SEA 9811
ARINC 429 Interface Module

The SEA 9811 Module offers:

- 8 receive channels and 1 send channel according to ARINC 429 standard
- Low-Speed und High Speed communication
- galvanic isolation of the backplane
- driver software and examples for LabVIEW 2017 or higher

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Module	SEA 9811		
Ordernumber	60000065		
Functions			
Number of input channels	8		
Number of output channels	1		
Technical Data	min.	Typ	max.
Data rate low speed [Kbps]	10.4	12.5	15.6
Data rate high speed [Kbps]	83	100	125
Channel Input Resistance [kOhm]	-	140	-
Differential Input Voltage [V]	-13	-	+13
Absolute maximum voltage at input pins:	-29V...29V		
Operating temperature range [deg C]	-40	20	+85
Backplane Current [mA] at 5V	45	45	50
Size [mm] xyz			
Weight [g]	175		
Software			
LabVIEW Driver and Examples	•		
Supported LabVIEW version	LabVIEW 2017 or higher		

- = included; - = not available

Subject to technical changes.

SEA 9811 ARINC 429 Interface Module

The SEA 9811 Module is designed for use with the CompactRIO System from National Instruments. It allows as an interface module to receive and transfer information on and to the ARINC 429 bus system for commercial aircraft such as Airbus and Boeing .

The module offers:

- 8 ARINC 429 input channels
- 1 ARINC 429 output channel
- high speed and low speed data rates data rates between 10.5 and 125 Kbps independent for each channel
- driver software and examples for LabVIEW 2017 or higher for immediate startup
- Complelety galvanic isolated

The electrical connection can be made by the front panel Sub-D Connector. The ARINC busses are completely separated from the backplane have an isolation barrier, so the module isolates the backplane from surges up to 5kV.

The SEA 9811 Module is designed for very low power operation and retrieves its supply directly from the backplane connector, thus there is no additional external power supply necessary. The front panel has 8 LED indicators to indicate the reception of incoming ARINC data.

The ARINC data are routed through the FPGA directly into the RT system, where the ARINC labels can be easily retrieved, filtered or processed via the provided LabVIEW API functions.

The SEA 9811 Module can be used in a CompactRIO system or can also be used in PXI-systems with the R-series expansion chassis.

CompactRIO Platform

The National Instruments CompactRIO™ platform for measurement and control applications bases on FPGA technology. It is a reliable, robust and compact system for reliable real time data acquisition and control solutions. Various digital and analog sensor signals and bus systems are supported.

Combined with the new SEA 9811 Module this offers new opportunities for avionic applications for example for the test of flight management computers or radar altimeters. It is also well suited for data acquisition and storage of flight data during qualification tests or for research applications.

Service

S.E.A. Datentechnik GmbH develops soft- and hardware for the CompactRIO platform and supplies customized control and measurement systems. Also we offer OEM solutions and integration support with CompactRIO products.

For further information please visit:

www.sea-gmbh.com

NI CompactRIO - system with SEA 9811 Module

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