SA PPA1200 / Arduino Control Schematics

	rduino	2560				
	Vin					
Supply	+5V					
Su	GND					
	A0	=====		Supply	y Lvl	
Ī	A1			Sign	al	
	A2			Tem		1
	А3			Cli		Channel 1
ŀ	A4	=====		Pea		anı
	A5			RMS		ರ
	A6			RMS		
80	A7			Peak		
Analog	A8			Supply		
⋖ .	A9			Sign		
-	A10			== Temp		0.1
-	A11			Clip		Channel 2
ŀ	A12					นนเ
-	A12		===== Peak I ===== RMS V		Cha	
-			====== RMS I			
-	A14	======	=====			
	A15	D)/(0	=====	Peak		
	D0	RX0	:=====		USB PC	
-	D1	TX0	=====			
	D2	PWM				
	D3	PWM				
	D4	PWM				
	D5	PWM				
	D6	PWM				
	D7	PWM				
	D8	PWM				
	D9	PWM				
	D10	PWM				
	D11	PWM				
	D12	PWM				
	D13	PWM				
	D14	TX3				
ľ	D15	RX3				
	D16	TX2	=====	RX	(
-	D17	RX2	=====	TX		LCD Touch
ŀ	D18	TX1				
ŀ	D19	RX1				
ŀ	D20	SDA				
	D21	SCL				
-	D22	JCL				
-	D23		220Ω==		Ground Lift	
-	D24		22012-	Bus 0	Input	
-	D25		220Ω==		input	
Е	D26		22012			
igit				Bus 1	Bridge Mode	
Digital	דכת		2200-	Bus 1	Bridge Mode	
	D27	=====	220Ω==	Bus 1 Bus 2	Power	
	D28	=====				
۵	D28 D29	=====	220Ω== 220Ω==			
۵	D28 D29 D30		220Ω==	Bus 2	Power Out Relay	
۵	D28 D29 D30 D31	=====		Bus 2	Power Out Relay Gnd Lift	12
	D28 D29 D30 D31 D32	=====	220Ω== 220Ω==	Bus 2	Power Out Relay	ınel 2
	D28 D29 D30 D31 D32 D33		220Ω==	Bus 2 Bus 3 Bus 4	Power Out Relay Gnd Lift Chassis / Fan	hannel 2
	D28 D29 D30 D31 D32	=====	220Ω== 220Ω==	Bus 2	Power Out Relay Gnd Lift	+ Channel 2
۵	D28 D29 D30 D31 D32 D33 D34 D35	=====	220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5	Power Out Relay Gnd Lift Chassis / Fan Filter	il 1 + Channel 2
Δ .	D28 D29 D30 D31 D32 D33 D34	=====	220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4	Power Out Relay Gnd Lift Chassis / Fan Filter	nnel 1 + Channel 2
	D28 D29 D30 D31 D32 D33 D34 D35	=====	220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5	Power Out Relay Gnd Lift Chassis / Fan Filter	hannel 1 + Channel 2.
	D28 D29 D30 D31 D32 D33 D34 D35 D36	======	220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5	Power Out Relay Gnd Lift Chassis / Fan Filter	Channel 1 + Channel 2
	D28 D29 D30 D31 D32 D33 D34 D35 D36 D37	======	220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5 Bus 5	Power Out Relay Gnd Lift Chassis / Fan Filter 6	Channel 1 + Channel 2
	D28 D29 D30 D31 D32 D33 D34 D35 D36 D37	======	220Ω== 220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5	Power Out Relay Gnd Lift Chassis / Fan Filter 6	Channel 1 + Channel 2
	D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39	======	220Ω== 220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5 Bus Bus	Power Out Relay Gnd Lift Chassis / Fan Filter 6 7	Channel 1 + Channel 2
	D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40		220Ω== 220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5 Bus 5	Power Out Relay Gnd Lift Chassis / Fan Filter 6 7	Channel 1 + Channel 2
	D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40 D41		220Ω== 220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5 Bus Bus Bus	Power Out Relay Gnd Lift Chassis / Fan Filter 6 7 8	Channel 1 + Channel 2
	D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43		220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5 Bus Bus	Power Out Relay Gnd Lift Chassis / Fan Filter 6 7 8	Channel 1 + Channel 2
	D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43 D44		220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5 Bus Bus Bus Bus	Power Out Relay Gnd Lift Chassis / Fan Filter 6 7 8 9	Channel 1 + Channel 2
	D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43 D44 D45		220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5 Bus Bus Bus	Power Out Relay Gnd Lift Chassis / Fan Filter 6 7 8 9	Channel 1 + Channel 2
	D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43 D44 D45 D46		220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5 Bus Bus Bus Bus Bus	Power Out Relay Gnd Lift Chassis / Fan Filter 6 7 8 9 10	
	D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43 D44 D45 D46 D47		220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5 Bus Bus Bus Bus	Power Out Relay Gnd Lift Chassis / Fan Filter 6 7 8 9	
	D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43 D44 D45 D46 D47 D48		220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5 Bus Bus Bus CS_AD7545	Power Out Relay Gnd Lift Chassis / Fan Filter 6 7 8 9 10 11 Chan	nel 1
	D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43 D44 D45 D46 D47 D48 D49		220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5 Bus 5 Bus Bus CS_AD7545 CS_AD7545	Power Out Relay Gnd Lift Chassis / Fan Filter 6 7 8 9 10 11 Chan	nel 1 nel 2
	D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43 D44 D44 D44 D44 D44 D44 D44 D45 D46 D47		220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5 Bus 5 Bus Bus CS_AD7545 DC	Power Out Relay Gnd Lift Chassis / Fan Filter 6 7 8 9 10 11 Chan	nel 1 nel 2
	D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43 D44 D45 D46 D47 D48 D49 D50 D51		220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5 Bus 5 Bus Bus CS_AD7545 CCS_AD7545 DC CS_74HC373	Power Out Relay Gnd Lift Chassis / Fan Filter 6 7 8 9 10 11 Chan	nel 1 nel 2
	D28 D29 D30 D31 D32 D33 D34 D35 D36 D37 D38 D39 D40 D41 D42 D43 D44 D44 D44 D44 D44 D44 D44 D45 D46 D47		220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω== 220Ω==	Bus 2 Bus 3 Bus 4 Bus 5 Bus 5 Bus Bus CS_AD7545 DC	Power Out Relay Gnd Lift Chassis / Fan Filter 6 7 8 9 10 11 Chan	nel 1 nel 2 nel 1

	Pre-	Amplifier Da	ata Connect	tor
Bus 0		1	26	===== Bus 1
Bus 2		2	25	===== Bus 3
Bus 4	=======	3	24	===== Bus 5
Bus 6	=======	4	23	===== Bus 7
Bus 8	=======	5	22	===== Bus 9
Bus 10		6	21	===== Bus 11
		7	20	===== RMS V
Supply Lvl	=======	8	19	===== RMS I
CS_AD7545	=======	9	18	====== Signal
Temp	=======	10	17	===== DC
Clip		11	16	====== Peak V
Main GND		12	15	====== -18V

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Peak I ======

Pre-Amplifier Latch Connector

1	====== CS_74HC373
2	====== Gnd

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Pre-Amplifier Alim Connector

-Amplifier A	ıım Connect	or
1		+85V
2		
3		-85V
4		
5		+18V
6		-18V
7		Gnd Signal
8		Main GND
9		+5V
10		Gnd
11		Lift Chassis / Fan
12		+12V
13		Relay
14		Power
15		DDC+
16		DDC-
	-	

Pre-Amplifier Signal Connector

1	======= Signal-
2	======= Signal+
3	====== Gnd Signal
4	======= Signal Bridge-
5	======= Signal Bridge+
6	
7	

Front Panel Connector

1	======= +5V
2	======= +5V
3	======= Main GND
4	====== Main GND
5	======= CH1 CS_74HC373
6	====== Main GND
7	====== Main GND
8	====== CH2 CS_74HC373
9	====== Sanet
10	====== Sanet
11	======= Sanet
12	====== Sanet