MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

ABB

CI862K01

FIELDBUS INTERFACE KIT

Used with the applicable AC 800M TRIO/Genius configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: ABB AC 800M Controller Hardware 3BSE036351-600 A

Table 102. TRIO block types.

Unit	Name	Type	Description	Can be BSM
ISO_8CKT	8 Circuit Isolated	Digital	8 Input or Output (configurable)	Yes
IN_16CKT	16 Circuit Input	Digital	16 Input	No
OP_16CKT	16 Circuit Output	Digital	16 Output	Yes
HSC_A	High Speed Counter A	Counter	4 16 bit Up/Down Counters	No
HSC_B	High Speed Counter B	Counter	2 Bi-directional 24 bit Up/Down Counters	No

Functional Block Diagram

A complete CI862K01 unit consists of a TP862 baseplate, a CI862 communication interface board, and their mechanics, Figure 86. All electronic devices and all functions are located on the board which also includes the µGenie slave module. The baseplate and CI862 are connected via an 80-pin edge connector. Connections to the outside world are made on the baseplate.

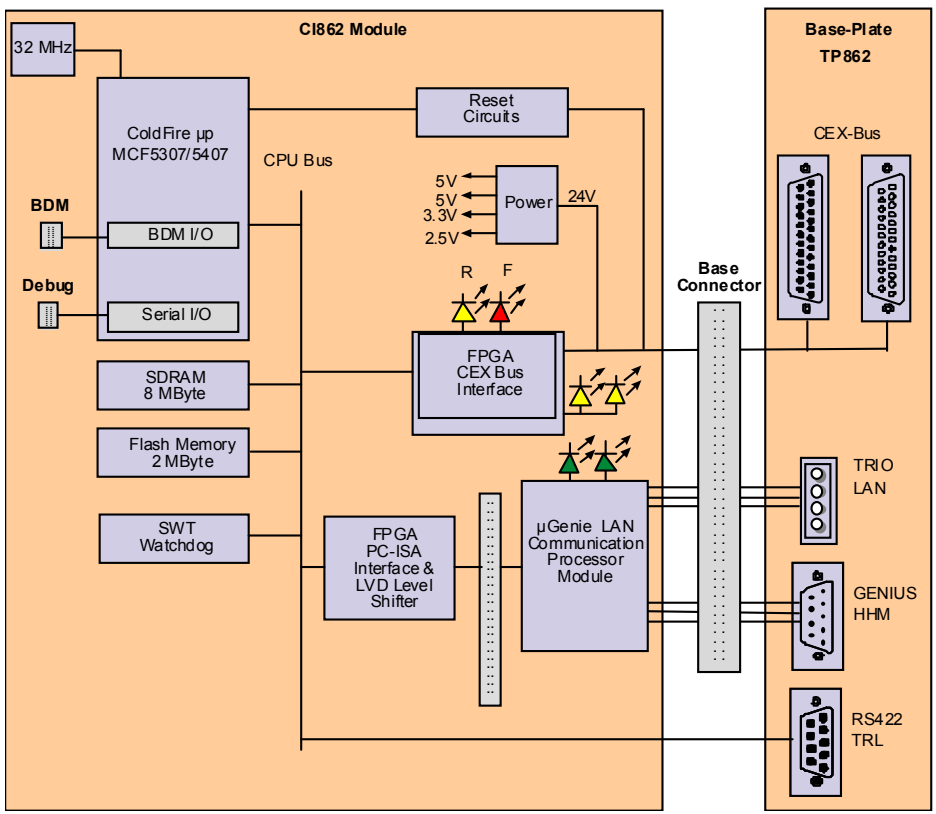


Figure 86. CI862 functionality

The baseplate contains only passive elements. It holds the input and output connectors for the CEX-Bus, a slot for the CI862 unit, a port used for the Genius Bus Hand Held Monitor, a high speed serial port used for module redundancy link communications and a port for the TRIO Field Bus connection.

CI862 contains the Coldfire MCF5307 Microcontroller with Flash memory, RAM, LED indicators, power supply, and CEX-Bus interface with dual port memory, bridged to a GE/Fanuc µGenie Communication Module. The µGenie handles all data transfer between the CI862 Carrier module and the TRIO FIELD BUS, allowing the Carrier CPU to control the remote I/O.

Indicators

LED indicators for R(un), F(ault), Communication Error, Primary (Bus Master), and Dual (redundancy)

Technical Data

Table 103. TRIO/Genius interface CI862

Item	Value
Bus Type	Daisy-chained bus cable; single twisted pair plus shield or Twinax.
Protocol	similar to the RS422 standard
Communication speed	153.6 ext, 38.4, 76.8, 153.6 std kbit/s
Bus Capacity	(one segment) Max 32 devices. 16 devices at 38.4 Kbaud. Includes CI862 and Hand-held Monitor.
Bus Termination	75, 100, 120, or 150 ohm resistor at both ends of electrical bus cable.
Maximum Bus Length	7500 feet at 38.4 Kbaud, 4500 feet at 76.8 Kbaud, 3500 feet at 153.6 Kbaud extended, 2000 feet at 153.6 Kbaud, standard. Maximum length at each baud rate also depends on cable type.
Galvanic Isolation	Yes
Status Indicators	Red LED for error Green LED for run Yellow LED for traffic Yellow LED for primary Yellow LED for dual mode

Table 103. TRIO/Genius interface CI862

Item	Value
Connector	one 4 pin (connects TRIO FIELD BUS) one DB9S (male) (connects Hand-held Monitor) one DB9, female (connects CEX expansion bus)
Current Consumption from CEX-Bus 24 V d.c.	*Typical 190 mA (max. 200 mA)*
Dimensions	W 58 x H 165 x D 122 mm (W 2.3 x H 6.4x D 4.81 inches)
Hot swap	Supported