

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

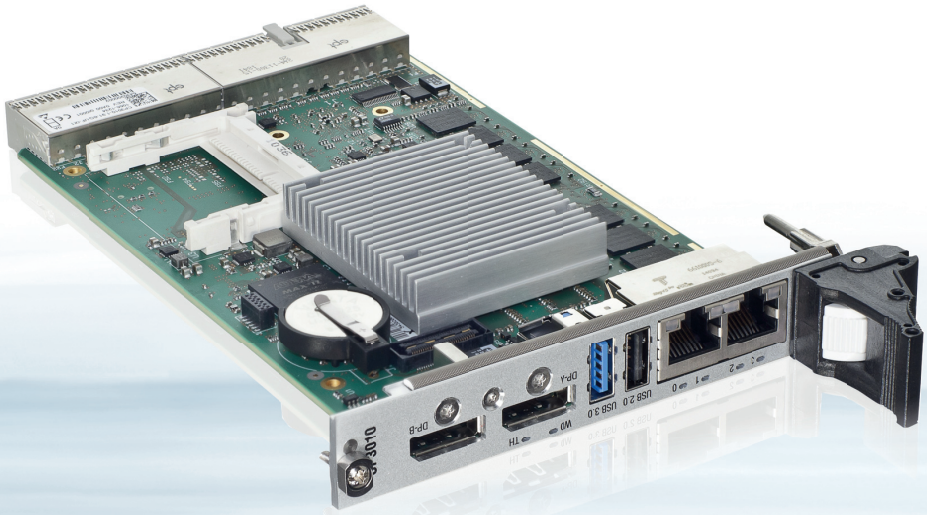
- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

CP3010-SA



Intel® Atom™ 3U CompactPCI® CPU BOARD

- latest 22nm Atom™ technology:
  powerful SOC with advanced graphics capabilities
- robust and low-power board design:
  optimized heatsink design, soldered components
- comprehensive I/O capabilities:
  DisplayPort, USB 3.0/2.0, Gigabit Ethernet, CAN, SATA …

POSSIBILITIES START HERE kontron

CP3010-SA

Intel Atom® 3U CompactPCI® CPU BOARD

Intel's latest Atom® technology provides signifi cant increases in performance and energy efficiency by using the new leading-edge 22nm Tri-Gate SOC (system-on-a-chip) manufacturing process.

The CP3010-SA Kontron's latest low-power 3U CompactPCI® CPU board supports the Intel Atom® processors E3827 and E3845 with a maximum of quad-core 1.91 GHz processing performance. Even though the board design is based on Atom® technology, performance levels of former Core™ 2 Duo platforms can be reached. Further, the built-in graphics core now features Intel® HD Graphics Technology offering an outstanding increase in graphics performance compared to previous Atom® designs. Memory demanding applications can make use of up to 8 GByte soldered DDR3L running at 1333 MHz. For onboard data storage the CP3010-SA offers a CFAST option or a soldered SATA Flash and a HDD/SSD option on the 8HP extension module. On the system side, the CP3010-SA supports a PCI 32-bit, 33 MHz (66 MHz on request) CompactPCI® interface enabling the peripheral mode feature.

Low-Power Design

Using the latest Atom® technology, the board offers a very low TDP (thermal design power) value. This feature, in conjunction with the special heatsink design, makes the CP3010-SA a perfect fi t for all systems and applications where cooling by fans is not desired or not possible. As a result, operation in temperature ranges from -40 °C up to +85 °C is possible.

Robust Board Layout

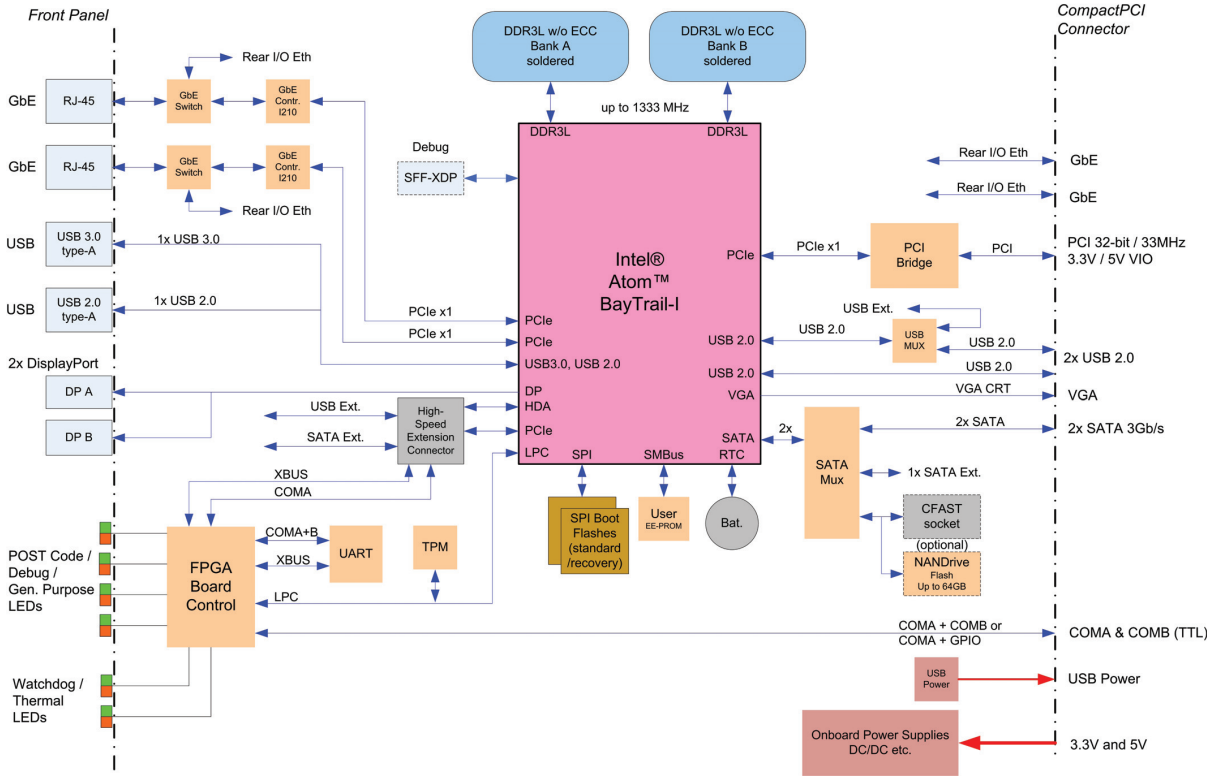
Designed with direct soldered processor and memory to handle even the toughest environmental conditions, the CP3010-SA can be used in industrial and mobile applications where motion, shock and vibration typically can be found. With respect to the transportation market the CP3010-SA is designed to meet EN50155.

Comprehensive I/O Connectivity

The CP3010-SA comes with a comprehensive I/O feature set supporting interfaces such as DisplayPort, USB 3.0/2.0, Gigabit Ethernet, SATA, CAN, RS-232 serial ports in common with the audio interfaces Line-In and Line-Out. Available as 4HP or 8HP version – optionally combined with rear I/O support - the CP3010-SA can be adapted to a wide range of application needs.

Long-Term Availability

Investing in a new project is always a challenge and risky. Extending the lifetime of an application to the possible maximum is therefore a critical issue to preserve the development investments. Delivering a stable product based on Intel®'s embedded product line, the CP3010-SA ensures long-term availability. This eliminates the risk of unplanned design changes and unexpected expensive application modifi cation. While minimizing deployment risks by providing a broad range of software support, the CP3010-SA eases the process of product integration and maximizes competitive advantages to meet time-to-market windows.



TECHNICAL INFORMATION

SOC (SYSTEM-ON-A-CHIP)		Intel Atom® SOC (22nm technology): E3845: Quad-Core 1.91 GHz, 2 MByte cache E3827: Dual-Core 1.75 GHz, 1 MByte cache All boards are passive cooled with a heatsink in 4HP height I/O Specification: - USB host interface with three USB 2.0 and one USB 3.0 ports - SATA host controller with two SATA 3Gb/s ports - Four x1 PCI Express® 2.0 ports operating at 5.0 GT/s Graphics Specification: - Intel® HD Graphics - Support for up to 2x independent displays
MEMORY	SYSTEM MEMORY BOOT FLASH (UEFI) EEPROM CFAST SATA FLASH HDD/SSD	Up to 8GB soldered DDR3L running at 1067/1333 MHz, dual channel w/o ECC Two redundant 8 MByte SPI boot flashes with fail-over functionality Serial EEPROM (24LC64) 64 Kbit for storing uEFI BIOS settings and serial number Onboard CFast installation via CFAST module Up to 64GB soldered SATA NAND Flash, optional available Onboard 2.5" SATA SSD/HDD installation via 8HP extension
ONBOARD CONTROLLER	GIGABIT ETHERNET UART WATCHDOG RTC TRUSTED PLATFORM MODULE (TPM) CAN	Up to three 1000BASE-T interfaces with WOL (Wake-on-LAN) support, two front/rear switchable, third available via 8HP extension, Intel® I210-IT Ethernet controller XR16L2750IM-F UART, 16C550-compatible FPGA-based, timeout ranging from 125ms to 4096s programmable in 16 steps, IRQ, reset, dual-stage configuration Integrated in SOC Atmel AT97SC3204 TPM 1.2 controller SJA1000 CAN controller for one CAN port, available on the 8HP extension
FRONT INTERFACES 4HP	DISPLAYPORT USB ETHERNET LEDS	2x 20-pin DisplayPort connectors, DVI/HDMI/VGA capable through cable adapter 1x USB 3.0 port, 9-pin type-A connector 1x USB 2.0 port, 4-pin type-A connector 2x RJ-45 with integrated LEDs (ACT, SPEED) 6x LED's: 4x POST Code or General Purpose, WD, TH
FRONT INTERFACES 8HP (ADDITIONAL TO 4HP)	ETHERNET CAN SERIAL PORT USB LINE-IN LINE-OUT CONTROL	1x RJ-45 with integrated LEDs (ACT, SPEED) 1x 9-pin D-Sub connector 1x 16C550-compatible serial port, RS-232 signalling, RJ-45 1x USB 2.0 port, 4-pin type-A connector 1x 3.5 mm stereo jack, blue jack 1x 3.5 mm stereo jack, green jack Reset button and HDD activity LED
ONBOARD INTERFACES	HIGH-SPEED EXTENSION CONNECTOR CFAST	One 60-pin high-speed connector holding: - COMA (TTL) - One SATA 3Gb/s - One USB 2.0 - PCIe x1 - HDA - XBUS - Reset One CFast card socket on CFAST module
REAR I/O VIA J2		The CP3010-SA supports the following interfaces via Rear I/O: - One VGA analog port - Two USB 2.0 ports - Two Gigabit Ethernet ports without LED signals - Two SATA 3 Gb/s ports - Two COM ports RS-232 (LVTTL signal level) - Five GPIs and Three GPOs (LVTTL signal level) - System management signals: Power Button, Sleep S3, 5 V Standby - Option to write protect non-volatile RAMs via a special pin
CompactPCI® BUS INTERFACE		PICMG 2.0 Rev. 3.0 compatible, 32-bit/33 MHz (66 MHz on request), version with rear I/O via J2 Universal 5V and 3.3V PCI signalling voltage supported, 7 Req/Gnt & clock lines Operating in system slot as system master and in peripheral slot in PCI passive mode
HOT SWAP		Support for all signals to allow peripheral boards to be hot swapped. The individual clocks for each slot and access the backplane ENUM# signal comply with the PICMG 2.1 Hot Swap Specification
SUPERVISORY FUNCTIONS		Watchdog, software configurable, 125ms to 4096s in 16 steps, generates IRQ or hardware reset or dual-stage configuration

TECHNICAL INFORMATION

SOFTWARE SUPPORT		- Phoenix uEFI, setup console redirection to serial port (VT100 mode) with CMOS setup access, EFI Shell support, board configuration via Shell, diskless, keyboardless, videoless operation - LAN boot support - Board identification number accessible via EEPROM - Support for Windows® 7, Windows® Embedded Standard 7, Windows® 8, Linux, VxWorks®, QNX® (Other OSs may also be used with the CP3010-SA. Please contact Kontron for further information)
COMPLIANCY		- CompactPCI® Core Specification PICMG 2.0 Rev. 3.0 - CompactPCI® Hot Swap Specification PICMG 2.1 Rev. 2.0 Designed to meet or exceed: - Safety: UL 60950-1, CSA 22.2 No 60950, EN 60950-1, IEC 60950-1 - EMI/EMC: EN 55022 / EN 55024, EN 61000-6-3 / EN 61000-6-2 - Railway: EN50155
GENERAL	DIMENSIONS WEIGHT MTBF	3U 4HP/8HP CompactPCI®, 100 x 160 mm 4HP: ca. 350 g MIL-HDBK-217 FN2, GB, GC - Ground Benign, Controlled: 316993 hours
POWER CONSUMPTION		typ. 9.5 W
ENVIRONMENTAL	OPERATING TEMPERATURE STORAGE TEMPERATURE CLIMATIC HUMIDITY ALTITUDE	0 °C to +60 °C standard; -40 °C to +85 °C extended temperature E2 -40 °C to +85 °C (without additional components) 93 % RH at 40 °C, non-condensing (acc. to IEC 60068-2-78) 2000 m

ORDERING INFORMATION

ARTICLE	DESCRIPTION
CP3010-SA CONFIGURATIONS	
CP3010-SA-1.91Q-4-4F-T	Atom® E3845, 1.91 GHz, 2 MByte cache, 4 GByte DDR3L, 4HP, Front I/O
CP3010-SA-1.91Q-4-4R-T	Atom® E3845, 1.91 GHz, 2 MByte cache, 4 GByte DDR3L, 4HP, Rear I/O
CP3010-SA-1.91Q-4-8F-T	Atom® E3845, 1.91 GHz, 2 MByte cache, 4 GByte DDR3L, 8HP, Front I/O, HD/SSD/CFast Carrier
CP3010-SA-1.75D-4-4F-T	Atom® E3827, 1.75 GHz, 1 MByte cache, 4 GByte DDR3L, 4HP, Front I/O
CP3010-SA-1.75D-4-4F-T-E2	Atom® E3827, 1.75 GHz, 1 MByte cache, 4 GByte DDR3L, 4HP, Front I/O, ext. Temp.
STORAGE (AS SEPARATE ITEMS, NOT MOUNTED ON THE CPU)	
CFASTX	Industrial grade CFast, various sizes available
CP-HDD-2.5-SATA-XX	Industrial grade HDD, various sizes available
CP-SSD-2.5-SATA-XX	Industrial grade SSD, various types and sizes available
REAR TRANSITION MODULES	
CP-RIO3-04	4HP rear I/O module (2x Ethernet, 2x USB, VGA, 2x SATA connectors)
CP-RIO3-04	8HP rear I/O module (additional to 4HP COMA/B)
CP-RIO3-04S	4HP rear I/O module (2x Ethernet, COM, VGA, 2x SATA connectors)
SOFTWARE	
VXW-BSP-CP3010-SA-V6.9.4	VxWorks 6.9.4 Board Support Package

Notes: Windows and Linux BSPs are only available as download on the web page. Please contact your local sales representative for other configuration options.

GLOBAL HEADQUARTERS

KONTRON S&T AG

Lise-Meitner-Str. 3-5
86156 Augsburg, Germany
Tel.: + 49 821 4086 0
Fax: + 49 821 4086 111
info@kontron.com
www.kontron.com

Copyright © 2018 Kontron AG. All rights reserved. All data is for information purposes only and not guaranteed for legal purposes. Information has been carefully checked and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Kontron and the Kontron logo and all other trademarks or registered trademarks are the property of their respective owners and are recognized. Specifications are subject to change without notice. ICPs-20180427-WMH

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP