

1. Connector explanation

1.1 VDD and I/O 2 connectors

VDD		IO2			
VDD_3V3	GND	Pin 3	Pin 4	VDD_12V	GND
Note		Web interface or remote DTMF		power	

- Pin 3 and Pin 4 are two configurable pins (off (default) or on) on the PA1 web interface:
 - Get IP address of the board
 - Go to the board web page
 - Select Preferences
 - Select value on or off for the Pin 3 or Pin 4
 - Press Save button on the bottom of the page to save the changes
 - The pin value on the IO2 will change after the save button has been pressed

Complete power consumption of the snom PA1 is 9.7W (POE or external power supply scenario). The power should be correctly distributed between Digital board power (DBP), Audio board power ABP and External board power EBP for 3.3V and 12V (EBP_3V3, EBP_12V).

	Maximum Power	Maximum Current	Comment
DBP (5V)	4W	800mA@5V	(2 linear low voltage drop regulators make 3.3V and 1.8V)
ABP (12V)	4W	1500mA@80hm	One step up 5V – 12V converter Max audio input signal for U14 should not exceed
EBP_3V3	0.5W	150mA	Can be used to supply external board
EBP_12V	1W	80mA	Typical current to open an electric-lock
Total	9.5W		

Total output power on 12V is 5W and can be combined for ABP and EBP_12V.

1.2 KBD connector (Keyboard connection)

1. (Schematics 2110_SNOM_PA1_V38_S01_ADD_KBD_01.pdf)

Use connection matrix from the schematic above to make snom PA1 keyboard)

KBD							
KEY0	KEY1	KEY2	KEY3	KEY4	KEY5	KEY6	KEY7

Keyboard module is automatically enabled in the PA1 firmware and door phone firmware

1.3 I/O 1 connector (CON13)

I/O 1						
GAIN1	GAIN0		PIN 1	PIN2	SCL	SDA
External gain control for the audio amplifier (READ ONLY)			Web interface or remote DTMF		I2C BUS	

- Pins GAIN1 and GAIN0 are read only pins, disabled in snom PA1
- Pin 1 and Pin 2 are two configurable pins (off (default) or on) on PA1 web interface:
 - Get IP address of the board
 - Go to the board web page
 - Select Preferences page
 - Select value on or off for the Pin 1 or Pin 2
 - Press Save button on the bottom of the page to save the changes
 - The pin value on the I/O 1 will change after the save button has been pressed
- Pins GAIN1, GAIN0 are not available in DP firmware
- SCL and SDA are the part of I2C BUS. These signals are not available in DP firmware

2. REMOTE DTMF control for IO pins

IO pins on PA1 controlled with DTMF out-band signals from another phone.

PIN1: on: 1#, off 1*

PIN2: on: 2#, off 2*

PIN3: on: 3#, off 3*

PIN4: on: 4#, off 4*