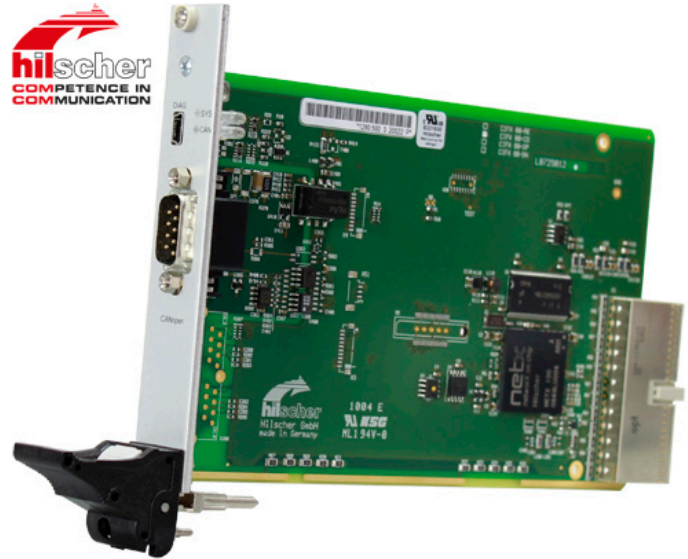


F750 – 3U CompactPCI® CANopen Interface Board

- **4HP 32-bit/33-MHz CompactPCI®**
- **Full CAN/Extended CAN according to ISO-11898**
- **CANopen master and slave by loadable firmware**
- **Based on netX universal network controller**
- **Optical isolation with 1000 VDC isolation voltage**
- **Driver support for all common operating systems**
- **-20 to +70°C screened**



The F750 is a single Eurocard CompactPCI® CANopen controller; that needs only one slot on the CompactPCI® bus.

It features one CAN bus interface supporting ISO high-speed up to 1 Mbit/s. The physical interface is isolated from the system.

Master or Slave protocol configuration can easily be done by loadable firmware. The complete protocol stack is executed on the F750, and data exchange to the host is done via Dual-Port-Memory or DMA.

The F750 is based on the netX SOC. This highly integrated network controller supports parallel data

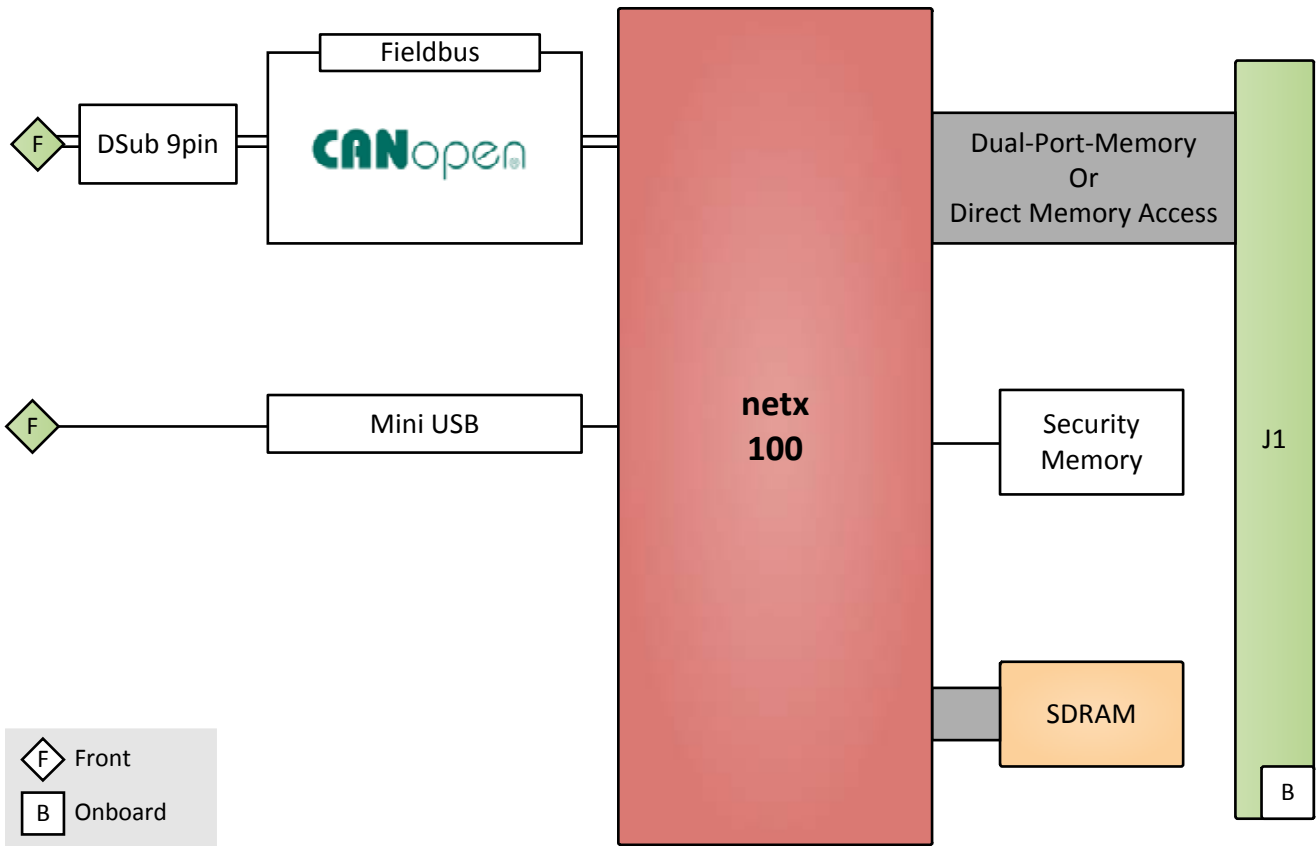
transmission via several data paths between the internal CPU and graphics engines, and the communication and host controllers. The netX SOC also controls the on-board memory and other peripheral interfaces such as UARTS, USB, SPI or I²C.

Communication works via a dual-port SRAM interface and is supported by window and pointer access mechanism. Interrupts are available in both directions from F750 to host and from host to F750.

The F750 supports a wide range of operating systems including Windows®, Windows® CE, Linux and VxWorks®.

The F750 has been designed for mission-critical industrial and for mobile applications with demand for high resistance regarding temperature, shock and vibration.

Diagram



Technical Data

CANopen	<ul style="list-style-type: none"> ■ Supported communication determined by firmware: <ul style="list-style-type: none"> □ CANopen Master □ CANopen Slave ■ CANopen Interface <ul style="list-style-type: none"> □ Type ISO-11898 □ Optically isolated □ 9-pin D-Sub receptacle connector
Communication Controller	<ul style="list-style-type: none"> ■ Hilscher netX 100 SOC
Integrated Memory	<ul style="list-style-type: none"> ■ 8 MB SDRAM ■ 4 MB serial Flash EPROM ■ 64 KB Dual-Port Memory (DPM)
Diagnostic Interface	<ul style="list-style-type: none"> ■ Mini B USB plug (5-pin)
LED Display	<ul style="list-style-type: none"> ■ System status LED ■ CANopen status (duo LED)
CompactPCI® Bus	<ul style="list-style-type: none"> ■ Compliant with PICMG 2.0 R2.1 ■ 32-bit/33-MHz bridge ■ DPM or DMA data access
Electrical Specifications	<ul style="list-style-type: none"> ■ Supply voltage/maximum current <ul style="list-style-type: none"> □ +3.3 V DC ±5% / 650 mA ■ Connected via CompactPCI® Bus
Mechanical Specifications	<ul style="list-style-type: none"> ■ Dimensions (L x W x H): 162.2 x 100 x 20 mm ■ CompactPCI® slot (3.3 V) ■ Weight: 134 g
Environmental Conditions	<ul style="list-style-type: none"> ■ Temperature range (operation): -20..+70°C ■ Temperature range (storage): -10..+70°C ■ Relative humidity: max. 95% non-condensing
CE Conformity	<ul style="list-style-type: none"> ■ EN 55011:2009 + A1:2010, CISPR 11:2009, Class A (radio disturbance) ■ EN 61000-4-2:2009 (electrostatic discharge) ■ EN 61000-4-3:2006 + A1:2008 + A2:2010 (radiated, radio-frequency, electromagnetic field immunity) ■ EN 61000-4-4:2004 + A1:2010 (burst electrical fast transients/burst) ■ EN 61000-4-5:2006 (surge) ■ EN 61000-4-6:2009 (to conducted disturbances, induced by radio- frequency fields) ■ EN 61000-4-8:2010 (power frequency magnetic field) ■ EN 61000-6-2:2005 + B1:2011 (for industrial environments)
Certification	<ul style="list-style-type: none"> ■ The device is certified according to UL 508 <ul style="list-style-type: none"> □ UL-File-Nr. E221530
Operating Systems	<ul style="list-style-type: none"> ■ Windows® ■ Windows® CE ■ Linux ■ VxWorks® ■ QNX®
Software and Drivers	<ul style="list-style-type: none"> ■ Configuration software master and slave: <ul style="list-style-type: none"> □ SYCON.net ■ Configuration Software Slave: <ul style="list-style-type: none"> □ netX Configuration Tool ■ For more information regarding drivers and firmware, please visit: <ul style="list-style-type: none"> □ CompactPCI® Communication Interface for CANopen master □ CompactPCI® Communication Interface for CANopen slave
Support and Downloads	<ul style="list-style-type: none"> ■ For more information on supported operating system versions and drivers see Downloads.

Ordering Information

Standard F750 Models	02F750-00	1 CANopen Slave interface, -20..+70°C screened
	02F750-01	1 CANopen Master interface, -20..+70°C screened
Related Hardware	This board can only be ordered together with one of the complete systems available from MEN.	
Software: Linux	This product is designed to work under Linux. See below for all available separate software packages.	
	13F750-90	Linux driver (Hilscher netX) for CANopen, PROFIBUS, DeviceNET, EtherNET/IP, EtherCat, PROFINET, OpenModBus, Sercos, Varan for F750, F751, F752, F753, PX50, PX51, PX52 and PX53.
Software: Windows®	This product is designed to work under Windows®. See below for all available separate software packages.	
	Windows® and Windows® CE software for Hilscher boards, as well as firmware and additional documentation can be downloaded directly from the following links: Hilscher Software and Hilscher Support and Downloads	
Software: VxWorks®	This product is designed to work under VxWorks®. For details regarding supported/unsupported board functions please refer to the corresponding software data sheets.	
	13F750-60	VxWorks® 5.4 / 6.2 driver (Hilscher netX) for CANopen, PROFIBUS, DeviceNET, EtherNET/IP, EtherCat, PROFINET, OpenModBus, Sercos, Varan for F750, F751, F752, F753, PX50, PX51, PX52 and PX53.
Software: QNX®	This product is designed to work under QNX®. For details regarding supported/unsupported board functions please refer to the corresponding software data sheets.	
	13F750-40	QNX® 6.4/6.5 driver (Hilscher netX) for CANopen, PROFIBUS, DeviceNET, EtherNET/IP, EtherCat, PROFINET, OpenModBus, Sercos, Varan for F750, F751, F752, F753, PX50, PX51, PX52 and PX53.
Software: Miscellaneous	A large range of corresponding driver software, software updates, firmware and firmware updates, as well as additional technical documentation is available at www.hilscher.com .	
For operating systems not mentioned here contact MEN sales.		
Documentation	Compare Chart 3U CompactPCI® / PlusIO peripheral cards » Download	
	20F750-00	User Manual for Hilscher cards F750, F751, F752, F753 as well as PX50, PX51, PX52 and PX53

Contact Information

Germany

MEN Mikro Elektronik GmbH
Neuwieder Straße 3-7
90411 Nuremberg
Phone +49-911-99 33 5-0
Fax +49-911-99 33 5-901

info@men.de
www.men.de

France

MEN Mikro Elektronik SAS
18, rue René Cassin
ZA de la Châtelaine
74240 Gaillard
Phone +33 (0) 450-955-312
Fax +33 (0) 450-955-211

info@men-france.fr
www.men-france.fr

USA

MEN Micro Inc.
860 Penllyn Blue Bell Pike
Blue Bell, PA 19422
Phone (215) 542-9575
Fax (215) 542-9577

sales@menmicro.com
www.menmicro.com

The date of issue stated in this data sheet refers to the Technical Data only. Changes in ordering information given herein do not affect the date of issue. All brand or product names are trademarks or registered trademarks of their respective holders.

MEN is not responsible for the results of any actions taken on the basis of information in the publication, nor for any error in or omission from the publication.

MEN expressly disclaims all and any liability and responsibility to any person, whether a reader of the publication or not, in respect of anything, and of the consequences of anything, done or omitted to be done by any such person in reliance, whether wholly or partially, on the whole or any part of the contents of the publication.

The correct function of MEN products in mission-critical and life-critical applications is limited to the environmental specification given for each product in the technical user manual. The correct function of MEN products under extended environmental conditions is limited to the individual requirement specification and subsequent validation documents for each product for the applicable use case and has to be agreed upon in writing by MEN and the customer. Should the customer purchase or use MEN products for any unintended or unauthorized application, the customer shall indemnify and hold MEN and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim or personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that MEN was negligent regarding the design or manufacture of the part.

In no case is MEN liable for the correct function of the technical installation where MEN products are a part of.

Copyright © 2015 MEN Mikro Elektronik GmbH. All rights reserved.