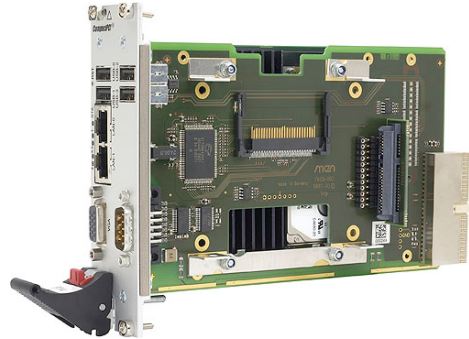


F603 – 3U CompactPCI® Side Card USB/COM

- 4 HP extension for 3U Intel® SBCs F14, F15, F17, F18, F19P, F21P
- 1 RS232
- 2 USB 2.0
- 2.5" SATA hard-disk slot
- CompactFlash® slot



The F603 is a 4HP mixed USB/COM extension card for 3U Intel® based CompactPCI® single-board computers. It can be used in combination with the F14 and [compatible CPU boards](#).

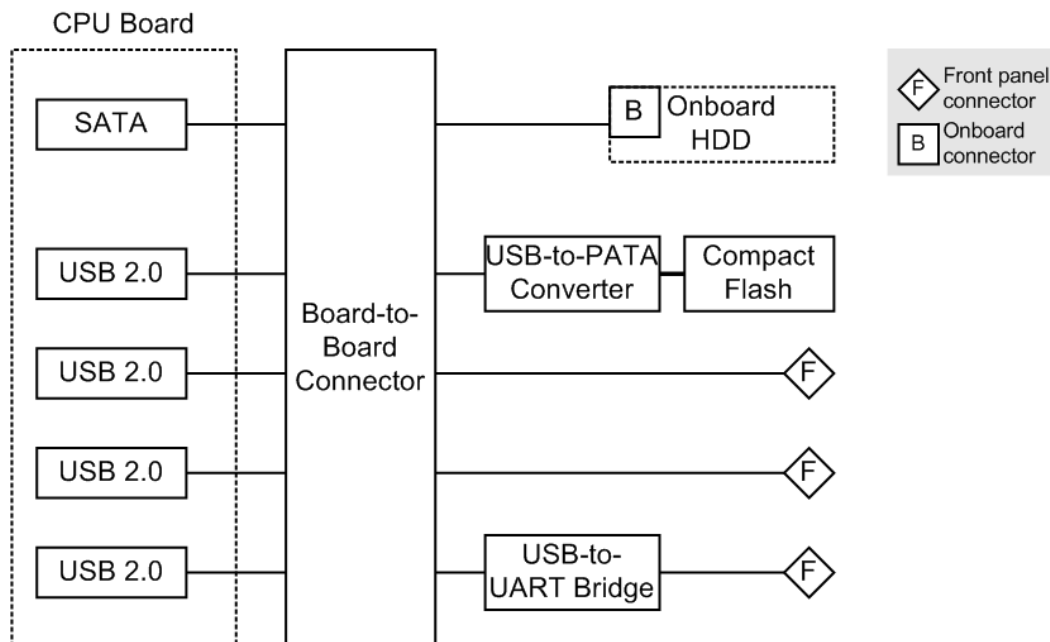
Modern Intel® based boards increasingly support USB interfaces as an exclusive universal connection of devices such as keyboard, mouse, CD-ROM, floppy etc. Especially in industrial applications however many existing systems still use legacy I/O.

Thus, the F603 provides one COM interface as well as two more USB 2.0 interfaces that extend the Single-Board Computer functionality to 4 USB ports at the front panel.

In addition an onboard 2.5" SATA hard-disk slot and a CompactFlash® slot is available on the F603.

The F603 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.

Diagram



Technical Data

I/O	<ul style="list-style-type: none"> ■ USB <ul style="list-style-type: none"> □ Two USB 2.0 ports □ Series A connector at front panel □ UHCI implementation □ Data rates up to 480Mbit/s □ High current up to 1A ■ UART <ul style="list-style-type: none"> □ One RS232 at front panel □ Data rates 300bit/s..230kbit/s (up to 1 Mbit/s with shielded cable) □ FIFO receive and transmit buffers for high data throughput □ Handshake lines: full support
Mass Storage	<ul style="list-style-type: none"> ■ Serial ATA (SATA) <ul style="list-style-type: none"> □ One port for onboard 2.5" hard-disk drive □ Transfer rates up to 150MB/s (depends on hard disk) □ RAID level 0/1 support (depends on CPU board) ■ CompactFlash® card interface <ul style="list-style-type: none"> □ Via USB to PATA converter □ Type I □ True IDE mode □ Multiword DMA 2 and UDMA 4 support ■ Please note that operating systems which cannot boot from removable data carriers (e.g. Windows® XP) cannot boot from the CompactFlash® over USB
Miscellaneous	<ul style="list-style-type: none"> ■ CompactPCI® J1 is assembled for increased mechanical stability and/or for power supply
Electrical Specifications	<ul style="list-style-type: none"> ■ Supply voltage/power consumption: <ul style="list-style-type: none"> □ +5V (-3%/+5%), 50mA typ. (w/o hard disk) □ +3.3V (-3%/+5%), 95mA typ. (w/o hard disk) ■ MTBF: tbdh @ 40°C according to IEC/TR 62380 (RDF 2000)
Mechanical Specifications	<ul style="list-style-type: none"> ■ Dimensions: conforming to CompactPCI® specification for 3U boards ■ Mountable on right (standard) or left (option) side of the CPU ■ Weight: 130g (w/o hard disk and CompactFlash®)
Environmental Specifications	<ul style="list-style-type: none"> ■ Temperature range (operation): <ul style="list-style-type: none"> □ 0..+60°C up to -40..+85°C (depending on hard disk; please refer to the hard disk specifications for possible limits) □ Airflow: min. 10m³/h ■ Temperature range (storage): -40..+85°C ■ Relative humidity (operation): max. 95% non-condensing ■ Relative humidity (storage): max. 95% non-condensing ■ Altitude: -300m to + 3,000m ■ Shock: 15g/11ms ■ Bump: 10g/16ms ■ Vibration (sinusoidal): 2g/10..150Hz ■ Conformal coating on request
Safety	<ul style="list-style-type: none"> ■ PCB manufactured with a flammability rating of 94V-0 by UL recognized manufacturers
EMC	<ul style="list-style-type: none"> ■ Tested according to EN 55022 (radio disturbance), IEC1000-4-2 (ESD) and IEC1000-4-4 (burst)
Software Support	<ul style="list-style-type: none"> ■ Driver software can be found in the data sheet of the CPU board that you use.

Configuration & Options

Standard Configurations

Article No.	Interfaces	Mass Storage	Position	Operation Temperature
02F603-00	1 COM, 2 USB 2.0	SATA HD and CompactFlash	right of CPU	0..+60°C

Options

Mass storage	<ul style="list-style-type: none"> ■ Second CompactFlash® interface instead of SATA hard disk <ul style="list-style-type: none"> □ Via AD95 adapter
Mechanical	<ul style="list-style-type: none"> ■ Mounting of side card on left side of the CPU
Operation Temperature	<ul style="list-style-type: none"> ■ 0..+60°C ■ -40..+85°C

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 F603 Models	02F603-00	3U CompactPCI® side card with 2 USB and 1 COM extension, SATA hard disk and CompactFlash® slot, for F14 and compatible SBCs, mounted to the right of the SBC, 0..+60°C
Memory	0751-0028	CompactFlash® card, 2 GB, Type I, -40..+85°C, S.M.A.R.T. interface
	0751-0060	CompactFlash® card, 16 GB, -40..+85°C
Miscellaneous Accessories	0710-0038	HDD SATA 2.5", 100 GB, 1.5GB/s, 4200rpm, -10..+70°C
Documentation		Compare Chart 3U CompactPCI® / PlusIO CPU cards » Download
		Compare Chart 3U CompactPCI® / PlusIO peripheral cards » Download
		Compare Chart 3U CompactPCI® / PlusIO extension cards » Download
		For more information on the interoperability of the side cards with the respective CPU boards please see the extension card compatibility matrix (PDF)
	20F603-00	F603 User Manual

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