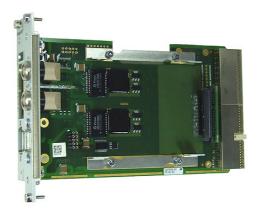
# F606 - 3U CompactPCI® Side Card Gb Ethernet

- 4 HP extension for 3U Intel® SBCs F14, F15,
   F17, F18, F19P, F21P
- 2 Gigabit Ethernet on Lemo railway compliant connectors
- 1 COM extension (SA-Adapter™)
- Conformal coating
- 2.5" SATA hard disk slot
- -40 to +85°C screened



The F606 is a 4HP dual Gigabit Ethernet extension card for 3U Intel® based CompactPCI® single-board computers. It can be used in combination with the F14 and compatible CPU boards.

Equipped with rugged Lemo connectors the F606 makes Gigabit Ethernet connectivity available for applications in railways and other harsh and mobile environments. An individually configurable UART is accessible via D-Sub connector. Consequently, this side card is screened for -40 to +85°C operation

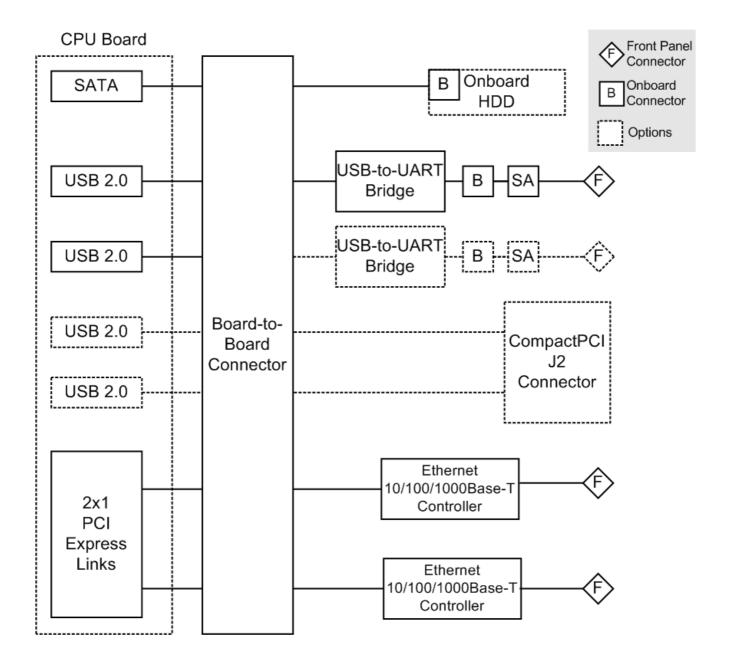
temperature and comes with conformal coating.

The F606 is directly plugged to the right side of the respective single-board computer. A robust connector makes for high mechanical stability. It is delivered with an 8HP front panel, replacing the 4HP front panel of a 3U single-board computer and thus resulting in a solid one-piece front panel.

Options of the F606 allow to replace the Lemo by D-Sub connectors and may provide up to two UART channels on the front and up to two USB ports via rear I/O.



### Diagram



### **Technical Data**

I/O	■ Ethernet
	<ul> <li>Two 10/100/1000Base-T Ethernet channels</li> <li>Lemo connectors at front panel</li> <li>Ethernet controllers are connected by two x1 PCle® links</li> <li>Two onboard LEDs for each channel to signal LAN Link, Activity status and connection speed</li> <li>UART</li> <li>One at front panel</li> <li>Physical interface using SA-Adapter™ via 10-pin connector</li> <li>RS232RS422, isolated or not</li> <li>Only full duplex operation for RS422</li> <li>Data rates up to 1 Mbit/s</li> <li>FIFO receive and transmit buffers for high data throughput</li> <li>Handshake lines: full support; lines depend on SA-Adapter™</li> <li>SA-Adapter™ has to be installed at the factory</li> </ul>
Mass Storage	Serial ATA (SATA)
	<ul> <li>One port for onboard 2.5" hard-disk drive</li> <li>Transfer rates up to 150MB/s (depends on hard disk)</li> <li>RAID level 0/1 support (depends on CPU board)</li> </ul>
Miscellaneous	■ CompactPCI® J1 is assembled for increased mechanical stability and/or for power supply
Electrical Specifications	<ul> <li>Supply voltage/power consumption:         <ul> <li>+5V (-3%/+5%), 600mA typ. (w/o hard disk)</li> <li>+3.3V (-3%/+5%), 1.6A typ. (w/o hard disk)</li> </ul> </li> <li>MTBF: 1,290,994h @ 40°C according to IEC/TR 62380 (RDF 2000)</li> </ul>
<b>Mechanical Specifications</b>	<ul> <li>Dimensions: conforming to CompactPCI® specification for 3U boards</li> <li>Mountable on right (standard) or left (option) side of the CPU</li> <li>Weight: 150g (w/o hard disk and SA-Adapters™)</li> </ul>
Environmental Specifications	<ul> <li>Temperature range (operation):         <ul> <li>-40+85°C (depending on hard disk; please refer to the hard disk specifications for possible limits)</li> <li>Airflow: min. 10m³/h</li> </ul> </li> <li>Temperature range (storage): -40+85°C</li> <li>Relative humidity (operation): max. 95% non-condensing</li> <li>Relative humidity (storage): max. 95% non-condensing</li> <li>Altitude: -300m to + 3,000m</li> <li>Shock: 15g/11ms</li> <li>Bump: 10g/16ms</li> <li>Vibration (sinusoidal): 1g/10150Hz</li> <li>Conformal coating</li> </ul>
Safety	■ PCB manufactured with a flammability rating of 94V-0 by UL recognized manufacturers
EMC	■ Tested according to EN 55022 (radio disturbance), IEC1000-4-2 (ESD) and IEC1000-4-4 (burst)
Software Support	■ Driver software can be found in the data sheet of the CPU board that you use.

### **Configuration & Options**

#### **Standard Configurations**

Article No.	Front Connectors	Mass Storage	Height
02F606-00	Lemo	no	4 HP

#### **Options**

•	
Mass storage	<ul> <li>CompactFlash® interface instead of SATA hard disk</li> <li>Via AD95 adapter</li> </ul>
I/O	<ul> <li>USB</li> <li>Two USB 2.0 host ports via rear I/O</li> <li>Ethernet</li> <li>9-pin D-Sub connectors instead of Lemo connectors</li> <li>UART</li> <li>Second interface via SA-Adapter™ on additional slot</li> </ul>
Mechanical	<ul> <li>■ Mounting of side card on left side of the CPU</li> <li>■ 8HP with additional SA-Adapter™</li> </ul>

Please note that some of these options may only be available for large volumes. Please ask our sales staff for more information.

## **Ordering Information**

Standard F606 Models	02F606-00	2 Gigabit Ethernet on Lemo railway compliant connectors, 1 COM extension (SA-Adapter™ not included), SATA hard disk slot, for F14 and compatible SBCs, conformally coated, -40+85°C screened	
Memory	0751-0028	CompactFlash® card, 2 GB, Type I, -40+85°C, S.M.A.R.T. interface	
	0751-0058	CompactFlash® card, 16 GB, Type I, fixed bit set, -40+85°C	
SA-Adapters™		re detailed overview of possible carrier board/SA-Adapter™ combinations along with n our option matrix (PDF).	
	08SA01-00	RS232, not optically isolated, 0+60°C	
	08SA02-01	RS422/485, full duplex, optically isolated, 0+60°C	
	08SA02-07	RS422/485, full duplex, optically isolated, -40+85°C screened	
	08SA03-00	1 RS232, optically isolated, 0+60°C	
	08SA03-01	1 RS232, optically isolated, -40+85°C screened	
	08SA22-00	IBIS master SA-Adapter™, -40+85°C screened	
	08SA22-01	IBIS slave SA-Adapter™, -40+85°C screened	
	08SA25-00	GPS receiver, isolated, -40+85°C screened	
Miscellaneous Accessories	0710-0038	HDD SATA 2.5", 100 GB, 1.5GB/s, 4200rpm, -10°+70°C	
Documentation	Compare Chart 31	J CompactPCI® / PlusIO CPU cards » Download	
	Compare Chart 3U CompactPCI® / PlusIO peripheral cards » Download		
	Compare Chart 3U CompactPCI® / PlusIO extension cards » Download		
	20F606-00	F606 User Manual	

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