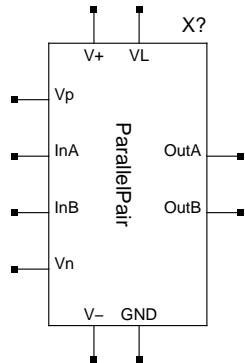


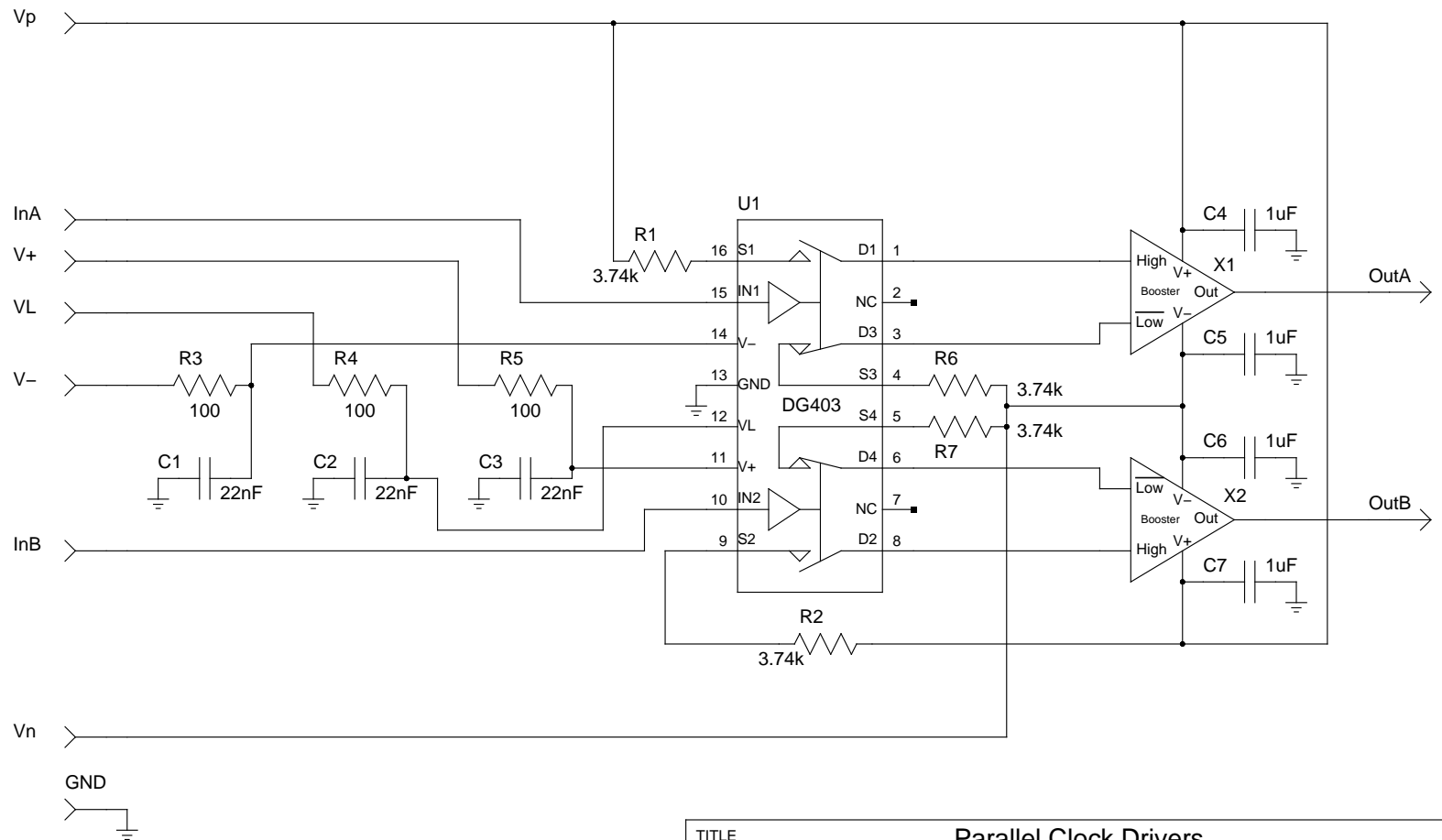
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.subckt ParallelPair %up



TITLE

Parallel Clock Drivers

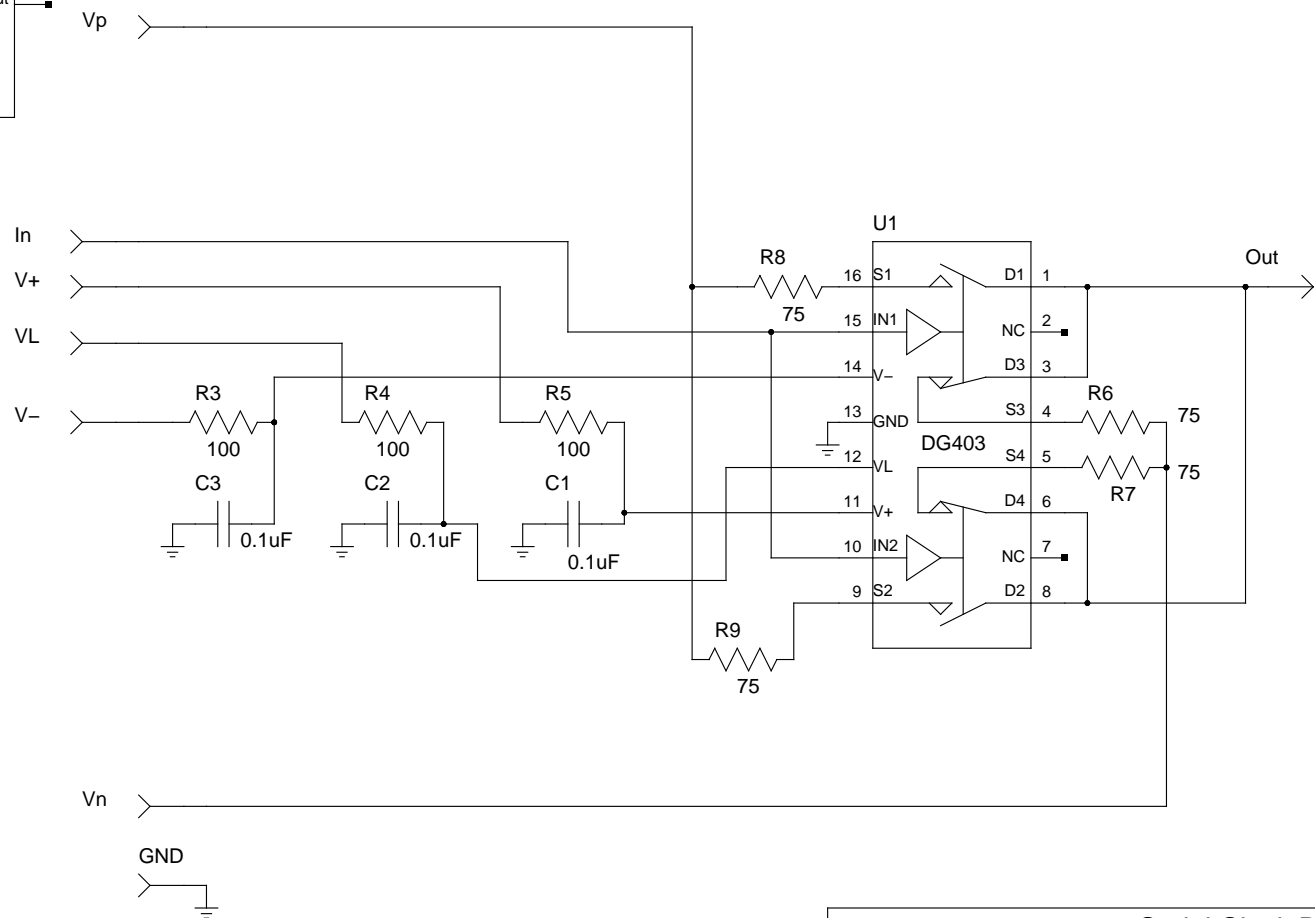
FILE: ParallelPair.sch

DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

PAGE 1 OF 1

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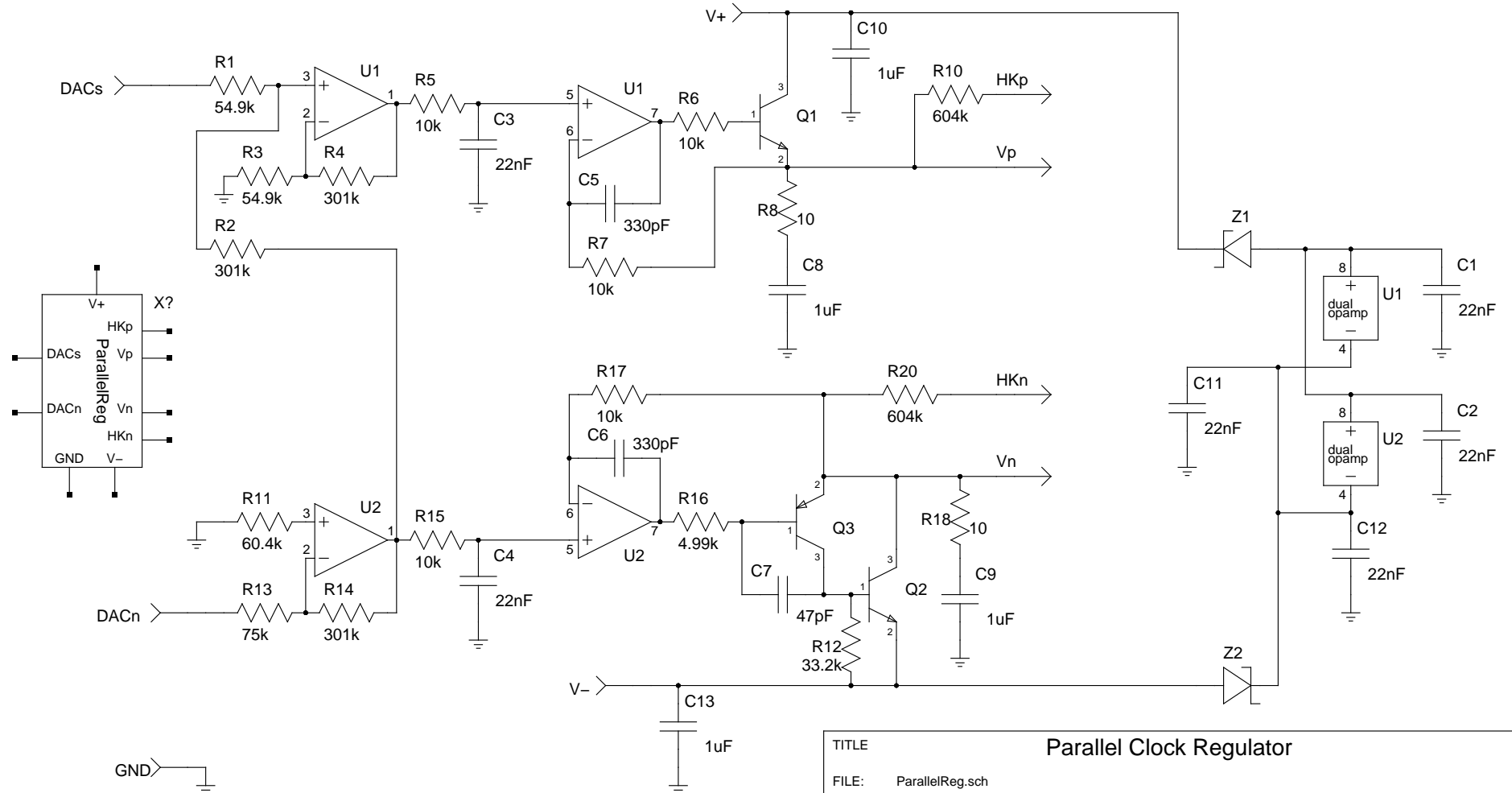
TITLE		Serial Clock Driver	
FILE:		SerialDriver.sch	
DATE	Tue Jun 23 08:22:27 2015	REVISION:	Interface-5.3
PAGE	1 OF 1	DRAWN BY:	jpd

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.subckt ParallelReg %up



TITLE

Parallel Clock Regulator

FILE: ParallelReg.sch

DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

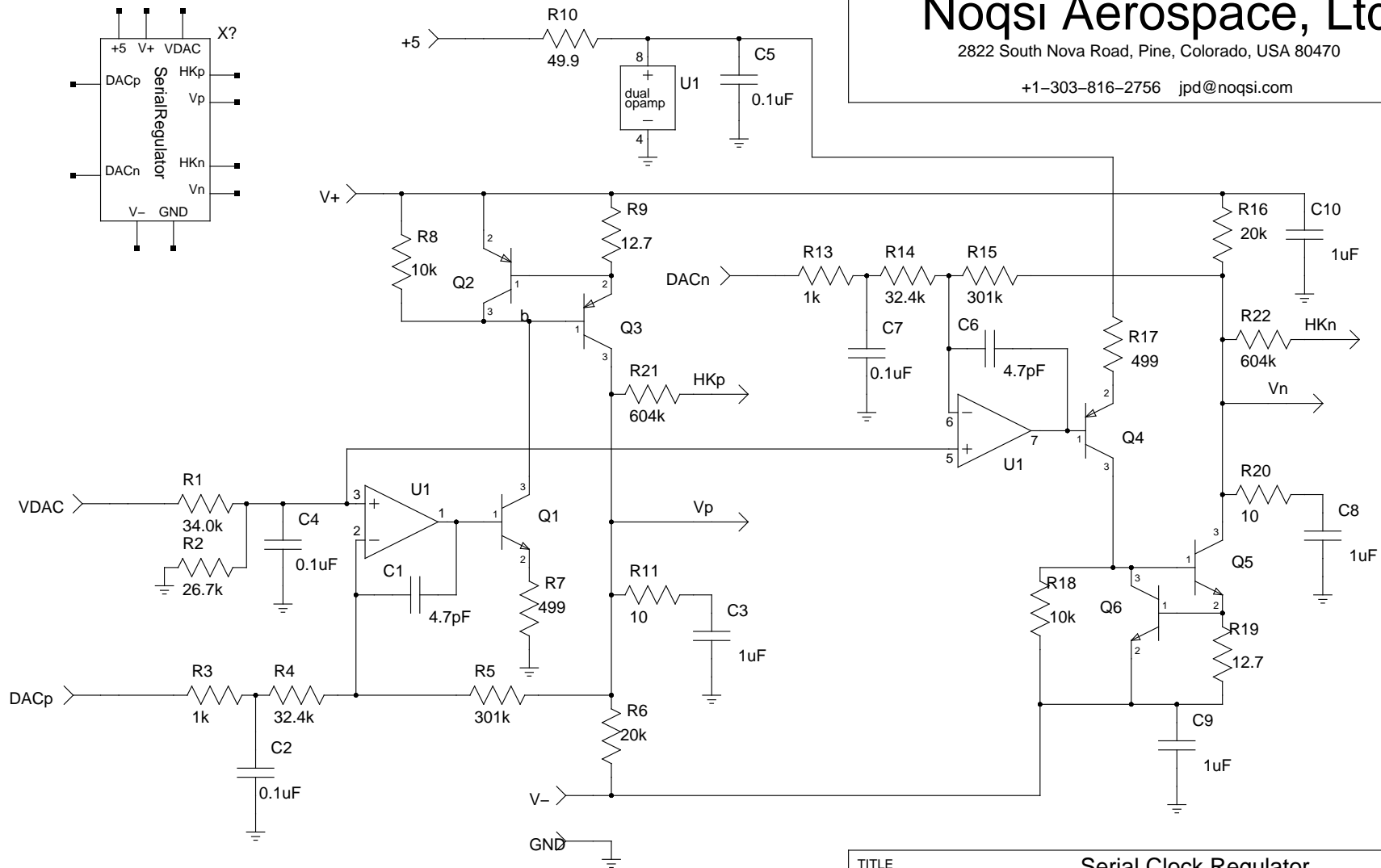
PAGE 1 OF 1

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TITLE

Serial Clock Regulator

FILE: SerialRegulator.sch

DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

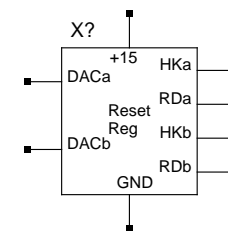
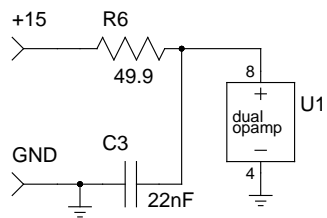
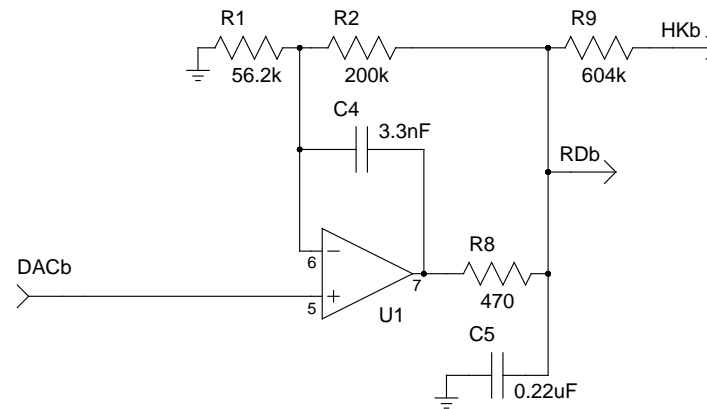
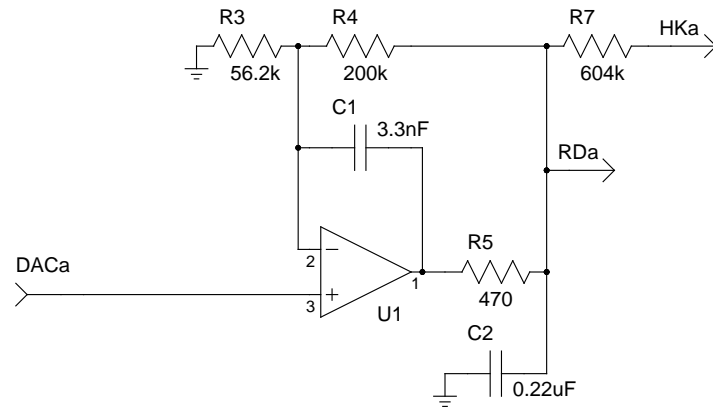
PAGE 1 OF 1

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TITLE

CCD Reset Drain Regulator

FILE: reset_regulator.sch

DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

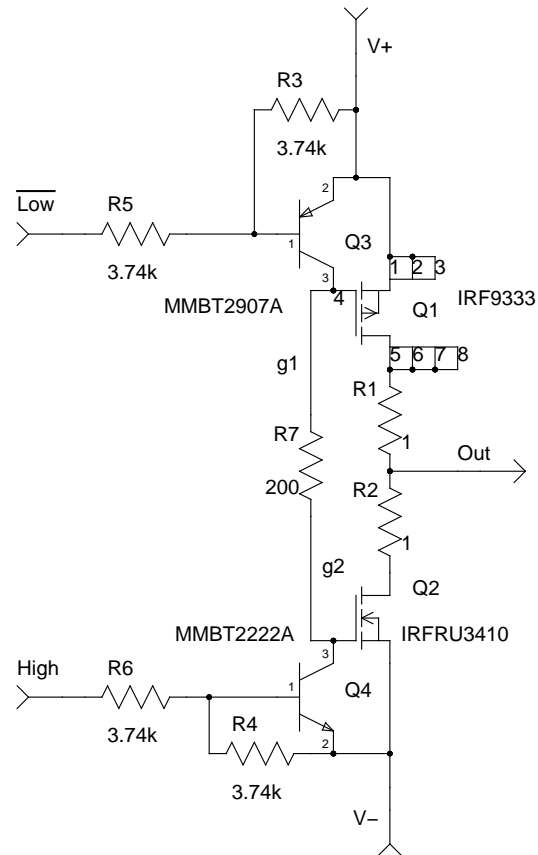
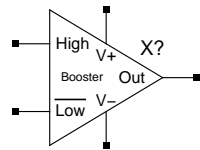
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.subckt Booster %up

TITLE

Parallel clock current booster

FILE: Booster.sch

DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

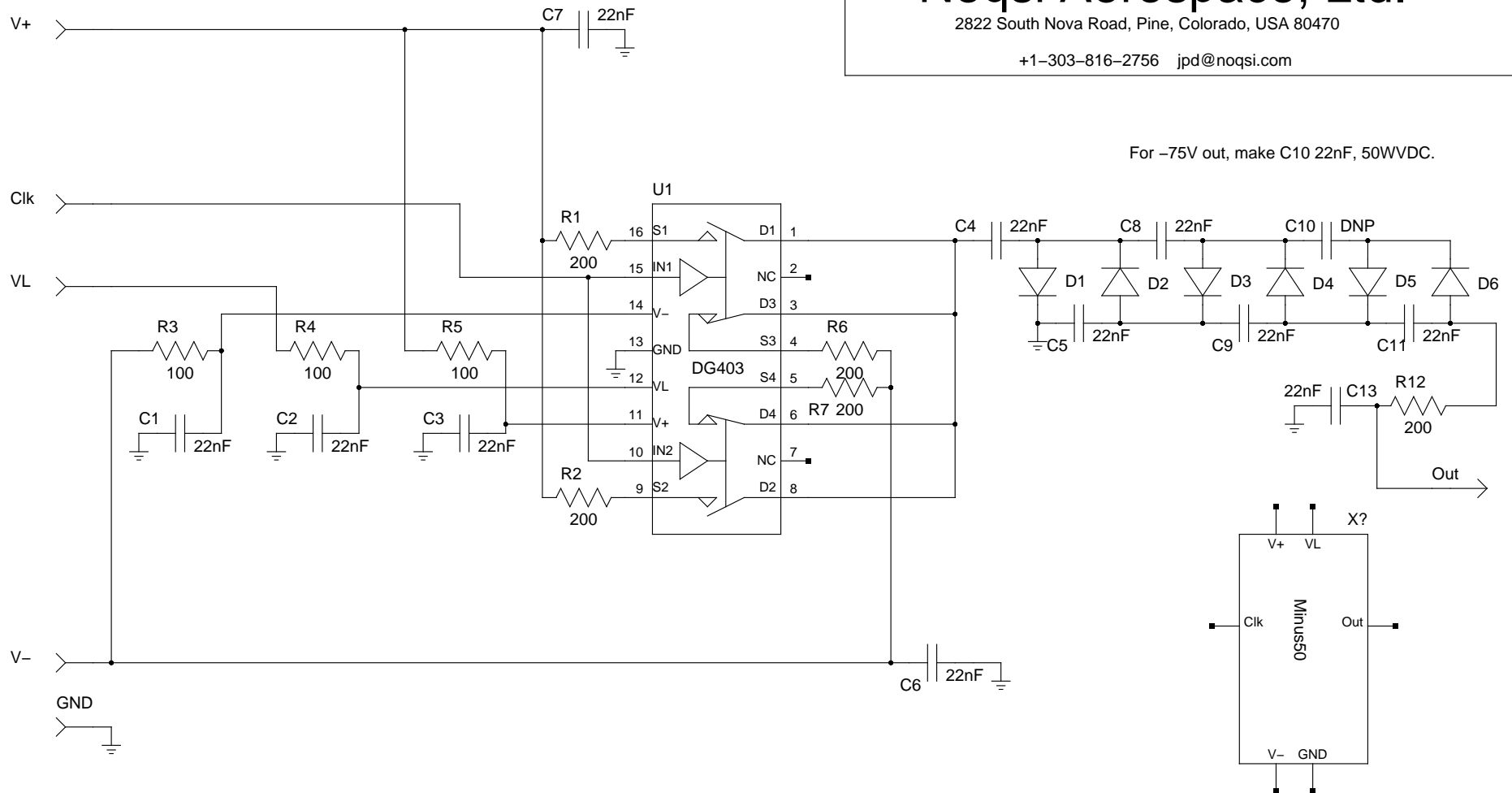
PAGE 1 OF 1

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TITLE

-50V Generator

FILE: Minus30.sch

DATE Tue Jun 23 08:22:27 2015 -0400

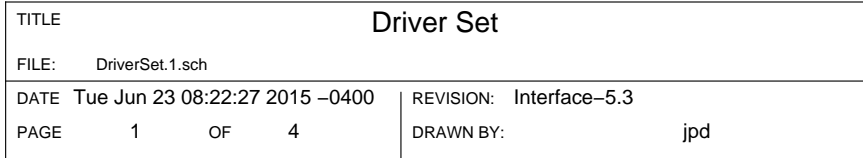
REVISION: Interface-5.3

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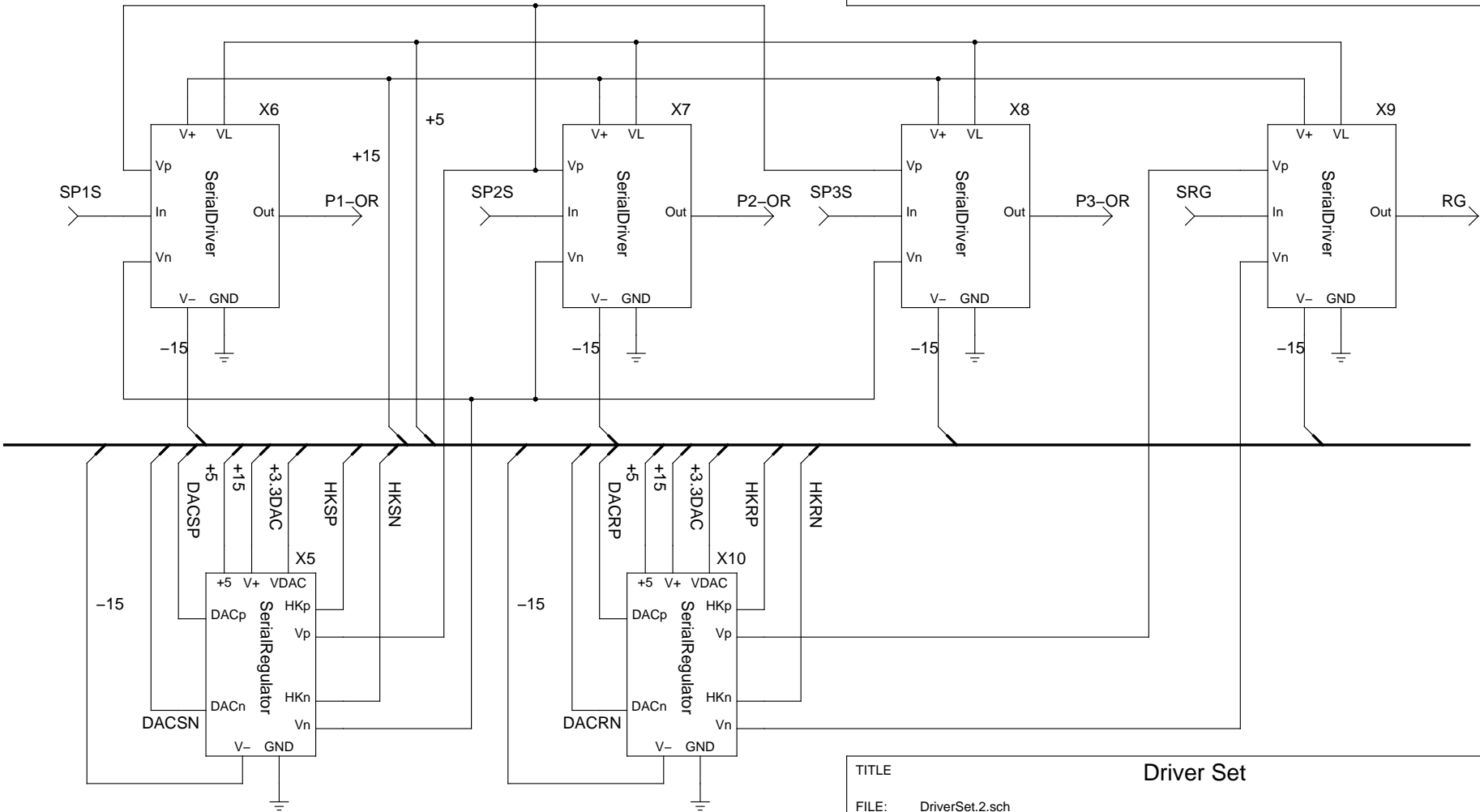


Serial Clock Drivers

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TITLE

Driver Set

FILE: DriverSet.2.sch

DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

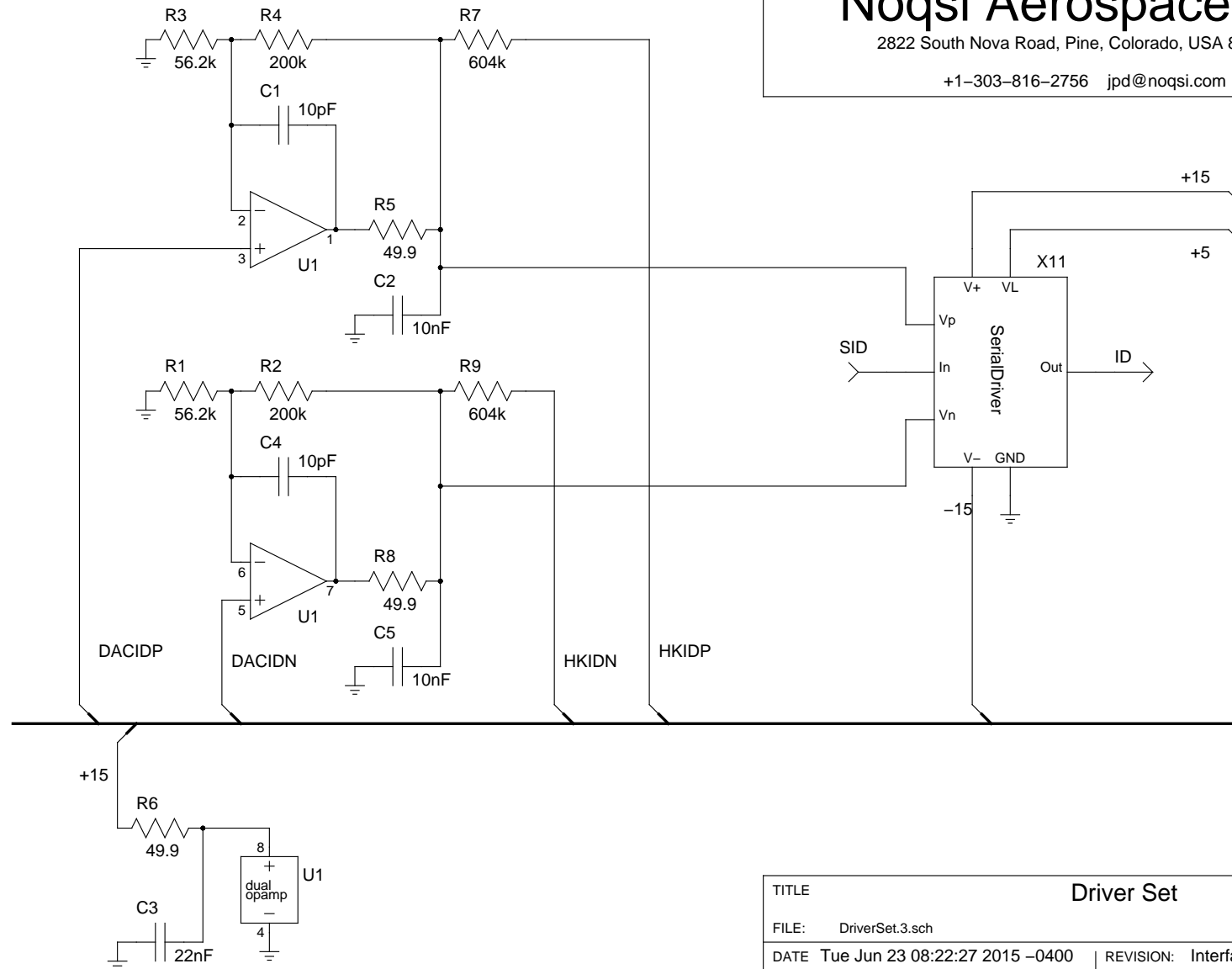
PAGE 2 OF 4

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TITLE

Driver Set

FILE: DriverSet.3.sch

DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

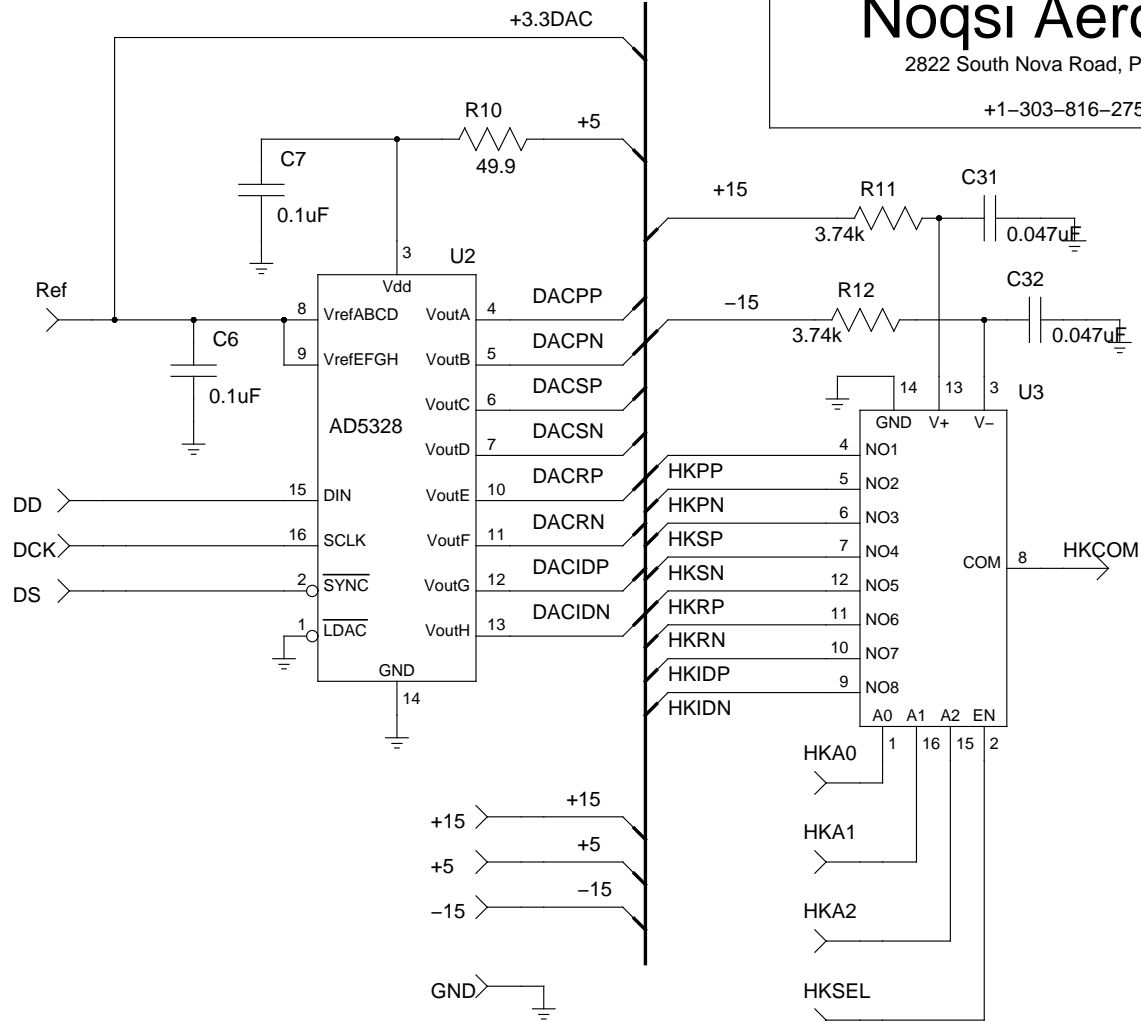
PAGE 3 OF 4

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TITLE

Driver Set

FILE: DriverSet.4.sch

DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

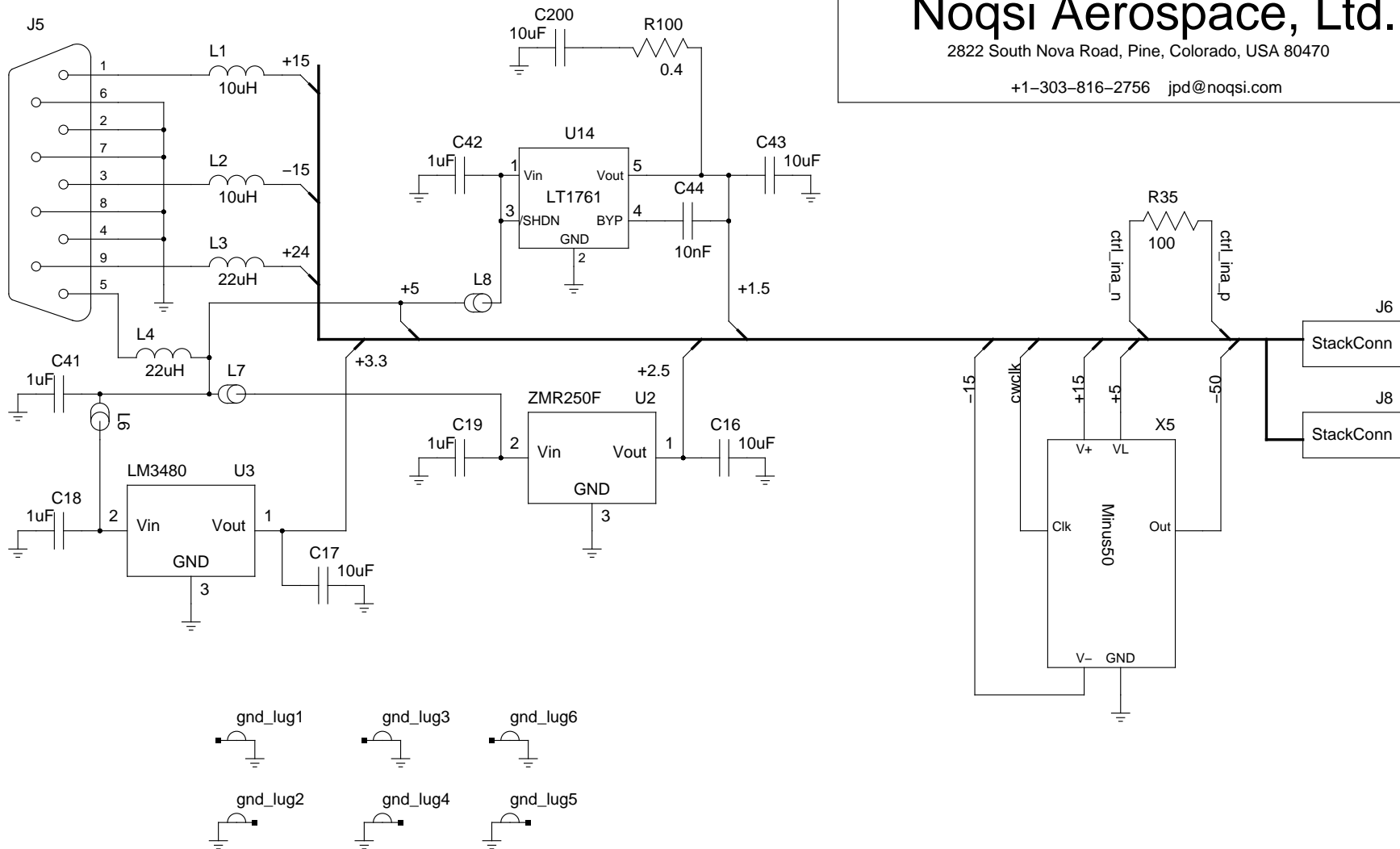
PAGE 4 OF 4

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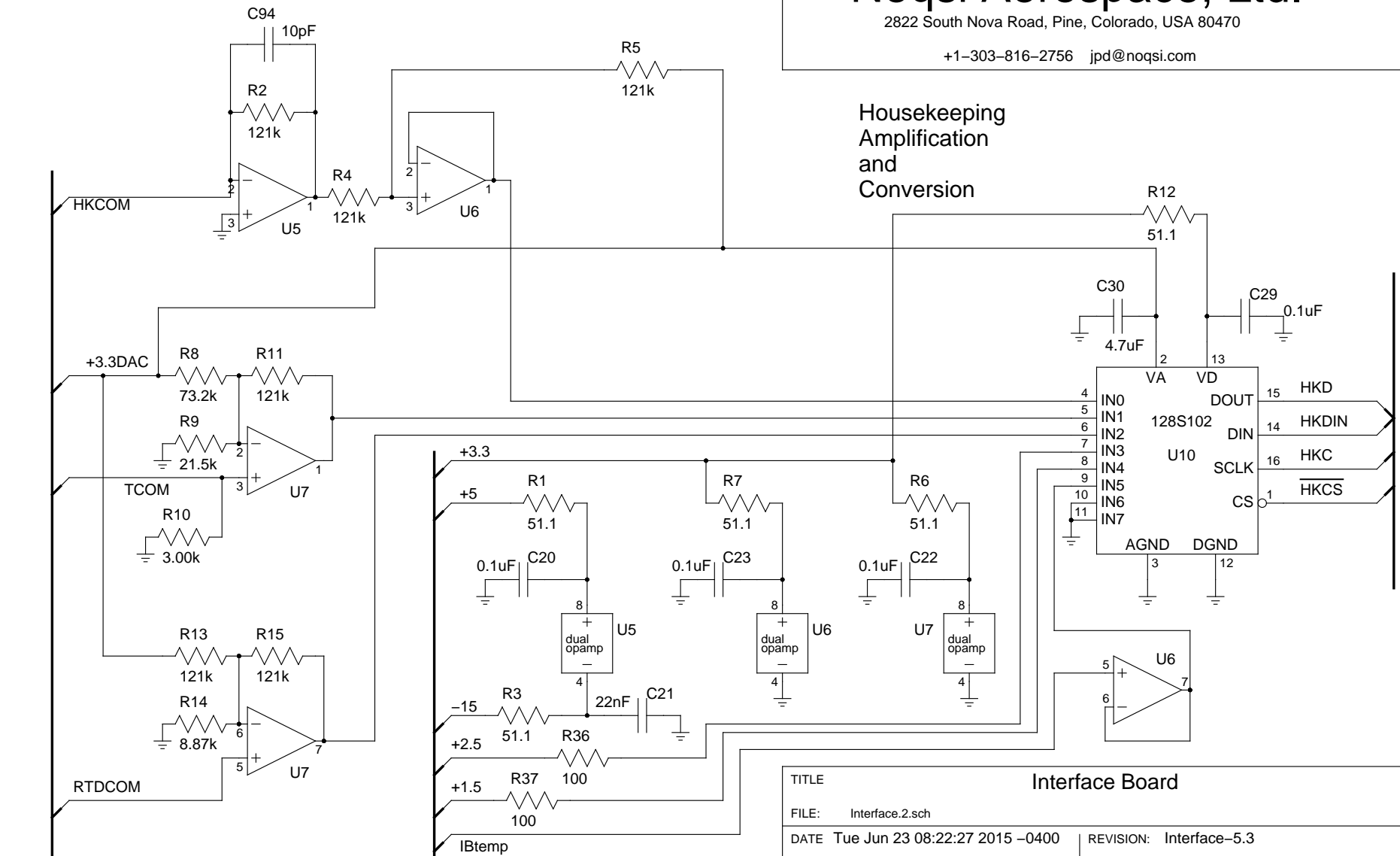
TITLE		Interface Board	
FILE:		Interface.1.sch	
DATE	Tue Jun 23 08:22:27 2015 -0400	REVISION:	Interface-5.3
PAGE	1 OF 10	DRAWN BY:	jpd

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Housekeeping Amplification and Conversion



TITLE

Interface Board

FILE: Interface.2.sch

DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

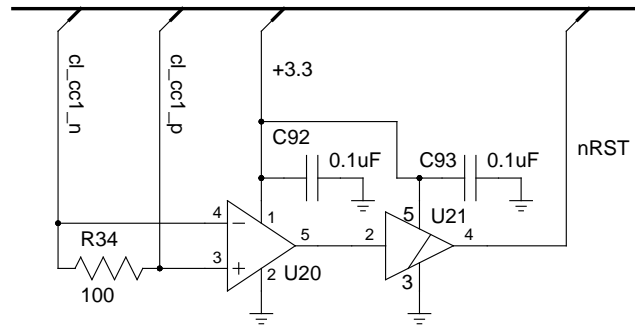
PAGE 2 OF 10

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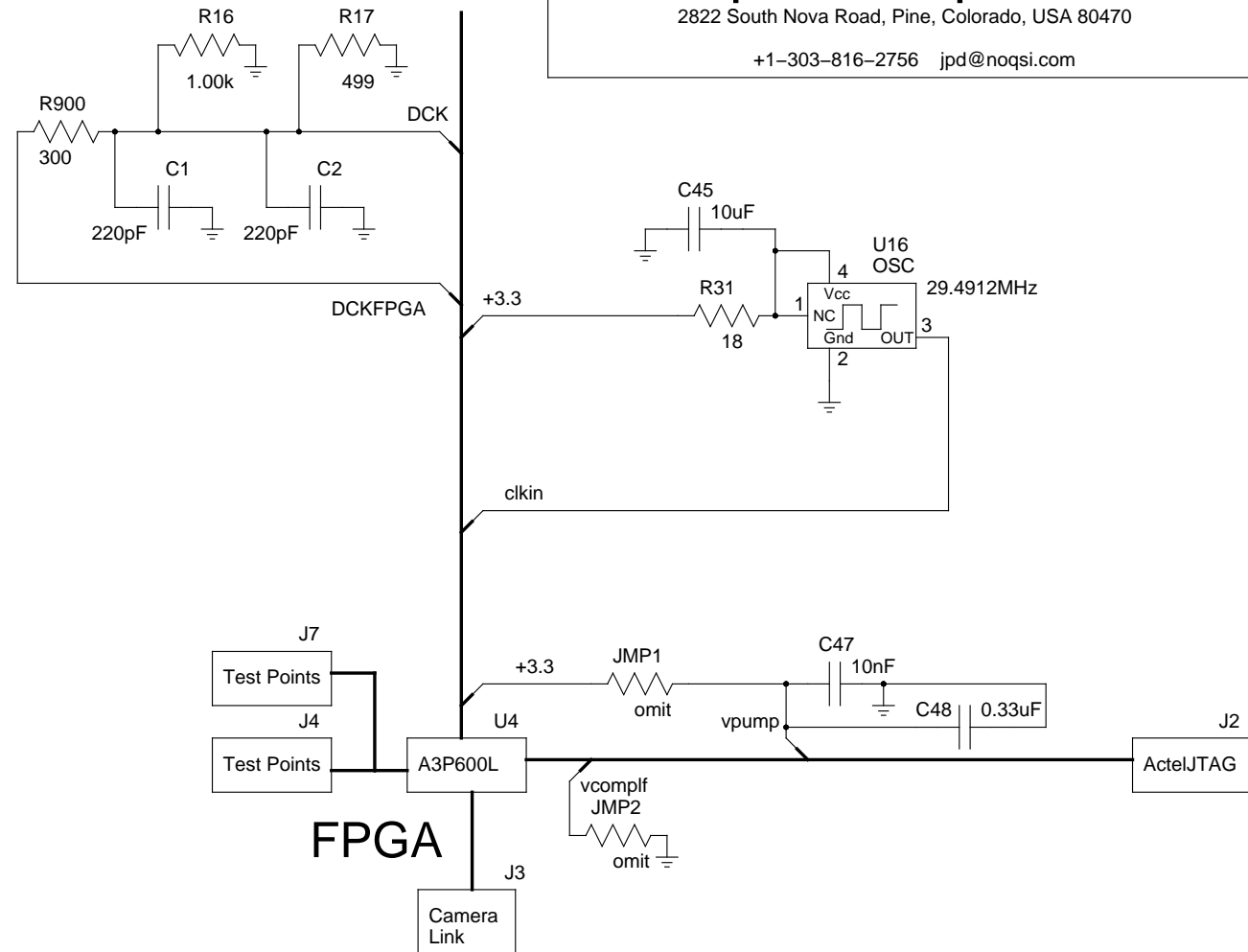
Camera Control Inputs

TITLE		Interface Board	
FILE:		Interface.3.sch	
DATE	Tue Jun 23 08:22:27 2015 -0400	REVISION:	Interface-5.3
PAGE	3	OF	10
DRAWN BY:		jpd	

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TITLE

Interface Board

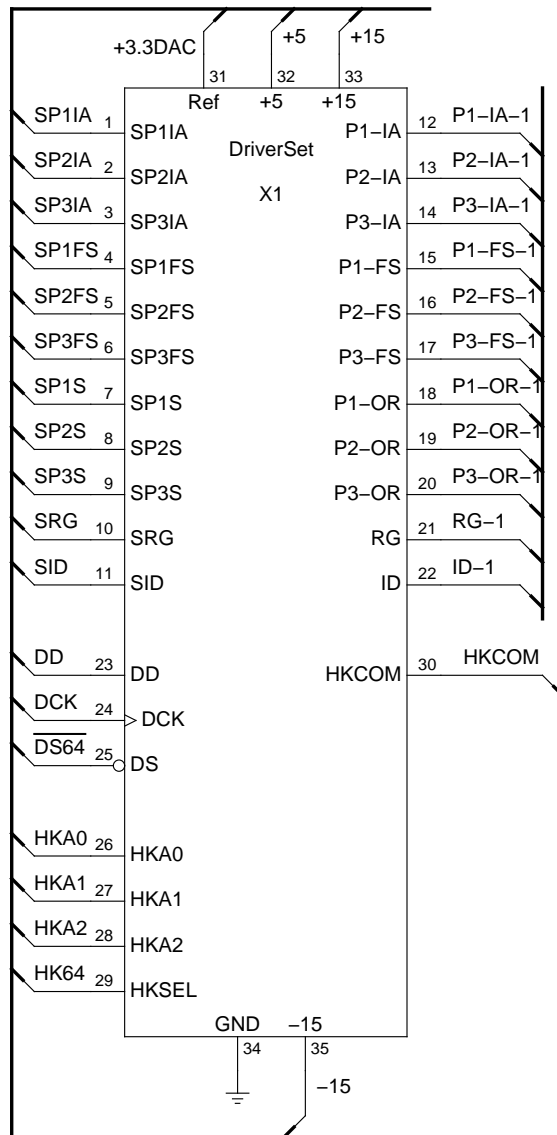
FILE: Interface.4.sch

DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

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TITLE

Interface Board

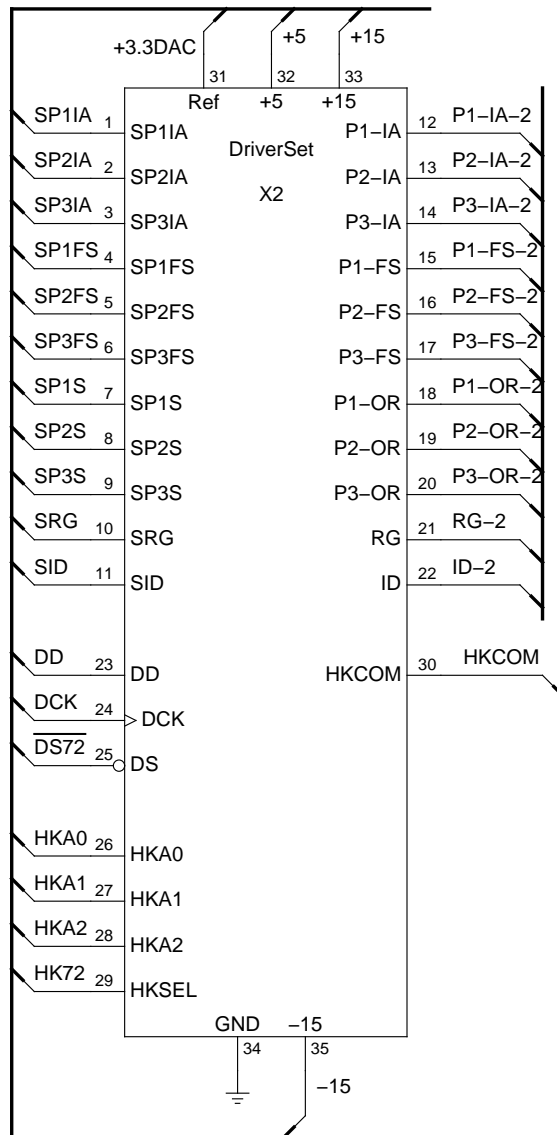
FILE: Interface.5.sch

DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

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TITLE

Interface Board

FILE: Interface.6.sch

DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

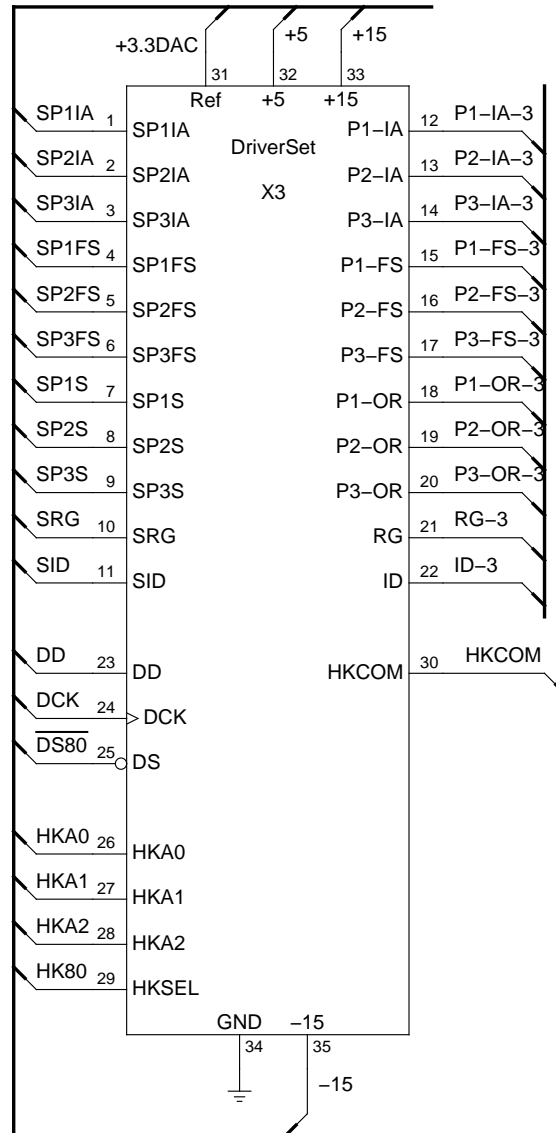
PAGE 6 OF 10

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TITLE

Interface Board

FILE: Interface.7.sch

DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

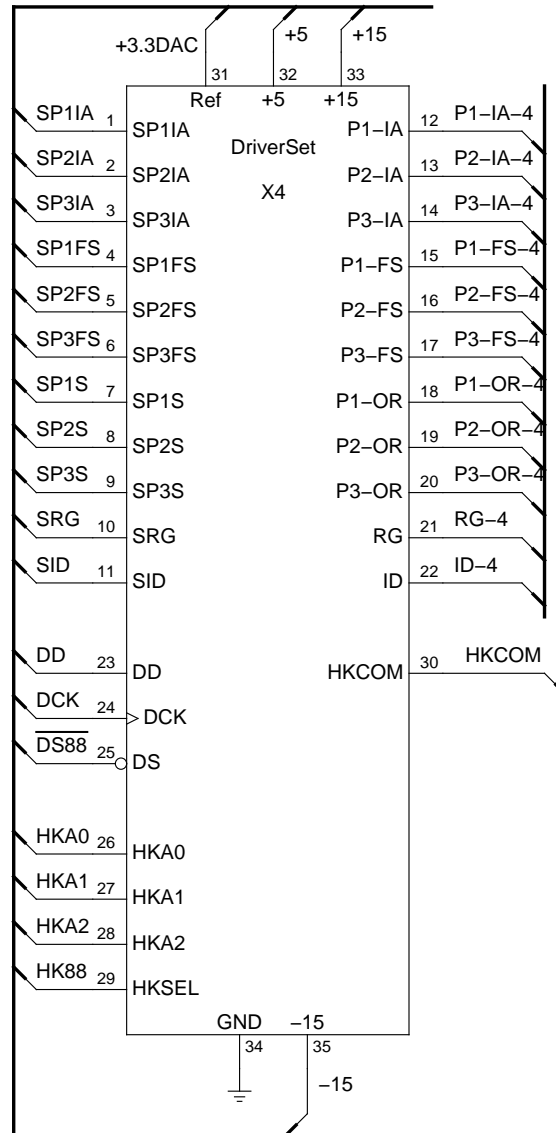
PAGE 7 OF 10

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TITLE

Interface Board

FILE: Interface.8.sch

DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

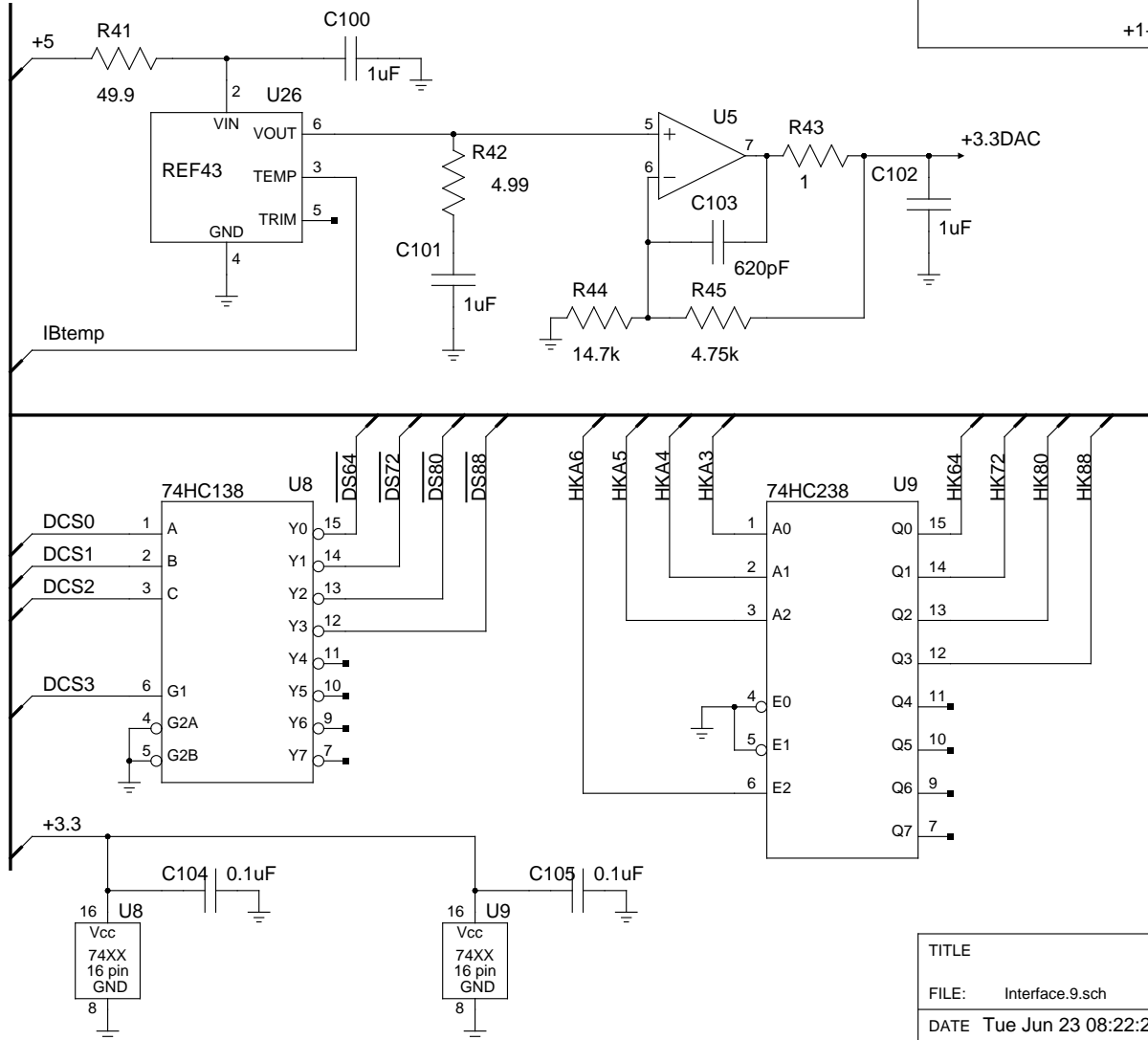
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TITLE

Interface Board

FILE: Interface.9.sch

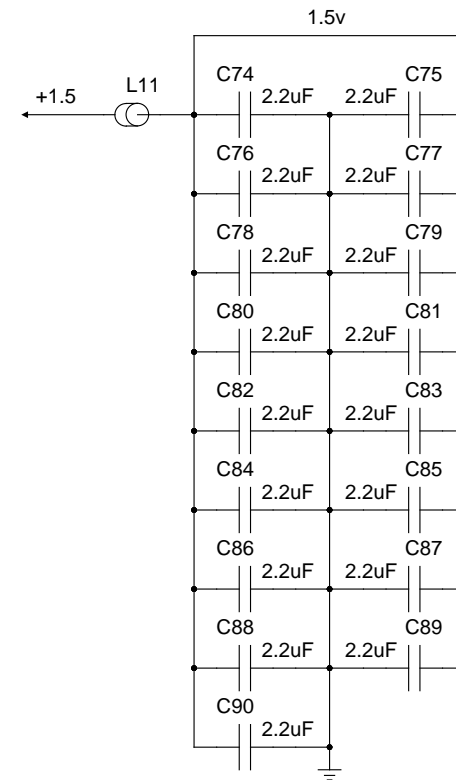
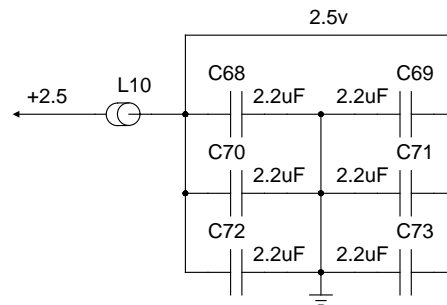
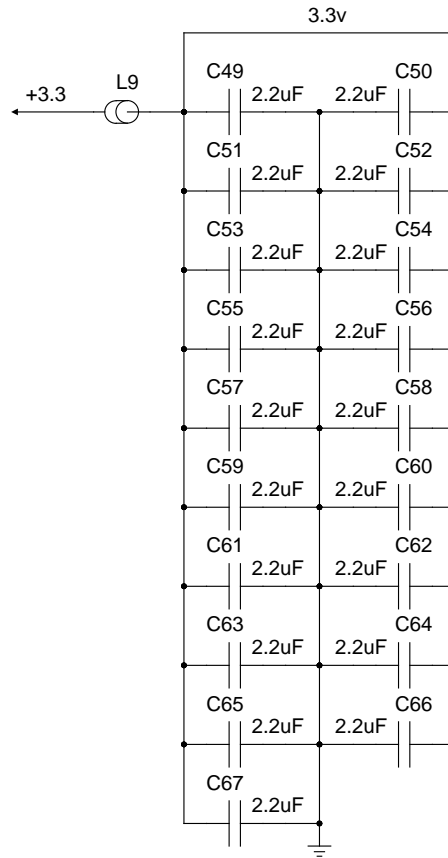
DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

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FPGA Bypass Capacitors



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TITLE

Interface Board

FILE: Interface.10.sch

DATE Tue Jun 23 08:22:27 2015 -0400

REVISION: Interface-5.3

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Dec 08, 14 15:00

Interface.J2.txt

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J2	1	tck
J2	3	tdo
J2	5	tms
J2	7	vpump
J2	9	tdi
J2	2	GND
J2	6	+3.3
J2	8	trst
J2	10	GND

Jun 20, 15 16:55

Interface.J3.txt

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J3	1	GND
J3	14	GND
J3	2	cl_out0n
J3	15	cl_out0p
J3	3	cl_out1n
J3	16	cl_out1p
J3	4	cl_out2n
J3	17	cl_out2p
J3	5	cl_clkn
J3	18	cl_clkp
J3	6	cl_out3n
J3	19	cl_out3p
J3	7	ctrl_ina_p
J3	20	ctrl_ina_n
J3	8	ctrl_out_n
J3	21	ctrl_out_p
J3	9	cl_cc1_n
J3	22	cl_cc1_p
J3	10	cl_cc2_n
J3	23	cl_cc2_p
J3	11	cl_cc3_n
J3	24	cl_cc3_p
J3	12	cl_cc4_n
J3	25	cl_cc4_p
J3	13	GND
J3	26	GND

Dec 08, 14 15:15

Interface.J4.txt

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J4	1	tp_out[0]
J4	2	tp_out[1]
J4	3	tp_out[2]
J4	4	tp_out[3]
J4	5	tp_out[4]
J4	6	tp_out[5]
J4	7	tp_out[6]
J4	8	tp_out[7]

Jun 20, 15 12:25		video_interconnect.txt	Page 1/3
J8	A1	GND	
J8	B1	+24	
J6	A34	-15	
J6	B34	+5	
J8	A2	SCK-1	
J8	B2	-50	
J6	A33	GND	
J6	B33	+15	
J8	A3	GND	
J8	B3	P1-FS-1	
J6	A32	SCK-4	
J6	B32	ID-4	
J8	A4	CNV-1	
J8	B4	P2-FS-1	
J6	A31	GND	
J6	B31	P1-OR-4	
J8	A5	GND	
J8	B5	P3-FS-1	
J6	A30	CNV-4	
J6	B30	P2-OR-4	
J8	A6	SDO-A-1	
J8	B6	P3-OR-1	
J6	A29	GND	
J6	B29	P3-OR-4	
J8	A7	GND	
J8	B7	P2-OR-1	
J6	A28	SDO-D-4	
J6	B28	P3-IA-4	
J8	A8	SDO-B-1	
J8	B8	P1-OR-1	
J6	A27	GND	
J6	B27	P2-IA-4	
J8	A9	GND	
J8	B9	RG-1	
J6	A26	SDO-C-4	
J6	B26	P1-IA-4	
J8	A10	SDO-C-1	
J8	B10	P1-IA-1	
J6	A25	GND	
J6	B25	RG-4	
J8	A11	GND	
J8	B11	P2-IA-1	
J6	A24	SDO-B-4	
J6	B24	P3-FS-4	
J8	A12	SDO-D-1	
J8	B12	P3-IA-1	
J6	A23	GND	
J6	B23	P2-FS-4	
J8	A13	GND	
J8	B13	ID-1	
J6	A22	SDO-A-4	
J6	B22	P1-FS-4	
J8	A14	GND	
J8	B14	GND	
J6	A21	GND	
# J6	B21	+2.5	
J8	A15	GND	
J8	B15	DCS1	
J6	A20	GND	

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J6	B20	GND	
J8	A16	GND	
J8	B16	DCS0	
J6	A19	GND	
J6	B19	HKA0	
J8	A17	Int	
J8	B17	DCS2	
J6	A18	DD	
J6	B18	HKA1	
J8	A18	GND	
J8	B18	DCS3	
J6	A17	HKA3	
J6	B17	HKA2	
J8	A19	_Hold_	
J8	B19	HKCOM	
J6	A16	HKA5	
J6	B16	HKA4	
J8	A20	GND	
J8	B20	TCOM	
J6	A15	GND	
J6	B15	HKA6	
J8	A21	Clamp	
J8	B21	RTDCOM	
J6	A14	GND	
J6	B14	DCK	
J8	A22	GND	
J8	B22	GND	
J6	A13	GND	
J6	B13	GND	
J8	A23	GND	
J8	B23	GND	
J6	A12	SCK-3	
J6	B12	GND	
J8	A24	SCK-2	
J8	B24	P1-FS-2	
J6	A11	GND	
J6	B11	ID-3	
J8	A25	GND	
J8	B25	P2-FS-2	
J6	A10	CNV-3	
J6	B10	P1-OR-3	
J8	A26	CNV-2	
J8	B26	P3-FS-2	
J6	A9	GND	
J6	B9	P2-OR-3	
J8	A27	GND	
J8	B27	P3-OR-2	
J6	A8	SDO-D-3	
J6	B8	P3-OR-3	
J8	A28	SDO-A-2	
J8	B28	P2-OR-2	
J6	A7	GND	
J6	B7	P3-IA-3	
J8	A29	GND	
J8	B29	P1-OR-2	
J6	A6	SDO-C-3	
J6	B6	P2-IA-3	
J8	A30	SDO-B-2	
J8	B30	RG-2	

Jun 20, 15 12:25

video_interconnect.txt

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J6	A5	GND
J6	B5	P1-IA-3
J8	A31	GND
J8	B31	P1-IA-2
J6	A4	SDO-B-3
J6	B4	RG-3
J8	A32	SDO-C-2
J8	B32	P2-IA-2
J6	A3	GND
J6	B3	P3-FS-3
J8	A33	GND
J8	B33	P3-IA-2
J6	A2	SDO-A-3
J6	B2	P2-FS-3
J8	A34	SDO-D-2
J8	B34	ID-2
J6	A1	GND
J6	B1	P1-FS-3

Dec 08, 14 15:00

Interface.J7.txt

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J7	1	CNV
J7	2	FVAL
J7	3	seq_data[14]
J7	5	seq_strbn
J7	6	seq_strbp
J7	7	seq_clkkn
J7	8	seq_clkp

Jun 20, 15 16:55

Interface.U4.txt

Page 1/3

```
# Table of FPGA pins
# column 3 is the name in the schematic
# column 4, if different, is the FPGA's internal name
# some pins commented out with # because they aren't used
```

```
U4      A1      GND
U4      A2      ctrl_out
U4      A3      ctrl_ina
U4      A4      nRST
U4      A5      DCS3
U4      A6      SP3FS      seq_dat5
U4      A7      SRG        seq_dat9
U4      A8      FVAL      seq_dat16
U4      A9      LVAL      seq_dat17
U4      A10     DCS0
U4      A11     HKA4
U4      A12     HKA2
U4      A13     HKA0
U4      A14     HKDIN      HK_DIN
U4      A15     HKC        HK_SCK
U4      A16     GND
U4      B1      cl_out1p
U4      B2      cl_out0p
U4      B3      GND        GNDQ
U4      B4      SP3IA      seq_dat2
U4      B5      DCS1
U4      B6      SP1IA      seq_dat0
U4      B7      SP3S      seq_dat8
U4      B8      CNV        seq_dat15
U4      B9      \_Hold\_      seq_dat12
U4      B10     DCS2
U4      B11     HKA3
U4      B12     HKA1
U4      B13     HKD        HK_D
U4      B14     \_HKCS\_      HK_CS
U4      B15     seq_clkp
U4      B16     seq_clkn
U4      C1      cl_out1n
U4      C2      cl_out0n
U4      C3      2.5v      VMV3
U4      C4      SP2IA      seq_dat1
U4      C5      SP1FS      seq_dat3
U4      C6      reset
U4      C7      SP2S      seq_dat7
U4      C8      seq_data[14]  seq_dat14
U4      C9      Clamp      seq_dat11
U4      C14     3.3v      VMV0
U4      C16     seq_strbp
U4      D1      cl_out2n
U4      D2      cl_out2p
U4      D5      GND        GNDQ
U4      D6      SP2FS      seq_dat4
U4      D7      SP1S      seq_dat6
U4      D8      SID        seq_dat13
U4      D12     GND        GNDQ
U4      D16     seq_strbn
U4      E1      cl_out3p
U4      E5      3.3v      VMV0
U4      E6      3.3v      VCCIB0
```

Jun 20, 15 16:55		Interface.U4.txt		Page 2/3
U4	E7	3.3v	VCCIB0	
U4	E8	Int	seq_dat10	
U4	E10	3.3v	VCCIB0	
U4	E11	3.3v	VCCIB0	
U4	E12	3.3v	VMV1	
U4	E16	tp_out[0]		tp_out0
U4	F1	cl_out3n		
U4	F5	2.5v	VCCIB3	
U4	F6	GND		
U4	F7	1.5v	VCC	
U4	F8	1.5v	VCC	
U4	F9	1.5v	VCC	
U4	F10	1.5v	VCC	
U4	F11	GND		
U4	F12	3.3v	VCCIB1	
U4	F16	tp_out[1]		tp_out1
U4	G2	cl_clkn		
U4	G3	cl_clkp		
U4	G5	2.5v	VCCIB3	
U4	G6	1.5v	VCC	
U4	G7	GND		
U4	G8	GND		
U4	G9	GND		
U4	G10	GND		
U4	G11	1.5v	VCC	
U4	G12	3.3v	VCCIB1	
U4	G13	seq_active		seq_actv
U4	G16	tp_out[2]		tp_out2
U4	H4	vcomplf	VCOMPL	
U4	H6	1.5v	VCC	
U4	H7	GND		
U4	H8	GND		
U4	H9	GND		
U4	H10	GND		
U4	H11	1.5v	VCC	
U4	H16	tp_out[3]		tp_out3
U4	J3	1.5v	VCCPL	
U4	J6	1.5v	VCC	
U4	J7	GND		
U4	J8	GND		
U4	J9	GND		
U4	J10	GND		
U4	J11	1.5v	VCC	
U4	J16	clkin		
U4	K5	2.5v	VCCIB3	
U4	K6	1.5v	VCC	
U4	K7	GND		
U4	K8	GND		
U4	K9	GND		
U4	K10	GND		
U4	K11	1.5v	VCC	
U4	K12	3.3v	VCCIB1	
U4	K13	SDO-D-1	sdo3	
U4	K16	tp_out[4]		tp_out4
U4	L3	ctrl_out_p		
U4	L5	2.5v	VCCIB3	
U4	L6	GND		
U4	L7	1.5v	VCC	
U4	L8	1.5v	VCC	

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U4	L9	1.5v	VCC	
U4	L10	1.5v	VCC	
U4	L11	GND		
U4	L12	3.3v	VCCIB1	
U4	L13	SDO-A-2	sdo4	
U4	L14	SDO-B-1	sdo1	
U4	L16	tp_out[5]		tp_out5
U4	M2	ctrl_out_n		
U4	M5	2.5v	VMV3	
U4	M6	3.3v	VCCIB2	
U4	M7	3.3v	VCCIB2	
U4	M8	SDO-D-4	sdo15	
U4	M9	SDO-C-4	sdo14	
U4	M10	3.3v	VCCIB2	
U4	M11	3.3v	VCCIB2	
U4	M12	3.3v	VMV2	
U4	M13	SDO-B-2	sdo5	
U4	M14	SDO-C-1	sdo2	
U4	M16	tp_out[6]		tp_out6
U4	N5	GND	GNDQ	
U4	N10	SDO-B-4	sdo13	
U4	N11	SDO-A-4	sdo12	
U4	N12	GND	GNDQ	
U4	N13	SDO-C-2	sdo6	
U4	N14	3.3v	VJTAG	
U4	N15	SDO-A-1	sdo0	
U4	N16	tp_out[7]		tp_out7
U4	P1	ctrl_ina_p		
U4	P2	ctrl_ina_n		
U4	P3	3.3v	VMV2	
U4	P9	CNV-4	cnv4	
U4	P10	CNV-3	cnv3	
U4	P11	CNV-2	cnv2	
U4	P12	3.3v	VMV1	
U4	P13	tck	TCK	
U4	P14	vpump	VPUMP	
U4	P15	trst	TRST	
U4	P16	cwclk	CWCLK	
U4	R3	HKA6		
U4	R9	SCK-3	sck3	
U4	R10	SCK-1	sck1	
U4	R11	CNV-1	cnv1	
U4	R12	SDO-C-3	sdo10	
U4	R13	SDO-D-2	sdo7	
U4	R14	tdi	TDI	
U4	R15	GND	GNDQ	
U4	R16	tdo	TDO	
U4	T1	GND		
U4	T2	DD		
U4	T3	DCKFPGA		
U4	T4	HKA5		
U4	T8	SCK-4	sck4	
U4	T9	SCK-2	sck2	
U4	T12	SDO-D-3	sdo11	
U4	T13	SDO-B-3	sdo9	
U4	T14	SDO-A-3	sdo8	
U4	T15	tms	TMS	
U4	T16	GND		

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refdes	device	value	spec	footprint	description	
L11	EXC-3BB102H		unknown	unknown 0603	EMI chip	
C89	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C87	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C85	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C83	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C81	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C79	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C77	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C75	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C90	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C88	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C86	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C84	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C82	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C80	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C78	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C76	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C74	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
L10	EXC-3BB102H		unknown	unknown 0603	EMI chip	
C73	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C71	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C69	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C72	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C70	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C68	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
L9	EXC-3BB102H		unknown	unknown 0603	EMI chip	
C66	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C64	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C62	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C60	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C58	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C56	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C54	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C52	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C50	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C67	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C65	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C63	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C61	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C59	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C57	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C55	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C53	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C51	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C49	CAPACITOR	2.2uF	6.3WVDC	X5R 0603	Ceramic capacitor	
C105	CAPACITOR	0.1uF	25WVDC	X7R 0603	Ceramic capacitor	
U9	74HC238	unknown	unknown	SO16N attribute_conflict		
C104	CAPACITOR	0.1uF	25WVDC	X7R 0603	Ceramic capacitor	
U8	74HC138	unknown	unknown	SO16N attribute_conflict		
R45	RESISTOR	4.75k	1%	1/10W 0603	Resistor	
C103	CAPACITOR	620pF	10WVDC	0805	Ceramic capacitor	
R44	RESISTOR	14.7k	1%	1/10W 0603	Resistor	
R43	RESISTOR	1	1%	1/10W 0603	Resistor	
C102	CAPACITOR	1uF	10WVDC	0805	Ceramic capacitor	
C101	CAPACITOR	1uF	10WVDC	0805	Ceramic capacitor	
R42	RESISTOR	4.99	1%	1/10W 0603	Resistor	
C100	CAPACITOR	1uF	10WVDC	0805	Ceramic capacitor	
R41	RESISTOR	49.9	1%	1/10W 0603	Resistor	

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U26	REFERENCE	REF43GS	N/A	S08	2.5V	Reference	
X4/R12	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/R11	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/C7	CAPACITOR	0.1uF	10WVDC	0603		Ceramic capacitor	
X4/R10	RESISTOR	49.9	1%	1/10W	0603	Resistor	
X4/C6	CAPACITOR	0.1uF	10WVDC	0603		Ceramic capacitor	
X4/C32	CAPACITOR	0.047uF	50WVDC	X7R	0603	Ceramic capacitor	
X4/U3	MAX308CSE+	unknown	unknown	S016	8 input	analog mux	
X4/C31	CAPACITOR	0.047uF	50WVDC	X7R	0603	Ceramic capacitor	
X4/U2	AD5328	unknown	unknown	TSSOP16	Octal	DAC	
X4/X1/Z1	ZENER_DIODE	BZV55	B3V3		unknown	SOD80C	unknown
X4/X1/Z2	ZENER_DIODE	BZV55	B3V3		unknown	SOD80C	unknown
X4/X1/C11	CAPACITOR	22nF	50WVDC	0603		Ceramic capacitor	
X4/X1/C12	CAPACITOR	22nF	50WVDC	0603		Ceramic capacitor	
X4/X1/C2	CAPACITOR	22nF	50WVDC	0603		Ceramic capacitor	
X4/X1/C13	CAPACITOR	1uF	25WVDC	1812		Ceramic capacitor	
X4/X1/C10	CAPACITOR	1uF	25WVDC	1812		Ceramic capacitor	
X4/X1/R20	RESISTOR	604k	1%	1/10W	0603	Resistor	
X4/X1/R10	RESISTOR	604k	1%	1/10W	0603	Resistor	
X4/X1/C1	CAPACITOR	22nF	50WVDC	0603		Ceramic capacitor	
X4/X1/R18	RESISTOR	10	1%	1W	2512	Resistor	
X4/X1/C9	CAPACITOR	1uF	25WVDC	1812		Ceramic capacitor	
X4/X1/R12	RESISTOR	33.2k	1%	1/10W	0603	Resistor	
X4/X1/Q2	LM395T	unknown	unknown	TO220	unknown		
X4/X1/C7	CAPACITOR	47pF	50WVDC	0603		Ceramic capacitor	
X4/X1/R16	RESISTOR	4.99k	1%	1/10W	0603	Resistor	
X4/X1/Q3	PNP_TRANSISTOR	MMBT2907A		unknown		SOT23	unknown
X4/X1/R8	RESISTOR	10	1%	1W	2512	Resistor	
X4/X1/C8	CAPACITOR	1uF	25WVDC	1812		Ceramic capacitor	
X4/X1/R2	RESISTOR	301k	1%	1/10W	0603	Resistor	
X4/X1/C6	CAPACITOR	330pF	50WVDC	0603		Ceramic capacitor	
X4/X1/R6	RESISTOR	10k	1%	1/10W	0603	Resistor	
X4/X1/Q1	LM395T	unknown	unknown	TO220	unknown		
X4/X1/R17	RESISTOR	10k	1%	1/10W	0603	Resistor	
X4/X1/R7	RESISTOR	10k	1%	1/10W	0603	Resistor	
X4/X1/C5	CAPACITOR	330pF	50WVDC	0603		Ceramic capacitor	
X4/X1/C4	CAPACITOR	22nF	50WVDC	0603		Ceramic capacitor	
X4/X1/C3	CAPACITOR	22nF	50WVDC	0603		Ceramic capacitor	
X4/X1/R15	RESISTOR	10k	1%	1/10W	0603	Resistor	
X4/X1/R5	RESISTOR	10k	1%	1/10W	0603	Resistor	
X4/X1/R11	RESISTOR	60.4k	1%	1/10W	0603	Resistor	
X4/X1/R13	RESISTOR	75k	1%	1/10W	0603	Resistor	
X4/X1/R14	RESISTOR	301k	1%	1/10W	0603	Resistor	
X4/X1/U2	DUAL_OPAMP	LM6142AIM		N/A		S08	attribute_confli
ct							
X4/X1/R1	RESISTOR	54.9k	1%	1/10W	0603	Resistor	
X4/X1/R3	RESISTOR	54.9k	1%	1/10W	0603	Resistor	
X4/X1/R4	RESISTOR	301k	1%	1/10W	0603	Resistor	
X4/X1/U1	DUAL_OPAMP	LM6142AIM		N/A		S08	attribute_confli
ct							
X4/X2/C3	CAPACITOR	22nF	50WVDC	0603		Ceramic capacitor	
X4/X2/C2	CAPACITOR	22nF	50WVDC	0603		Ceramic capacitor	
X4/X2/C1	CAPACITOR	22nF	50WVDC	0603		Ceramic capacitor	
X4/X2/C7	CAPACITOR	1uF	25WVDC	1812		Ceramic capacitor	
X4/X2/C4	CAPACITOR	1uF	25WVDC	1812		Ceramic capacitor	
X4/X2/C6	CAPACITOR	1uF	25WVDC	1812		Ceramic capacitor	
X4/X2/C5	CAPACITOR	1uF	25WVDC	1812		Ceramic capacitor	
X4/X2/R2	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X2/R1	RESISTOR	3.74k	1%	1/10W	0603	Resistor	

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X4/X2/R7	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X2/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X2/X2/Q1	PMOS-S08	IRF9333	unknown	S08	P	channel MOS transistor	
(enhancement type)							
X4/X2/X2/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X2/X2/R5	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X2/X2/R4	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X2/X2/R3	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X2/X2/R7	RESISTOR	200	1%	1/10W	0603	Resistor	
X4/X2/X2/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X4/X2/X2/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X4/X2/X2/R2	RESISTOR	1	1%	1W	2512	Resistor	
X4/X2/X2/R1	RESISTOR	1	1%	1W	2512	Resistor	
X4/X2/X2/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channel MOS transistor (enhancement type)	
X4/X2/X1/Q1	PMOS-S08	IRF9333	unknown	S08	P	channel MOS transistor	
(enhancement type)							
X4/X2/X1/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X2/X1/R5	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X2/X1/R4	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X2/X1/R3	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X2/X1/R7	RESISTOR	200	1%	1/10W	0603	Resistor	
X4/X2/X1/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X4/X2/X1/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X4/X2/X1/R2	RESISTOR	1	1%	1W	2512	Resistor	
X4/X2/X1/R1	RESISTOR	1	1%	1W	2512	Resistor	
X4/X2/X1/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channel MOS transistor (enhancement type)	
X4/X2/R3	RESISTOR	100	1%	1/10W	0603	Resistor	
X4/X2/R4	RESISTOR	100	1%	1/10W	0603	Resistor	
X4/X2/R5	RESISTOR	100	1%	1/10W	0603	Resistor	
X4/X2/U1	DG403	unknown	unknown	SO16	Dual	SPDT switch	
X4/X3/C3	CAPACITOR	22nF		50WVDC	0603	Ceramic capacitor	
X4/X3/C2	CAPACITOR	22nF		50WVDC	0603	Ceramic capacitor	
X4/X3/C1	CAPACITOR	22nF		50WVDC	0603	Ceramic capacitor	
X4/X3/C7	CAPACITOR	1uF		25WVDC	1812	Ceramic capacitor	
X4/X3/C4	CAPACITOR	1uF		25WVDC	1812	Ceramic capacitor	
X4/X3/C6	CAPACITOR	1uF		25WVDC	1812	Ceramic capacitor	
X4/X3/C5	CAPACITOR	1uF		25WVDC	1812	Ceramic capacitor	
X4/X3/R2	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X3/R1	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X3/R7	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X3/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X3/X2/Q1	PMOS-S08	IRF9333	unknown	S08	P	channel MOS transistor	
(enhancement type)							
X4/X3/X2/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X3/X2/R5	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X3/X2/R4	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X3/X2/R3	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X3/X2/R7	RESISTOR	200	1%	1/10W	0603	Resistor	
X4/X3/X2/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X4/X3/X2/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X4/X3/X2/R2	RESISTOR	1	1%	1W	2512	Resistor	
X4/X3/X2/R1	RESISTOR	1	1%	1W	2512	Resistor	
X4/X3/X2/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channel MOS transistor (enhancement type)	
X4/X3/X1/Q1	PMOS-S08	IRF9333	unknown	S08	P	channel MOS transistor	
(enhancement type)							
X4/X3/X1/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	

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X4/X3/X1/R5	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X3/X1/R4	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X3/X1/R3	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X3/X1/R7	RESISTOR	200	1%	1/10W	0603	Resistor	
X4/X3/X1/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X4/X3/X1/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X4/X3/X1/R2	RESISTOR	1	1%	1W	2512	Resistor	
X4/X3/X1/R1	RESISTOR	1	1%	1W	2512	Resistor	
X4/X3/X1/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channe	
l MOS transistor (enhancement type)							
X4/X3/R3	RESISTOR	100	1%	1/10W	0603	Resistor	
X4/X3/R4	RESISTOR	100	1%	1/10W	0603	Resistor	
X4/X3/R5	RESISTOR	100	1%	1/10W	0603	Resistor	
X4/X3/U1	DG403	unknown	unknown	SO16	Dual	SPDT switch	
X4/X4/C3	CAPACITOR	22nF		50WVDC	0603	Ceramic capacitor	
X4/X4/C2	CAPACITOR	22nF		50WVDC	0603	Ceramic capacitor	
X4/X4/C1	CAPACITOR	22nF		50WVDC	0603	Ceramic capacitor	
X4/X4/C7	CAPACITOR	1uF		25WVDC	1812	Ceramic capacitor	
X4/X4/C4	CAPACITOR	1uF		25WVDC	1812	Ceramic capacitor	
X4/X4/C6	CAPACITOR	1uF		25WVDC	1812	Ceramic capacitor	
X4/X4/C5	CAPACITOR	1uF		25WVDC	1812	Ceramic capacitor	
X4/X4/R2	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X4/R1	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X4/R7	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X4/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X4/X2/Q1	PMOS-S08	IRF9333		unknown	S08	P channel MOS transistor	
(enhancement type)							
X4/X4/X2/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X4/X2/R5	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X4/X2/R4	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X4/X2/R3	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X4/X2/R7	RESISTOR	200	1%	1/10W	0603	Resistor	
X4/X4/X2/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X4/X4/X2/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X4/X4/X2/R2	RESISTOR	1	1%	1W	2512	Resistor	
X4/X4/X2/R1	RESISTOR	1	1%	1W	2512	Resistor	
X4/X4/X2/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channe	
l MOS transistor (enhancement type)							
X4/X4/X1/Q1	PMOS-S08	IRF9333		unknown	S08	P channel MOS transistor	
(enhancement type)							
X4/X4/X1/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X4/X1/R5	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X4/X1/R4	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X4/X1/R3	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X4/X4/X1/R7	RESISTOR	200	1%	1/10W	0603	Resistor	
X4/X4/X1/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X4/X4/X1/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X4/X4/X1/R2	RESISTOR	1	1%	1W	2512	Resistor	
X4/X4/X1/R1	RESISTOR	1	1%	1W	2512	Resistor	
X4/X4/X1/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channe	
l MOS transistor (enhancement type)							
X4/X4/R3	RESISTOR	100	1%	1/10W	0603	Resistor	
X4/X4/R4	RESISTOR	100	1%	1/10W	0603	Resistor	
X4/X4/R5	RESISTOR	100	1%	1/10W	0603	Resistor	
X4/X4/U1	DG403	unknown	unknown	SO16	Dual	SPDT switch	
X4/X10/R22	RESISTOR	604k	1%	1/10W	0603	Resistor	
X4/X10/R21	RESISTOR	604k	1%	1/10W	0603	Resistor	
X4/X10/C10	CAPACITOR	1uF		25WVDC	1812	Ceramic capacitor	
X4/X10/C9	CAPACITOR	1uF		25WVDC	1812	Ceramic capacitor	

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X4/X10/C4	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor
X4/X10/R20	RESISTOR	10	1% 1/10W	0603	Resistor	
X4/X10/C8	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor
X4/X10/R18	RESISTOR	10k	1% 1/10W	0603	Resistor	
X4/X10/Q6	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown
X4/X10/R19	RESISTOR	12.7	1% 1/10W	0603	Resistor	
X4/X10/Q5	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown
X4/X10/R16	RESISTOR	20k	1% 1/10W	0603	Resistor	
X4/X10/R17	RESISTOR	499	1% 1/10W	0603	Resistor	
X4/X10/Q4	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown
X4/X10/C7	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor
X4/X10/R13	RESISTOR	1k	1% 1/10W	0603	Resistor	
X4/X10/R14	RESISTOR	32.4k	1% 1/10W	0603	Resistor	
X4/X10/C6	CAPACITOR	4.7pF	10WVDC	0603	Ceramic	capacitor
X4/X10/R15	RESISTOR	301k	1% 1/10W	0603	Resistor	
X4/X10/R11	RESISTOR	10	1% 1/10W	0603	Resistor	
X4/X10/C1	CAPACITOR	4.7pF	10WVDC	0603	Ceramic	capacitor
X4/X10/Q1	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown
X4/X10/R7	RESISTOR	499	1% 1/10W	0603	Resistor	
X4/X10/R10	RESISTOR	49.9	1% 1/10W	0603	Resistor	
X4/X10/C5	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor
X4/X10/U1	DUAL_OPAMP	LM6142AIM		N/A	SO8	attribute_confli
ct						
X4/X10/R8	RESISTOR	10k	1% 1/10W	0603	Resistor	
X4/X10/R2	RESISTOR	26.7k	1% 1/10W	0603	Resistor	
X4/X10/R1	RESISTOR	34.0k	1% 1/10W	0603	Resistor	
X4/X10/C2	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor
X4/X10/R3	RESISTOR	1k	1% 1/10W	0603	Resistor	
X4/X10/R4	RESISTOR	32.4k	1% 1/10W	0603	Resistor	
X4/X10/R5	RESISTOR	301k	1% 1/10W	0603	Resistor	
X4/X10/R6	RESISTOR	20k	1% 1/10W	0603	Resistor	
X4/X10/C3	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor
X4/X10/R9	RESISTOR	12.7	1% 1/10W	0603	Resistor	
X4/X10/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown
X4/X10/Q2	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown
X4/X9/R9	RESISTOR	75	1% 1/10W	0603	Resistor	
X4/X9/R8	RESISTOR	75	1% 1/10W	0603	Resistor	
X4/X9/R7	RESISTOR	75	1% 1/10W	0603	Resistor	
X4/X9/R6	RESISTOR	75	1% 1/10W	0603	Resistor	
X4/X9/R3	RESISTOR	100	1% 1/10W	0603	Resistor	
X4/X9/C3	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacito
r						
X4/X9/R4	RESISTOR	100	1% 1/10W	0603	Resistor	
X4/X9/C2	CAPACITOR	0.1uF	16WVDC	X7R	0603	Ceramic capacito
r						
X4/X9/R5	RESISTOR	100	1% 1/10W	0603	Resistor	
X4/X9/C1	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacito
r						
X4/X9/U1	DG403	unknown	unknown	SO16	Dual SPDT switch	
X4/X8/R9	RESISTOR	75	1% 1/10W	0603	Resistor	
X4/X8/R8	RESISTOR	75	1% 1/10W	0603	Resistor	
X4/X8/R7	RESISTOR	75	1% 1/10W	0603	Resistor	
X4/X8/R6	RESISTOR	75	1% 1/10W	0603	Resistor	
X4/X8/R3	RESISTOR	100	1% 1/10W	0603	Resistor	
X4/X8/C3	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacito
r						
X4/X8/R4	RESISTOR	100	1% 1/10W	0603	Resistor	
X4/X8/C2	CAPACITOR	0.1uF	16WVDC	X7R	0603	Ceramic capacito
r						

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X4/X8/R5	RESISTOR	100	1% 1/10W	0603	Resistor
X4/X8/C1	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X4/X8/U1	DG403	unknown	unknown	SO16	Dual SPDT switch
X4/X7/R9	RESISTOR	75	1% 1/10W	0603	Resistor
X4/X7/R8	RESISTOR	75	1% 1/10W	0603	Resistor
X4/X7/R7	RESISTOR	75	1% 1/10W	0603	Resistor
X4/X7/R6	RESISTOR	75	1% 1/10W	0603	Resistor
X4/X7/R3	RESISTOR	100	1% 1/10W	0603	Resistor
X4/X7/C3	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X4/X7/R4	RESISTOR	100	1% 1/10W	0603	Resistor
X4/X7/C2	CAPACITOR	0.1uF	16WVDC X7R	0603	Ceramic capacitor
X4/X7/R5	RESISTOR	100	1% 1/10W	0603	Resistor
X4/X7/C1	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X4/X7/U1	DG403	unknown	unknown	SO16	Dual SPDT switch
X4/X6/R9	RESISTOR	75	1% 1/10W	0603	Resistor
X4/X6/R8	RESISTOR	75	1% 1/10W	0603	Resistor
X4/X6/R7	RESISTOR	75	1% 1/10W	0603	Resistor
X4/X6/R6	RESISTOR	75	1% 1/10W	0603	Resistor
X4/X6/R3	RESISTOR	100	1% 1/10W	0603	Resistor
X4/X6/C3	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X4/X6/R4	RESISTOR	100	1% 1/10W	0603	Resistor
X4/X6/C2	CAPACITOR	0.1uF	16WVDC X7R	0603	Ceramic capacitor
X4/X6/R5	RESISTOR	100	1% 1/10W	0603	Resistor
X4/X6/C1	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X4/X6/U1	DG403	unknown	unknown	SO16	Dual SPDT switch
X4/X5/R22	RESISTOR	604k	1% 1/10W	0603	Resistor
X4/X5/R21	RESISTOR	604k	1% 1/10W	0603	Resistor
X4/X5/C10	CAPACITOR	1uF	25WVDC 1812	0603	Ceramic capacitor
X4/X5/C9	CAPACITOR	1uF	25WVDC 1812	0603	Ceramic capacitor
X4/X5/C4	CAPACITOR	0.1uF	10WVDC 0603	0603	Ceramic capacitor
X4/X5/R20	RESISTOR	10	1% 1/10W	0603	Resistor
X4/X5/C8	CAPACITOR	1uF	25WVDC 1812	0603	Ceramic capacitor
X4/X5/R18	RESISTOR	10k	1% 1/10W	0603	Resistor
X4/X5/Q6	NPN_TRANSISTOR	MMBT2222A	unknown	SOT23	unknown
X4/X5/R19	RESISTOR	12.7	1% 1/10W	0603	Resistor
X4/X5/Q5	NPN_TRANSISTOR	MMBT2222A	unknown	SOT23	unknown
X4/X5/R16	RESISTOR	20k	1% 1/10W	0603	Resistor
X4/X5/R17	RESISTOR	499	1% 1/10W	0603	Resistor
X4/X5/Q4	PNP_TRANSISTOR	MMBT2907A	unknown	SOT23	unknown
X4/X5/C7	CAPACITOR	0.1uF	10WVDC 0603	0603	Ceramic capacitor
X4/X5/R13	RESISTOR	1k	1% 1/10W	0603	Resistor
X4/X5/R14	RESISTOR	32.4k	1% 1/10W	0603	Resistor
X4/X5/C6	CAPACITOR	4.7pF	10WVDC 0603	0603	Ceramic capacitor
X4/X5/R15	RESISTOR	301k	1% 1/10W	0603	Resistor
X4/X5/R11	RESISTOR	10	1% 1/10W	0603	Resistor
X4/X5/C1	CAPACITOR	4.7pF	10WVDC 0603	0603	Ceramic capacitor
X4/X5/Q1	NPN_TRANSISTOR	MMBT2222A	unknown	SOT23	unknown
X4/X5/R7	RESISTOR	499	1% 1/10W	0603	Resistor
X4/X5/R10	RESISTOR	49.9	1% 1/10W	0603	Resistor
X4/X5/C5	CAPACITOR	0.1uF	10WVDC 0603	0603	Ceramic capacitor
X4/X5/U1	DUAL_OPAMP	LM6142AIM	N/A	SO8	attribute_conflict

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X4/X5/R8	RESISTOR	10k	1%	1/10W	0603	Resistor	
X4/X5/R2	RESISTOR	26.7k	1%	1/10W	0603	Resistor	
X4/X5/R1	RESISTOR	34.0k	1%	1/10W	0603	Resistor	
X4/X5/C2	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor	
X4/X5/R3	RESISTOR	1k	1%	1/10W	0603	Resistor	
X4/X5/R4	RESISTOR	32.4k	1%	1/10W	0603	Resistor	
X4/X5/R5	RESISTOR	301k	1%	1/10W	0603	Resistor	
X4/X5/R6	RESISTOR	20k	1%	1/10W	0603	Resistor	
X4/X5/C3	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X4/X5/R9	RESISTOR	12.7	1%	1/10W	0603	Resistor	
X4/X5/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X4/X5/Q2	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X4/X11/R9	RESISTOR	75	1%	1/10W	0603	Resistor	
X4/X11/R8	RESISTOR	75	1%	1/10W	0603	Resistor	
X4/X11/R7	RESISTOR	75	1%	1/10W	0603	Resistor	
X4/X11/R6	RESISTOR	75	1%	1/10W	0603	Resistor	
X4/X11/R3	RESISTOR	100	1%	1/10W	0603	Resistor	
X4/X11/C3	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacitor	
X4/X11/R4	RESISTOR	100	1%	1/10W	0603	Resistor	
X4/X11/C2	CAPACITOR	0.1uF	16WVDC	X7R	0603	Ceramic capacitor	
X4/X11/R5	RESISTOR	100	1%	1/10W	0603	Resistor	
X4/X11/C1	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacitor	
X4/X11/U1	DG403	unknown	unknown	SO16		Dual SPDT switch	
X4/R9	RESISTOR	604k	1%	0603		Resistor	
X4/R1	RESISTOR	56.2k	1%	0603		Resistor	
X4/R2	RESISTOR	200k	1%	0603		Resistor	
X4/C4	CAPACITOR	10pF	25WVDC	X7R	0603	Ceramic capacitor	
X4/R8	RESISTOR	49.9	1%	1/10W	0603	Resistor	
X4/C5	CAPACITOR	10nF	25WVDC	X7R	0603	Ceramic capacitor	
X4/R6	RESISTOR	49.9	1%	1/10W	0603	Resistor	
X4/C3	CAPACITOR	22nF	50WVDC	X7R	0603	Ceramic capacitor	
X4/U1	DUAL_OPAMP	LM6142AIM		N/A	SO8	attribute_conflict	
X4/R7	RESISTOR	604k	1%	0603		Resistor	
X4/R3	RESISTOR	56.2k	1%	0603		Resistor	
X4/R4	RESISTOR	200k	1%	0603		Resistor	
X4/C1	CAPACITOR	10pF	25WVDC	X7R	0603	Ceramic capacitor	
X4/R5	RESISTOR	49.9	1%	1/10W	0603	Resistor	
X4/C2	CAPACITOR	10nF	25WVDC	X7R	0603	Ceramic capacitor	
X3/R12	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/R11	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/C7	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor	
X3/R10	RESISTOR	49.9	1%	1/10W	0603	Resistor	
X3/C6	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor	
X3/C32	CAPACITOR	0.047uF	50WVDC	X7R	0603	Ceramic capacitor	
X3/U3	MAX308CSE+	unknown	unknown	SO16	8 input	analog mux	
X3/C31	CAPACITOR	0.047uF	50WVDC	X7R	0603	Ceramic capacitor	
X3/U2	AD5328	unknown	unknown	TSSOP16	Octal	DAC	
X3/X1/Z1	ZENER_DIODE	BZV55-B3V3		unknown	SOD80C	unknown	
X3/X1/Z2	ZENER_DIODE	BZV55-B3V3		unknown	SOD80C	unknown	
X3/X1/C11	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X3/X1/C12	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X3/X1/C2	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X3/X1/C13	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X3/X1/C10	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X3/X1/R20	RESISTOR	604k	1%	1/10W	0603	Resistor	
X3/X1/R10	RESISTOR	604k	1%	1/10W	0603	Resistor	

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X3/X1/C1	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor		
X3/X1/R18	RESISTOR	10	1% 1W	2512	Resistor		
X3/X1/C9	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X3/X1/R12	RESISTOR	33.2k	1% 1/10W	0603	Resistor		
X3/X1/Q2	LM395T unknown	unknown	TO220	unknown			
X3/X1/C7	CAPACITOR	47pF	50WVDC	0603	Ceramic capacitor		
X3/X1/R16	RESISTOR	4.99k	1% 1/10W	0603	Resistor		
X3/X1/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X3/X1/R8	RESISTOR	10	1% 1W	2512	Resistor		
X3/X1/C8	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X3/X1/R2	RESISTOR	301k	1% 1/10W	0603	Resistor		
X3/X1/C6	CAPACITOR	330pF	50WVDC	0603	Ceramic capacitor		
X3/X1/R6	RESISTOR	10k	1% 1/10W	0603	Resistor		
X3/X1/Q1	LM395T unknown	unknown	TO220	unknown			
X3/X1/R17	RESISTOR	10k	1% 1/10W	0603	Resistor		
X3/X1/R7	RESISTOR	10k	1% 1/10W	0603	Resistor		
X3/X1/C5	CAPACITOR	330pF	50WVDC	0603	Ceramic capacitor		
X3/X1/C4	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor		
X3/X1/C3	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor		
X3/X1/R15	RESISTOR	10k	1% 1/10W	0603	Resistor		
X3/X1/R5	RESISTOR	10k	1% 1/10W	0603	Resistor		
X3/X1/R11	RESISTOR	60.4k	1% 1/10W	0603	Resistor		
X3/X1/R13	RESISTOR	75k	1% 1/10W	0603	Resistor		
X3/X1/R14	RESISTOR	301k	1% 1/10W	0603	Resistor		
X3/X1/U2	DUAL_OPAMP	LM6142AIM		N/A	SO8	attribute_confli	ct
X3/X1/R1	RESISTOR	54.9k	1% 1/10W	0603	Resistor		
X3/X1/R3	RESISTOR	54.9k	1% 1/10W	0603	Resistor		
X3/X1/R4	RESISTOR	301k	1% 1/10W	0603	Resistor		
X3/X1/U1	DUAL_OPAMP	LM6142AIM		N/A	SO8	attribute_confli	ct
X3/X2/C3	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor		
X3/X2/C2	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor		
X3/X2/C1	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor		
X3/X2/C7	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X3/X2/C4	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X3/X2/C6	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X3/X2/C5	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X3/X2/R2	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X2/R1	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X2/R7	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X2/R6	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X2/X2/Q1	PMOS-S08	IRF9333	unknown	SO8	P channel MOS transistor		
(enhancement type)							
X3/X2/X2/R6	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X2/X2/R5	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X2/X2/R4	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X2/X2/R3	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X2/X2/R7	RESISTOR	200	1% 1/10W	0603	Resistor		
X3/X2/X2/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X3/X2/X2/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X3/X2/X2/R2	RESISTOR	1	1% 1W	2512	Resistor		
X3/X2/X2/R1	RESISTOR	1	1% 1W	2512	Resistor		
X3/X2/X2/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channe	l MOS transistor (enhancement type)
X3/X2/X1/Q1	PMOS-S08	IRF9333	unknown	SO8	P channel MOS transistor		
(enhancement type)							
X3/X2/X1/R6	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X2/X1/R5	RESISTOR	3.74k	1% 1/10W	0603	Resistor		

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X3/X2/X1/R4	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/X2/X1/R3	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/X2/X1/R7	RESISTOR	200	1%	1/10W	0603	Resistor	
X3/X2/X1/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X3/X2/X1/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X3/X2/X1/R2	RESISTOR	1	1%	1W	2512	Resistor	
X3/X2/X1/R1	RESISTOR	1	1%	1W	2512	Resistor	
X3/X2/X1/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channe	
l MOS transistor (enhancement type)							
X3/X2/R3	RESISTOR	100	1%	1/10W	0603	Resistor	
X3/X2/R4	RESISTOR	100	1%	1/10W	0603	Resistor	
X3/X2/R5	RESISTOR	100	1%	1/10W	0603	Resistor	
X3/X2/U1	DG403	unknown	unknown	SO16	Dual	SPDT switch	
X3/X3/C3	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X3/X3/C2	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X3/X3/C1	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X3/X3/C7	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X3/X3/C4	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X3/X3/C6	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X3/X3/C5	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X3/X3/R2	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/X3/R1	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/X3/R7	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/X3/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/X3/X2/Q1	PMOS-S08	IRF9333	unknown	S08		P channel MOS transistor	
(enhancement type)							
X3/X3/X2/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/X3/X2/R5	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/X3/X2/R4	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/X3/X2/R3	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/X3/X2/R7	RESISTOR	200	1%	1/10W	0603	Resistor	
X3/X3/X2/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X3/X3/X2/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X3/X3/X2/R2	RESISTOR	1	1%	1W	2512	Resistor	
X3/X3/X2/R1	RESISTOR	1	1%	1W	2512	Resistor	
X3/X3/X2/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channe	
l MOS transistor (enhancement type)							
X3/X3/X1/Q1	PMOS-S08	IRF9333	unknown	S08		P channel MOS transistor	
(enhancement type)							
X3/X3/X1/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/X3/X1/R5	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/X3/X1/R4	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/X3/X1/R3	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X3/X3/X1/R7	RESISTOR	200	1%	1/10W	0603	Resistor	
X3/X3/X1/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X3/X3/X1/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X3/X3/X1/R2	RESISTOR	1	1%	1W	2512	Resistor	
X3/X3/X1/R1	RESISTOR	1	1%	1W	2512	Resistor	
X3/X3/X1/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channe	
l MOS transistor (enhancement type)							
X3/X3/R3	RESISTOR	100	1%	1/10W	0603	Resistor	
X3/X3/R4	RESISTOR	100	1%	1/10W	0603	Resistor	
X3/X3/R5	RESISTOR	100	1%	1/10W	0603	Resistor	
X3/X3/U1	DG403	unknown	unknown	SO16	Dual	SPDT switch	
X3/X4/C3	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X3/X4/C2	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X3/X4/C1	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X3/X4/C7	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X3/X4/C4	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	

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X3/X4/C6	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X3/X4/C5	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X3/X4/R2	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X4/R1	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X4/R7	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X4/R6	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X4/X2/Q1	PMOS-S08	IRF9333	unknown	S08	P channel	MOS transistor	
(enhancement type)							
X3/X4/X2/R6	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X4/X2/R5	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X4/X2/R4	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X4/X2/R3	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X4/X2/R7	RESISTOR	200	1% 1/10W	0603	Resistor		
X3/X4/X2/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X3/X4/X2/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X3/X4/X2/R2	RESISTOR	1	1% 1W	2512	Resistor		
X3/X4/X2/R1	RESISTOR	1	1% 1W	2512	Resistor		
X3/X4/X2/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channel MOS transistor (enhancement type)	
X3/X4/X1/Q1	PMOS-S08	IRF9333	unknown	S08	P channel	MOS transistor	
(enhancement type)							
X3/X4/X1/R6	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X4/X1/R5	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X4/X1/R4	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X4/X1/R3	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X3/X4/X1/R7	RESISTOR	200	1% 1/10W	0603	Resistor		
X3/X4/X1/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X3/X4/X1/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X3/X4/X1/R2	RESISTOR	1	1% 1W	2512	Resistor		
X3/X4/X1/R1	RESISTOR	1	1% 1W	2512	Resistor		
X3/X4/X1/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channel MOS transistor (enhancement type)	
X3/X4/R3	RESISTOR	100	1% 1/10W	0603	Resistor		
X3/X4/R4	RESISTOR	100	1% 1/10W	0603	Resistor		
X3/X4/R5	RESISTOR	100	1% 1/10W	0603	Resistor		
X3/X4/U1	DG403	unknown	unknown	SO16	Dual	SPDT switch	
X3/X10/R22	RESISTOR	604k	1% 1/10W	0603	Resistor		
X3/X10/R21	RESISTOR	604k	1% 1/10W	0603	Resistor		
X3/X10/C10	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X3/X10/C9	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X3/X10/C4	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor	
X3/X10/R20	RESISTOR	10	1% 1/10W	0603	Resistor		
X3/X10/C8	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X3/X10/R18	RESISTOR	10k	1% 1/10W	0603	Resistor		
X3/X10/Q6	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X3/X10/R19	RESISTOR	12.7	1% 1/10W	0603	Resistor		
X3/X10/Q5	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X3/X10/R16	RESISTOR	20k	1% 1/10W	0603	Resistor		
X3/X10/R17	RESISTOR	499	1% 1/10W	0603	Resistor		
X3/X10/Q4	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X3/X10/C7	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor	
X3/X10/R13	RESISTOR	1k	1% 1/10W	0603	Resistor		
X3/X10/R14	RESISTOR	32.4k	1% 1/10W	0603	Resistor		
X3/X10/C6	CAPACITOR	4.7pF	10WVDC	0603	Ceramic	capacitor	
X3/X10/R15	RESISTOR	301k	1% 1/10W	0603	Resistor		
X3/X10/R11	RESISTOR	10	1% 1/10W	0603	Resistor		
X3/X10/C1	CAPACITOR	4.7pF	10WVDC	0603	Ceramic	capacitor	
X3/X10/Q1	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X3/X10/R7	RESISTOR	499	1% 1/10W	0603	Resistor		

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X3/X10/R10	RESISTOR	49.9	1% 1/10W	0603	Resistor	
X3/X10/C5	CAPACITOR	0.1uF	10WVDC	0603	Ceramic capacitor	
X3/X10/U1	DUAL_OPAMP	LM6142AIM	N/A	SO8	attribute_confli	ct
X3/X10/R8	RESISTOR	10k	1% 1/10W	0603	Resistor	
X3/X10/R2	RESISTOR	26.7k	1% 1/10W	0603	Resistor	
X3/X10/R1	RESISTOR	34.0k	1% 1/10W	0603	Resistor	
X3/X10/C2	CAPACITOR	0.1uF	10WVDC	0603	Ceramic capacitor	
X3/X10/R3	RESISTOR	1k	1% 1/10W	0603	Resistor	
X3/X10/R4	RESISTOR	32.4k	1% 1/10W	0603	Resistor	
X3/X10/R5	RESISTOR	301k	1% 1/10W	0603	Resistor	
X3/X10/R6	RESISTOR	20k	1% 1/10W	0603	Resistor	
X3/X10/C3	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor	
X3/X10/R9	RESISTOR	12.7	1% 1/10W	0603	Resistor	
X3/X10/Q3	PNP_TRANSISTOR	MMBT2907A	unknown	SOT23	unknown	
X3/X10/Q2	PNP_TRANSISTOR	MMBT2907A	unknown	SOT23	unknown	
X3/X9/R9	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X9/R8	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X9/R7	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X9/R6	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X9/R3	RESISTOR	100	1% 1/10W	0603	Resistor	
X3/X9/C3	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacito
X3/X9/R4	RESISTOR	100	1% 1/10W	0603	Resistor	
X3/X9/C2	CAPACITOR	0.1uF	16WVDC	X7R	0603	Ceramic capacito
X3/X9/R5	RESISTOR	100	1% 1/10W	0603	Resistor	
X3/X9/C1	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacito
X3/X9/U1	DG403	unknown	unknown	SO16	Dual SPDT switch	
X3/X8/R9	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X8/R8	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X8/R7	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X8/R6	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X8/R3	RESISTOR	100	1% 1/10W	0603	Resistor	
X3/X8/C3	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacito
X3/X8/R4	RESISTOR	100	1% 1/10W	0603	Resistor	
X3/X8/C2	CAPACITOR	0.1uF	16WVDC	X7R	0603	Ceramic capacito
X3/X8/R5	RESISTOR	100	1% 1/10W	0603	Resistor	
X3/X8/C1	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacito
X3/X8/U1	DG403	unknown	unknown	SO16	Dual SPDT switch	
X3/X7/R9	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X7/R8	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X7/R7	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X7/R6	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X7/R3	RESISTOR	100	1% 1/10W	0603	Resistor	
X3/X7/C3	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacito
X3/X7/R4	RESISTOR	100	1% 1/10W	0603	Resistor	
X3/X7/C2	CAPACITOR	0.1uF	16WVDC	X7R	0603	Ceramic capacito
X3/X7/R5	RESISTOR	100	1% 1/10W	0603	Resistor	
X3/X7/C1	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacito
X3/X7/U1	DG403	unknown	unknown	SO16	Dual SPDT switch	
X3/X6/R9	RESISTOR	75	1% 1/10W	0603	Resistor	

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X3/X6/R8	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X6/R7	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X6/R6	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X6/R3	RESISTOR	100	1% 1/10W	0603	Resistor	
X3/X6/C3	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor	
X3/X6/R4	RESISTOR	100	1% 1/10W	0603	Resistor	
X3/X6/C2	CAPACITOR	0.1uF	16WVDC X7R	0603	Ceramic capacitor	
X3/X6/R5	RESISTOR	100	1% 1/10W	0603	Resistor	
X3/X6/C1	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor	
X3/X6/U1	DG403	unknown	unknown SO16	Dual SPDT switch		
X3/X5/R22	RESISTOR	604k	1% 1/10W	0603	Resistor	
X3/X5/R21	RESISTOR	604k	1% 1/10W	0603	Resistor	
X3/X5/C10	CAPACITOR	1uF	25WVDC 1812	Ceramic capacitor		
X3/X5/C9	CAPACITOR	1uF	25WVDC 1812	Ceramic capacitor		
X3/X5/C4	CAPACITOR	0.1uF	10WVDC 0603	Ceramic capacitor		
X3/X5/R20	RESISTOR	10	1% 1/10W	0603	Resistor	
X3/X5/C8	CAPACITOR	1uF	25WVDC 1812	Ceramic capacitor		
X3/X5/R18	RESISTOR	10k	1% 1/10W	0603	Resistor	
X3/X5/Q6	NPN_TRANSISTOR	MMBT2222A	unknown	SOT23	unknown	
X3/X5/R19	RESISTOR	12.7	1% 1/10W	0603	Resistor	
X3/X5/Q5	NPN_TRANSISTOR	MMBT2222A	unknown	SOT23	unknown	
X3/X5/R16	RESISTOR	20k	1% 1/10W	0603	Resistor	
X3/X5/R17	RESISTOR	499	1% 1/10W	0603	Resistor	
X3/X5/Q4	PNP_TRANSISTOR	MMBT2907A	unknown	SOT23	unknown	
X3/X5/C7	CAPACITOR	0.1uF	10WVDC 0603	Ceramic capacitor		
X3/X5/R13	RESISTOR	1k	1% 1/10W	0603	Resistor	
X3/X5/R14	RESISTOR	32.4k	1% 1/10W	0603	Resistor	
X3/X5/C6	CAPACITOR	4.7pF	10WVDC 0603	Ceramic capacitor		
X3/X5/R15	RESISTOR	301k	1% 1/10W	0603	Resistor	
X3/X5/R11	RESISTOR	10	1% 1/10W	0603	Resistor	
X3/X5/C1	CAPACITOR	4.7pF	10WVDC 0603	Ceramic capacitor		
X3/X5/Q1	NPN_TRANSISTOR	MMBT2222A	unknown	SOT23	unknown	
X3/X5/R7	RESISTOR	499	1% 1/10W	0603	Resistor	
X3/X5/R10	RESISTOR	49.9	1% 1/10W	0603	Resistor	
X3/X5/C5	CAPACITOR	0.1uF	10WVDC 0603	Ceramic capacitor		
X3/X5/U1	DUAL_OPAMP	LM6142AIM	N/A	SO8	attribute_conflict	
X3/X5/R8	RESISTOR	10k	1% 1/10W	0603	Resistor	
X3/X5/R2	RESISTOR	26.7k	1% 1/10W	0603	Resistor	
X3/X5/R1	RESISTOR	34.0k	1% 1/10W	0603	Resistor	
X3/X5/C2	CAPACITOR	0.1uF	10WVDC 0603	Ceramic capacitor		
X3/X5/R3	RESISTOR	1k	1% 1/10W	0603	Resistor	
X3/X5/R4	RESISTOR	32.4k	1% 1/10W	0603	Resistor	
X3/X5/R5	RESISTOR	301k	1% 1/10W	0603	Resistor	
X3/X5/R6	RESISTOR	20k	1% 1/10W	0603	Resistor	
X3/X5/C3	CAPACITOR	1uF	25WVDC 1812	Ceramic capacitor		
X3/X5/R9	RESISTOR	12.7	1% 1/10W	0603	Resistor	
X3/X5/Q3	PNP_TRANSISTOR	MMBT2907A	unknown	SOT23	unknown	
X3/X5/Q2	PNP_TRANSISTOR	MMBT2907A	unknown	SOT23	unknown	
X3/X11/R9	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X11/R8	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X11/R7	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X11/R6	RESISTOR	75	1% 1/10W	0603	Resistor	
X3/X11/R3	RESISTOR	100	1% 1/10W	0603	Resistor	
X3/X11/C3	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor	

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X3/X11/R4	RESISTOR	100	1% 1/10W	0603	Resistor		
X3/X11/C2	CAPACITOR	0.1uF	16WVDC X7R	0603	Ceramic capacitor		
X3/X11/R5	RESISTOR	100	1% 1/10W	0603	Resistor		
X3/X11/C1	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor		
X3/X11/U1	DG403	unknown	unknown	SO16	Dual SPDT switch		
X3/R9	RESISTOR	604k	1%	0603	Resistor		
X3/R1	RESISTOR	56.2k	1%	0603	Resistor		
X3/R2	RESISTOR	200k	1%	0603	Resistor		
X3/C4	CAPACITOR	10pF	25WVDC X7R	0603	Ceramic capacitor		
X3/R8	RESISTOR	49.9	1% 1/10W	0603	Resistor		
X3/C5	CAPACITOR	10nF	25WVDC X7R	0603	Ceramic capacitor		
X3/R6	RESISTOR	49.9	1% 1/10W	0603	Resistor		
X3/C3	CAPACITOR	22nF	50WVDC X7R	0603	Ceramic capacitor		
X3/U1	DUAL_OPAMP	LM6142AIM	N/A	SO8	attribute_conflict		
X3/R7	RESISTOR	604k	1%	0603	Resistor		
X3/R3	RESISTOR	56.2k	1%	0603	Resistor		
X3/R4	RESISTOR	200k	1%	0603	Resistor		
X3/C1	CAPACITOR	10pF	25WVDC X7R	0603	Ceramic capacitor		
X3/R5	RESISTOR	49.9	1% 1/10W	0603	Resistor		
X3/C2	CAPACITOR	10nF	25WVDC X7R	0603	Ceramic capacitor		
X2/R12	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/R11	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/C7	CAPACITOR	0.1uF	10WVDC	0603	Ceramic capacitor		
X2/R10	RESISTOR	49.9	1% 1/10W	0603	Resistor		
X2/C6	CAPACITOR	0.1uF	10WVDC	0603	Ceramic capacitor		
X2/C32	CAPACITOR	0.047uF	50WVDC X7R	0603	Ceramic capacitor		
X2/U3	MAX308CSE+	unknown	unknown	SO16	8 input analog mux		
X2/C31	CAPACITOR	0.047uF	50WVDC X7R	0603	Ceramic capacitor		
X2/U2	AD5328	unknown	unknown	TSSOP16	Octal DAC		
X2/X1/Z1	ZENER_DIODE	BZV55-B3V3		unknown	SOD80C	unknown	
X2/X1/Z2	ZENER_DIODE	BZV55-B3V3		unknown	SOD80C	unknown	
X2/X1/C11	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor		
X2/X1/C12	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor		
X2/X1/C2	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor		
X2/X1/C13	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X2/X1/C10	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X2/X1/R20	RESISTOR	604k	1% 1/10W	0603	Resistor		
X2/X1/R10	RESISTOR	604k	1% 1/10W	0603	Resistor		
X2/X1/C1	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor		
X2/X1/R18	RESISTOR	10	1% 1W	2512	Resistor		
X2/X1/C9	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X2/X1/R12	RESISTOR	33.2k	1% 1/10W	0603	Resistor		
X2/X1/Q2	LM395T	unknown	unknown	TO220	unknown		
X2/X1/C7	CAPACITOR	47pF	50WVDC	0603	Ceramic capacitor		
X2/X1/R16	RESISTOR	4.99k	1% 1/10W	0603	Resistor		
X2/X1/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X2/X1/R8	RESISTOR	10	1% 1W	2512	Resistor		
X2/X1/C8	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X2/X1/R2	RESISTOR	301k	1% 1/10W	0603	Resistor		
X2/X1/C6	CAPACITOR	330pF	50WVDC	0603	Ceramic capacitor		
X2/X1/R6	RESISTOR	10k	1% 1/10W	0603	Resistor		
X2/X1/Q1	LM395T	unknown	unknown	TO220	unknown		
X2/X1/R17	RESISTOR	10k	1% 1/10W	0603	Resistor		
X2/X1/R7	RESISTOR	10k	1% 1/10W	0603	Resistor		
X2/X1/C5	CAPACITOR	330pF	50WVDC	0603	Ceramic capacitor		
X2/X1/C4	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor		
X2/X1/C3	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor		

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X2/X1/R15	RESISTOR	10k	1%	1/10W	0603	Resistor	
X2/X1/R5	RESISTOR	10k	1%	1/10W	0603	Resistor	
X2/X1/R11	RESISTOR	60.4k	1%	1/10W	0603	Resistor	
X2/X1/R13	RESISTOR	75k	1%	1/10W	0603	Resistor	
X2/X1/R14	RESISTOR	301k	1%	1/10W	0603	Resistor	
X2/X1/U2	DUAL_OPAMP	LM6142AIM		N/A	SO8	attribute_confli	ct
X2/X1/R1	RESISTOR	54.9k	1%	1/10W	0603	Resistor	
X2/X1/R3	RESISTOR	54.9k	1%	1/10W	0603	Resistor	
X2/X1/R4	RESISTOR	301k	1%	1/10W	0603	Resistor	
X2/X1/U1	DUAL_OPAMP	LM6142AIM		N/A	SO8	attribute_confli	ct
X2/X2/C3	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X2/X2/C2	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X2/X2/C1	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X2/X2/C7	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X2/X2/C4	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X2/X2/C6	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X2/X2/C5	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X2/X2/R2	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X2/R1	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X2/R7	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X2/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X2/X2/Q1	PMOS-SO8	IRF9333	unknown	SO8	P channel	MOS transistor	
(enhancement type)							
X2/X2/X2/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X2/X2/R5	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X2/X2/R4	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X2/X2/R3	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X2/X2/R7	RESISTOR	200	1%	1/10W	0603	Resistor	
X2/X2/X2/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X2/X2/X2/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X2/X2/X2/R2	RESISTOR	1	1%	1W	2512	Resistor	
X2/X2/X2/R1	RESISTOR	1	1%	1W	2512	Resistor	
X2/X2/X2/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channe	l MOS transistor (enhancement type)
X2/X2/X1/Q1	PMOS-SO8	IRF9333	unknown	SO8	P channel	MOS transistor	
(enhancement type)							
X2/X2/X1/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X2/X1/R5	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X2/X1/R4	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X2/X1/R3	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X2/X1/R7	RESISTOR	200	1%	1/10W	0603	Resistor	
X2/X2/X1/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X2/X2/X1/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X2/X2/X1/R2	RESISTOR	1	1%	1W	2512	Resistor	
X2/X2/X1/R1	RESISTOR	1	1%	1W	2512	Resistor	
X2/X2/X1/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channe	l MOS transistor (enhancement type)
X2/X2/R3	RESISTOR	100	1%	1/10W	0603	Resistor	
X2/X2/R4	RESISTOR	100	1%	1/10W	0603	Resistor	
X2/X2/R5	RESISTOR	100	1%	1/10W	0603	Resistor	
X2/X2/U1	DG403	unknown	unknown	SO16	Dual SPDT switch		
X2/X3/C3	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X2/X3/C2	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X2/X3/C1	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X2/X3/C7	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X2/X3/C4	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X2/X3/C6	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	

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X2/X3/C5	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X2/X3/R2	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X3/R1	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X3/R7	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X3/R6	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X3/X2/Q1	PMOS-S08	IRF9333	unknown	S08	P channel MOS transistor		
(enhancement type)							
X2/X3/X2/R6	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X3/X2/R5	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X3/X2/R4	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X3/X2/R3	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X3/X2/R7	RESISTOR	200	1% 1/10W	0603	Resistor		
X2/X3/X2/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X2/X3/X2/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X2/X3/X2/R2	RESISTOR	1	1% 1W	2512	Resistor		
X2/X3/X2/R1	RESISTOR	1	1% 1W	2512	Resistor		
X2/X3/X2/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channel MOS transistor	
(enhancement type)							
X2/X3/X1/Q1	PMOS-S08	IRF9333	unknown	S08	P channel MOS transistor		
(enhancement type)							
X2/X3/X1/R6	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X3/X1/R5	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X3/X1/R4	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X3/X1/R3	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X3/X1/R7	RESISTOR	200	1% 1/10W	0603	Resistor		
X2/X3/X1/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X2/X3/X1/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X2/X3/X1/R2	RESISTOR	1	1% 1W	2512	Resistor		
X2/X3/X1/R1	RESISTOR	1	1% 1W	2512	Resistor		
X2/X3/X1/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channel MOS transistor	
(enhancement type)							
X2/X3/R3	RESISTOR	100	1% 1/10W	0603	Resistor		
X2/X3/R4	RESISTOR	100	1% 1/10W	0603	Resistor		
X2/X3/R5	RESISTOR	100	1% 1/10W	0603	Resistor		
X2/X3/U1	DG403	unknown	unknown	S016	Dual SPDT switch		
X2/X4/C3	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor		
X2/X4/C2	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor		
X2/X4/C1	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor		
X2/X4/C7	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X2/X4/C4	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X2/X4/C6	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X2/X4/C5	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X2/X4/R2	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X4/R1	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X4/R7	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X4/R6	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X4/X2/Q1	PMOS-S08	IRF9333	unknown	S08	P channel MOS transistor		
(enhancement type)							
X2/X4/X2/R6	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X4/X2/R5	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X4/X2/R4	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X4/X2/R3	RESISTOR	3.74k	1% 1/10W	0603	Resistor		
X2/X4/X2/R7	RESISTOR	200	1% 1/10W	0603	Resistor		
X2/X4/X2/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X2/X4/X2/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X2/X4/X2/R2	RESISTOR	1	1% 1W	2512	Resistor		
X2/X4/X2/R1	RESISTOR	1	1% 1W	2512	Resistor		
X2/X4/X2/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channel MOS transistor	
(enhancement type)							

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X2/X4/X1/Q1	PMOS-S08	IRF9333	unknown	S08	P channel MOS transistor		
(enhancement type)							
X2/X4/X1/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X4/X1/R5	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X4/X1/R4	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X4/X1/R3	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X2/X4/X1/R7	RESISTOR	200	1%	1/10W	0603	Resistor	
X2/X4/X1/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X2/X4/X1/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X2/X4/X1/R2	RESISTOR	1	1%	1W	2512	Resistor	
X2/X4/X1/R1	RESISTOR	1	1%	1W	2512	Resistor	
X2/X4/X1/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channe	
l MOS transistor (enhancement type)							
X2/X4/R3	RESISTOR	100	1%	1/10W	0603	Resistor	
X2/X4/R4	RESISTOR	100	1%	1/10W	0603	Resistor	
X2/X4/R5	RESISTOR	100	1%	1/10W	0603	Resistor	
X2/X4/U1	DG403	unknown	unknown	SO16	Dual SPDT switch		
X2/X10/R22	RESISTOR	604k	1%	1/10W	0603	Resistor	
X2/X10/R21	RESISTOR	604k	1%	1/10W	0603	Resistor	
X2/X10/C10	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X2/X10/C9	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X2/X10/C4	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor	
X2/X10/R20	RESISTOR	10	1%	1/10W	0603	Resistor	
X2/X10/C8	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X2/X10/R18	RESISTOR	10k	1%	1/10W	0603	Resistor	
X2/X10/Q6	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X2/X10/R19	RESISTOR	12.7	1%	1/10W	0603	Resistor	
X2/X10/Q5	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X2/X10/R16	RESISTOR	20k	1%	1/10W	0603	Resistor	
X2/X10/R17	RESISTOR	499	1%	1/10W	0603	Resistor	
X2/X10/Q4	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X2/X10/C7	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor	
X2/X10/R13	RESISTOR	1k	1%	1/10W	0603	Resistor	
X2/X10/R14	RESISTOR	32.4k	1%	1/10W	0603	Resistor	
X2/X10/C6	CAPACITOR	4.7pF	10WVDC	0603	Ceramic	capacitor	
X2/X10/R15	RESISTOR	301k	1%	1/10W	0603	Resistor	
X2/X10/R11	RESISTOR	10	1%	1/10W	0603	Resistor	
X2/X10/C1	CAPACITOR	4.7pF	10WVDC	0603	Ceramic	capacitor	
X2/X10/Q1	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X2/X10/R7	RESISTOR	499	1%	1/10W	0603	Resistor	
X2/X10/R10	RESISTOR	49.9	1%	1/10W	0603	Resistor	
X2/X10/C5	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor	
X2/X10/U1	DUAL_OPAMP	LM6142AIM		N/A	S08	attribute_confli	
ct							
X2/X10/R8	RESISTOR	10k	1%	1/10W	0603	Resistor	
X2/X10/R2	RESISTOR	26.7k	1%	1/10W	0603	Resistor	
X2/X10/R1	RESISTOR	34.0k	1%	1/10W	0603	Resistor	
X2/X10/C2	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor	
X2/X10/R3	RESISTOR	1k	1%	1/10W	0603	Resistor	
X2/X10/R4	RESISTOR	32.4k	1%	1/10W	0603	Resistor	
X2/X10/R5	RESISTOR	301k	1%	1/10W	0603	Resistor	
X2/X10/R6	RESISTOR	20k	1%	1/10W	0603	Resistor	
X2/X10/C3	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X2/X10/R9	RESISTOR	12.7	1%	1/10W	0603	Resistor	
X2/X10/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X2/X10/Q2	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X2/X9/R9	RESISTOR	75	1%	1/10W	0603	Resistor	
X2/X9/R8	RESISTOR	75	1%	1/10W	0603	Resistor	
X2/X9/R7	RESISTOR	75	1%	1/10W	0603	Resistor	

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X2/X9/R6	RESISTOR	75	1% 1/10W	0603	Resistor
X2/X9/R3	RESISTOR	100	1% 1/10W	0603	Resistor
X2/X9/C3	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X2/X9/R4	RESISTOR	100	1% 1/10W	0603	Resistor
X2/X9/C2	CAPACITOR	0.1uF	16WVDC X7R	0603	Ceramic capacitor
X2/X9/R5	RESISTOR	100	1% 1/10W	0603	Resistor
X2/X9/C1	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X2/X9/U1	DG403	unknown	unknown	SO16	Dual SPDT switch
X2/X8/R9	RESISTOR	75	1% 1/10W	0603	Resistor
X2/X8/R8	RESISTOR	75	1% 1/10W	0603	Resistor
X2/X8/R7	RESISTOR	75	1% 1/10W	0603	Resistor
X2/X8/R6	RESISTOR	75	1% 1/10W	0603	Resistor
X2/X8/R3	RESISTOR	100	1% 1/10W	0603	Resistor
X2/X8/C3	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X2/X8/R4	RESISTOR	100	1% 1/10W	0603	Resistor
X2/X8/C2	CAPACITOR	0.1uF	16WVDC X7R	0603	Ceramic capacitor
X2/X8/R5	RESISTOR	100	1% 1/10W	0603	Resistor
X2/X8/C1	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X2/X8/U1	DG403	unknown	unknown	SO16	Dual SPDT switch
X2/X7/R9	RESISTOR	75	1% 1/10W	0603	Resistor
X2/X7/R8	RESISTOR	75	1% 1/10W	0603	Resistor
X2/X7/R7	RESISTOR	75	1% 1/10W	0603	Resistor
X2/X7/R6	RESISTOR	75	1% 1/10W	0603	Resistor
X2/X7/R3	RESISTOR	100	1% 1/10W	0603	Resistor
X2/X7/C3	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X2/X7/R4	RESISTOR	100	1% 1/10W	0603	Resistor
X2/X7/C2	CAPACITOR	0.1uF	16WVDC X7R	0603	Ceramic capacitor
X2/X7/R5	RESISTOR	100	1% 1/10W	0603	Resistor
X2/X7/C1	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X2/X7/U1	DG403	unknown	unknown	SO16	Dual SPDT switch
X2/X6/R9	RESISTOR	75	1% 1/10W	0603	Resistor
X2/X6/R8	RESISTOR	75	1% 1/10W	0603	Resistor
X2/X6/R7	RESISTOR	75	1% 1/10W	0603	Resistor
X2/X6/R6	RESISTOR	75	1% 1/10W	0603	Resistor
X2/X6/R3	RESISTOR	100	1% 1/10W	0603	Resistor
X2/X6/C3	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X2/X6/R4	RESISTOR	100	1% 1/10W	0603	Resistor
X2/X6/C2	CAPACITOR	0.1uF	16WVDC X7R	0603	Ceramic capacitor
X2/X6/R5	RESISTOR	100	1% 1/10W	0603	Resistor
X2/X6/C1	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X2/X6/U1	DG403	unknown	unknown	SO16	Dual SPDT switch
X2/X5/R22	RESISTOR	604k	1% 1/10W	0603	Resistor
X2/X5/R21	RESISTOR	604k	1% 1/10W	0603	Resistor
X2/X5/C10	CAPACITOR	1uF	25WVDC 1812		Ceramic capacitor
X2/X5/C9	CAPACITOR	1uF	25WVDC 1812		Ceramic capacitor
X2/X5/C4	CAPACITOR	0.1uF	10WVDC 0603		Ceramic capacitor
X2/X5/R20	RESISTOR	10	1% 1/10W	0603	Resistor

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X2/X5/C8	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor
X2/X5/R18	RESISTOR	10k	1% 1/10W		0603	Resistor
X2/X5/Q6	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown
X2/X5/R19	RESISTOR	12.7	1% 1/10W		0603	Resistor
X2/X5/Q5	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown
X2/X5/R16	RESISTOR	20k	1% 1/10W		0603	Resistor
X2/X5/R17	RESISTOR	499	1% 1/10W		0603	Resistor
X2/X5/Q4	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown
X2/X5/C7	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor
X2/X5/R13	RESISTOR	1k	1% 1/10W		0603	Resistor
X2/X5/R14	RESISTOR	32.4k	1% 1/10W		0603	Resistor
X2/X5/C6	CAPACITOR	4.7pF	10WVDC	0603	Ceramic	capacitor
X2/X5/R15	RESISTOR	301k	1% 1/10W		0603	Resistor
X2/X5/R11	RESISTOR	10	1% 1/10W		0603	Resistor
X2/X5/C1	CAPACITOR	4.7pF	10WVDC	0603	Ceramic	capacitor
X2/X5/Q1	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown
X2/X5/R7	RESISTOR	499	1% 1/10W		0603	Resistor
X2/X5/R10	RESISTOR	49.9	1% 1/10W		0603	Resistor
X2/X5/C5	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor
X2/X5/U1	DUAL_OPAMP	LM6142AIM		N/A	SO8	attribute_confli
ct						
X2/X5/R8	RESISTOR	10k	1% 1/10W		0603	Resistor
X2/X5/R2	RESISTOR	26.7k	1% 1/10W		0603	Resistor
X2/X5/R1	RESISTOR	34.0k	1% 1/10W		0603	Resistor
X2/X5/C2	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor
X2/X5/R3	RESISTOR	1k	1% 1/10W		0603	Resistor
X2/X5/R4	RESISTOR	32.4k	1% 1/10W		0603	Resistor
X2/X5/R5	RESISTOR	301k	1% 1/10W		0603	Resistor
X2/X5/R6	RESISTOR	20k	1% 1/10W		0603	Resistor
X2/X5/C3	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor
X2/X5/R9	RESISTOR	12.7	1% 1/10W		0603	Resistor
X2/X5/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown
X2/X5/Q2	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown
X2/X11/R9	RESISTOR	75	1% 1/10W		0603	Resistor
X2/X11/R8	RESISTOR	75	1% 1/10W		0603	Resistor
X2/X11/R7	RESISTOR	75	1% 1/10W		0603	Resistor
X2/X11/R6	RESISTOR	75	1% 1/10W		0603	Resistor
X2/X11/R3	RESISTOR	100	1% 1/10W		0603	Resistor
X2/X11/C3	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacito
r						
X2/X11/R4	RESISTOR	100	1% 1/10W		0603	Resistor
X2/X11/C2	CAPACITOR	0.1uF	16WVDC	X7R	0603	Ceramic capacito
r						
X2/X11/R5	RESISTOR	100	1% 1/10W		0603	Resistor
X2/X11/C1	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacito
r						
X2/X11/U1	DG403	unknown	unknown	SO16	Dual SPDT switch	
X2/R9	RESISTOR	604k	1%	0603	Resistor	
X2/R1	RESISTOR	56.2k	1%	0603	Resistor	
X2/R2	RESISTOR	200k	1%	0603	Resistor	
X2/C4	CAPACITOR	10pF	25WVDC	X7R	0603	Ceramic capacitor
X2/R8	RESISTOR	49.9	1% 1/10W		0603	Resistor
X2/C5	CAPACITOR	10nF	25WVDC	X7R	0603	Ceramic capacitor
X2/R6	RESISTOR	49.9	1% 1/10W		0603	Resistor
X2/C3	CAPACITOR	22nF	50WVDC	X7R	0603	Ceramic capacitor
X2/U1	DUAL_OPAMP	LM6142AIM		N/A	SO8	attribute_conflict
X2/R7	RESISTOR	604k	1%	0603	Resistor	
X2/R3	RESISTOR	56.2k	1%	0603	Resistor	
X2/R4	RESISTOR	200k	1%	0603	Resistor	

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X2/C1	CAPACITOR	10pF	25WVDC	X7R	0603	Ceramic capacitor	
X2/R5	RESISTOR	49.9	1%	1/10W	0603	Resistor	
X2/C2	CAPACITOR	10nF	25WVDC	X7R	0603	Ceramic capacitor	
X1/R12	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/R11	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/C7	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor	
X1/R10	RESISTOR	49.9	1%	1/10W	0603	Resistor	
X1/C6	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor	
X1/C32	CAPACITOR	0.047uF	50WVDC	X7R	0603	Ceramic capacitor	
X1/U3	MAX308CSE+	unknown	unknown	SO16	8 input	analog mux	
X1/C31	CAPACITOR	0.047uF	50WVDC	X7R	0603	Ceramic capacitor	
X1/U2	AD5328	unknown	unknown	TSSOP16	Octal	DAC	
X1/X1/Z1	ZENER_DIODE	BZV55-B3V3	unknown	SOD80C	unknown		
X1/X1/Z2	ZENER_DIODE	BZV55-B3V3	unknown	SOD80C	unknown		
X1/X1/C11	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X1/X1/C12	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X1/X1/C2	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X1/X1/C13	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X1/X1/C10	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X1/X1/R20	RESISTOR	604k	1%	1/10W	0603	Resistor	
X1/X1/R10	RESISTOR	604k	1%	1/10W	0603	Resistor	
X1/X1/C1	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X1/X1/R18	RESISTOR	10	1%	1W	2512	Resistor	
X1/X1/C9	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X1/X1/R12	RESISTOR	33.2k	1%	1/10W	0603	Resistor	
X1/X1/Q2	LM395T	unknown	unknown	TO220	unknown		
X1/X1/C7	CAPACITOR	47pF	50WVDC	0603	Ceramic	capacitor	
X1/X1/R16	RESISTOR	4.99k	1%	1/10W	0603	Resistor	
X1/X1/Q3	PNP_TRANSISTOR	MMBT2907A	unknown	SOT23	unknown		
X1/X1/R8	RESISTOR	10	1%	1W	2512	Resistor	
X1/X1/C8	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X1/X1/R2	RESISTOR	301k	1%	1/10W	0603	Resistor	
X1/X1/C6	CAPACITOR	330pF	50WVDC	0603	Ceramic	capacitor	
X1/X1/R6	RESISTOR	10k	1%	1/10W	0603	Resistor	
X1/X1/Q1	LM395T	unknown	unknown	TO220	unknown		
X1/X1/R17	RESISTOR	10k	1%	1/10W	0603	Resistor	
X1/X1/R7	RESISTOR	10k	1%	1/10W	0603	Resistor	
X1/X1/C5	CAPACITOR	330pF	50WVDC	0603	Ceramic	capacitor	
X1/X1/C4	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X1/X1/C3	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X1/X1/R15	RESISTOR	10k	1%	1/10W	0603	Resistor	
X1/X1/R5	RESISTOR	10k	1%	1/10W	0603	Resistor	
X1/X1/R11	RESISTOR	60.4k	1%	1/10W	0603	Resistor	
X1/X1/R13	RESISTOR	75k	1%	1/10W	0603	Resistor	
X1/X1/R14	RESISTOR	301k	1%	1/10W	0603	Resistor	
X1/X1/U2	DUAL_OPAMP	LM6142AIM	N/A	SO8	attribute_confli	ct	
X1/X1/R1	RESISTOR	54.9k	1%	1/10W	0603	Resistor	
X1/X1/R3	RESISTOR	54.9k	1%	1/10W	0603	Resistor	
X1/X1/R4	RESISTOR	301k	1%	1/10W	0603	Resistor	
X1/X1/U1	DUAL_OPAMP	LM6142AIM	N/A	SO8	attribute_confli	ct	
X1/X2/C3	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X1/X2/C2	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X1/X2/C1	CAPACITOR	22nF	50WVDC	0603	Ceramic	capacitor	
X1/X2/C7	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X1/X2/C4	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X1/X2/C6	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	
X1/X2/C5	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor	

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X1/X2/R2	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X2/R1	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X2/R7	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X2/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X2/X2/Q1	PMOS-SO8	IRF9333	unknown	SO8	P channel MOS transistor		
(enhancement type)							
X1/X2/X2/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X2/X2/R5	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X2/X2/R4	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X2/X2/R3	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X2/X2/R7	RESISTOR	200	1%	1/10W	0603	Resistor	
X1/X2/X2/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X1/X2/X2/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X1/X2/X2/R2	RESISTOR	1	1%	1W	2512	Resistor	
X1/X2/X2/R1	RESISTOR	1	1%	1W	2512	Resistor	
X1/X2/X2/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channel MOS transistor (enhancement type)	
X1/X2/X1/Q1	PMOS-SO8	IRF9333	unknown	SO8	P channel MOS transistor		
(enhancement type)							
X1/X2/X1/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X2/X1/R5	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X2/X1/R4	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X2/X1/R3	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X2/X1/R7	RESISTOR	200	1%	1/10W	0603	Resistor	
X1/X2/X1/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X1/X2/X1/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X1/X2/X1/R2	RESISTOR	1	1%	1W	2512	Resistor	
X1/X2/X1/R1	RESISTOR	1	1%	1W	2512	Resistor	
X1/X2/X1/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channel MOS transistor (enhancement type)	
X1/X2/R3	RESISTOR	100	1%	1/10W	0603	Resistor	
X1/X2/R4	RESISTOR	100	1%	1/10W	0603	Resistor	
X1/X2/R5	RESISTOR	100	1%	1/10W	0603	Resistor	
X1/X2/U1	DG403	unknown	unknown	SO16	Dual	SPDT switch	
X1/X3/C3	CAPACITOR	22nF		50WVDC	0603	Ceramic capacitor	
X1/X3/C2	CAPACITOR	22nF		50WVDC	0603	Ceramic capacitor	
X1/X3/C1	CAPACITOR	22nF		50WVDC	0603	Ceramic capacitor	
X1/X3/C7	CAPACITOR	1uF		25WVDC	1812	Ceramic capacitor	
X1/X3/C4	CAPACITOR	1uF		25WVDC	1812	Ceramic capacitor	
X1/X3/C6	CAPACITOR	1uF		25WVDC	1812	Ceramic capacitor	
X1/X3/C5	CAPACITOR	1uF		25WVDC	1812	Ceramic capacitor	
X1/X3/R2	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X3/R1	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X3/R7	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X3/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X3/X2/Q1	PMOS-SO8	IRF9333	unknown	SO8	P channel MOS transistor		
(enhancement type)							
X1/X3/X2/R6	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X3/X2/R5	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X3/X2/R4	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X3/X2/R3	RESISTOR	3.74k	1%	1/10W	0603	Resistor	
X1/X3/X2/R7	RESISTOR	200	1%	1/10W	0603	Resistor	
X1/X3/X2/Q4	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown	
X1/X3/X2/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown	
X1/X3/X2/R2	RESISTOR	1	1%	1W	2512	Resistor	
X1/X3/X2/R1	RESISTOR	1	1%	1W	2512	Resistor	
X1/X3/X2/Q2	NMOS_TRANSISTOR	IRFR3410		unknown	TO252AA	generic N channel MOS transistor (enhancement type)	
X1/X3/X1/Q1	PMOS-SO8	IRF9333	unknown	SO8	P channel MOS transistor		

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(enhancement type)
X1/X3/X1/R6    RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X3/X1/R5    RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X3/X1/R4    RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X3/X1/R3    RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X3/X1/R7    RESISTOR      200      1% 1/10W    0603    Resistor
X1/X3/X1/Q4    NPN_TRANSISTOR  MMBT2222A    unknown  SOT23    unknown
X1/X3/X1/Q3    PNP_TRANSISTOR  MMBT2907A    unknown  SOT23    unknown
X1/X3/X1/R2    RESISTOR      1        1% 1W      2512    Resistor
X1/X3/X1/R1    RESISTOR      1        1% 1W      2512    Resistor
X1/X3/X1/Q2    NMOS_TRANSISTOR IRFR3410     unknown  TO252AA  generic N channe
l MOS transistor (enhancement type)
X1/X3/R3       RESISTOR      100      1% 1/10W    0603    Resistor
X1/X3/R4       RESISTOR      100      1% 1/10W    0603    Resistor
X1/X3/R5       RESISTOR      100      1% 1/10W    0603    Resistor
X1/X3/U1       DG403    unknown  unknown  SO16      Dual SPDT switch
X1/X4/C3       CAPACITOR     22nF     50WVDC    0603    Ceramic capacitor
X1/X4/C2       CAPACITOR     22nF     50WVDC    0603    Ceramic capacitor
X1/X4/C1       CAPACITOR     22nF     50WVDC    0603    Ceramic capacitor
X1/X4/C7       CAPACITOR     1uF      25WVDC    1812    Ceramic capacitor
X1/X4/C4       CAPACITOR     1uF      25WVDC    1812    Ceramic capacitor
X1/X4/C6       CAPACITOR     1uF      25WVDC    1812    Ceramic capacitor
X1/X4/C5       CAPACITOR     1uF      25WVDC    1812    Ceramic capacitor
X1/X4/R2       RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X4/R1       RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X4/R7       RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X4/R6       RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X4/X2/Q1    PMOS-S08     IRF9333  unknown  S08      P channel MOS transistor
(enhancement type)
X1/X4/X2/R6    RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X4/X2/R5    RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X4/X2/R4    RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X4/X2/R3    RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X4/X2/R7    RESISTOR      200      1% 1/10W    0603    Resistor
X1/X4/X2/Q4    NPN_TRANSISTOR  MMBT2222A    unknown  SOT23    unknown
X1/X4/X2/Q3    PNP_TRANSISTOR  MMBT2907A    unknown  SOT23    unknown
X1/X4/X2/R2    RESISTOR      1        1% 1W      2512    Resistor
X1/X4/X2/R1    RESISTOR      1        1% 1W      2512    Resistor
X1/X4/X2/Q2    NMOS_TRANSISTOR IRFR3410     unknown  TO252AA  generic N channe
l MOS transistor (enhancement type)
X1/X4/X1/Q1    PMOS-S08     IRF9333  unknown  S08      P channel MOS transistor
(enhancement type)
X1/X4/X1/R6    RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X4/X1/R5    RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X4/X1/R4    RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X4/X1/R3    RESISTOR      3.74k    1% 1/10W    0603    Resistor
X1/X4/X1/R7    RESISTOR      200      1% 1/10W    0603    Resistor
X1/X4/X1/Q4    NPN_TRANSISTOR  MMBT2222A    unknown  SOT23    unknown
X1/X4/X1/Q3    PNP_TRANSISTOR  MMBT2907A    unknown  SOT23    unknown
X1/X4/X1/R2    RESISTOR      1        1% 1W      2512    Resistor
X1/X4/X1/R1    RESISTOR      1        1% 1W      2512    Resistor
X1/X4/X1/Q2    NMOS_TRANSISTOR IRFR3410     unknown  TO252AA  generic N channe
l MOS transistor (enhancement type)
X1/X4/R3       RESISTOR      100      1% 1/10W    0603    Resistor
X1/X4/R4       RESISTOR      100      1% 1/10W    0603    Resistor
X1/X4/R5       RESISTOR      100      1% 1/10W    0603    Resistor
X1/X4/U1       DG403    unknown  unknown  SO16      Dual SPDT switch
X1/X10/R22     RESISTOR      604k     1% 1/10W    0603    Resistor
X1/X10/R21     RESISTOR      604k     1% 1/10W    0603    Resistor

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X1/X10/C10	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor
X1/X10/C9	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor
X1/X10/C4	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor
X1/X10/R20	RESISTOR	10	1% 1/10W	0603	Resistor	
X1/X10/C8	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor
X1/X10/R18	RESISTOR	10k	1% 1/10W	0603	Resistor	
X1/X10/Q6	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown
X1/X10/R19	RESISTOR	12.7	1% 1/10W	0603	Resistor	
X1/X10/Q5	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown
X1/X10/R16	RESISTOR	20k	1% 1/10W	0603	Resistor	
X1/X10/R17	RESISTOR	499	1% 1/10W	0603	Resistor	
X1/X10/Q4	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown
X1/X10/C7	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor
X1/X10/R13	RESISTOR	1k	1% 1/10W	0603	Resistor	
X1/X10/R14	RESISTOR	32.4k	1% 1/10W	0603	Resistor	
X1/X10/C6	CAPACITOR	4.7pF	10WVDC	0603	Ceramic	capacitor
X1/X10/R15	RESISTOR	301k	1% 1/10W	0603	Resistor	
X1/X10/R11	RESISTOR	10	1% 1/10W	0603	Resistor	
X1/X10/C1	CAPACITOR	4.7pF	10WVDC	0603	Ceramic	capacitor
X1/X10/Q1	NPN_TRANSISTOR	MMBT2222A		unknown	SOT23	unknown
X1/X10/R7	RESISTOR	499	1% 1/10W	0603	Resistor	
X1/X10/R10	RESISTOR	49.9	1% 1/10W	0603	Resistor	
X1/X10/C5	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor
X1/X10/U1	DUAL_OPAMP	LM6142AIM		N/A	SO8	attribute_confli
ct						
X1/X10/R8	RESISTOR	10k	1% 1/10W	0603	Resistor	
X1/X10/R2	RESISTOR	26.7k	1% 1/10W	0603	Resistor	
X1/X10/R1	RESISTOR	34.0k	1% 1/10W	0603	Resistor	
X1/X10/C2	CAPACITOR	0.1uF	10WVDC	0603	Ceramic	capacitor
X1/X10/R3	RESISTOR	1k	1% 1/10W	0603	Resistor	
X1/X10/R4	RESISTOR	32.4k	1% 1/10W	0603	Resistor	
X1/X10/R5	RESISTOR	301k	1% 1/10W	0603	Resistor	
X1/X10/R6	RESISTOR	20k	1% 1/10W	0603	Resistor	
X1/X10/C3	CAPACITOR	1uF	25WVDC	1812	Ceramic	capacitor
X1/X10/R9	RESISTOR	12.7	1% 1/10W	0603	Resistor	
X1/X10/Q3	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown
X1/X10/Q2	PNP_TRANSISTOR	MMBT2907A		unknown	SOT23	unknown
X1/X9/R9	RESISTOR	75	1% 1/10W	0603	Resistor	
X1/X9/R8	RESISTOR	75	1% 1/10W	0603	Resistor	
X1/X9/R7	RESISTOR	75	1% 1/10W	0603	Resistor	
X1/X9/R6	RESISTOR	75	1% 1/10W	0603	Resistor	
X1/X9/R3	RESISTOR	100	1% 1/10W	0603	Resistor	
X1/X9/C3	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacito
r						
X1/X9/R4	RESISTOR	100	1% 1/10W	0603	Resistor	
X1/X9/C2	CAPACITOR	0.1uF	16WVDC	X7R	0603	Ceramic capacito
r						
X1/X9/R5	RESISTOR	100	1% 1/10W	0603	Resistor	
X1/X9/C1	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacito
r						
X1/X9/U1	DG403	unknown	unknown	SO16	Dual SPDT switch	
X1/X8/R9	RESISTOR	75	1% 1/10W	0603	Resistor	
X1/X8/R8	RESISTOR	75	1% 1/10W	0603	Resistor	
X1/X8/R7	RESISTOR	75	1% 1/10W	0603	Resistor	
X1/X8/R6	RESISTOR	75	1% 1/10W	0603	Resistor	
X1/X8/R3	RESISTOR	100	1% 1/10W	0603	Resistor	
X1/X8/C3	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacito
r						
X1/X8/R4	RESISTOR	100	1% 1/10W	0603	Resistor	

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X1/X8/C2	CAPACITOR	0.1uF	16WVDC X7R	0603	Ceramic capacitor
X1/X8/R5	RESISTOR	100	1% 1/10W	0603	Resistor
X1/X8/C1	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X1/X8/U1	DG403	unknown	unknown	SO16	Dual SPDT switch
X1/X7/R9	RESISTOR	75	1% 1/10W	0603	Resistor
X1/X7/R8	RESISTOR	75	1% 1/10W	0603	Resistor
X1/X7/R7	RESISTOR	75	1% 1/10W	0603	Resistor
X1/X7/R6	RESISTOR	75	1% 1/10W	0603	Resistor
X1/X7/R3	RESISTOR	100	1% 1/10W	0603	Resistor
X1/X7/C3	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X1/X7/R4	RESISTOR	100	1% 1/10W	0603	Resistor
X1/X7/C2	CAPACITOR	0.1uF	16WVDC X7R	0603	Ceramic capacitor
X1/X7/R5	RESISTOR	100	1% 1/10W	0603	Resistor
X1/X7/C1	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X1/X7/U1	DG403	unknown	unknown	SO16	Dual SPDT switch
X1/X6/R9	RESISTOR	75	1% 1/10W	0603	Resistor
X1/X6/R8	RESISTOR	75	1% 1/10W	0603	Resistor
X1/X6/R7	RESISTOR	75	1% 1/10W	0603	Resistor
X1/X6/R6	RESISTOR	75	1% 1/10W	0603	Resistor
X1/X6/R3	RESISTOR	100	1% 1/10W	0603	Resistor
X1/X6/C3	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X1/X6/R4	RESISTOR	100	1% 1/10W	0603	Resistor
X1/X6/C2	CAPACITOR	0.1uF	16WVDC X7R	0603	Ceramic capacitor
X1/X6/R5	RESISTOR	100	1% 1/10W	0603	Resistor
X1/X6/C1	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor
X1/X6/U1	DG403	unknown	unknown	SO16	Dual SPDT switch
X1/X5/R22	RESISTOR	604k	1% 1/10W	0603	Resistor
X1/X5/R21	RESISTOR	604k	1% 1/10W	0603	Resistor
X1/X5/C10	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor
X1/X5/C9	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor
X1/X5/C4	CAPACITOR	0.1uF	10WVDC	0603	Ceramic capacitor
X1/X5/R20	RESISTOR	10	1% 1/10W	0603	Resistor
X1/X5/C8	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor
X1/X5/R18	RESISTOR	10k	1% 1/10W	0603	Resistor
X1/X5/Q6	NPN_TRANSISTOR	MMBT2222A	unknown	SOT23	unknown
X1/X5/R19	RESISTOR	12.7	1% 1/10W	0603	Resistor
X1/X5/Q5	NPN_TRANSISTOR	MMBT2222A	unknown	SOT23	unknown
X1/X5/R16	RESISTOR	20k	1% 1/10W	0603	Resistor
X1/X5/R17	RESISTOR	499	1% 1/10W	0603	Resistor
X1/X5/Q4	PNP_TRANSISTOR	MMBT2907A	unknown	SOT23	unknown
X1/X5/C7	CAPACITOR	0.1uF	10WVDC	0603	Ceramic capacitor
X1/X5/R13	RESISTOR	1k	1% 1/10W	0603	Resistor
X1/X5/R14	RESISTOR	32.4k	1% 1/10W	0603	Resistor
X1/X5/C6	CAPACITOR	4.7pF	10WVDC	0603	Ceramic capacitor
X1/X5/R15	RESISTOR	301k	1% 1/10W	0603	Resistor
X1/X5/R11	RESISTOR	10	1% 1/10W	0603	Resistor
X1/X5/C1	CAPACITOR	4.7pF	10WVDC	0603	Ceramic capacitor
X1/X5/Q1	NPN_TRANSISTOR	MMBT2222A	unknown	SOT23	unknown
X1/X5/R7	RESISTOR	499	1% 1/10W	0603	Resistor
X1/X5/R10	RESISTOR	49.9	1% 1/10W	0603	Resistor
X1/X5/C5	CAPACITOR	0.1uF	10WVDC	0603	Ceramic capacitor

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X1/X5/U1	DUAL_OPAMP	LM6142AIM	N/A	SO8	attribute_confli	ct	
X1/X5/R8	RESISTOR	10k	1% 1/10W	0603	Resistor		
X1/X5/R2	RESISTOR	26.7k	1% 1/10W	0603	Resistor		
X1/X5/R1	RESISTOR	34.0k	1% 1/10W	0603	Resistor		
X1/X5/C2	CAPACITOR	0.1uF	10WVDC	0603	Ceramic capacitor		
X1/X5/R3	RESISTOR	1k	1% 1/10W	0603	Resistor		
X1/X5/R4	RESISTOR	32.4k	1% 1/10W	0603	Resistor		
X1/X5/R5	RESISTOR	301k	1% 1/10W	0603	Resistor		
X1/X5/R6	RESISTOR	20k	1% 1/10W	0603	Resistor		
X1/X5/C3	CAPACITOR	1uF	25WVDC	1812	Ceramic capacitor		
X1/X5/R9	RESISTOR	12.7	1% 1/10W	0603	Resistor		
X1/X5/Q3	PNP_TRANSISTOR	MMBT2907A	unknown	SOT23	unknown		
X1/X5/Q2	PNP_TRANSISTOR	MMBT2907A	unknown	SOT23	unknown		
X1/X11/R9	RESISTOR	75	1% 1/10W	0603	Resistor		
X1/X11/R8	RESISTOR	75	1% 1/10W	0603	Resistor		
X1/X11/R7	RESISTOR	75	1% 1/10W	0603	Resistor		
X1/X11/R6	RESISTOR	75	1% 1/10W	0603	Resistor		
X1/X11/R3	RESISTOR	100	1% 1/10W	0603	Resistor		
X1/X11/C3	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacitor	
X1/X11/R4	RESISTOR	100	1% 1/10W	0603	Resistor		
X1/X11/C2	CAPACITOR	0.1uF	16WVDC	X7R	0603	Ceramic capacitor	
X1/X11/R5	RESISTOR	100	1% 1/10W	0603	Resistor		
X1/X11/C1	CAPACITOR	0.1uF	25WVDC	X7R	0603	Ceramic capacitor	
X1/X11/U1	DG403	unknown	unknown	SO16	Dual SPDT switch		
X1/R9	RESISTOR	604k	1%	0603	Resistor		
X1/R1	RESISTOR	56.2k	1%	0603	Resistor		
X1/R2	RESISTOR	200k	1%	0603	Resistor		
X1/C4	CAPACITOR	10pF	25WVDC	X7R	0603	Ceramic capacitor	
X1/R8	RESISTOR	49.9	1% 1/10W	0603	Resistor		
X1/C5	CAPACITOR	10nF	25WVDC	X7R	0603	Ceramic capacitor	
X1/R6	RESISTOR	49.9	1% 1/10W	0603	Resistor		
X1/C3	CAPACITOR	22nF	50WVDC	X7R	0603	Ceramic capacitor	
X1/U1	DUAL_OPAMP	LM6142AIM	N/A	SO8	attribute_conflict		
X1/R7	RESISTOR	604k	1%	0603	Resistor		
X1/R3	RESISTOR	56.2k	1%	0603	Resistor		
X1/R4	RESISTOR	200k	1%	0603	Resistor		
X1/C1	CAPACITOR	10pF	25WVDC	X7R	0603	Ceramic capacitor	
X1/R5	RESISTOR	49.9	1% 1/10W	0603	Resistor		
X1/C2	CAPACITOR	10nF	25WVDC	X7R	0603	Ceramic capacitor	
C2	CAPACITOR	220pF	25WVDC	X7R	0603	Ceramic capacitor	
C1	CAPACITOR	220pF	250WVDC	X7R	0603	Ceramic capacitor	
R17	RESISTOR	499	1% 1/10W	0603	Resistor		
R16	RESISTOR	1.00k	1% 1/10W	0603	Resistor		
R900	RESISTOR	300	1% 1/10W	0603	Resistor		
R31	RESISTOR	18	1% 1/10W	0603	Resistor		
C45	CAPACITOR	10uF	6.3WVDC	X5R	0603	Ceramic capacitor	
U16	OSC	29.4912MHz	unknown	SMTOSC	Surface Mount Oscillator		
J7	TP8	LPPB042NFSS	8pos, .050" pitch		LPPB042NFSS	connector header	
J4	TP8	LPPB042NFSS	8pos, .050" pitch		LPPB042NFSS	connector header	
J3	CamLink	unknown	unknown	10226-5212PL	unknown		
C48	CAPACITOR	0.33uF	10WVDC	X5R	0603	Ceramic capacitor	
C47	CAPACITOR	10nF	50WVDC	X7R	0603	Ceramic capacitor	
JMP1	RESISTOR	omit	1% 1/10W	0603	Resistor		

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JMP2	RESISTOR	omit	1% 1/10W	0603	Resistor	
J2	ActelJTAG	JTAG	10 pin jtag10	connector	header	
U4	A3P600L unknown	unknown	FBGA256 unknown			
C93	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor	
C92	CAPACITOR	0.1uF	25WVDC X7R	0603	Ceramic capacitor	
R34	RESISTOR	100	1% 1/10W	0603	Resistor	
U21	SN74LVC1G07DBV	unknown	unknown TSOT23-5		Noninverting driver with	
open collector output						
U20	FIN1002M5	unknown	unknown TSOT23-5		single LVDS receiver	
C94	CAPACITOR	10pF	25WVDC X7R	0603	Ceramic capacitor	
R37	RESISTOR	100	1% 1/10W	0603	Resistor	
R36	RESISTOR	100	1% 1/10W	0603	Resistor	
C29	CAPACITOR	0.1uF	16WVDC X7R	0603	Ceramic capacitor	
R12	RESISTOR	51.1	1% 1/10W	0603	Resistor	
C22	CAPACITOR	0.1uF	16WVDC X7R	0603	Ceramic capacitor	
R6	RESISTOR	51.1	1% 1/10W	0603	Resistor	
C23	CAPACITOR	0.1uF	16WVDC X7R	0603	Ceramic capacitor	
R7	RESISTOR	51.1	1% 1/10W	0603	Resistor	
C21	CAPACITOR	22nF	50WVDC X7R	0603	Ceramic capacitor	
C20	CAPACITOR	0.1uF	16WVDC X7R	0603	Ceramic capacitor	
R3	RESISTOR	51.1	1% 1/10W	0603	Resistor	
R1	RESISTOR	51.1	1% 1/10W	0603	Resistor	
U7	DUAL_OPAMP	LM6142AIM	N/A	SO8	attribute_conflict	
U6	DUAL_OPAMP	LM6142AIM	N/A	SO8	attribute_conflict	
U5	DUAL_OPAMP	LM6142AIM	N/A	SO8	attribute_conflict	
C30	CAPACITOR	4.7uF	10WVDC X7R	1812	Ceramic capacitor	
U10	ADC128S102	unknown	unknown TSSOP16	ADC		
R5	RESISTOR	121k	1%	0603	Resistor	
R14	RESISTOR	8.87k	1%	0603	Resistor	
R15	RESISTOR	121k	1%	0603	Resistor	
R13	RESISTOR	121k	1%	0603	Resistor	
R11	RESISTOR	121k	1%	0603	Resistor	
R8	RESISTOR	73.2k	1%	0603	Resistor	
R9	RESISTOR	21.5k	1%	0603	Resistor	
R10	RESISTOR	3.00k	1%	0603	Resistor	
R4	RESISTOR	121k	1%	0603	Resistor	
R2	RESISTOR	121k	1%	0603	Resistor	
gnd_lug5	gnd_lug	unknown	unknown	0603	unknown	
gnd_lug4	gnd_lug	unknown	unknown	0603	unknown	
gnd_lug6	gnd_lug	unknown	unknown	0603	unknown	
gnd_lug3	gnd_lug	unknown	unknown	0603	unknown	
gnd_lug2	gnd_lug	unknown	unknown	0603	unknown	
gnd_lug1	gnd_lug	unknown	unknown	0603	unknown	
R100	RESISTOR	0.4	1% 1/10W	0603	Resistor	
C200	CAPACITOR	10uF	6.3WVDC X5R	0603	Ceramic capacitor	
X5/C13	CAPACITOR	22nF	100WVDC X7R	0805	Ceramic capacitor	
X5/R12	RESISTOR	200	1% 1/4W	0805	Resistor	
X5/C10	CAPACITOR	DNP	50WVDC	0603	Ceramic capacitor	
X5/D6	DIODE 1N914UR	N/A	DO213AA	Signal	Diode	
X5/C11	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor	
X5/D5	DIODE 1N914UR	N/A	DO213AA	Signal	Diode	
X5/C8	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor	
X5/D4	DIODE 1N914UR	N/A	DO213AA	Signal	Diode	
X5/C9	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor	
X5/D3	DIODE 1N914UR	N/A	DO213AA	Signal	Diode	
X5/R7	RESISTOR	200	1% 1/10W	0603	Resistor	
X5/R6	RESISTOR	200	1% 1/10W	0603	Resistor	
X5/R2	RESISTOR	200	1% 1/10W	0603	Resistor	
X5/C7	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor	

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X5/C6	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor
X5/D2	DIODE 1N914UR	N/A	DO213AA	Signal Diode	
X5/C5	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor
X5/C4	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor
X5/D1	DIODE 1N914UR	N/A	DO213AA	Signal Diode	
X5/C3	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor
X5/C2	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor
X5/C1	CAPACITOR	22nF	50WVDC	0603	Ceramic capacitor
X5/R1	RESISTOR	200	1% 1/10W	0603	Resistor
X5/R3	RESISTOR	100	1% 1/10W	0603	Resistor
X5/R4	RESISTOR	100	1% 1/10W	0603	Resistor
X5/R5	RESISTOR	100	1% 1/10W	0603	Resistor
X5/U1	DG403	unknown	unknown	SO16	Dual SPDT switch
J8	FX2S	unknown	unknown	FX2CA-68S-1.27DSA(71)	Stacking connector
L2	IHLP5050FDER100M01		10uH	unknown	IHLP5050 inductor
R35	RESISTOR	100	1% 1/10W	0603	Resistor
J6	FX2S	unknown	unknown	FX2CA-68S-1.27DSA(71)	Stacking connector
C44	CAPACITOR	10nF	50WVDC	X7R 0603	Ceramic capacitor
C43	CAPACITOR	10uF	6.3WVDC	X5R 0603	Ceramic capacitor
L8	EXC-3BB102H	unknown	unknown	0603	EMI chip
C42	CAPACITOR	1uF	10WVDC	X5R 0603	capacitor
C41	CAPACITOR	1uF	10WVDC	X5R 0603	capacitor
L7	EXC-3BB102H	unknown	unknown	0603	EMI chip
L6	EXC-3BB102H	unknown	unknown	0603	EMI chip
U14	LT1761ES5-1.5	unknown	unknown	TSOT23-5	unknown
C17	CAPACITOR	10uF	6.3WVDC	X5R 0603	Ceramic capacitor
C16	CAPACITOR	10uF	6.3WVDC	X5R 0603	Ceramic capacitor
L4	CDPH4D19FNP-220MC		22uH	unknown	CDPH4D19F inductor
C18	CAPACITOR	1uF	10WVDC	X5R 0603	capacitor
U3	LM3480IM3-3.3	unknown	unknown	SOT23	unknown
L3	CDPH4D19FNP-220MC		22uH	unknown	CDPH4D19F inductor
L1	IHLP5050FDER100M01		10uH	unknown	IHLP5050 inductor
J5	747467-1	unknown	unknown	747467-1	unknown
C19	CAPACITOR	1uF	10WVDC	X5R 0603	capacitor
U2	ZMR250F	unknown	unknown	SOT23	unknown

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