

# CERN ALICE DAQ

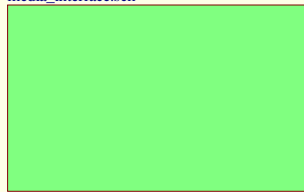
## Detector Data Link (DDL) Interface Cards

v. 2.3

(RadTol SIU)

### Schematic Diagrams

**MEDIA INTERFACE**  
media\_interface.sch



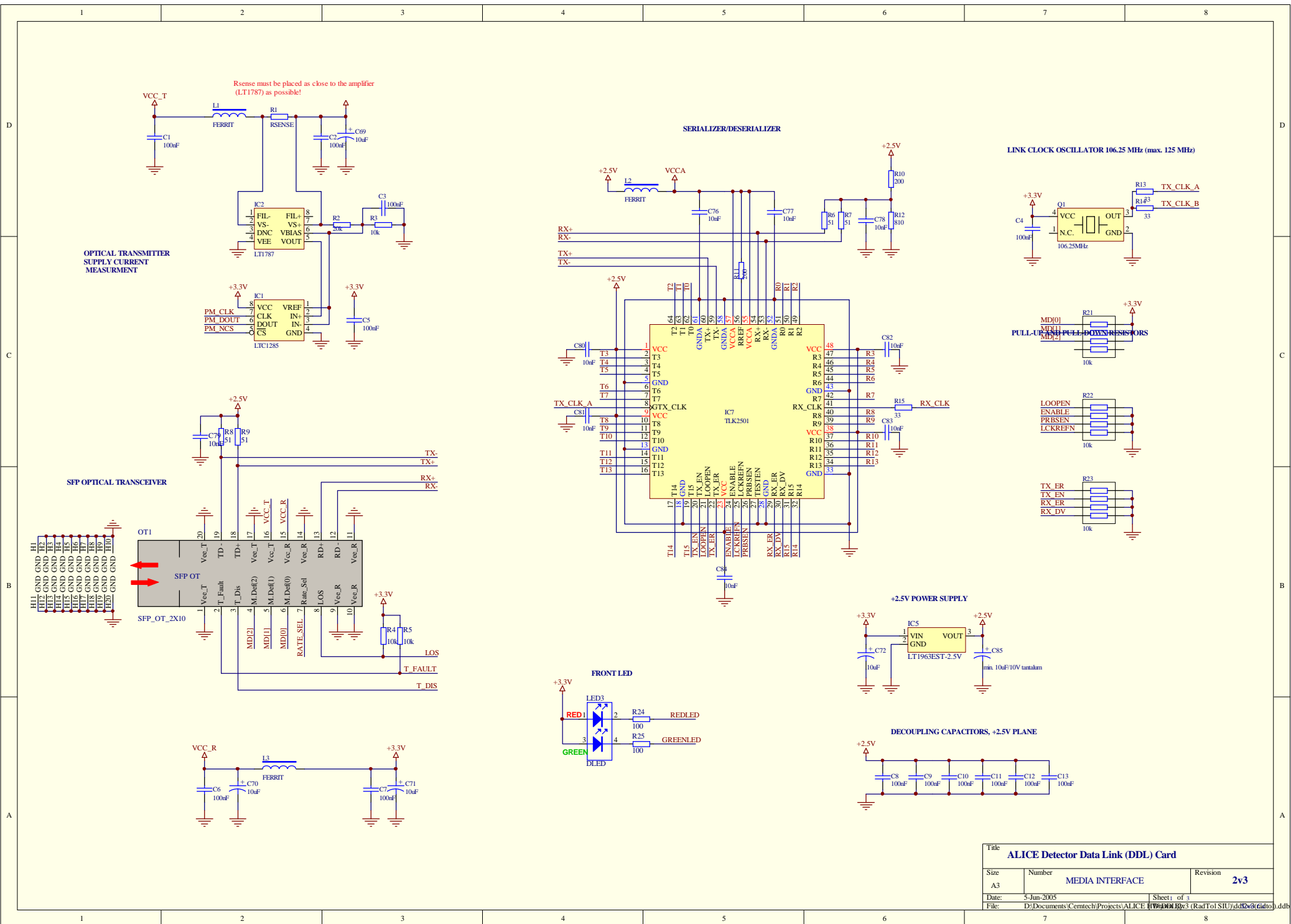
**ACTEL FPGA**  
actel.sch

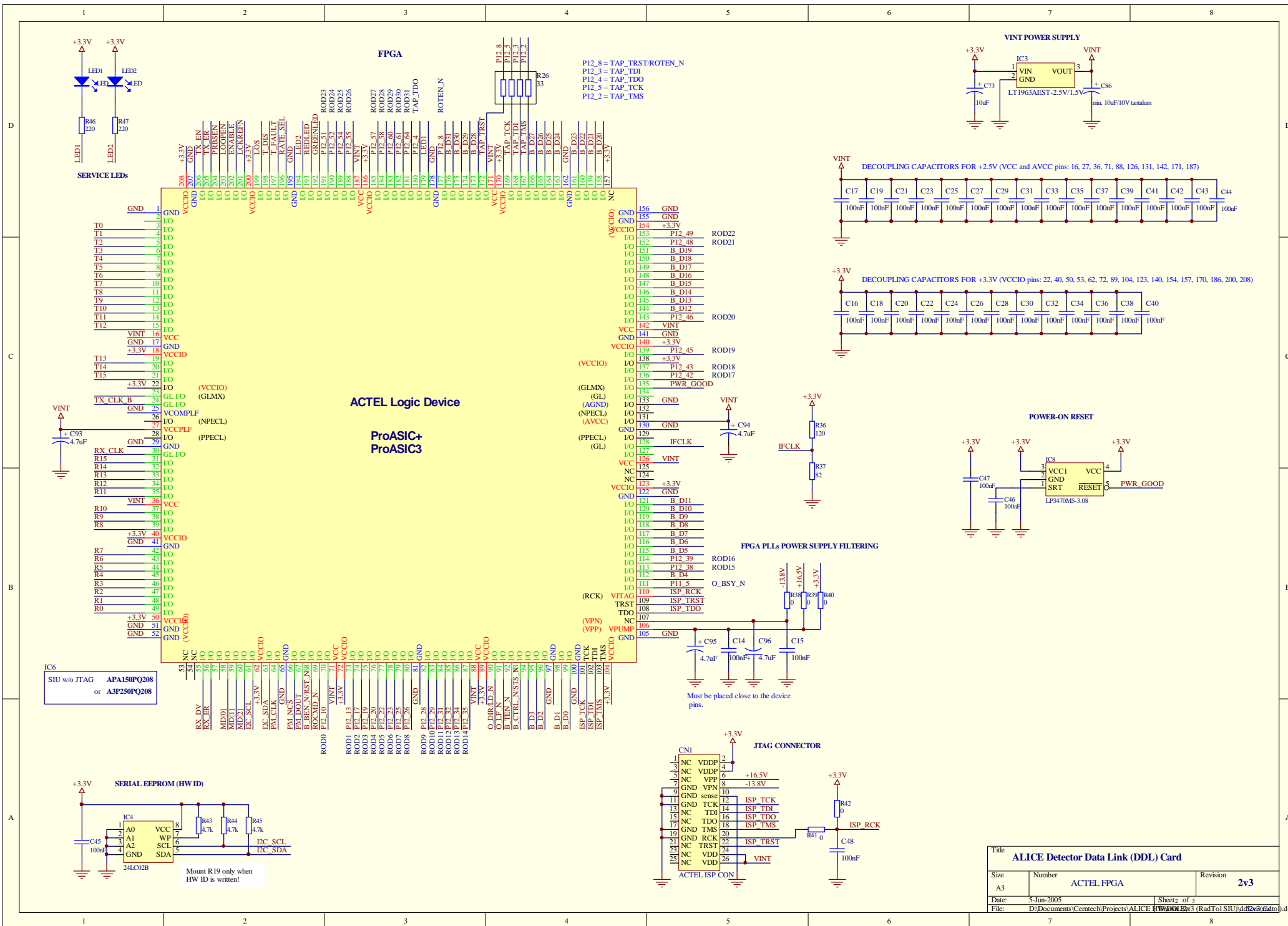


**DDL INTERFACE**  
ddl\_interface.sch



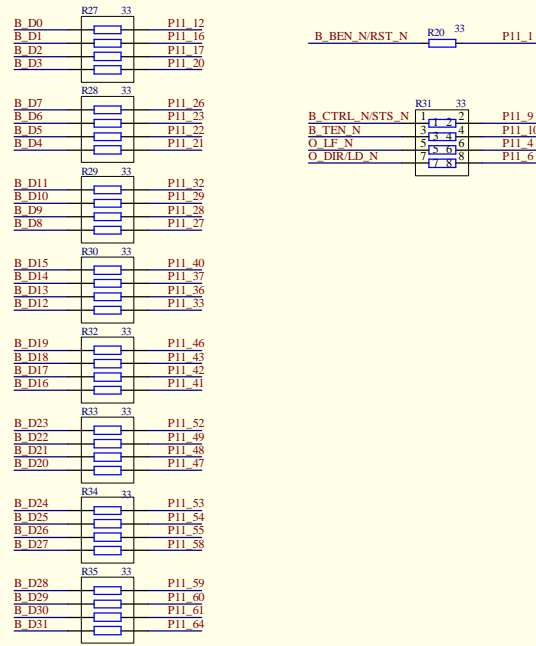
Title		
Size A4	Number	Revision
Date: 5-Jun-2005	Sheet of	
File: D:\Documents\Cemtech\Projects\ALICE HW\DDL v3 (RadTol SIU)\ddl2v3(radtol).ddb		





Title			
<b>ALICE Detector Data Link (DDL) Card</b>			
Size	Number	Revision	
A3	ACTEL FPGA	2v3	
Date:	5-Jun-2005	Sheet 2 of 3	
File:	D:\Documents\Cemtech\Projects\ALICE HW\HW\DDL\DDL (RadToSIU) d.d2v3 (RadToSIU).ddb		

SERIAL RESISTORS ON INTERFACE SIGNALS



DDL INTERFACE CONNECTORS

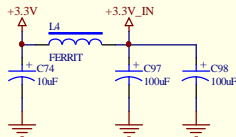
P11				P12			
P11_1	1	2		P12_2	2	2	P12_2
GND	3	4	P11_4	3	4	4	P12_4
P11_5	5	6	P11_6	5	6	6	GND
	7	8		7	8	8	P12_8
P11_9	9	10	P11_10	9	10	10	P12_10
GND	11	12	P11_12	11	12	12	+3.3V_IN
IFCLK	13	14	GND	13	14	14	
GND	15	16	P11_16	15	16	16	
P11_17	17	18		17	18	18	GND
+3.3V_IN	19	20	P11_20	19	20	20	P12_20
P11_21	21	22	P11_22	21	22	22	P12_22
P11_23	23	24	GND	23	24	24	+3.3V_IN
GND	25	26	P11_26	25	26	26	P12_26
P11_27	27	28	P11_28	27	28	28	P12_28
P11_29	29	30		29	30	30	GND
+3.3V_IN	31	32	P11_32	31	32	32	P12_32
P11_33	33	34	GND	33	34	34	P12_34
GND	35	36	P11_36	35	36	36	+3.3V_IN
P11_37	37	38		37	38	38	GND
GND	39	40	P11_40	39	40	40	GND
P11_41	41	42	P11_42	39	42	42	P12_42
P11_43	43	44	GND	41	44	44	GND
+3.3V_IN	45	46	P11_46	41	46	46	P12_46
P11_47	47	48	P11_48	47	48	48	P12_48
P11_49	49	50		47	49	50	+3.3V_IN
GND	51	52	P11_52	49	52	52	P12_52
P11_53	53	54	P11_54	51	54	54	P12_54
P11_55	55	56	GND	51	56	56	GND
+3.3V_IN	57	58	P11_58	53	58	58	P12_58
P11_59	59	60	P11_60	55	60	60	P12_60
P11_61	61	62	P11_64	57	62	62	+3.3V_IN
GND	63	64		59	64	64	P12_64
				61			
				63			

PMC CONNECTOR

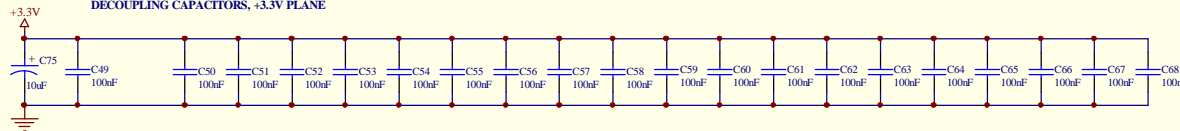
DIU			SIU		
P11_1	RORST_N	FIBEN_N	P12_2	TAP_TMS	TAP_TMS
P11_4	RILF_N	FILE_N	P12_3	TAP_TDI	TAP_TDI
P11_5	ROBSY_N	FOBSY_N	P12_4	TAP_TDO	TAP_TDO
P11_6	RILD_N	FIBIR	P12_5	TAP_TCK	TAP_TCK
P11_9	RISTS_N	FBCTRL_N	P12_8	ROTEN_N	TAP_TRST
P11_10	RTEN_N	FBTEN_N	P12_9	ROCMD_N	res. (HZ)
P11_12	RIDD	FBD0	P12_10	ROD0	res. (HZ)
P11_16	RID1	FBD1	P12_13	ROD1	res. (HZ)
P11_17	RID2	FBD2	P12_17	ROD2	res. (HZ)
P11_20	RID3	FBD3	P12_19	ROD3	res. (HZ)
P11_21	RID4	FBD4	P12_20	ROD4	res. (HZ)
P11_22	RID5	FBD5	P12_22	ROD5	res. (HZ)
P11_23	RID6	FBD6	P12_23	ROD6	res. (HZ)
P11_26	RID7	FBD7	P12_25	ROD7	res. (HZ)
P11_27	RID8	FBD8	P12_26	ROD8	res. (HZ)
P11_28	RID9	FBD9	P12_28	ROD9	res. (HZ)
P11_29	RID10	FBD10	P12_29	ROD10	res. (HZ)
P11_32	RID11	FBD11	P12_31	ROD11	res. (HZ)
P11_33	RID12	FBD12	P12_32	ROD12	res. (HZ)
P11_36	RID13	FBD13	P12_34	ROD13	res. (HZ)
P11_37	RID14	FBD14	P12_35	ROD14	res. (HZ)
P11_40	RID15	FBD15	P12_38	ROD15	res. (HZ)
P11_41	RID16	FBD16	P12_39	ROD16	res. (HZ)
P11_42	RID17	FBD17	P12_42	ROD17	res. (HZ)
P11_43	RID18	FBD18	P12_43	ROD18	res. (HZ)
P11_46	RID19	FBD19	P12_45	ROD19	res. (HZ)
P11_47	RID20	FBD20	P12_46	ROD20	res. (HZ)
P11_48	RID21	FBD21	P12_48	ROD21	res. (HZ)
P11_49	RID22	FBD22	P12_49	ROD22	res. (HZ)
P11_52	RID23	FBD23	P12_51	ROD23	res. (HZ)
P11_53	RID24	FBD24	P12_52	ROD24	res. (HZ)
P11_54	RID25	FBD25	P12_54	ROD25	res. (HZ)
P11_55	RID26	FBD26	P12_55	ROD26	res. (HZ)
P11_58	RID27	FBD27	P12_57	ROD27	res. (HZ)
P11_59	RID28	FBD28	P12_58	ROD28	res. (HZ)
P11_60	RID29	FBD29	P12_60	ROD29	res. (HZ)
P11_61	RID30	FBD30	P12_61	ROD30	res. (HZ)
P11_64	RID31	FBD31	P12_64	ROD31	res. (HZ)

PMC CONNECTOR

INPUT POWER FILTERING



DECOUPLING CAPACITORS, +3.3V PLANE



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A3	DDL INTERFACE	2v3	
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File:	D:\Documents\Cemtech\Projects\ALICE HW\DDL\Bv3 (RadToSIU)\ML2C\radio.ddb		