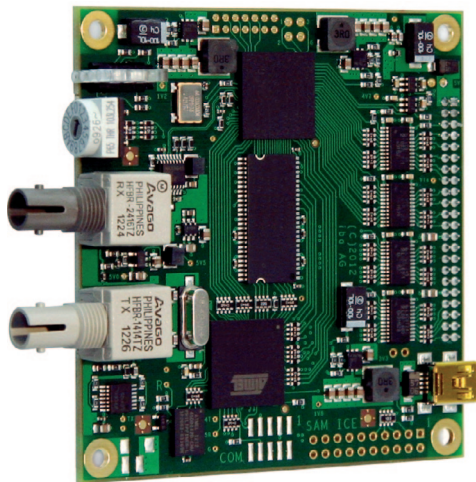


ibaLink-io-embedded



In brief

- Integrated connection to iba measuring systems in OEM solutions
- Fast 8/16 bit Dual Port RAM data interface
- Bidirectional fiber optic link for analog and digital inputs and outputs
- Supported ibaNet protocols: 32Mbit, 32Mbit Flex
- Flexible setting of data rate, data size and formatting with 32Mbit Flex
- Different operation modes (cascading, point-to-point)
- Compact design

Description

The ibaLink-io-embedded module offers integrators and OEM manufacturers the possibility to integrate the connection to iba measuring and automation systems into their own systems. The iba applications ibaPDA or ibaLogic can directly be connected to manufacturer's systems via a fiber optic input and output. Additional devices like coupling systems from the ibaPADU family are no longer necessary.

Applications

ibaLink-io-embedded supports several operation modes with the following applications:

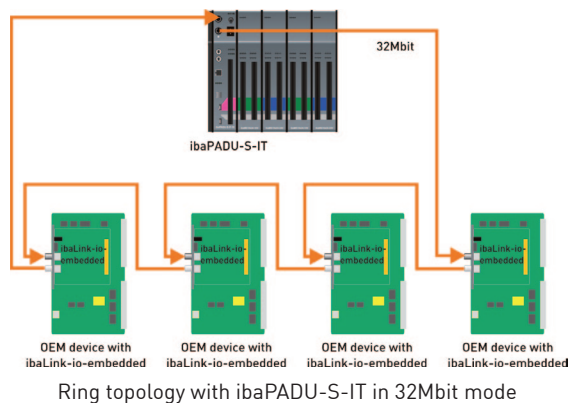
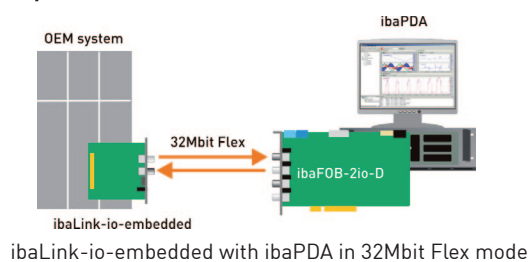
- **32Mbit Flex:** This mode provides the highest flexibility for data exchange with ibaPDA, since transmission rate, size and formatting of data can freely be set. For small amounts of data the cycle time can be faster, up to 10 μ s with 17 bytes. The maximum amount of data is 4060 bytes at 1.4 ms. Moreover, with 32Mbit Flex, it is possible to connect up to 15 devices in a ring topology.
- **32Mbit P2P:** All data is captured with one of the fixed sampling rates (ranging from 50 μ s to 1400 μ s). Configuration is done through a DPRAM control register.
- **32Mbit:** Up to 16 ibaLink-io-embedded modules can be connected in a ring topology to an ibaLogic system. Using this mode ibaLogic can read and write data for all modules, while the modules can read all data but write only to their own data section. The sampling time is a constant 100 μ s or 1000 μ s cycle and is configured through a DPRAM control register.

Data interface for OEM systems

In order to connect the manufacturer's system the ibaLink-io-embedded module provides a parallel asynchronous data bus that can be operated in 8 or 16 bit mode. The electrical connection is accomplished by a double row pin header. Due to the compact design the module requires only little space. A voltage of 5 V (\pm 5%) is supplied via the pin header. 4 LEDs give information about the operating status.

An example application with C source code supports the integration.

Examples:



Short description	
Name	ibaLink-io-embedded
Description	Integrated system interface module for OEM systems
Order number	14.132400
Interfaces	
Communication channels	Bidirectional fiber optic connection
ibaNet protocols	32Mbit, 32Mbit Flex
FO cable	62.5/125 µm
FO connector type	ST plug
FO cable length	Max. 6,560 ft (2,000 m), without repeater
Mounting interface	Dual pin header 2x22, 2 mm
Power supply	
Power supply	5 V DC ±5%
Current consumption	Max 0.4 A (2 W)
Indicators and operating element	
Indicators	4 LEDs for operating status
Rotary switch	Setting of the device address in 32Mbit Flex and 32Mbit mode
Operating and environmental conditions	
Cooling	Passive
Operating temperature	32 °F...149 °F (0 °C to 65 °C)
Storage temperature	-13 °F...158 °F (-25 °C to 70 °C)
Transport temperature	-13 °F...158 °F (-25 °C to 70 °C)
Dimensions	
Dimensions (Width x Depth x Height)	3.15 in x 3.15 in x 0.60 in (80 mm x 80 mm x 15 mm), without connector