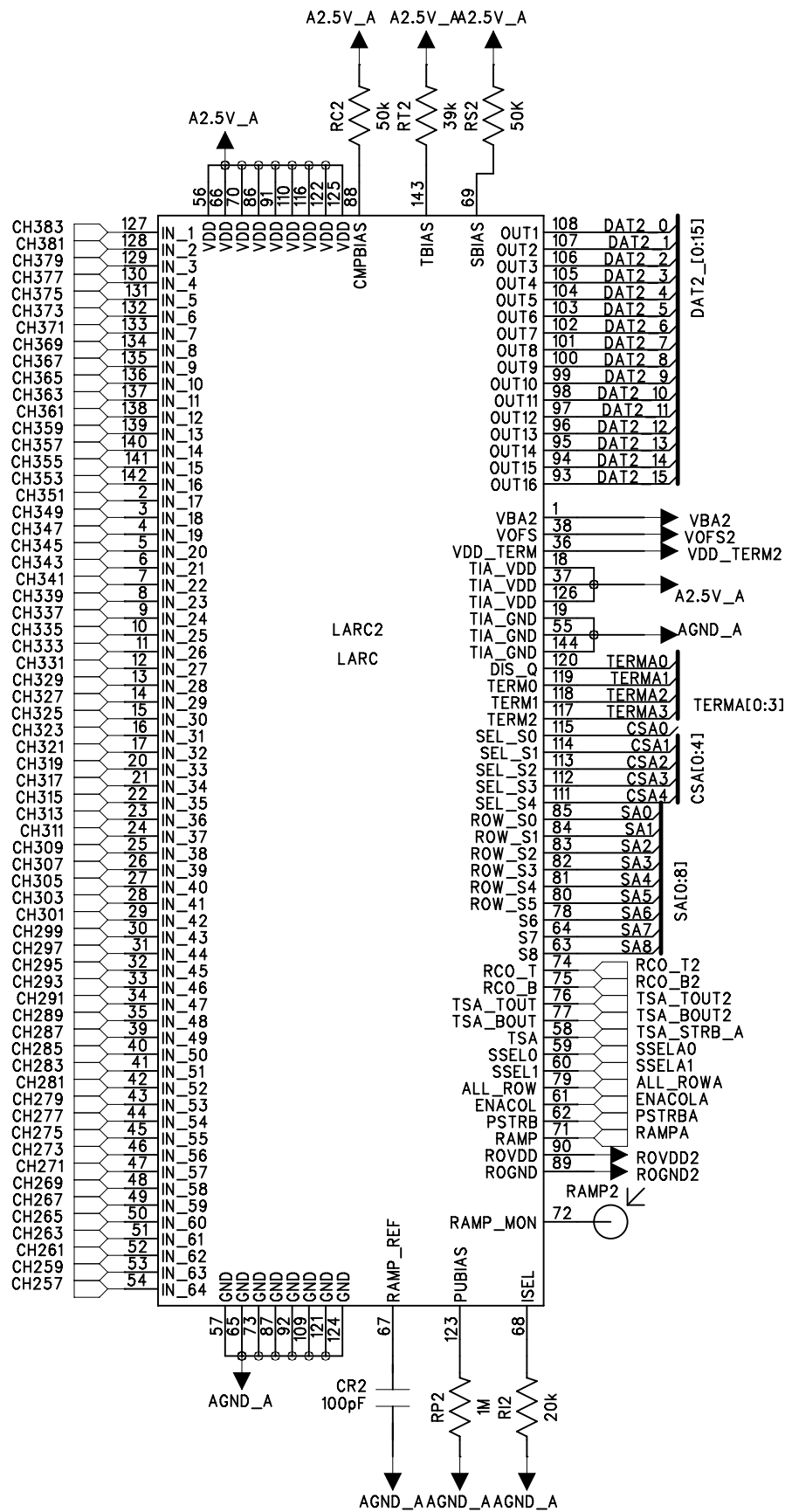
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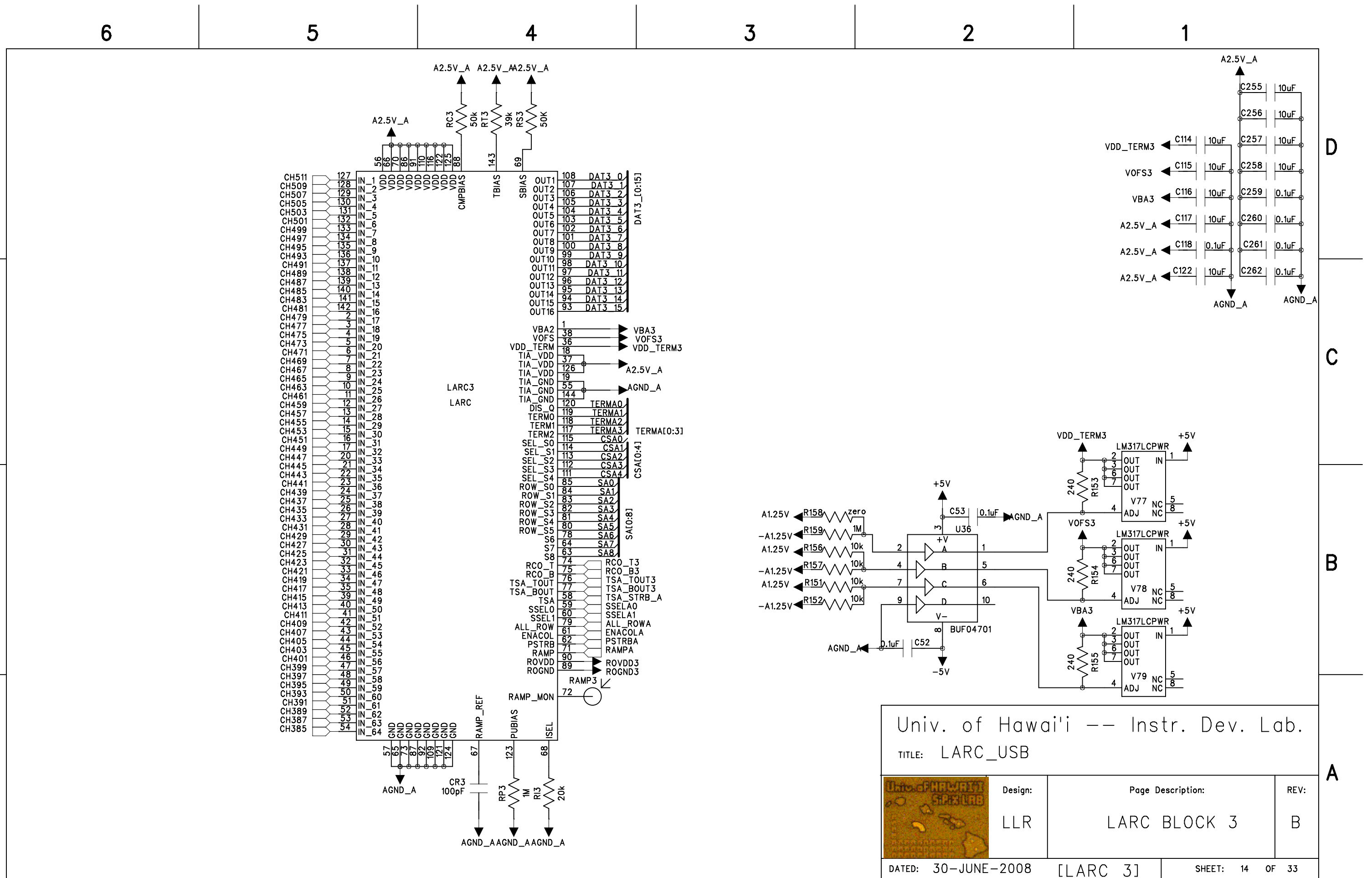
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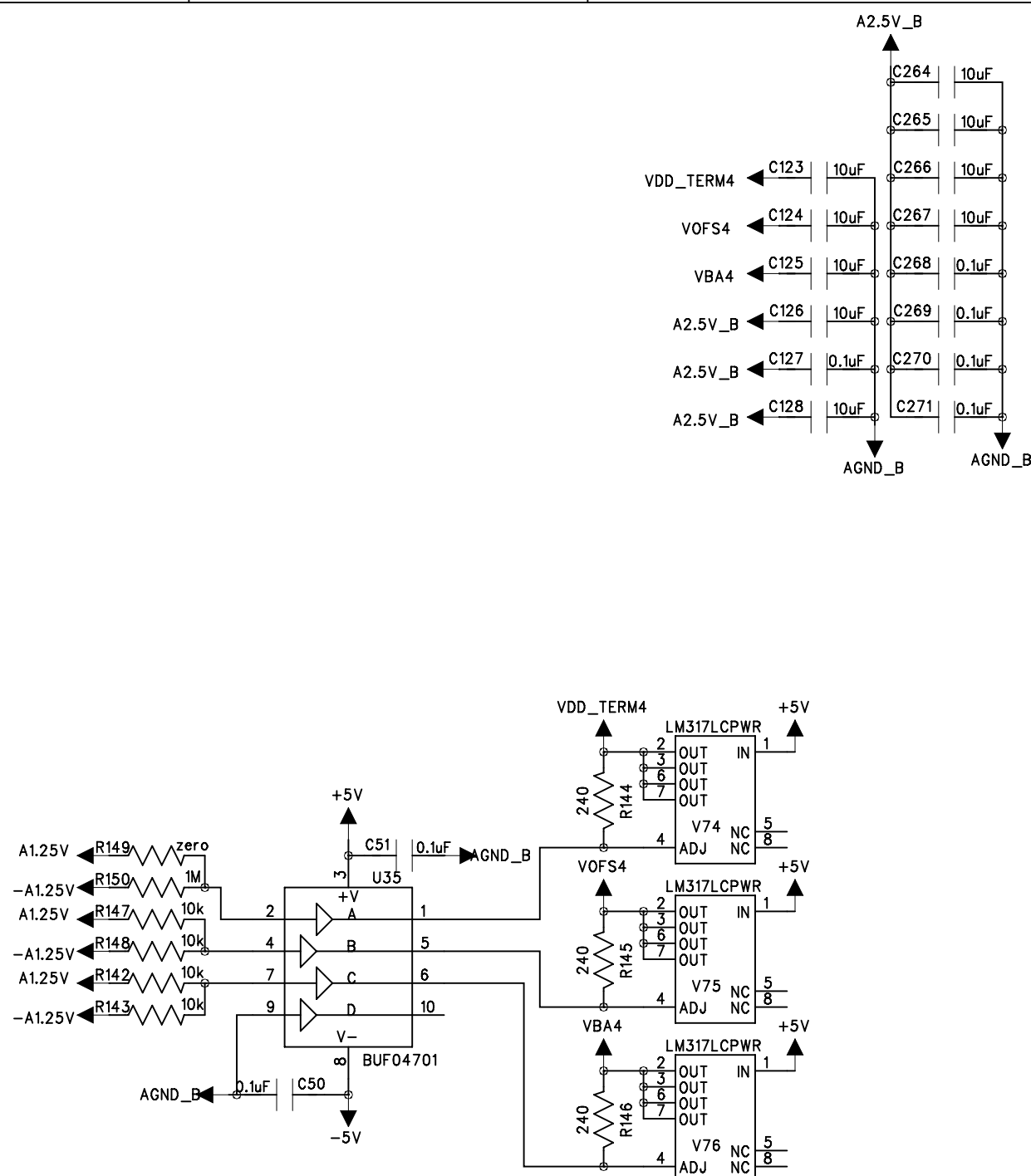
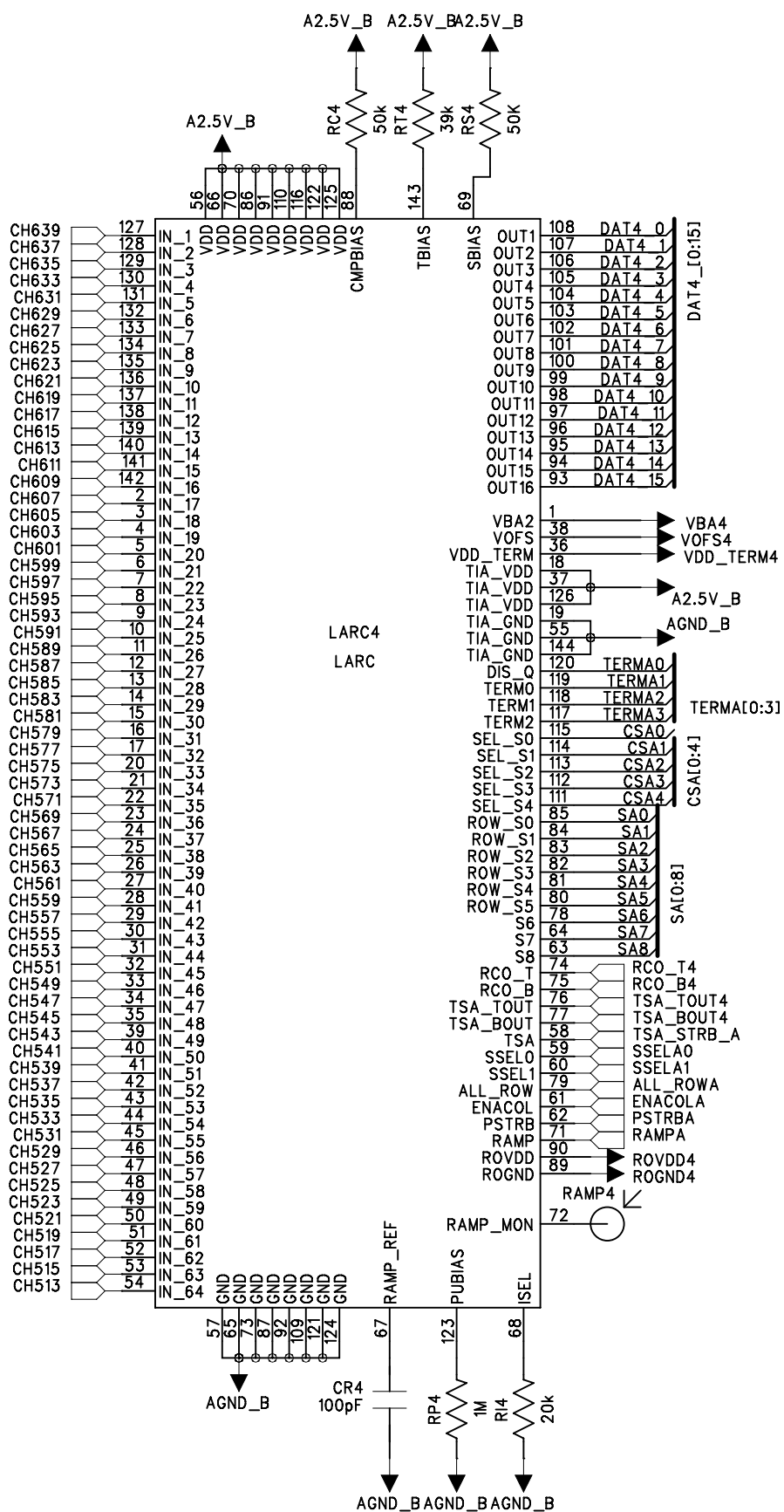
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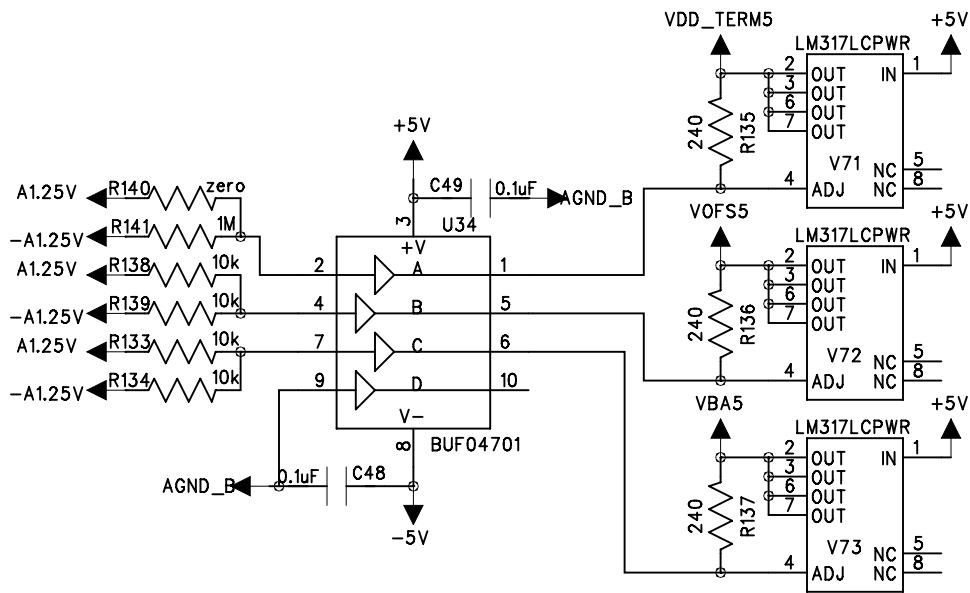
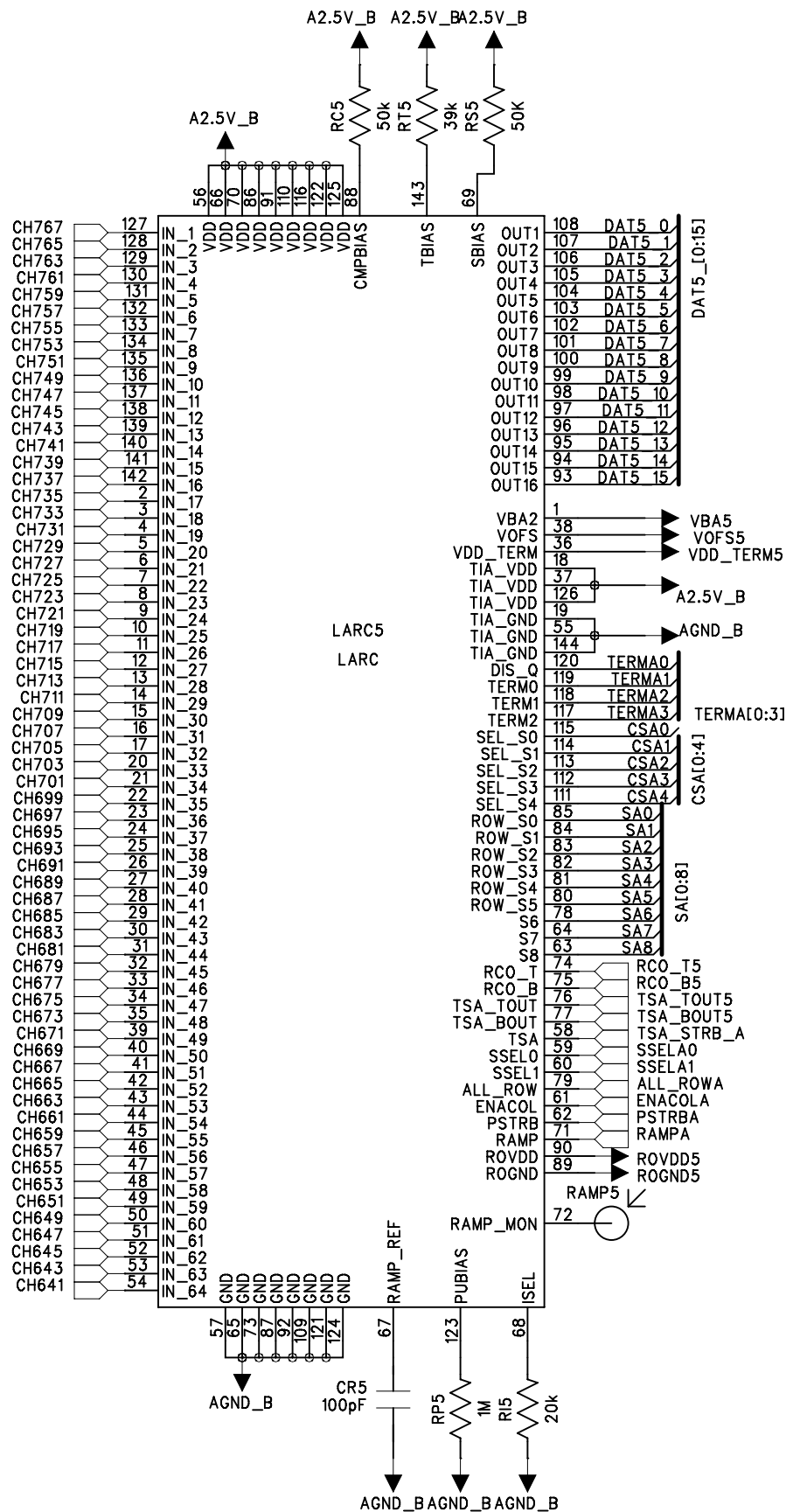
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TITLE: LARC_USB



Design:

LLR

Page Description:

LARC BLOCK 5

REV:

B

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[LARC_5]

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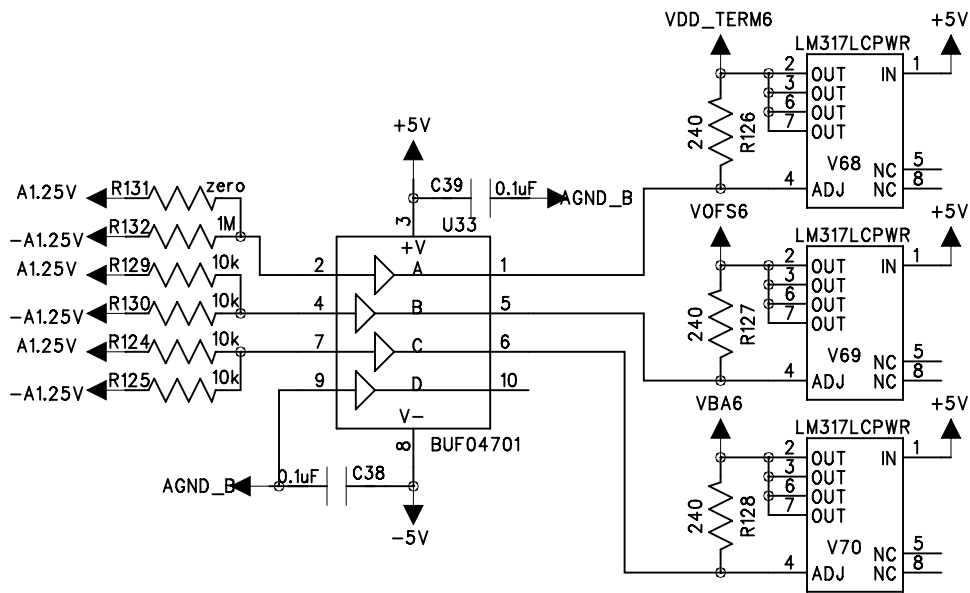
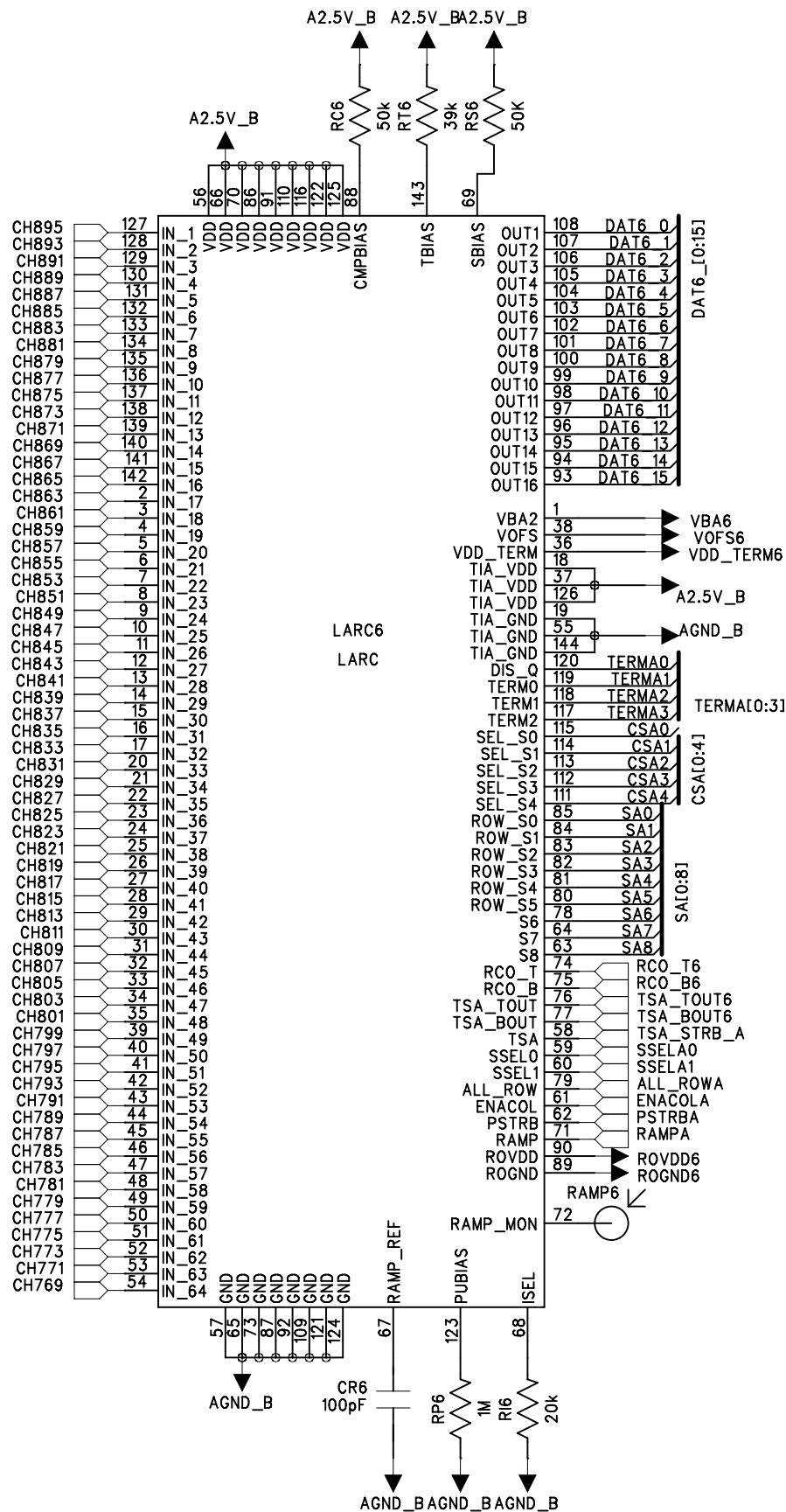
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TITLE: LARC_USB



Design:

LLR

Page Description:

LARC BLOCK 6

REV:

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DATED: 30-JUNE-2008

[LARC_6]

SHEET: 17 OF 33

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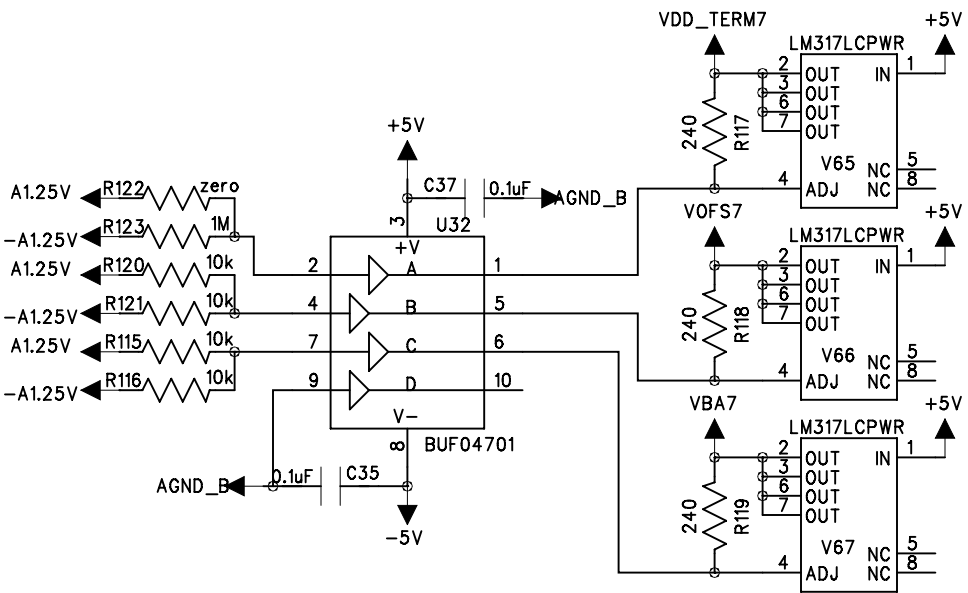
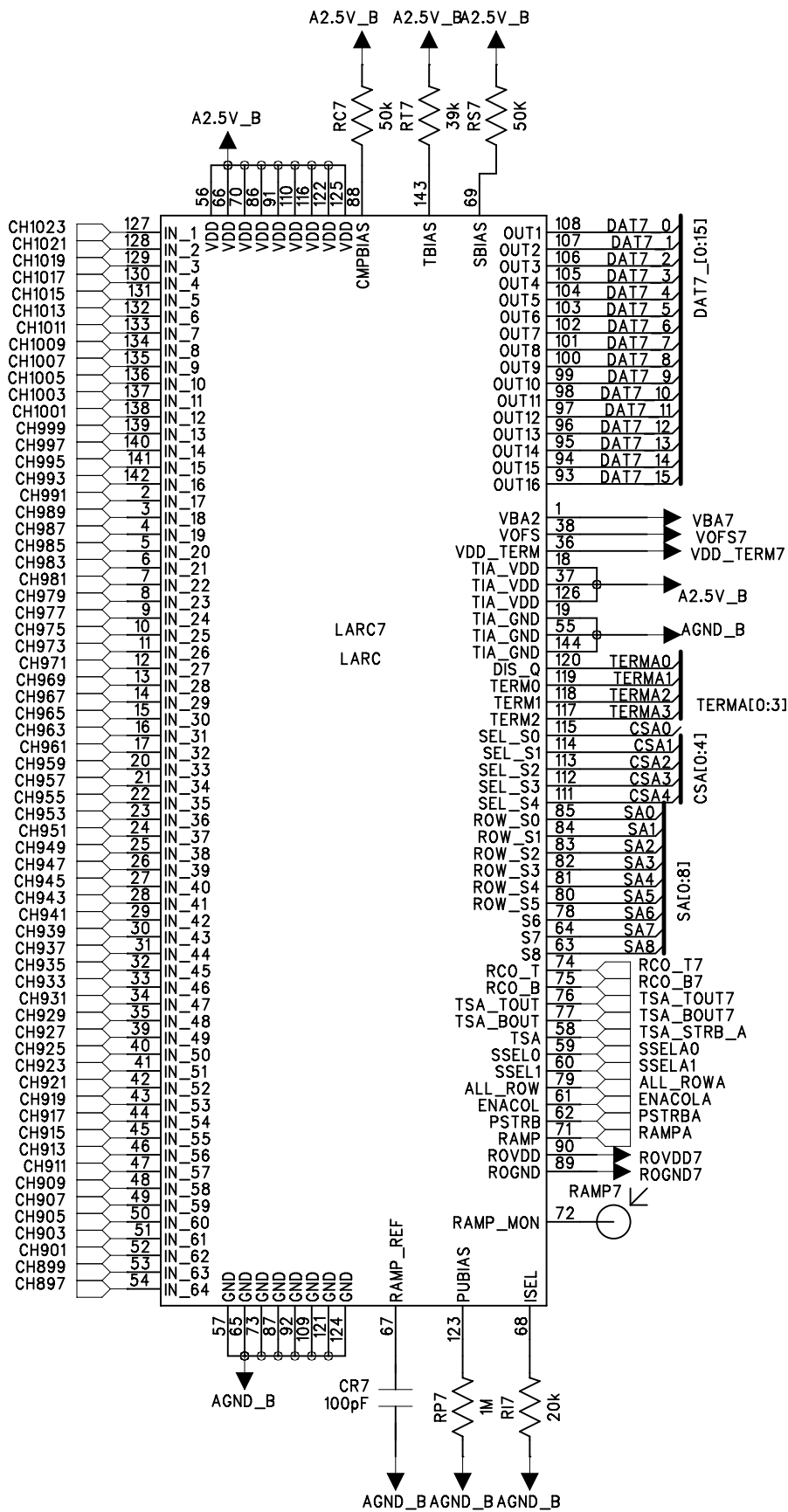
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TITLE: LARC_USB



Design:

LLR

Page Description:

LARC BLOCK 7

REV:

B

DATED: 30-JUNE-2008

[LARC_7]

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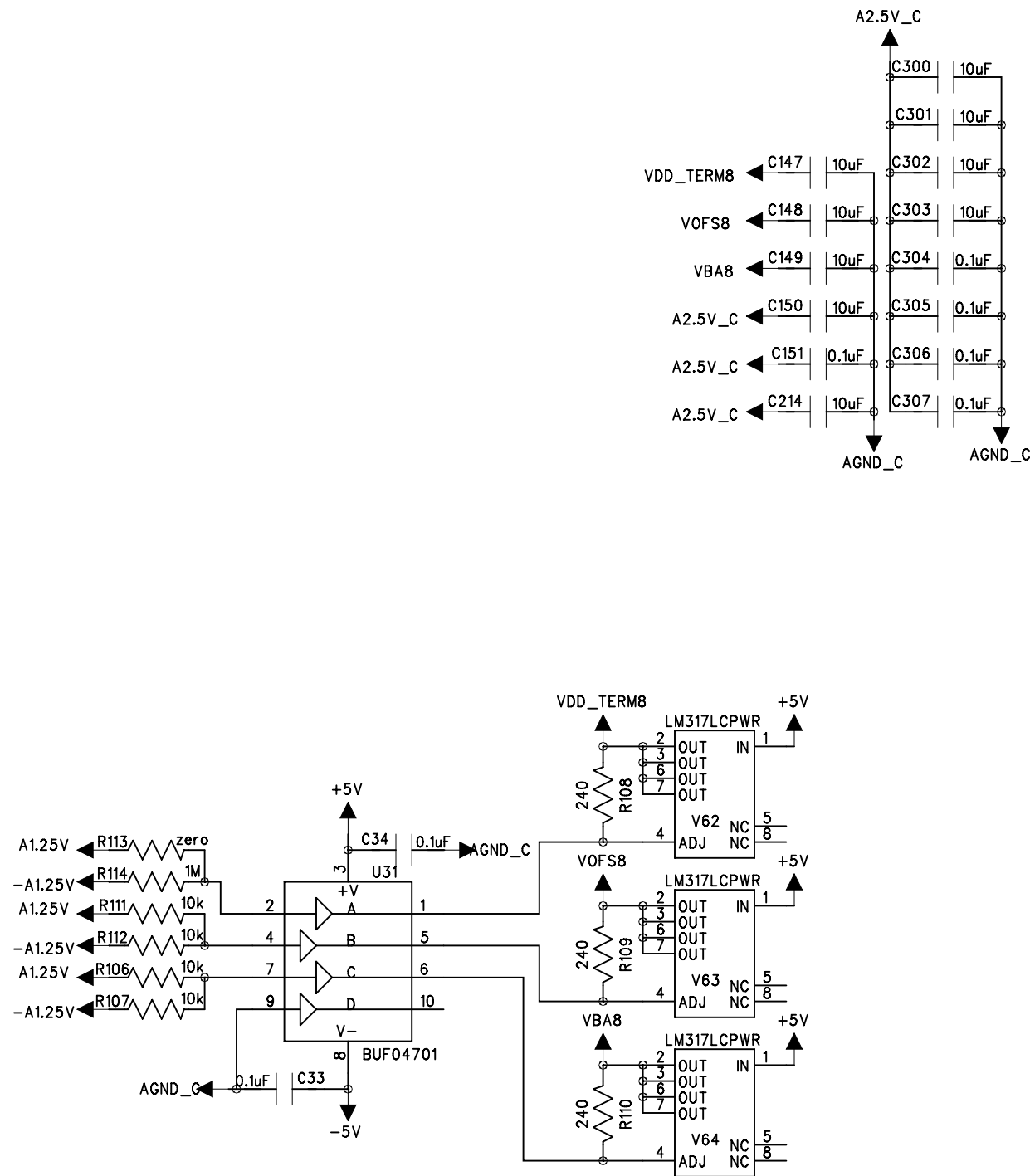
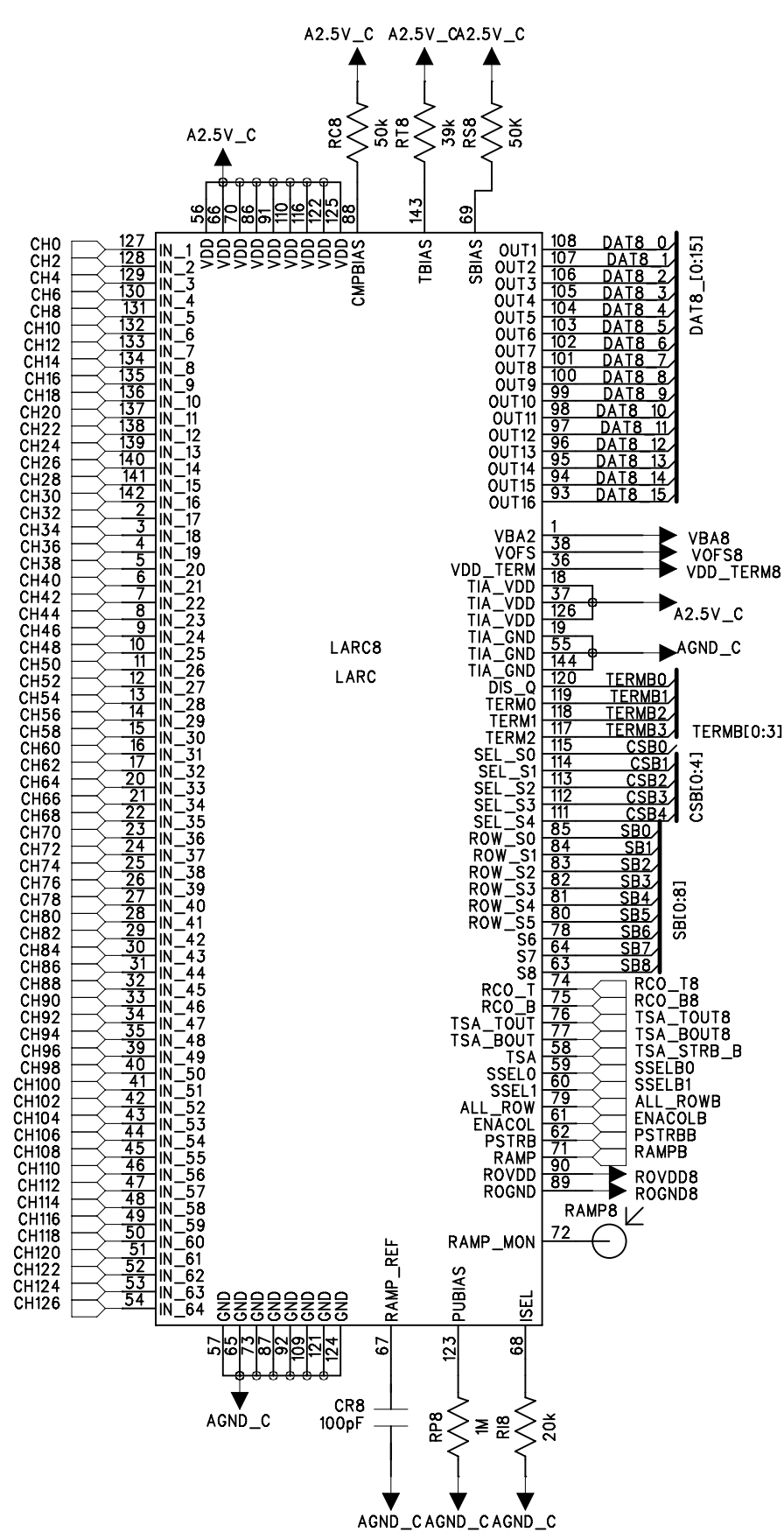
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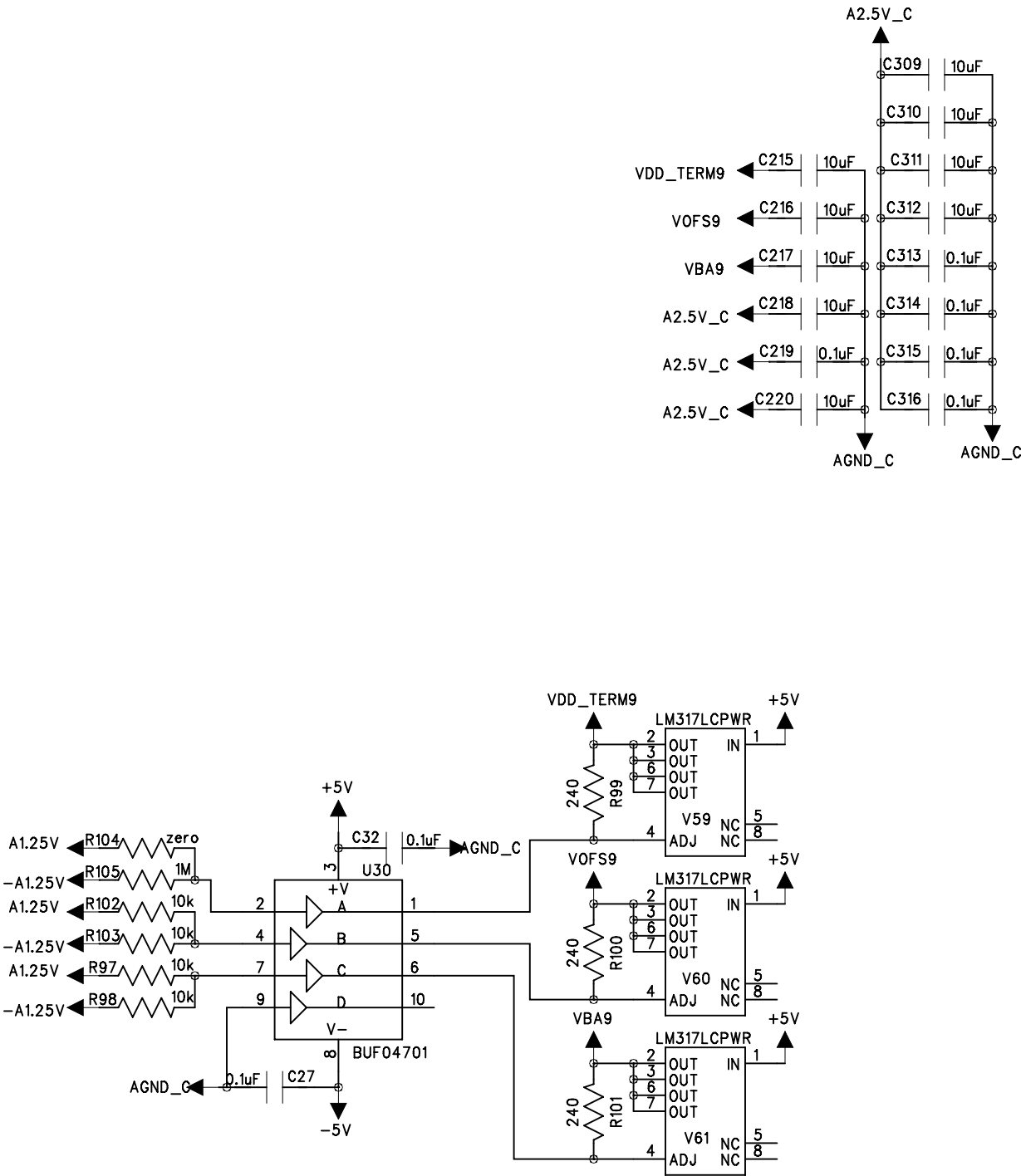
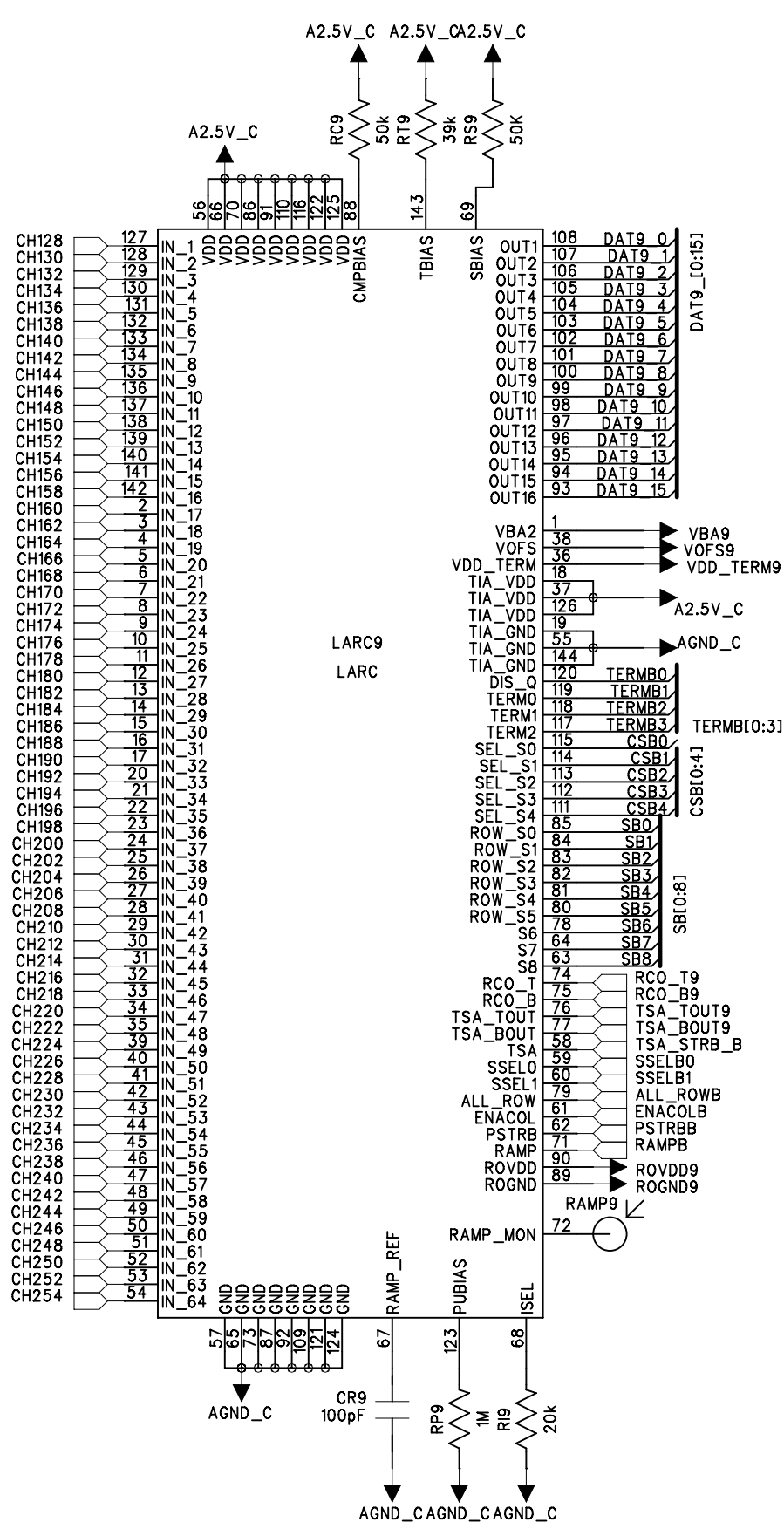
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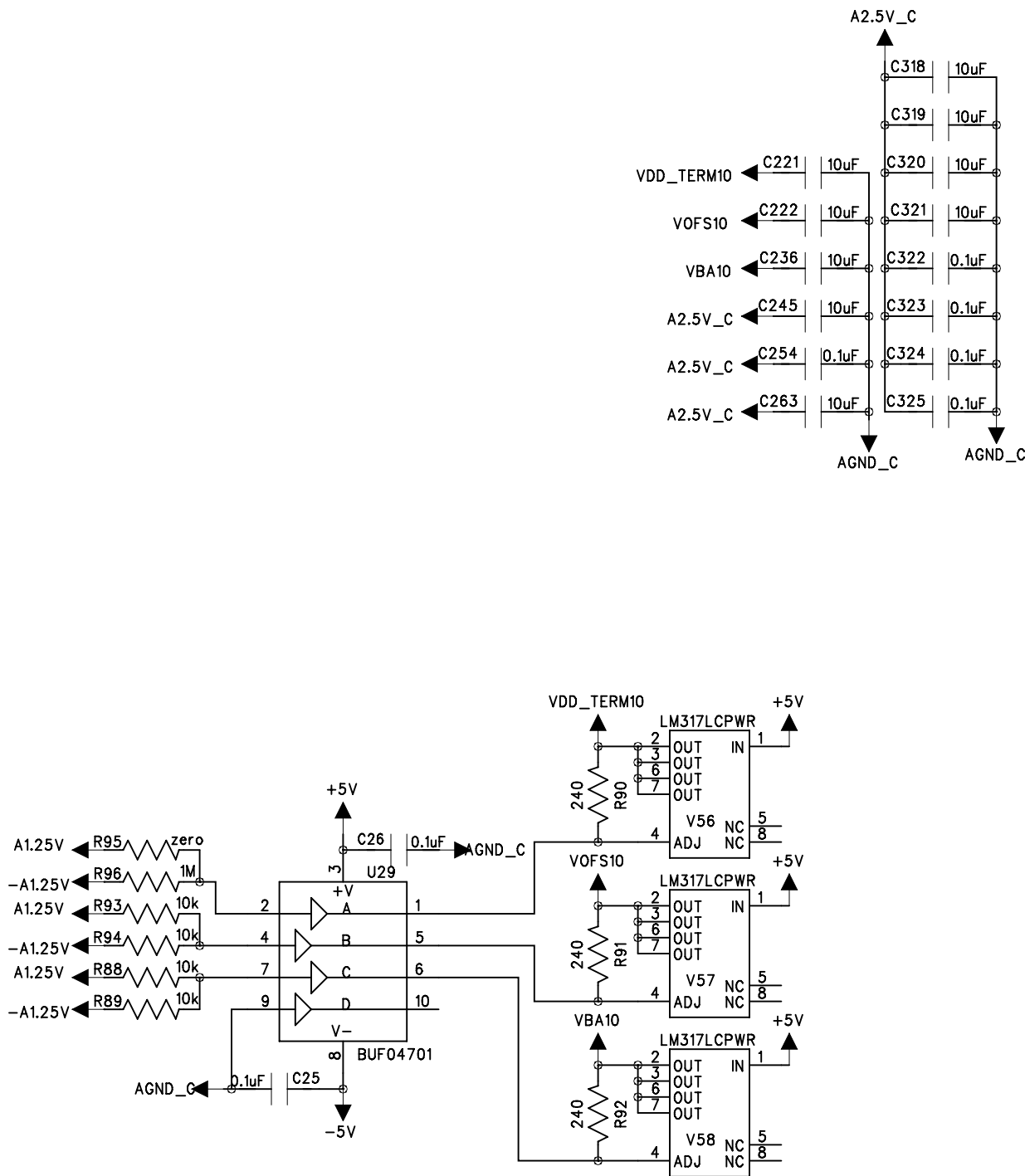
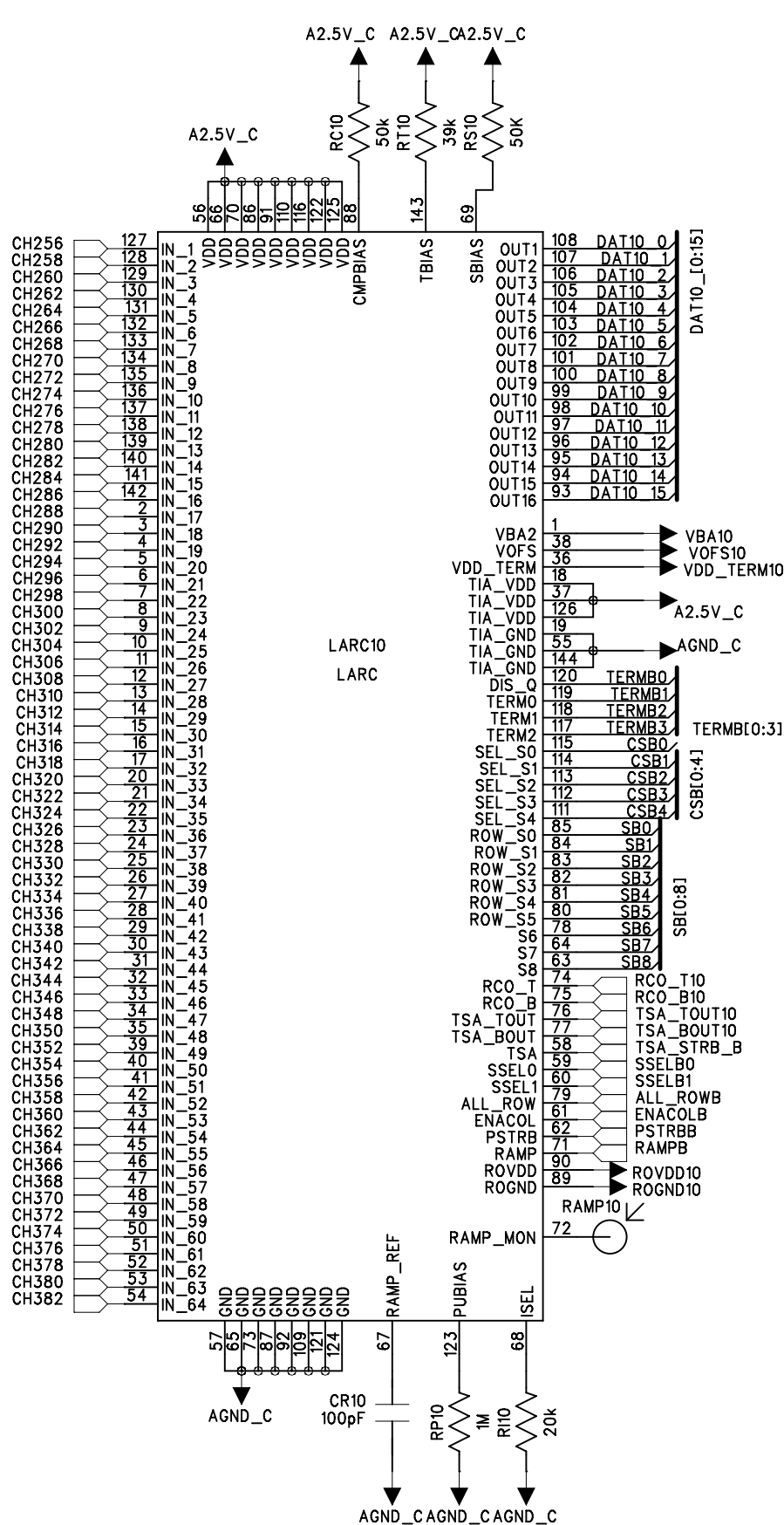
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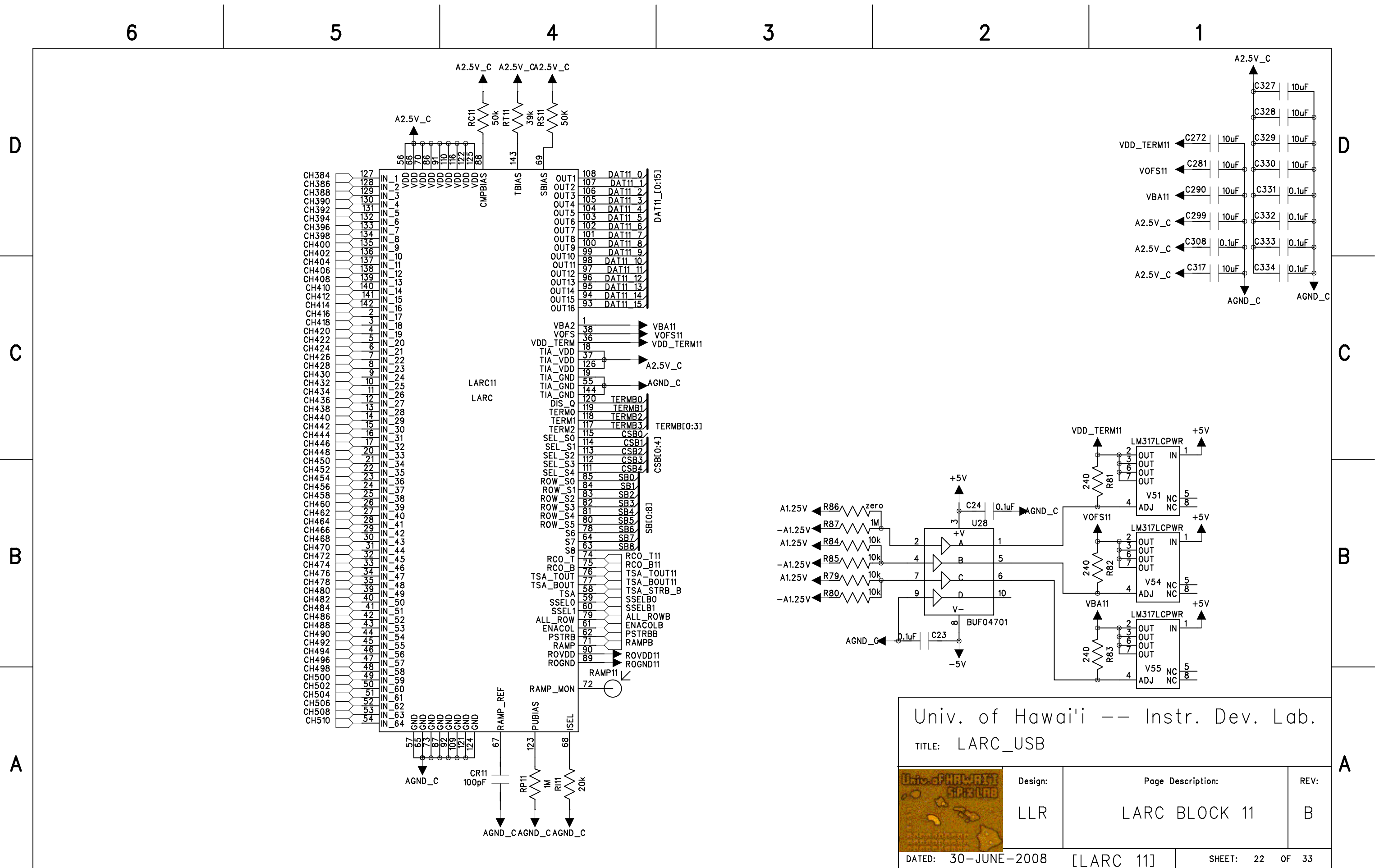
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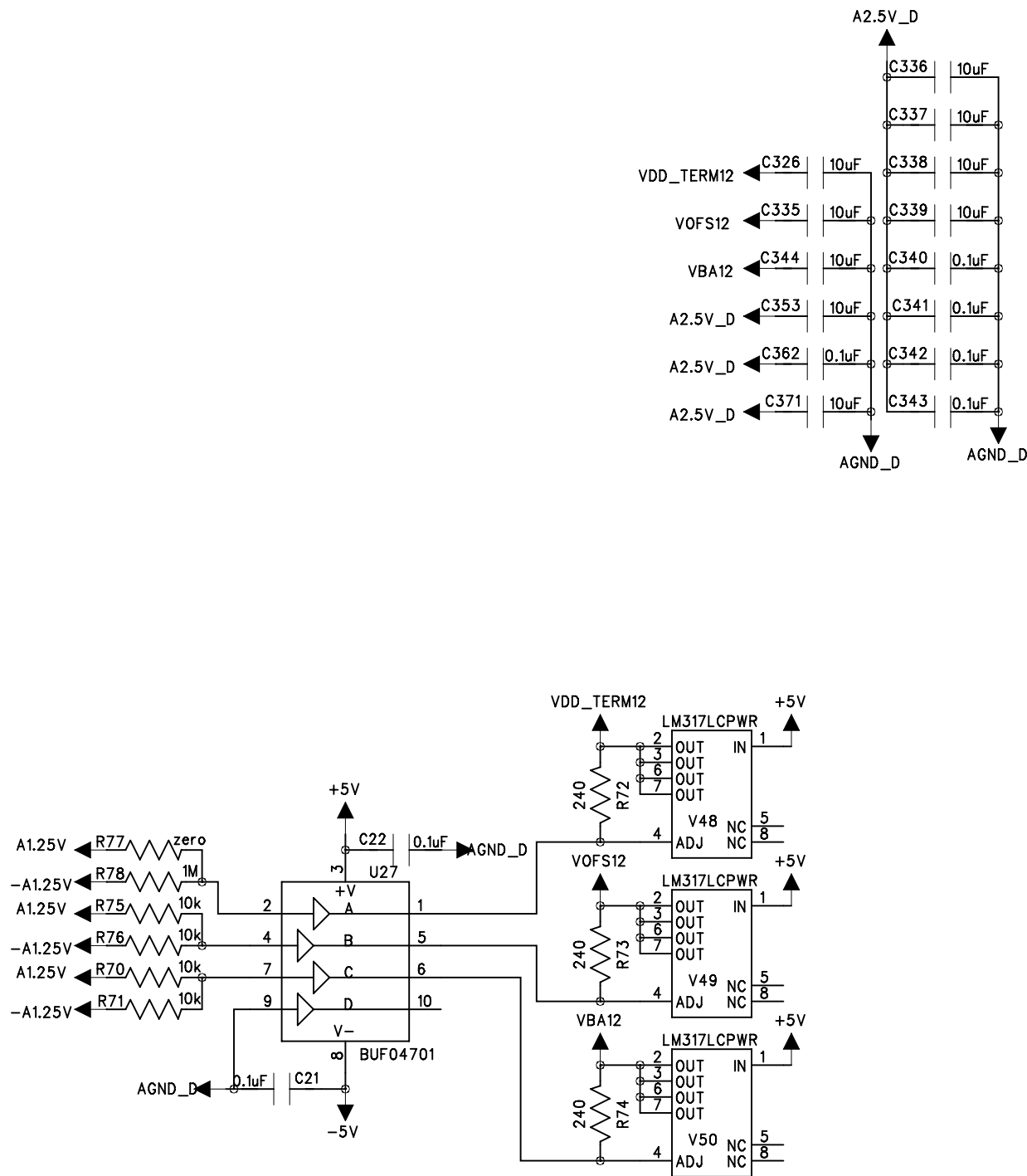
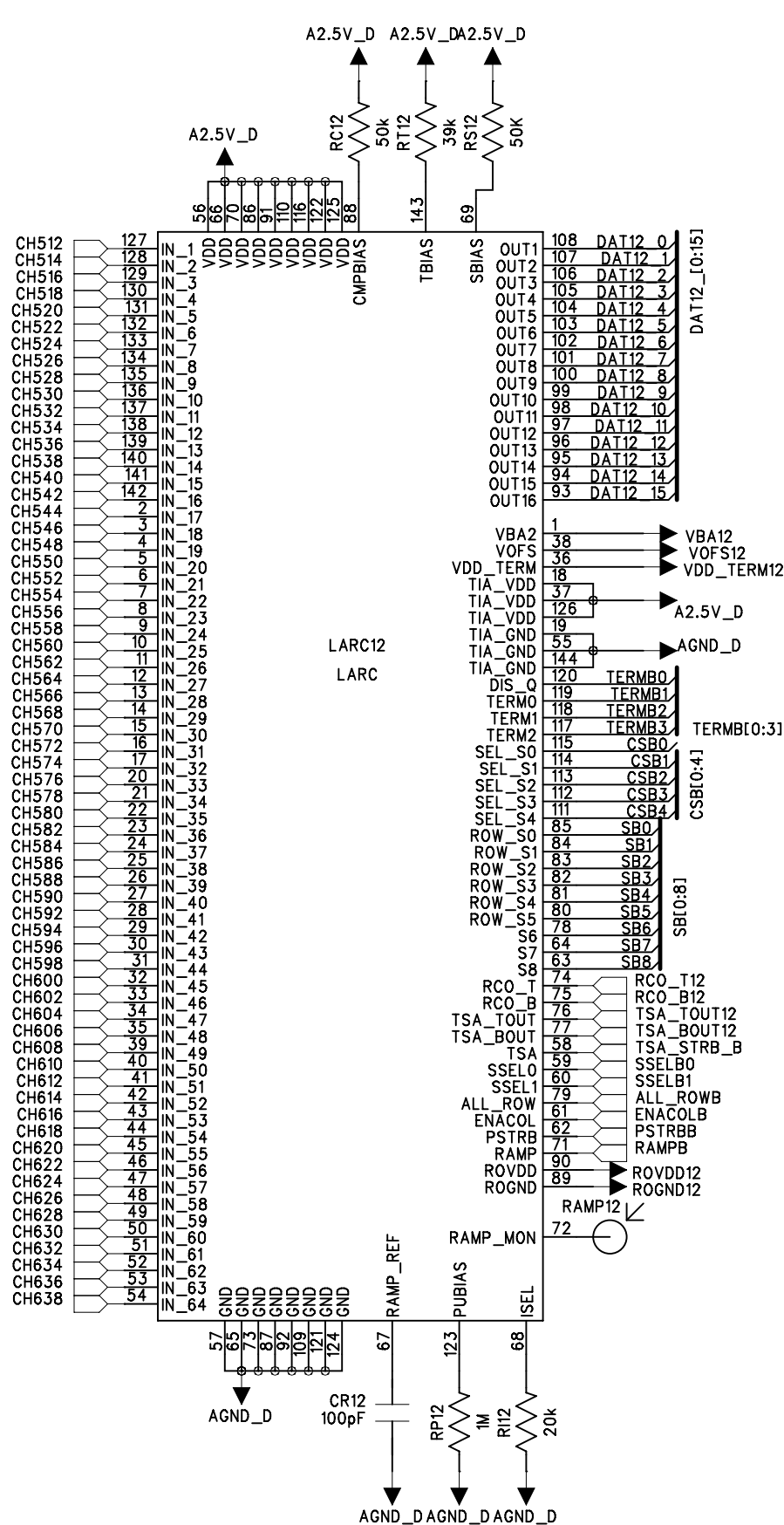
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TITLE: LARC_USB



Design:

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Page Description:

LARC BLOCK 12

REV:

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DATED: 30-JUNE-2008

[LARC_12]

SHEET: 23 OF 33

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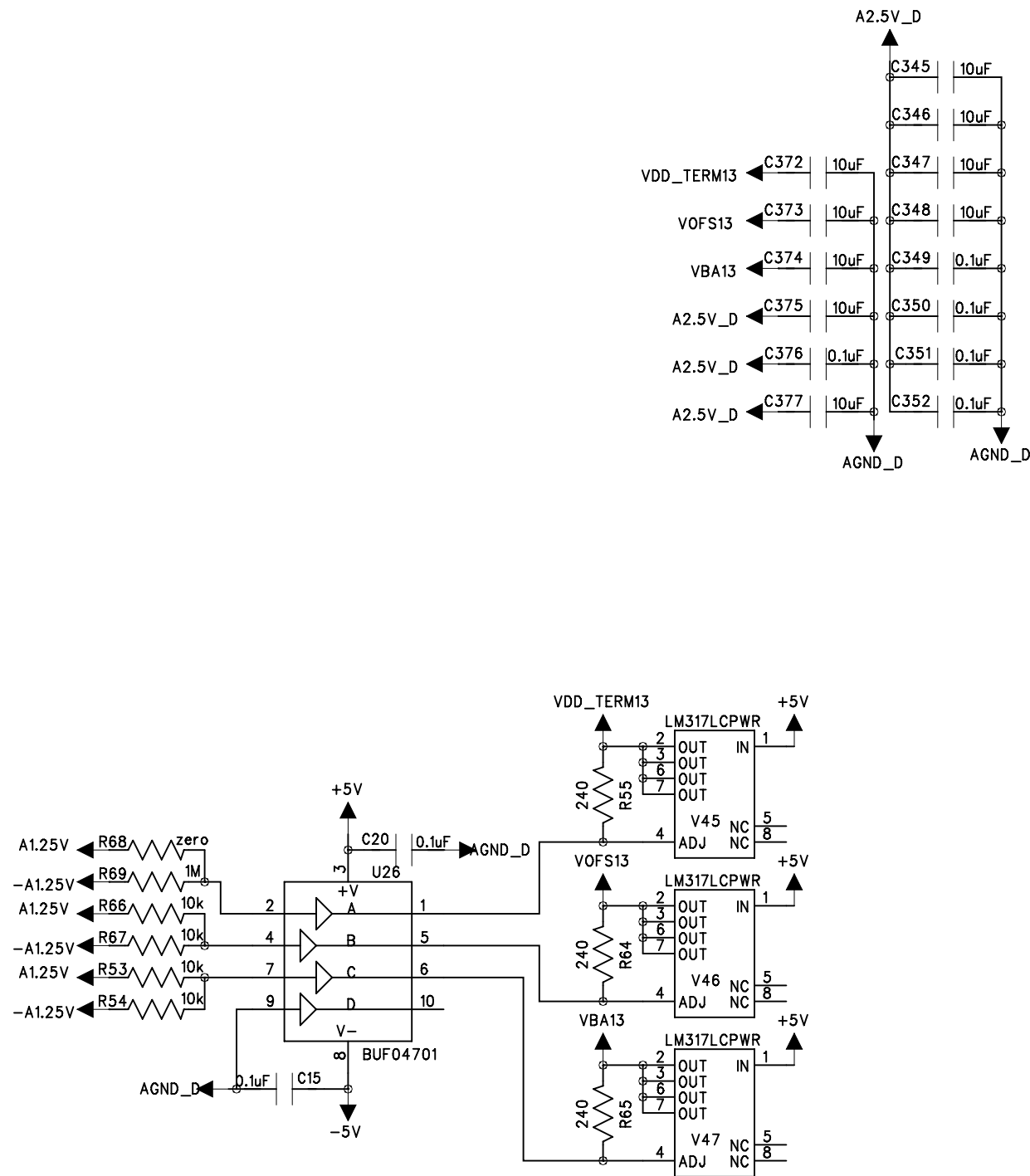
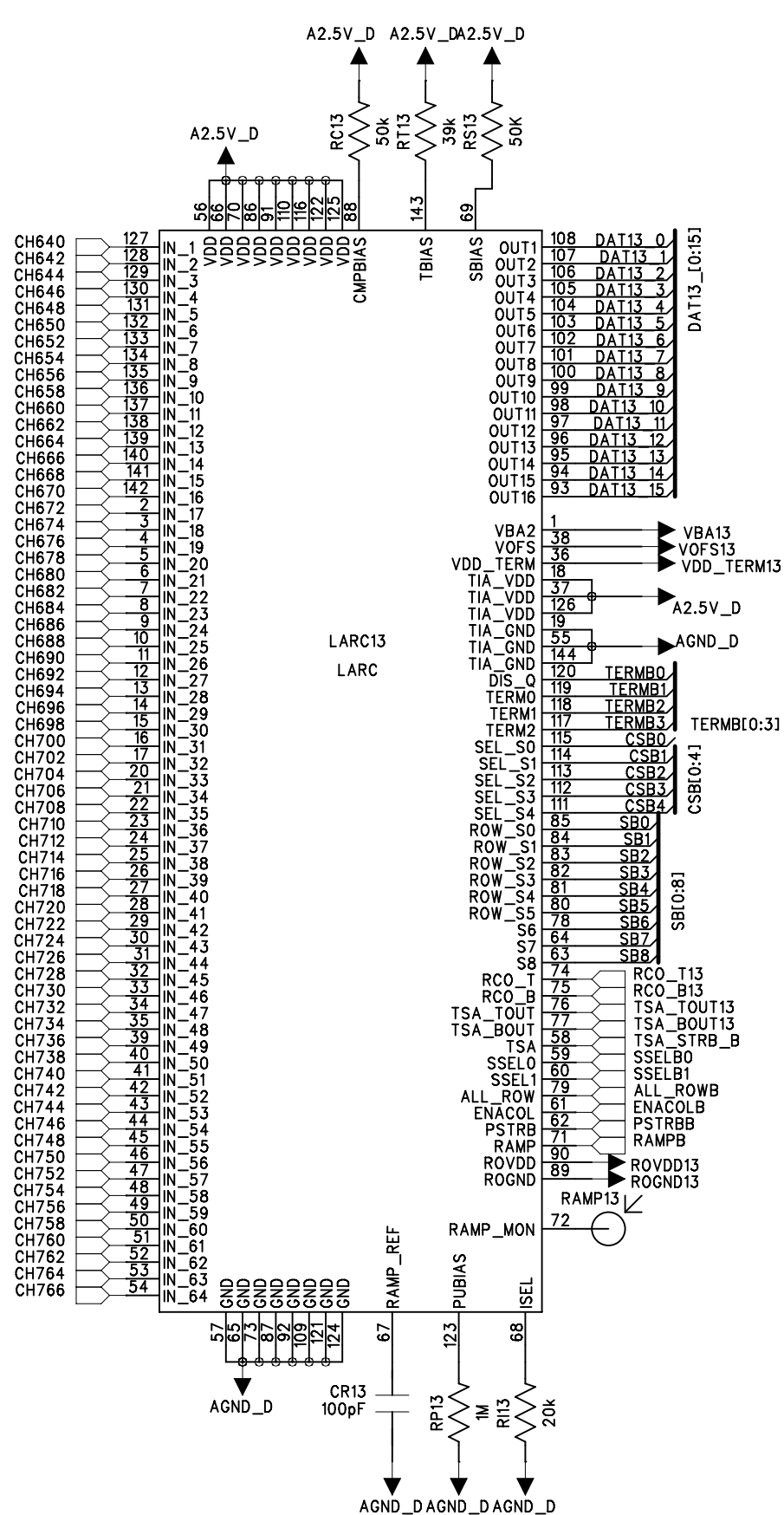
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Univ. of Hawai'i -- Instr. Dev. Lab.

TITLE: LARC_USB



Design:

LLR

Page Description:

LARC BLOCK 13

REV:

B

DATED: 30-JUNE-2008

[LARC_13]

SHEET: 24 OF 33

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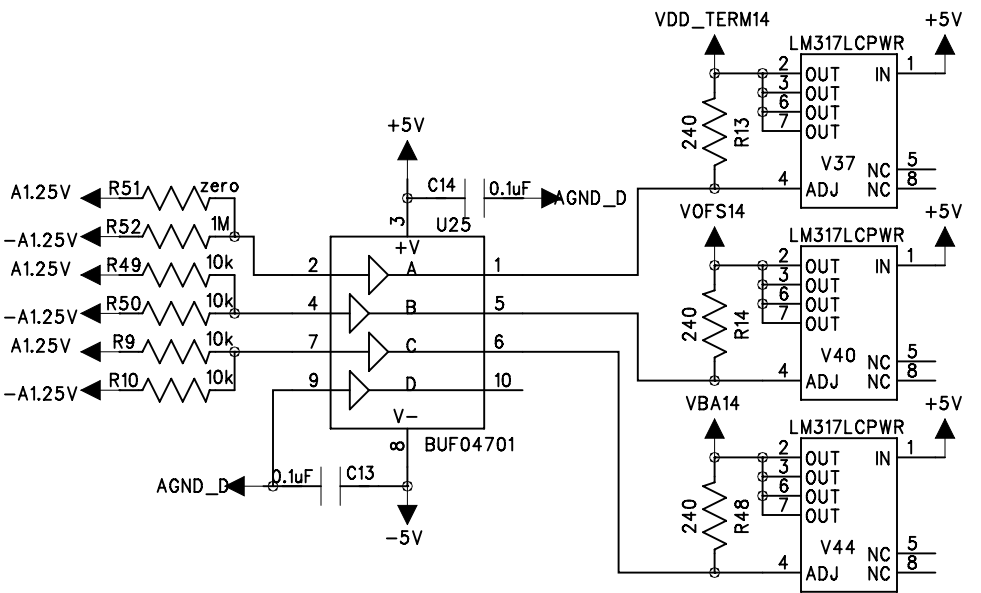
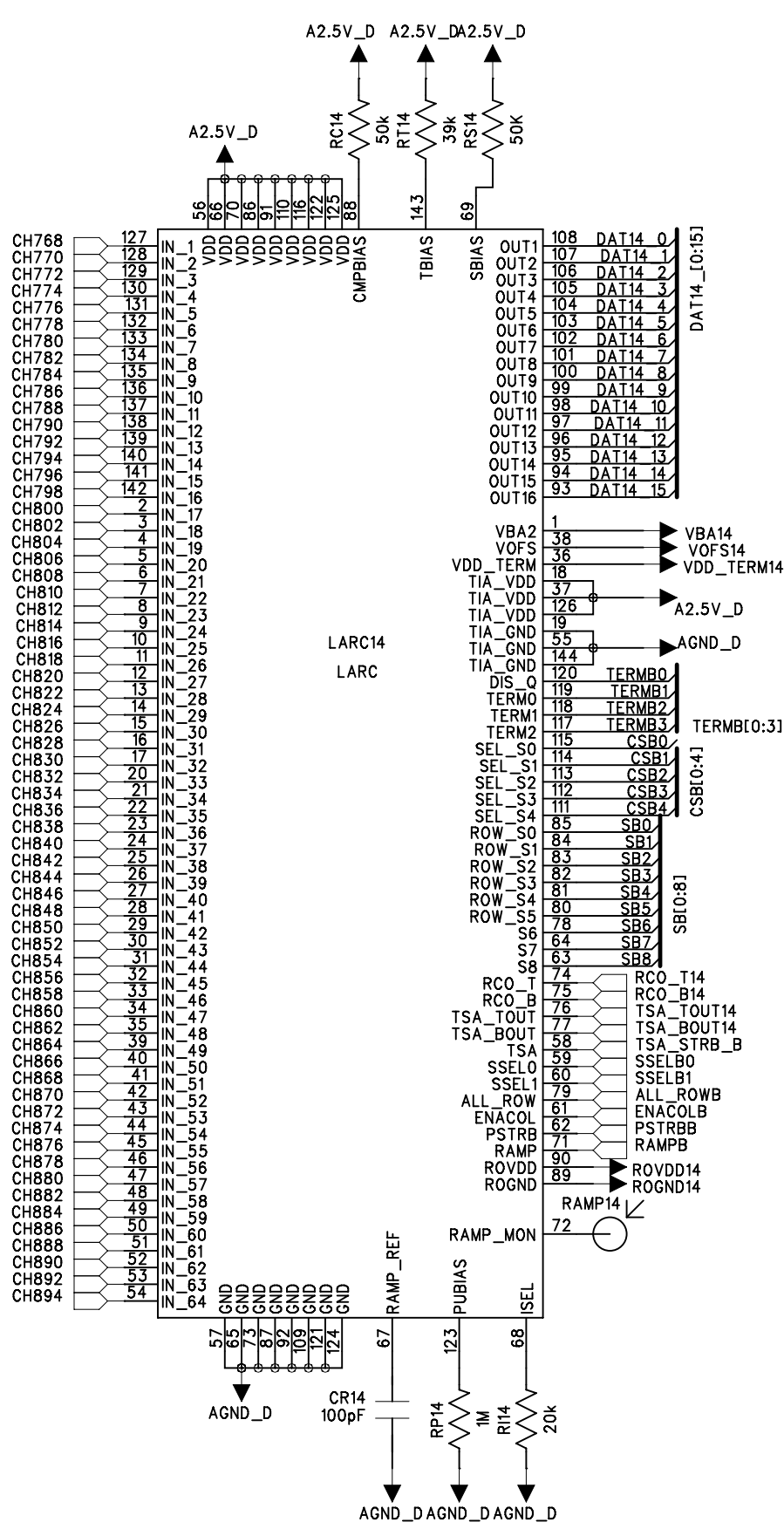
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Univ. of Hawai'i -- Instr. Dev. Lab.
TITLE: LARC_USB

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DATED: 30-JUNE-2008 [LARC_14]		SHEET: 25 OF 33		

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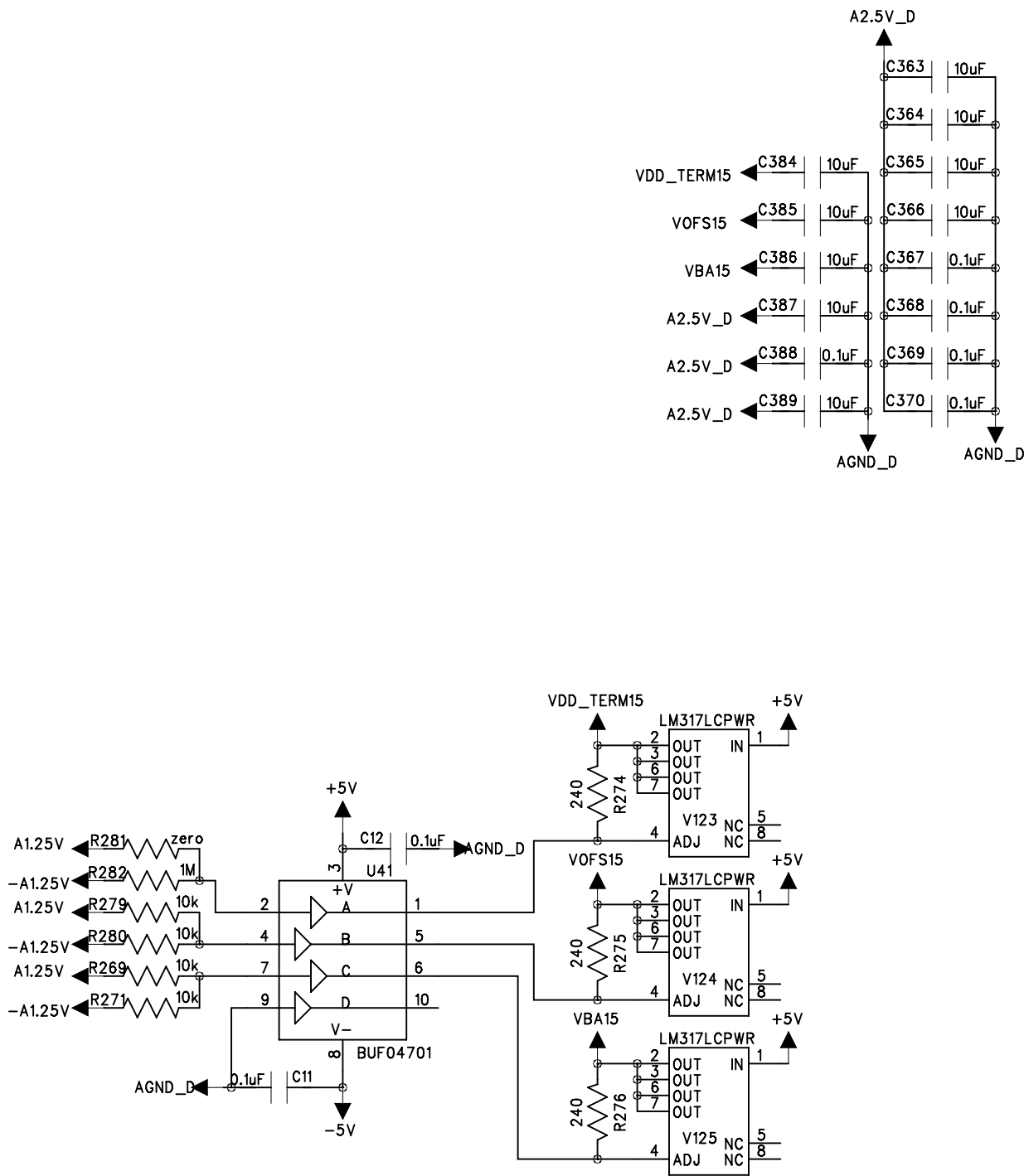
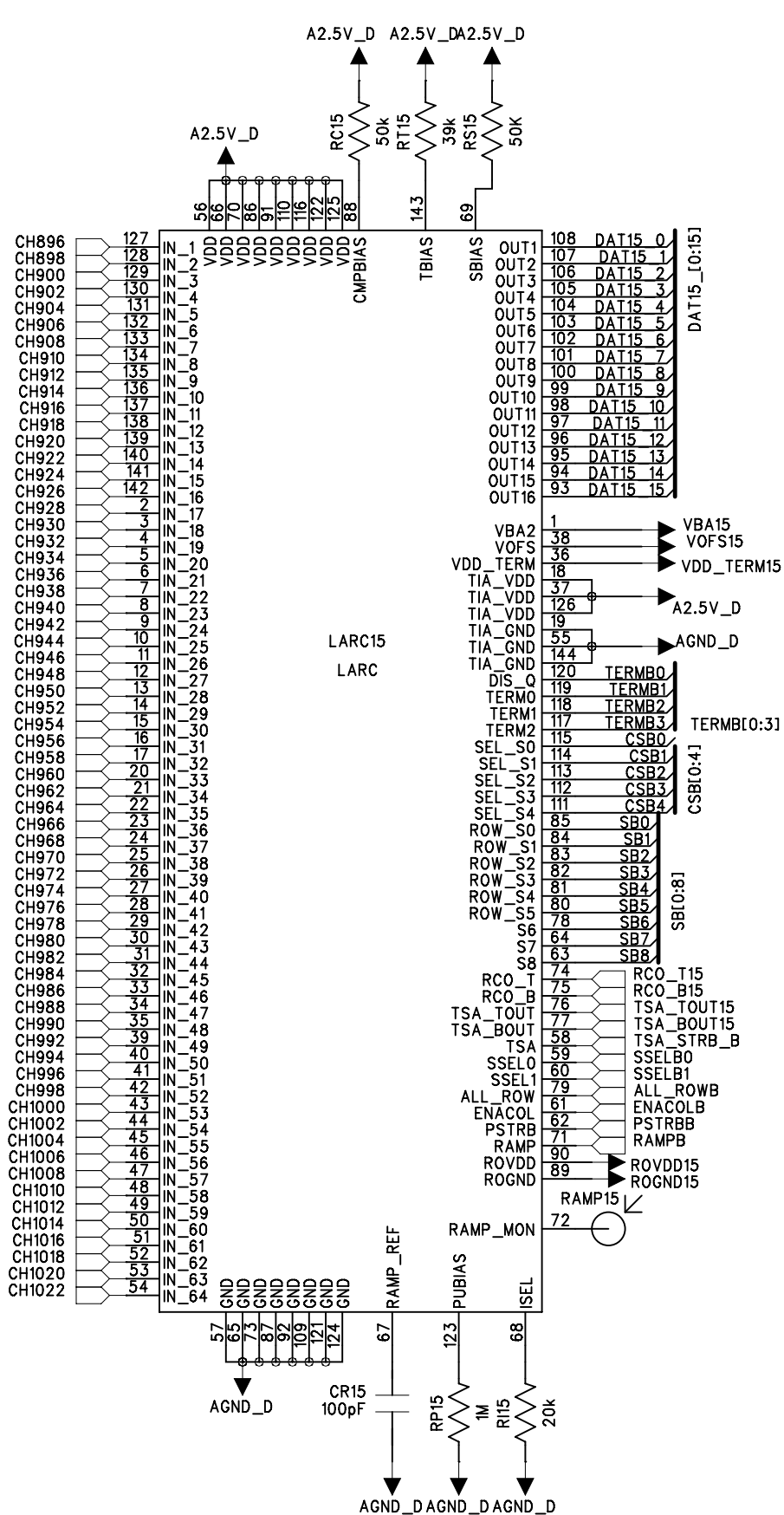
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TITLE: LARC_USB



Design:

LLR

Page Description:

LARC BLOCK 15

REV:

B

DATED: 30-JUNE-2008

[LARC_15]

SHEET: 26 OF 33

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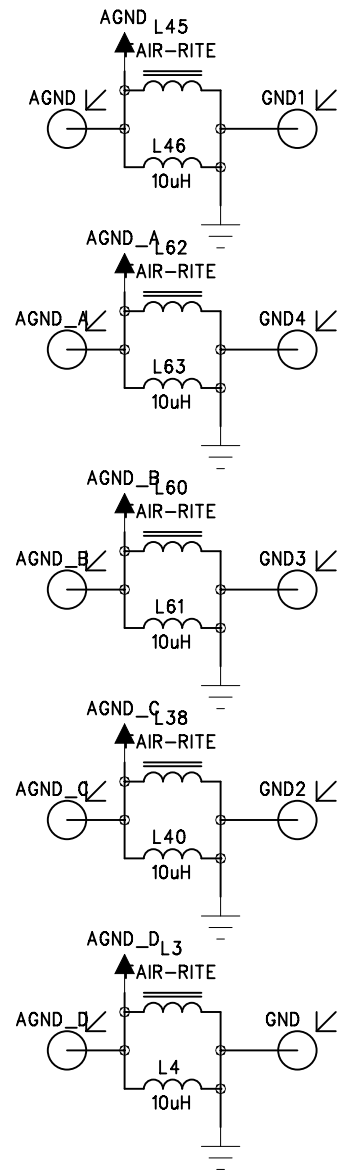
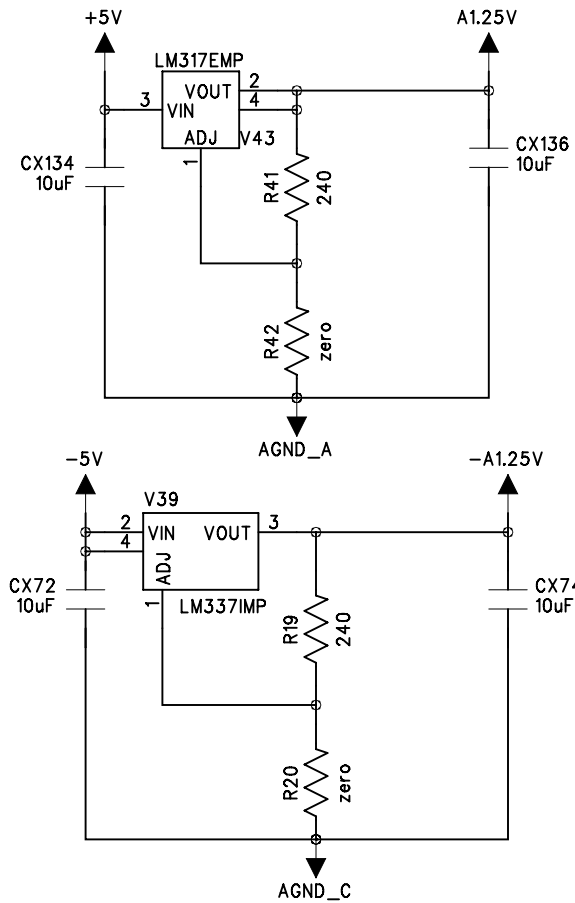
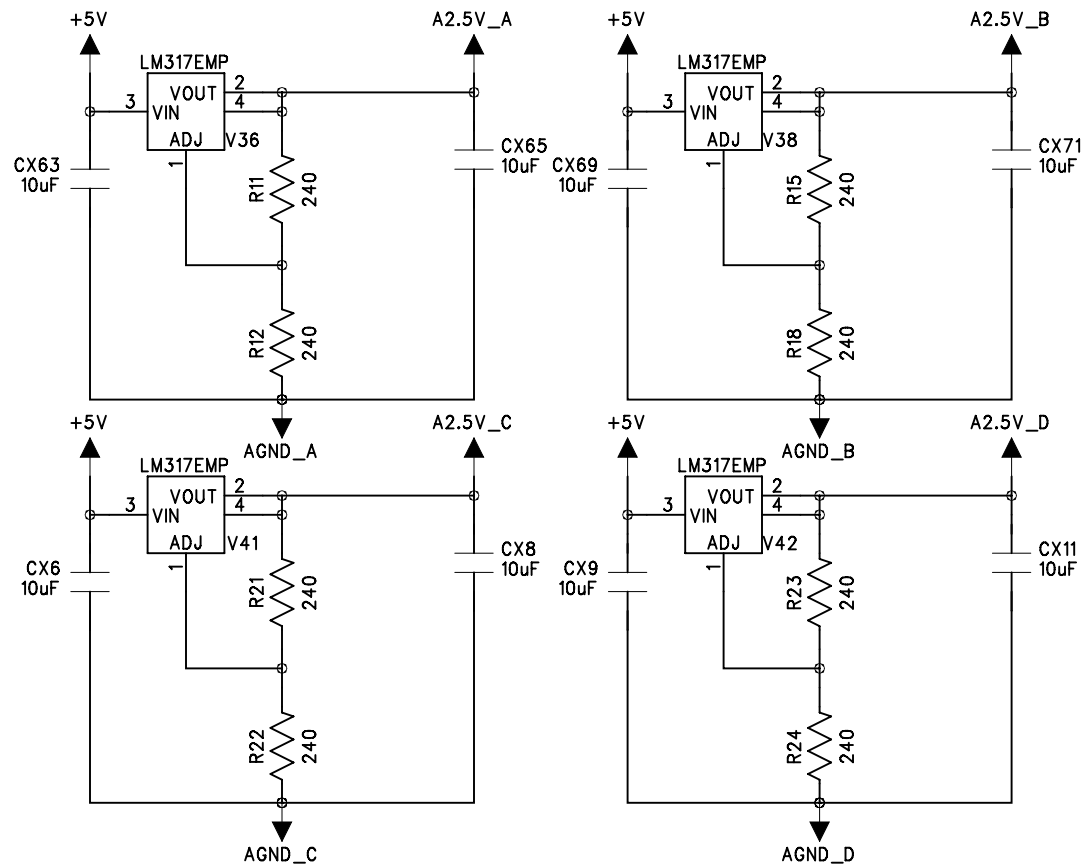
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Univ. of Hawai'i -- Instr. Dev. Lab.

TITLE: LARC_USB



Design:

LLR

Page Description:

Analog Power Block

REV:

B

DATED: 30-JUNE-2008 [A PWR]

SHEET: 27 OF 33

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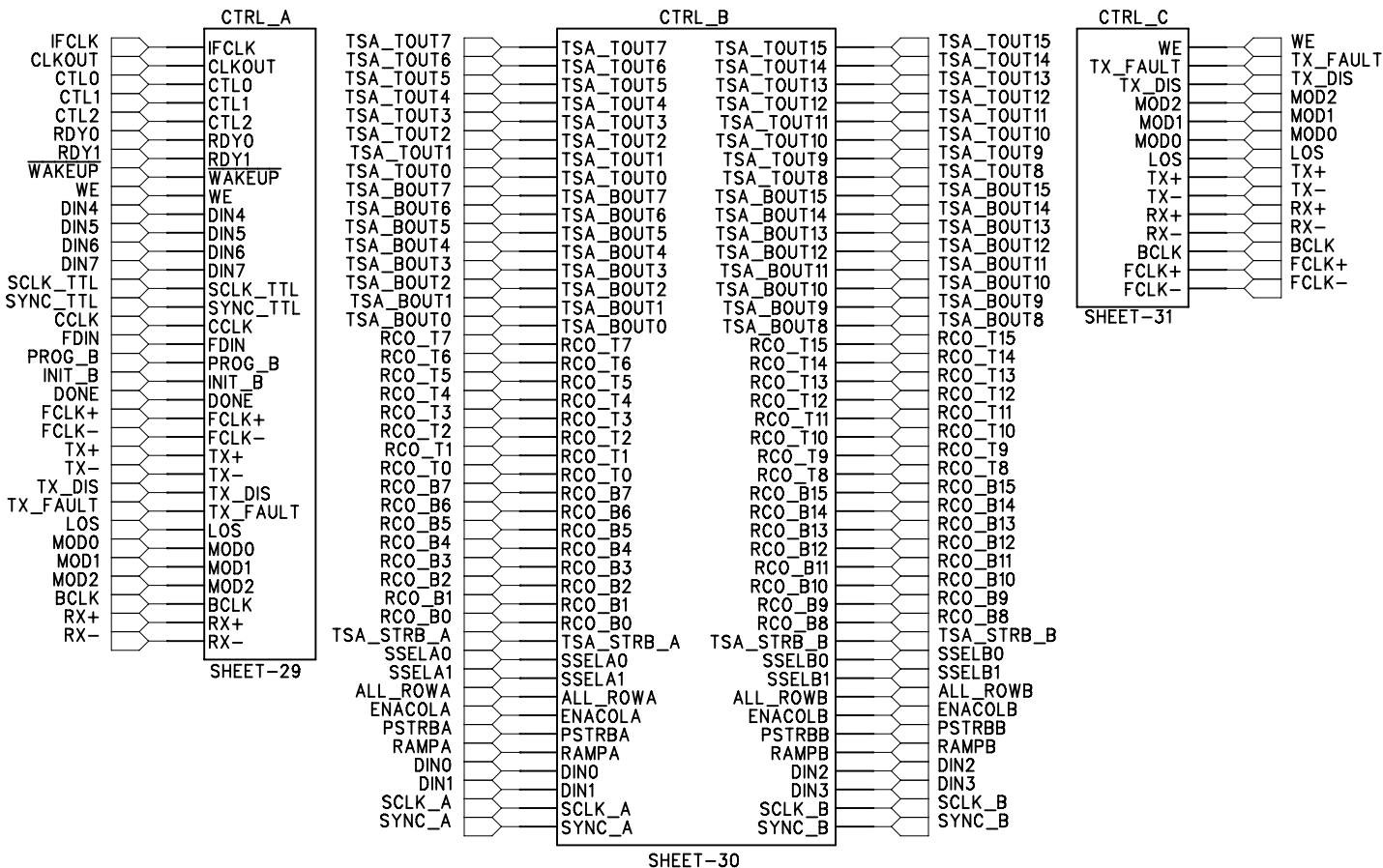
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Univ. of Hawai'i -- Instr. Dev. Lab.

TITLE: LARC_USB



Design:

LLR

Page Description:

Control Top Block

REV:

B

DATED: 15-JAN-2008 [CTRL_TOP]

SHEET: 28 OF 33

6

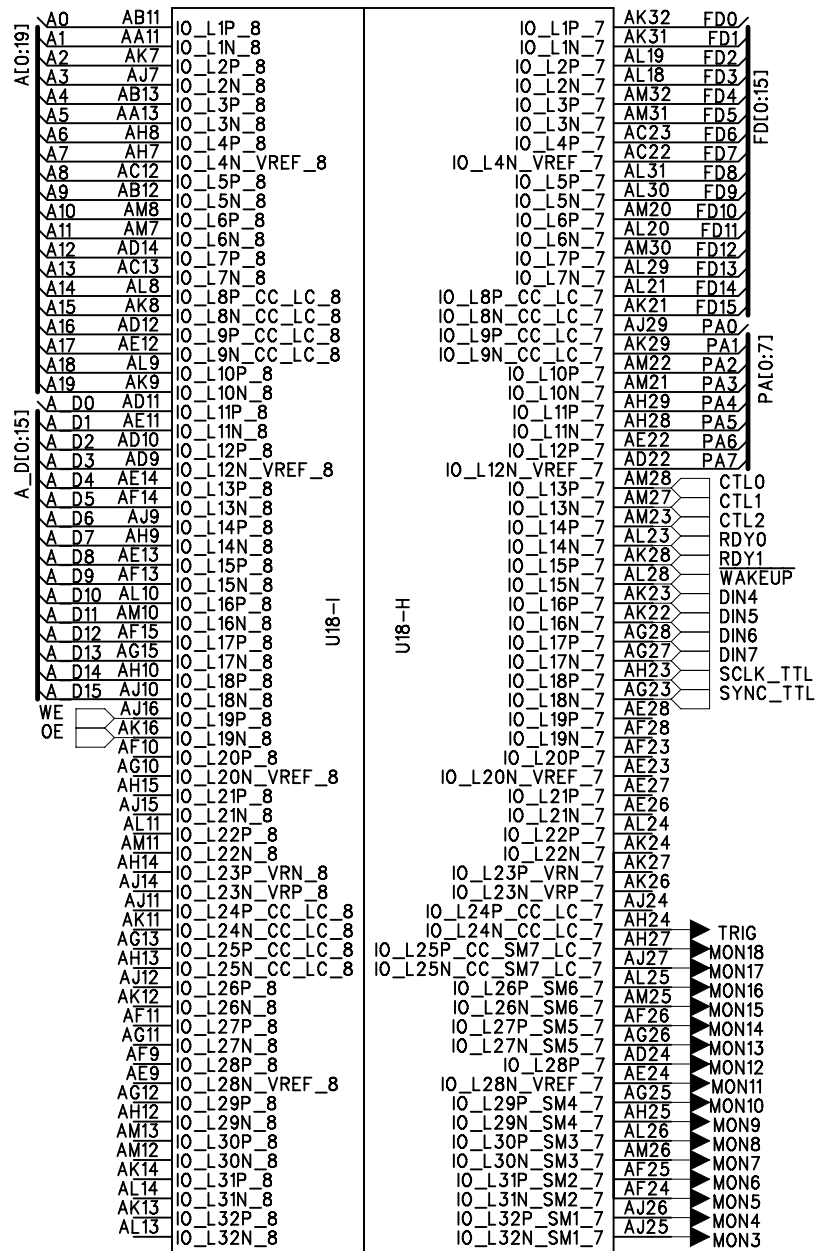
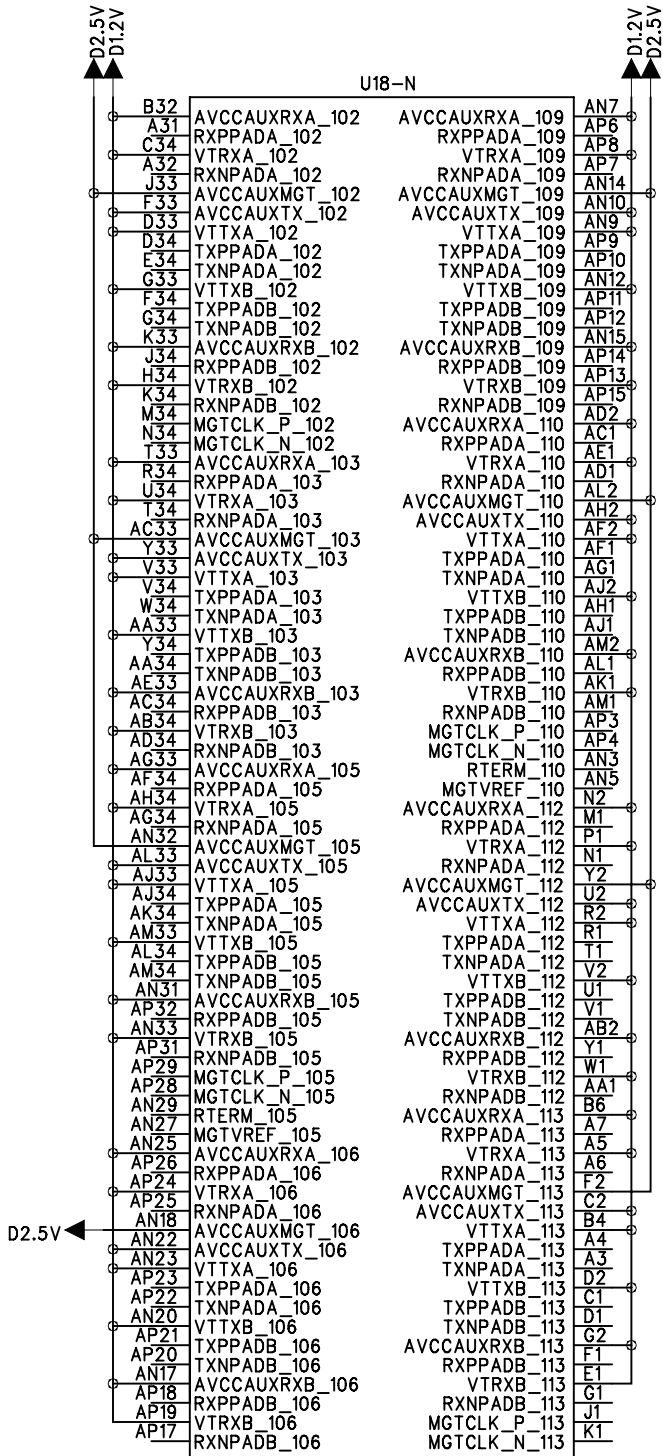
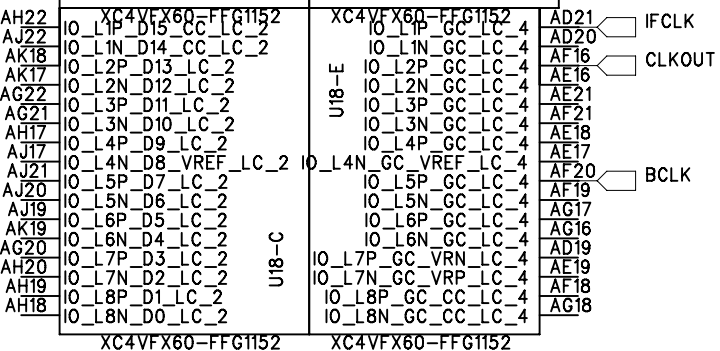
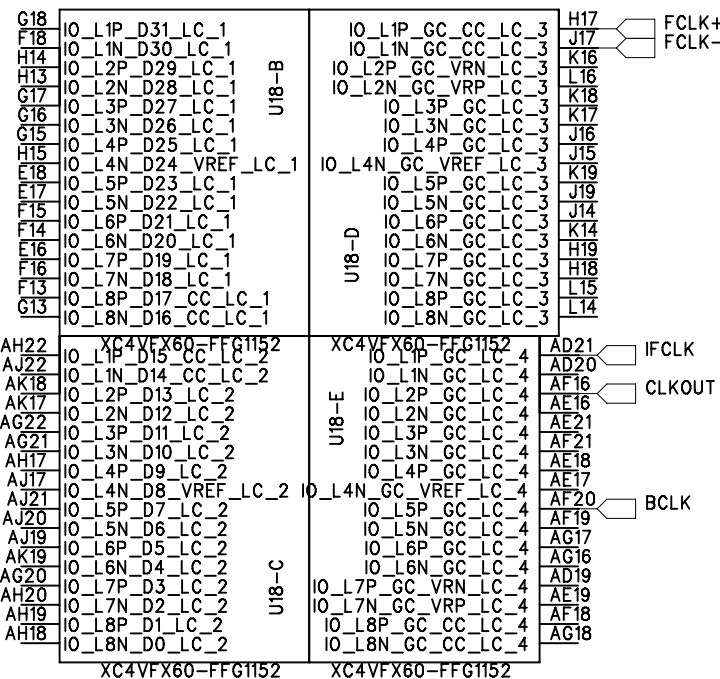
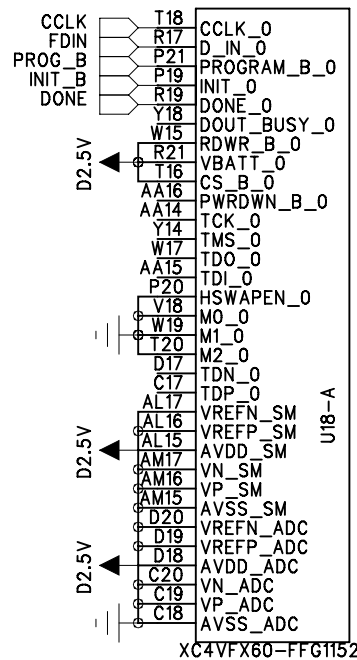
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Univ. of Hawai'i -- Instr. Dev. Lab.

TITLE: LARC_USB



Design:

LLR

Page Description:

Control Block A

REV:

B

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[CTRL A]

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DAT15 [0:15]	DAT15_0G10	IO_L1P_6	IO_L1P_10	L9 DAT11_0	DAT7_0 H24	IO_L1P_ADC7_5	IO_L1P_9	E31 DAT3_0	DAT15 [0:15]
DAT15_1H10	IO_L1N_6	IO_L1N_10	IO_L1N_10	L8 DAT11_1	DAT7_1 J24	IO_L1N_ADC7_5	IO_L1N_9	D31 DAT3_1	DAT15_1H10
DAT15_2D10	IO_L2P_6	IO_L2P_10	IO_L2P_10	H5 DAT11_2	DAT7_2 E23	IO_L2P_ADC6_5	IO_L2P_9	D29 DAT3_2	DAT15_2D10
DAT15_3C10	IO_L2N_6	IO_L2N_10	IO_L2N_10	H4 DAT11_3	DAT7_3 F23	IO_L2N_ADC6_5	IO_L2N_9	C29 DAT3_3	DAT15_3C10
DAT15_4F10	IO_L3P_6	IO_L3P_10	IO_L3P_10	L10 DAT11_4	DAT7_4 E24	IO_L3P_ADC5_5	IO_L3P_9	E32 DAT3_4	DAT15_4F10
DAT15_5F9	IO_L3N_6	IO_L3N_10	IO_L3N_10	M10 DAT11_5	DAT7_5 F24	IO_L3N_ADC5_5	IO_L3N_9	F31 DAT3_5	DAT15_5F9
DAT15_6H9	IO_L4P_6	IO_L4P_10	IO_L4P_10	M8 DAT11_6	DAT7_6 G23	IO_L4P_5	IO_L4P_9	H28 DAT3_6	DAT15_6H9
DAT15_7J9	IO_L4N_VREF_6	IO_L4N_VREF_10	IO_L4N_VREF_10	M7 DAT11_7	DAT7_7 H23	IO_L4N_VREF_5	IO_L4N_VREF_9	H27 DAT3_7	DAT15_7J9
DAT15_8F11	IO_L5P_6	IO_L5P_10	IO_L5P_10	F5 DAT11_8	DAT7_8 C24	IO_L5P_ADC4_5	IO_L5P_9	G30 DAT3_8	DAT15_8F11
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DAT15_10D9	IO_L6P_6	IO_L6P_10	IO_L6P_10	G3 DAT11_10	DAT7_10 C23	IO_L6P_ADC3_5	IO_L6P_9	D30 DAT3_10	DAT15_10D9
DAT15_11E9	IO_L6N_6	IO_L6N_10	IO_L6N_10	H3 DAT11_11	DAT7_11 C22	IO_L6N_ADC3_5	IO_L6N_9	C30 DAT3_11	DAT15_11E9
DAT15_12D12	IO_L7P_6	IO_L7P_10	IO_L7P_10	F4 DAT11_12	DAT7_12 J25	IO_L7P_ADC2_5	IO_L7P_9	G32 DAT3_12	DAT15_12D12
DAT15_13D11	IO_L7N_6	IO_L7N_10	IO_L7N_10	F3 DAT11_13	DAT7_13 H25	IO_L7N_ADC2_5	IO_L7N_9	G31 DAT3_13	DAT15_13D11
DAT15_14C9	IO_L8P_CC_LC_6	IO_L8P_CC_LC_10	IO_L8P_CC_LC_10	J5 DAT11_14	DAT7_14 G22	IO_L8P_CC_ADC1_LC_5	IO_L8P_CC_LC_9	F29 DAT3_14	DAT15_14C9
DAT15_15C8	IO_L8N_CC_LC_6	IO_L8N_CC_LC_10	IO_L8N_CC_LC_10	J4 DAT11_15	DAT7_15 H22	IO_L8N_CC_ADC1_LC_5	IO_L8N_CC_LC_9	E29 DAT3_15	DAT15_15C8
DAT14_0J12	IO_L17P_6	IO_L17P_10	IO_L17P_10	J6 DAT10_0	DAT6_0 K26	IO_L17P_5	IO_L17P_9	K29 DAT2_0	DAT14_0J12
DAT14_1H12	IO_L17N_6	IO_L17N_10	IO_L17N_10	K6 DAT10_1	DAT6_1 J26	IO_L17N_5	IO_L17N_9	J29 DAT2_1	DAT14_1H12
DAT14_2E7	IO_L18P_6	IO_L18P_10	IO_L18P_10	K4 DAT10_2	DAT6_2 D21	IO_L18P_5	IO_L18P_9	D32 DAT2_2	DAT14_2E7
DAT14_3E6	IO_L18N_6	IO_L18N_10	IO_L18N_10	K3 DAT10_3	DAT6_3 E21	IO_L18N_5	IO_L18N_9	C32 DAT2_3	DAT14_3E6
DAT14_4E13	IO_L19P_6	IO_L19P_10	IO_L19P_10	N10 DAT10_4	DAT6_4 E27	IO_L19P_5	IO_L19P_9	J31 DAT2_4	DAT14_4E13
DAT14_5E12	IO_L19N_6	IO_L19N_10	IO_L19N_10	N9 DAT10_5	DAT6_5 D27	IO_L19N_5	IO_L19N_9	J30 DAT2_5	DAT14_5E12
DAT14_6K9	IO_L20P_6	IO_L20P_10	IO_L20P_10	N8 DAT10_6	DAT6_6 K23	IO_L20P_5	IO_L20P_9	K28 DAT2_6	DAT14_6K9
DAT14_7K8	IO_L20N_VREF_6	IO_L20N_VREF_10	IO_L20N_VREF_10	N7 DAT10_7	DAT6_7 L23	IO_L20N_VREF_5	IO_L20N_VREF_9	J27 DAT2_7	DAT14_7K8
DAT14_8E14	IO_L21P_6	IO_L21P_10	IO_L21P_10	L6 DAT10_8	DAT6_8 C28	IO_L21P_5	IO_L21P_9	L29 DAT2_8	DAT14_8E14
DAT14_9D14	IO_L21N_6	IO_L21N_10	IO_L21N_10	L5 DAT10_9	DAT6_9 C27	IO_L21N_5	IO_L21N_9	L28 DAT2_9	DAT14_9D14
DAT14_10C7	IO_L22P_6	IO_L22P_10	IO_L22P_10	L4 DAT10_10	DAT6_10 H20	IO_L22P_5	IO_L22P_9	H30 DAT2_10	DAT14_10C7
DAT14_11D7	IO_L22N_6	IO_L22N_10	IO_L22N_10	L3 DAT10_11	DAT6_11 J20	IO_L22N_5	IO_L22N_9	H29 DAT2_11	DAT14_11D7
DAT14_12C5	IO_L23P_VRN_6	IO_L23P_VRN_10	IO_L23P_VRN_10	M6 DAT10_12	DAT6_12 G28	IO_L23P_VRN_5	IO_L23P_VRN_9	K32 DAT2_12	DAT14_12C5
DAT14_13C14	IO_L23N_VRP_6	IO_L23N_VRP_10	IO_L23N_VRP_10	M5 DAT10_13	DAT6_13 G27	IO_L23N_VRP_5	IO_L23N_VRP_9	K31 DAT2_13	DAT14_13C14
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DAT13_1C12	IO_L9N_CC_LC_6	IO_L9N_CC_LC_10	IO_L9N_CC_LC_10	N4 DAT9_1	DAT5_1 F25	IO_L9N_CC_LC_5	IO_L9N_CC_LC_9	L30 DAT1_1	DAT13_1C12
DAT13_2E8	IO_L10P_6	IO_L10P_10	IO_L10P_10	P5 DAT9_2	DAT5_2 D22	IO_L10P_5	IO_L10P_9	J32 DAT1_2	DAT13_2E8
DAT13_3F8	IO_L10N_6	IO_L10N_10	IO_L10N_10	P4 DAT9_3	DAT5_3 E22	IO_L10N_5	IO_L10N_9	H32 DAT1_3	DAT13_3F8
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DAT13_7H8	IO_L12N_VREF_6	IO_L12N_VREF_10	IO_L12N_VREF_10	R3 DAT9_7	DAT5_7 K22	IO_L12N_VREF_5	IO_L12N_VREF_9	M28 DAT1_7	DAT13_7H8
DAT13_8G12	IO_L13P_6	IO_L13P_10	IO_L13P_10	T5 DAT9_8	DAT5_8 G26	IO_L13P_5	IO_L13P_9	N30 DAT1_8	DAT13_8G12
DAT13_9G11	IO_L13N_6	IO_L13N_10	IO_L13N_10	T4 DAT9_9	DAT5_9 F26	IO_L13N_5	IO_L13N_9	M30 DAT1_9	DAT13_9G11
DAT13_10J7	IO_L14P_6	IO_L14P_10	IO_L14P_10	P7 DAT9_10	DAT5_10 J21	IO_L14P_5	IO_L14P_9	M32 DAT1_10	DAT13_10J7
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DAT13_14C7	IO_L16P_6	IO_L16P_10	IO_L16P_10	T6 DAT9_14	DAT5_14 F21	IO_L16P_5	IO_L16P_9	P27 DAT1_14	DAT13_14C7
DAT13_15H7	IO_L16N_6	IO_L16N_10	IO_L16N_10	R6 DAT9_15	DAT5_15 G21	IO_L16N_5	IO_L16N_9	P26 DAT1_15	DAT13_15H7
DAT12_0D16	IO_L25P_CC_LC_6	IO_L25P_CC_LC_10	IO_L25P_CC_LC_10	V5 DAT8_0	DAT4_0 F28	IO_L25P_CC_LC_5	IO_L25P_CC_LC_9	P32 DAT0_0	DAT12_0D16
DAT12_1D15	IO_L25N_CC_LC_6	IO_L25N_CC_LC_10	IO_L25N_CC_LC_10	U5 DAT8_1	DAT4_1 E28	IO_L25N_CC_LC_5	IO_L25N_CC_LC_9	N32 DAT0_1	DAT12_1D15
DAT12_2D6	IO_L26P_6	IO_L26P_10	IO_L26P_10	U3 DAT8_2	DAT4_2 E19	IO_L26P_5	IO_L26P_9	R32 DAT0_2	DAT12_2D6
DAT12_3C5	IO_L26N_6	IO_L26N_10	IO_L26N_10	T3 DAT8_3	DAT4_3 F19	IO_L26N_5	IO_L26N_9	R31 DAT0_3	DAT12_3C5
DAT12_4K13	IO_L27P_6	IO_L27P_10	IO_L27P_10	U8 DAT8_4	DAT4_4 K24	IO_L27P_5	IO_L27P_9	R29 DAT0_4	DAT12_4K13
DAT12_5K12	IO_L27N_6	IO_L27N_10	IO_L27N_10	T8 DAT8_5	DAT4_5 L24	IO_L27N_5	IO_L27N_9	P29 DAT0_5	DAT12_5K12
DAT12_6D5	IO_L28P_6	IO_L28P_10	IO_L28P_10	R8 DAT8_6	DAT4_6 L21	IO_L28P_5	IO_L28P_9	R28 DAT0_6	DAT12_6D5
DAT12_7D4	IO_L28N_VREF_6	IO_L28N_VREF_10	IO_L28N_VREF_10	R7 DAT8_7	DAT4_7 M22	IO_L28N_VREF_5	IO_L28N_VREF_9	R27 DAT0_7	DAT12_7D4
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DAT12_9L13	IO_L29N_6	IO_L29N_10	IO_L29N_10	R9 DAT8_9	DAT4_9 L25	IO_L29N_5	IO_L29N_9	T30 DAT0_9	DAT12_9L13
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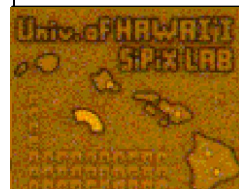
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RCO_T10	AA4	IO_L3N_12	U30	RCO_T2
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RCO_B14	Y7	IO_L5N_12	V32	RCO_B6
RCO_B13	Y4	IO_L6P_12	W26	RCO_B5
RCO_B12	Y3	IO_L6N_12	Y26	RCO_B4
RCO_B11	AC5	IO_L7P_12	Y29	RCO_B3
RCO_B10	AB5	IO_L7N_12	W29	RCO_B2
RCO_B9	AB3	IO_L8P_CC_LC_12	W27	RCO_B1
RCO_B8	AA3	IO_L8N_CC_LC_12	V27	RCO_B0
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TSA_TOUT14	AB6	IO_L9N_CC_LC_12	W30	TSA_TOUT6
TSA_TOUT13	AA6	IO_L10P_12	Y32	TSA_TOUT5
TSA_TOUT12	Y6	IO_L10N_12	Y31	TSA_TOUT4
TSA_TOUT11	AG3	IO_L11P_12	Y28	TSA_TOUT3
TSA_TOUT10	AF3	IO_L11N_12	Y27	TSA_TOUT2
TSA_TOUT9	W9	IO_L12P_12	Y24	TSA_TOUT1
TSA_TOUT8	Y9	IO_L12N_VREF_12	AA24	TSA_TOUT0
TSA_BOUT15	AA9	IO_L13P_12	AA31	TSA_BOUT7
TSA_BOUT14	AA8	IO_L13N_12	AA30	TSA_BOUT6
TSA_BOUT13	AC4	IO_L14P_12	AB32	TSA_BOUT5
TSA_BOUT12	AC3	IO_L14N_12	AC32	TSA_BOUT4
TSA_BOUT11	AF6	IO_L15P_12	AA29	TSA_BOUT3
TSA_BOUT10	AE6	IO_L15N_12	AA28	TSA_BOUT2
TSA_BOUT9	AD5	IO_L16P_12	AB31	TSA_BOUT1
TSA_BOUT8	AD4	IO_L16N_12	AB30	TSA_BOUT0
TSA_STRB_B	AK4	IO_L17P_12	AA26	TSA_STRB_A
SSELB0	AK3	IO_L17N_12	AA25	SSELA0
SSELB1	AE4	IO_L18P_12	AC30	SSELA1
ALL_ROWB	AE3	IO_L18N_12	AC29	ALL_ROW_A
ENACOLB	AM5	IO_L19P_12	AB28	ENACOLA
PSTRBB	AL5	IO_L19N_12	AB27	PSTRBA
RAMPB	AC7	IO_L20P_12	AB26	RAMPA
DIN2	AB8	IO_L20N_VREF_12	AB25	DINO
DIN3	AL4	IO_L21P_12	AD32	DIN1
SCLK_B	AK4	IO_L21N_12	AD31	SCLK_A
SYNC_B	AF5	IO_L22P_12	AD30	SYNC_A
SB10-81	AF4	IO_L22N_12	AD29	SA0
SB1	AF8	IO_L23P_VRN_12	AC28	SA1
SB2	AE7	IO_L23N_VRP_12	AC27	SA2
SB3	AH4	IO_L24P_CC_LC_12	AG32	SA3
SB4	AH3	IO_L24N_CC_LC_12	AH32	SA4
SB5	AK6	IO_L25P_CC_LC_12	AE32	SA5
SB6	AJ6	IO_L25N_CC_LC_12	AE31	SA6
SB7	AM3	IO_L26P_12	AD27	SA7
SB8	AL3	IO_L26N_12	AD26	SA8
CSB0-41	AG8	IO_L27P_12	AF31	CSA0
CSB1	AG7	IO_L27N_12	AF30	CSA1
CSB2	AD7	IO_L28P_12	AC25	CSA2
CSB3	AD6	IO_L28N_VREF_12	AD25	CSA3
CSB4	AM6	IO_L29P_12	AE29	CSA4
TERMB0	AL6	IO_L29N_12	AF29	TERMA0
TERMB1	AG6	IO_L30P_12	AJ32	TERMA1
TERMB2	AG5	IO_L30N_12	AJ31	TERMA2
TERMB3	AC10	IO_L31P_12	AG31	TERMA3
	AC9	IO_L31N_12	AG30	
	AJ5	IO_L32P_12	AH30	
	AH5	IO_L32N_12	AJ30	

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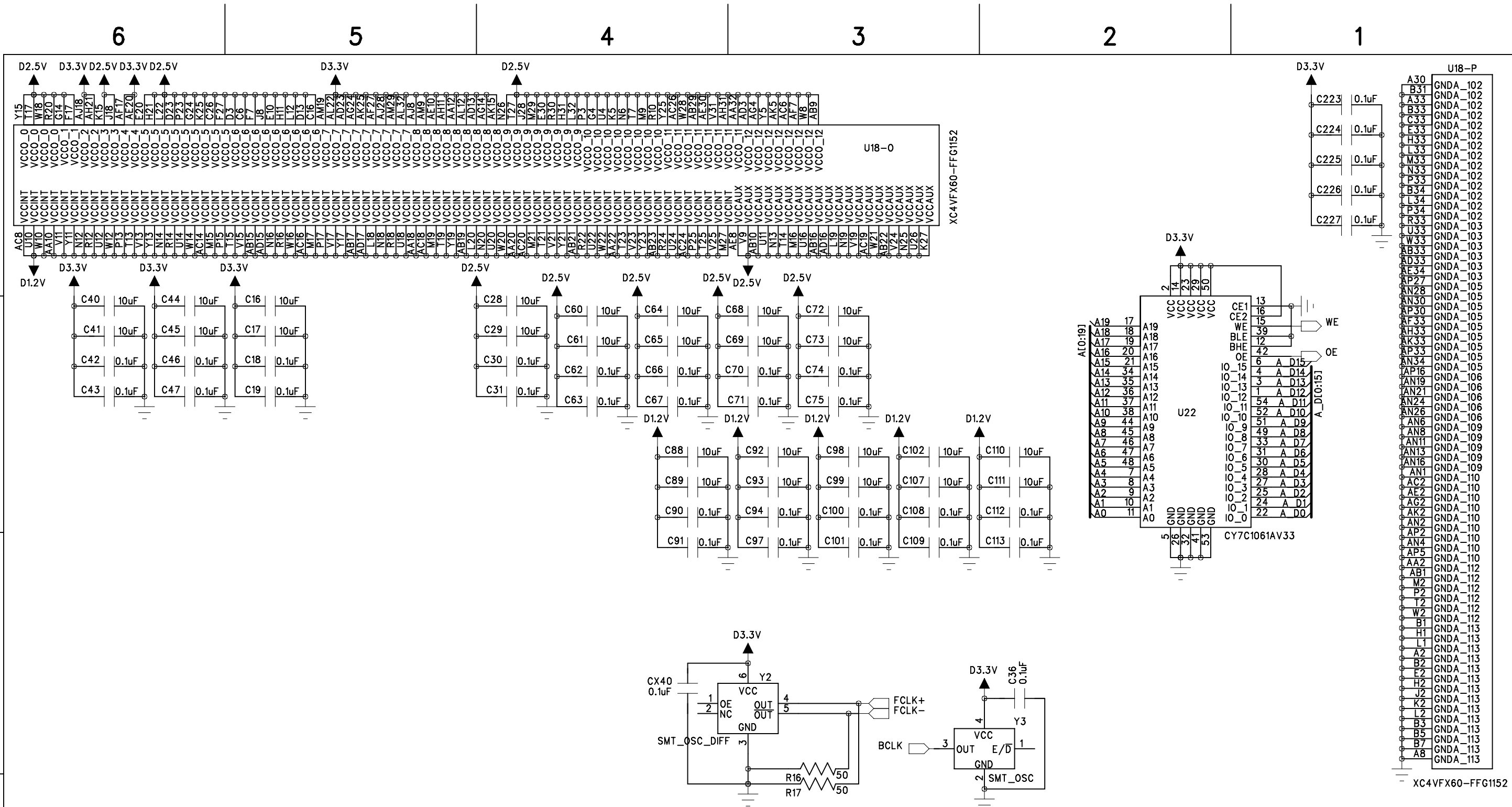
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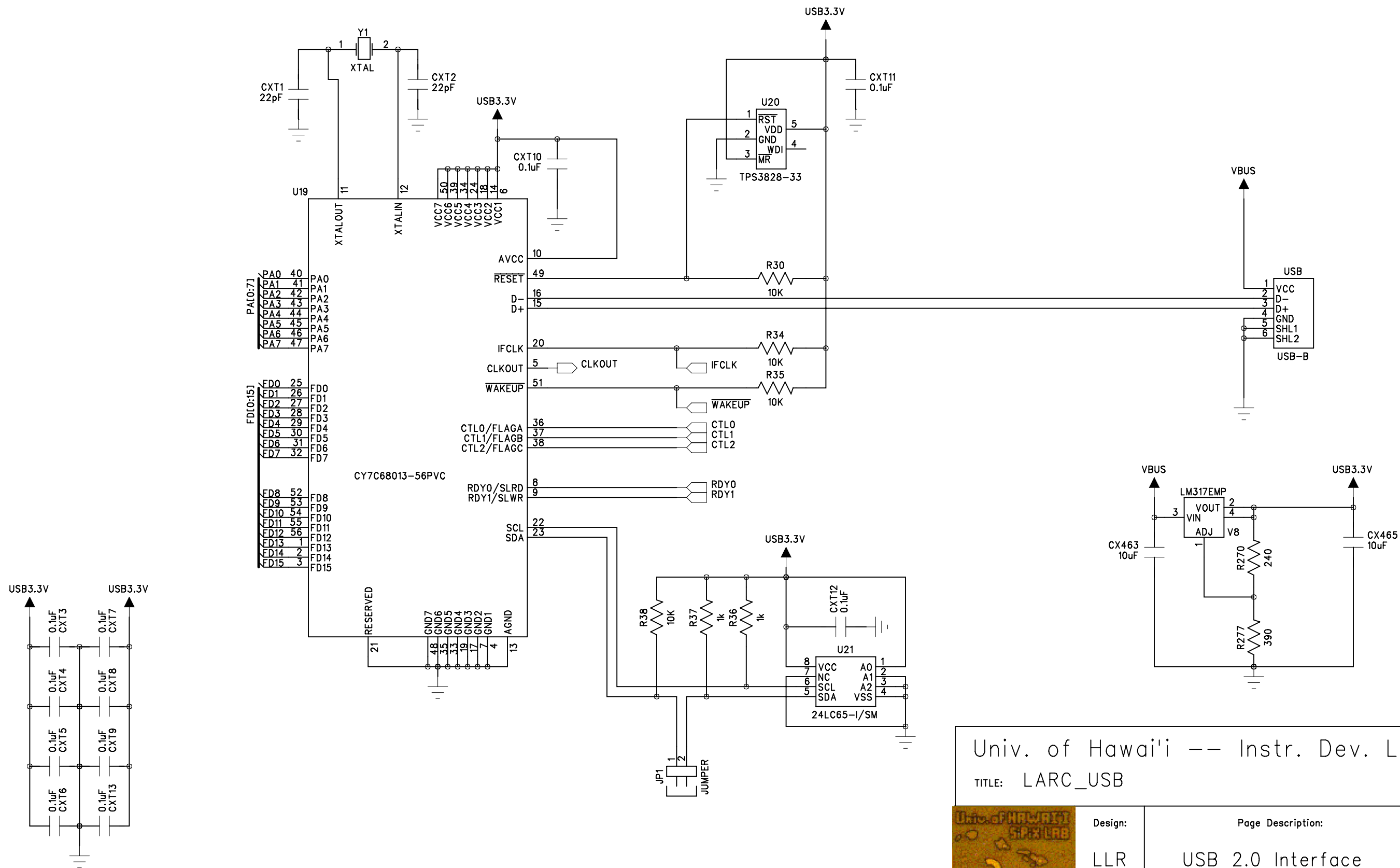
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