## 6.4 Non-Audio I/O Cards

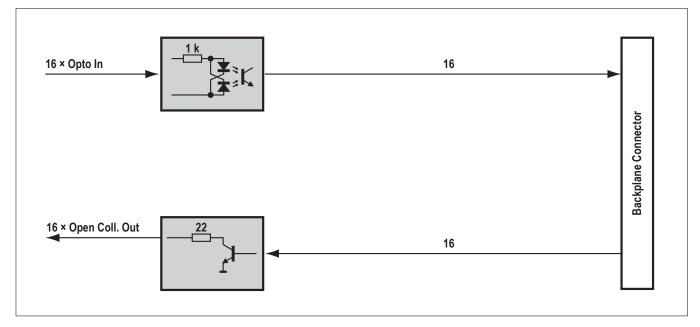
## 6.4.1 GPIO Card (VISTA, OnAir, ROUTE 6000)

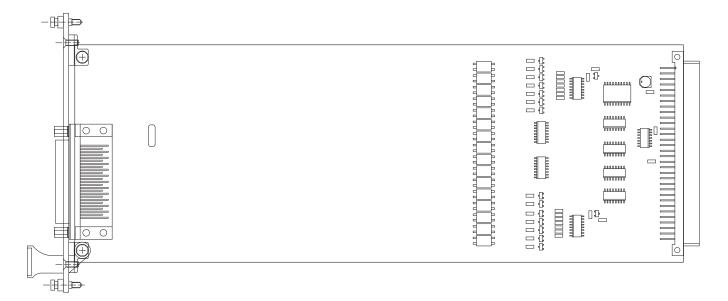


For general-purpose input/output control signals, this card provides 16 electrically isolated opto-coupler inputs (5-12 VDC) and 16 open-collector outputs. 5 VDC supply pins are available. Inputs and outputs on standard 25-pin D-type connectors (female).

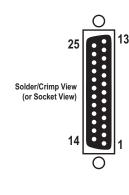
**Current consumption** (5 V) **Operating temperature**  max. 0.65 A 0-40 °C

A949.0435





**Connector Pin Assignment** 



Inputs

GPI 1-16 / GPO 1-16 (25pin D-type, female, UNC 4-40 thread)

Pin	Signal 'GPI 1-16'	Signal 'GPO 1-16'	Pin	Signal 'GPI 1-16'	Signal 'GPO 1-16'
1	GPI 1-4 common	GPO 1	14	GPI 11	GPO 14
2	GPI 1	GPO 2	15	GPI 12	GPO 15
3	GPI 2	GPO 3	16	GPI 13-16 common	GPO 16
4	GPI 3	GPO 4	17	GPI 13	GND (0 V)
5	GPI 4	GPO 5	18	GPI 14	GND (0 V)
6	GPI 5-8 common	GPO 6	19	GPI 15	GND (0 V)
7	GPI 5	GPO 7	20	GPI 16	GND (0 V)
8	GPI 6	GPO 8	21	GND (0 V)	GND (0 V)
9	GPI 7	GPO 9	22	V <sub>CC</sub> (+5 V) *	V <sub>CC</sub> (+5 V) *
10	GPI 8	GPO 10	23	V <sub>CC</sub> (+5 V) *	V <sub>CC</sub> (+5 V) *
11	GPI 9-12 common	GPO 11	24	V <sub>CC</sub> (+5 V) *	V <sub>CC</sub> (+5 V) *
12	GPI 9	GPO 12	25	V <sub>CC</sub> (+5 V) *	V <sub>CC</sub> (+5 V) *
13	GPI 10	GPO 13		* 650 mA ma	ax. total

## Application

Control inputs can be used either with the internal +5 VDC supply voltage, or with external voltages (5-12 VDC), regardless of the polarity. For higher voltages (48 V max.), appropriate series resistors *must* be used, see table below. Please note that the control inputs are arranged in groups of four, each group having one of the control connections in common. Total current supplied by all +5 VDC pins of one card *must not* exceed 650 mA.

Input Voltage	Series Resistor	
24 VDC	2.2 kΩ min.	
36 VDC	3.3 kΩ min.	
48 VDC	4.7 kΩ min.	

**Outputs** Control outputs are open-collector outputs pulling to GND if active. For activating e.g. relays or LEDs, either the internal +5 VDC supply voltage or external voltages of up to 24 VDC may be used. Output current *must not* exceed 50 mA per output. Please make sure to use appropriate series resistors if necessary. Total current supplied by all +5 VDC pins of one card *must not* exceed 650 mA.