

Features



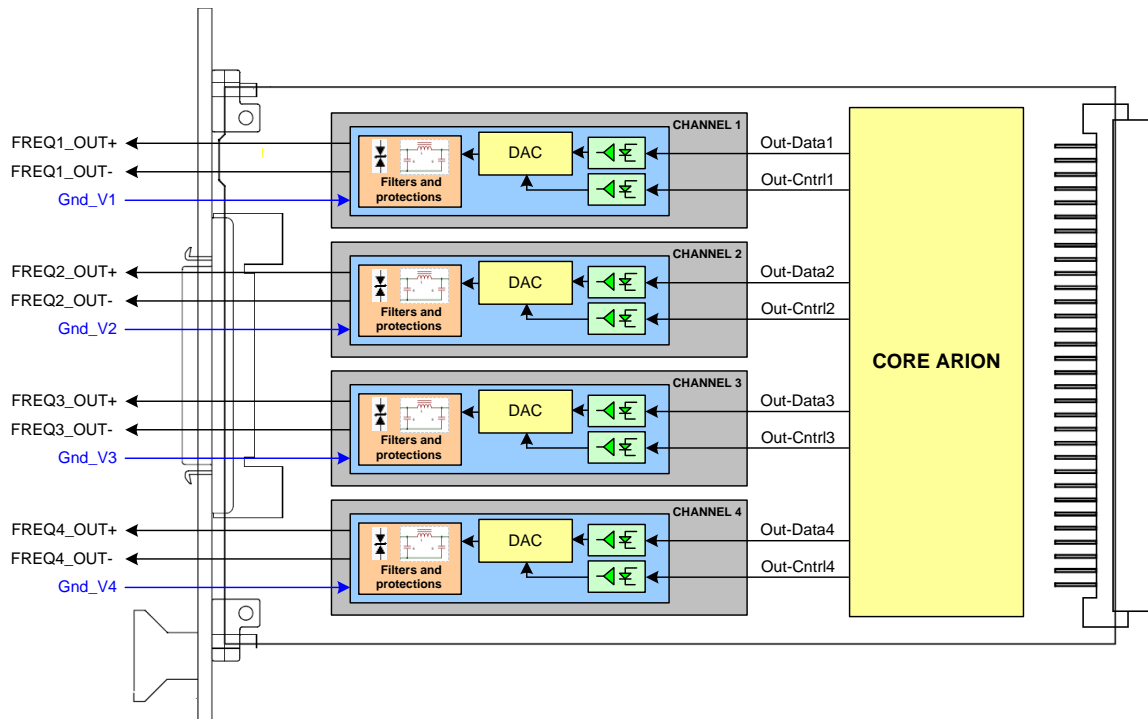
- 4 programmable frequency outputs
- Differential or non-differential outputs
- Frequency Range: 0.001Hz to 100KHz $\pm 1\%$
- Sine or Square output signals
- 4 voltage ranges:
 - 0V to 5V
 - 0V to 10V
 - -5V to +5V
 - -10 to +10V
- Optically isolated: provides a direct connection to industrial equipments
- Common mode transient immunity of 100V/ μ s
- All outputs are protected from transient voltage spikes, short-circuits and overvoltage



Physical and environmental condition

Dimensions: 3U format (length 160mm) x 3T
 Temperature: Industrial range temperature -40°C / +85°C
 Weight: 300g
 Consumption: 1.5A for analogical 5V line and 200mA for numerical 3.3V line

Block diagram

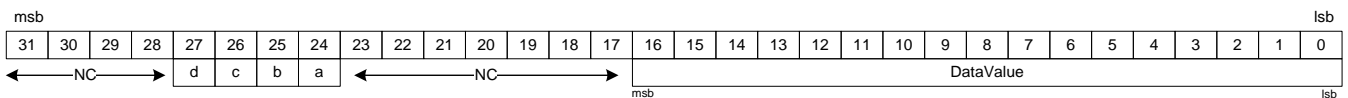


This board generates the output frequency as: **Frequency = (DataValue / 10,000) * SetCoeff**

Frequency Range	SetCoeff	D	C	B	A
0.001Hz < f ≤ 0.01Hz	0.001	0	0	0	1
0.01Hz < f ≤ 0.1Hz	0.01	0	0	1	0
0.1Hz < f ≤ 1Hz	0.1	0	0	1	1
1Hz < f ≤ 10Hz	1	0	1	0	0
10Hz < f ≤ 100Hz	10	0	1	0	1
100Hz < f ≤ 1KHz	100	0	1	1	0
1KHz < f ≤ 10KHz	1000	0	1	1	1
10KHz < f ≤ 100KHz	1000	1	0	0	0

The parameter DataValue is encoded on 17 bits in binary. The parameter SetCoeff is set by 4 bits d-c-b-a.

Data coding:



Arion operating modes

Regarding the data of Arion-IO boards, three operating modes are available.

These 3 modes can be used in 'Global Channel' or 'Channel List' ; See Configuration documentation for more information.

1. Cyclic mode: default mode

On cyclic trigger, the data are set to the outputs of the board.

Remark: The cyclic trigger is created by a configurable timer. This timer is set during the configuration step.

2. Up-Sampled mode: this mode works like cyclic mode but with N samples.

On cyclic trigger, a sub-cycle is defined to set N data samples to the outputs of the board.

Remark: The N number of samples has to be defined during the configuration step.

3. On demand: this mode is only available on Output Boards.

The data are set to the outputs of the board when the user writes data.