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.

Find the *EKF CC9-SAMBA* at our website: ***Click HERE***

Product Information

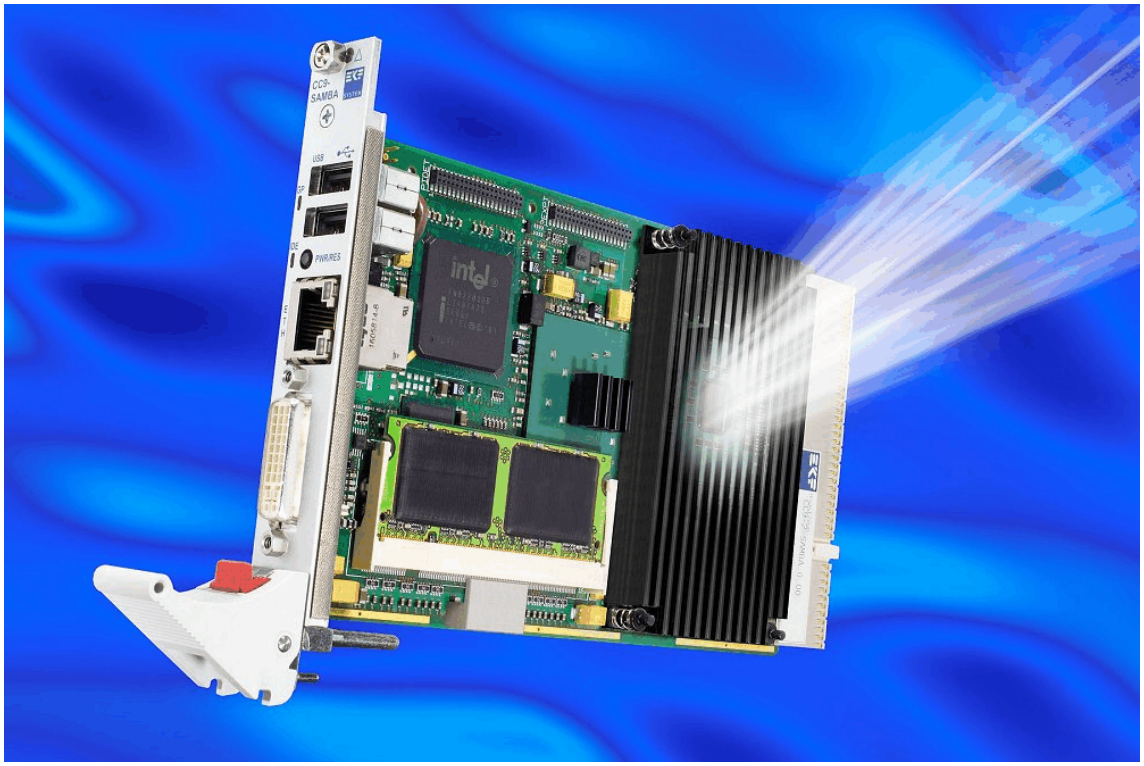
CompactPCI® Pentium® M CPU • CC9-SAMBA

Document No. 3240 • Edition 2009-09

Alternatively equipped with the Intel® series of (LV) Pentium® M and ULV Celeron® M processors and up to 1GB RAM, the CC9-SAMBA is a versatile 4HP/3U (single size Eurocard) CompactPCI® CPU board, designed especially for systems which require low power consumption.

Available with a variety of processors, starting with the ULV 600MHz Celeron® M up to the 2.0GHz Pentium® M Dothan755, the CC9-SAMBA covers a wide range of industrial applications.

The DVI-I video interface allows for attachment of both, advanced (digital) and legacy (analog) flat panel displays and CRT monitors (D-SUB connector optionally). The CC9-SAMBA is provided with a Gigabit Ethernet controller. An on-board socket accommodates either a CompactFlash memory card or Microdrive®, or an 1.8-inch hard disk module (option). The local expansion interface connector may be used to directly attach a mezzanine companion I/O board, which can carry in addition a 2.5-inch hard disk drive. As an option, rear I/O across the J2/P2 connector is available.



CC9-SAMBA

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Feature Summary CC9-SAMBA	
Form Factor	Single size *CompactPCI* style Eurocard (160x100mm^2), front panel width 4HP (20.3mm)
Processor	Designed for Intel® Pentium® M Micro FC-BGA 479 processors (0.13□ Banias, 0.09□ Dothan), maximum junction temperature 100°C • CC9-1: 600MHz ULV Celeron® M, 512KB L2 cache, 7W • CC9-2: 1.0GHz ULV Celeron® M (Dothan 373), 512KB L2 cache, 5W • CC9-3: 1.4GHz LV Pentium® M (Dothan 738), 2MB L2 cache, 10W • CC9-5: 1.8GHz Pentium® M (Dothan 745), 2MB L2 cache, 21W • CC5-6: 2.0GHz Pentium® M (Dothan 755), 2MB L2 cache, 21W
Chipset	Intel® i855 chipset consisting of: • 82855GME Graphics/Memory Controller Hub (GMCH) - Montara • 82801D I/O Controller Hub (ICH4) • 82802 Compatible Firmware Hub (FWH)
Memory	200-pin SO-DIMM socket (notebook style module), PC2100/2700 DDR266/333-SDRAM, 1GB maximum
Video I/O	Analog monitor and digital flat-panel display support by DVI-I connector (front panel), up to 2048x1536 pixel 16M colours @75Hz refresh rate (analog), up to 1600 x 1200 pixel 16M colours @60Hz (digital), incorporates PanelLink Digital technology (Silicon Image). • Front panel option: D-Sub (female HD15) VGA connector available, replaces DVI-I connector • Rear I/O option: Analog video across J2/P2 (CCR-RIO rear I/O transition module)
USB I/O	All ports over-current protected, data transfer rate of up to 480Mbps, conforming to USB2.0 • USB port 1: Type A connector (front panel) • USB port 2: Type A connector (front panel) • USB ports 3/5: J2/P2 Rear I/O option (CCR-RIO rear I/O transition module) • USB ports 4/6: Expansion interface option (CCA-LAMBADA/CCB-BOSSANOVA mezzanine companion board)
Ethernet I/O	• Standard 10/100/1000Mbps Gigabit Ethernet controller 82541ER, accessible via RJ45 jack from the front panel or as an option across J2/P2 with attached CCR-RIO rear I/O transition module • Jumbo Frame support up to 16KB • Option 82541PI Gigabit Ethernet controller (replaces 82541ER), Virtual LAN support, IEEE 802.1Q VLAN tag insertion and stripping and packet filtering for up to 4096 VLAN tags • Option 10/100 Ethernet (secondary LAN port), accessible via expansion connector LCI (LAN Connect Interface ICH4), requires 82562 PHY on expansion board (CCB-BOSSANOVA)
Mezzanine I/O	• On-board LPC/USB/AC97 Super-I/O, USB and audio expansion interface connector • Suitable CCA-LAMBADA/CCB-BOSSANOVA mezzanine companion boards available • On-board LCI (LAN Connect Interface) connector for an additional Ethernet port (suitable mezzanine companion board CCB-BOSSANOVA)
IDE/ATA	• Ultra ATA/100 connector (Secondary IDE), handover to CCA-LAMBADA/CCB-BOSSANOVA mezzanine expansion board with optional on-board 2.5-inch hard disk drive or external device • CompactFlash socket for a CFA ATA memory card or Microdrive® (Secondary IDE) • Option 1.8-inch on-board hard disk module (Secondary IDE), replaces CompactFlash facility • J2/P2 Rear I/O option: Primary IDE accessible from CCR-RIO rear I/O transition module CCR-RIO
CompactPCI	32-bit PCI bridge chip PLX PCI 6150 (HB4), 133MBps CPCI master

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Feature Summary CC9-SAMBA

J2/P2 Rear I/O	• Primary IDE • GB Ethernet • USB Ports 3, 5 • VGA Analog Video • Keyboard, Mouse • COM1 (TTL Level) • Suitable rear I/O transition module CCR-RIO available
BIOS	Phoenix BIOS
Drivers (All Major OS)	▸ Intel graphics drivers ▸ Intel networking drivers

Typical Power Requirements

Board	+3.3V +0.17V/-0.1V		+5V +0.25V/-0.15V	
	MaxPower	WinXP Idle	MaxPower	WinXP Idle
CC9-1-SAMBA				
CC9-2-SAMBA	1.9A	1.9A	1.4A	0.7A
CC9-3-SAMBA				
CC9-5-SAMBA				
CC9-6-SAMBA				

Thermal Conditions Environmental Conditions	• Operating temperature: 0°C ... +70°C (CPU dependent) • Storage temperature: -40°C ... +85°C, max. gradient 5°C/min • Humidity 5% ... 95% RH non condensing • Altitude -300m ... +3000m • Shock 15g 0.33ms, 6g 6ms • Vibration 1g 5-2000Hz
EC Regulations	EN55022, EN55024, EN60950-1 (UL60950-1/IEC60950-1)
MTBF	90 x 10^3h ~ 10 years (CC9-3 @ 50°C)

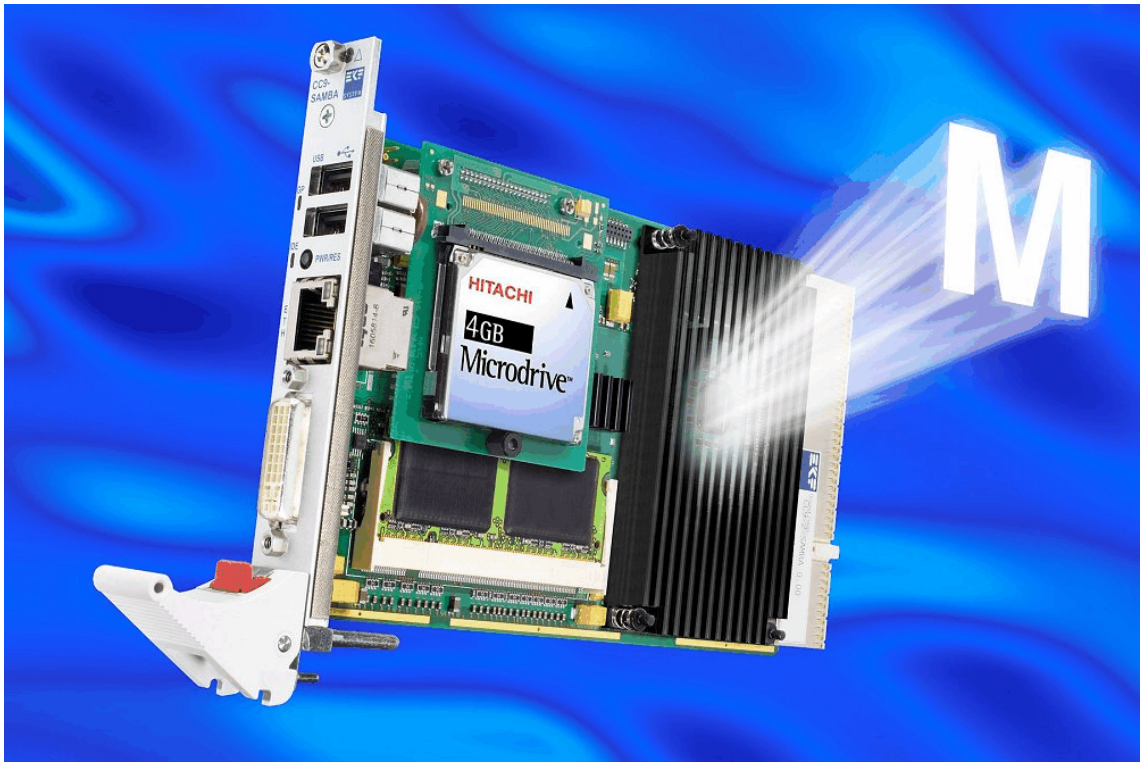
Performance Rating

Measured with PCMark2002 under Windows XP, 512MB PC2700 DDR

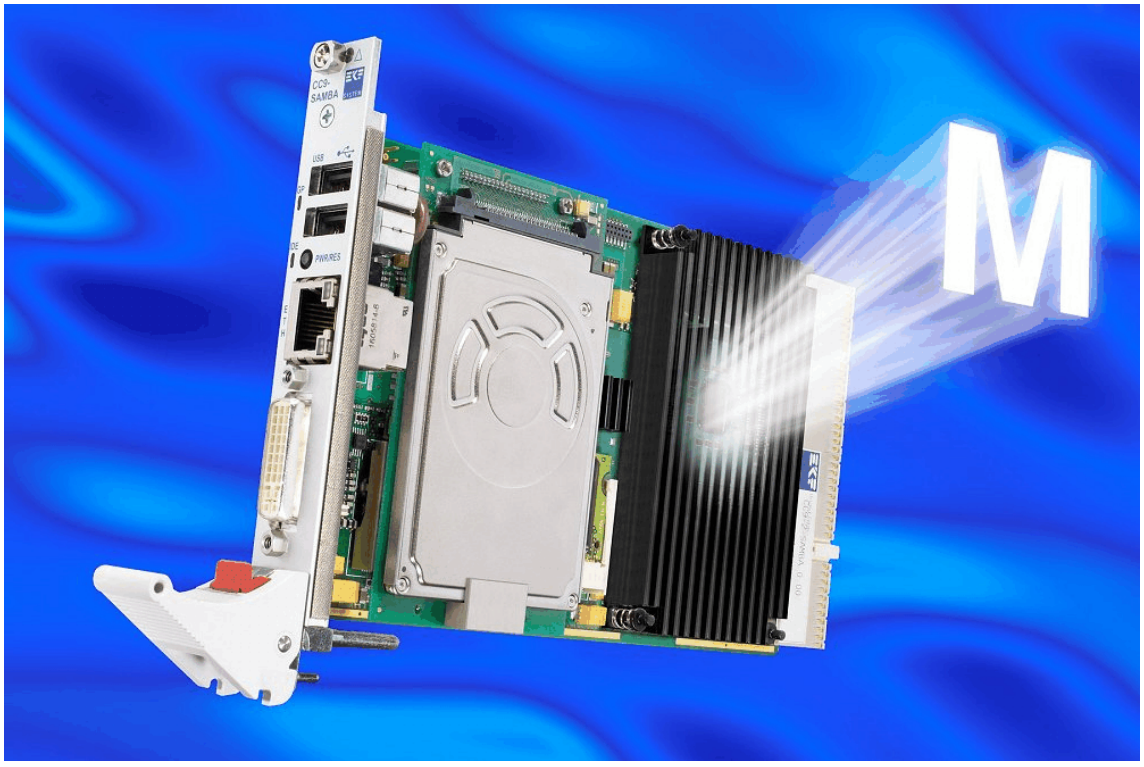
Board	Processor	CPU/MEM Score
CC9-1-SAMBA	600MHz ULV Celeron® M (Banias)	1986/2645
CC9-2-SAMBA	1.0GHz ULV Celeron® M (Dothan 373)	3386/3274
CC9-3-SAMBA	1.4GHz LV Pentium® M (Dothan 738)	4745/8489
CC9-5-SAMBA	1.8GHz Pentium® M (Dothan 745)	6143/10609
CC9-6-SAMBA	2.0GHz Pentium® M (Dothan 755)	6773/11398

subject to changes

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



CC9-SAMBA with CF Microdrive (or CF Flash Card)



CC9-SAMBA with 1.8-Inch HD Option

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



CompactFlash Adapter Module for CC9-SAMBA

The CC9-SAMBA comes with a CompactFlash adapter module, which is suitable to hold a silicon memory CF card or Microdrive hard disk. If the CC9-SAMBA is accompanied by a mezzanine expansion module such as the CCA-LAMBADA or CCB-BOSSANOVA, the position of the CompactFlash adapter module changes to the mezzanine card.

Optionally an on-board 1.8-inch hard disk module is available. When ordered, it replaces the CompactFlash adapter module (please request for a special solution which allows to use both the CF slot and the 1.8-inch drive simultaneously, see also lower picture on pg. 7).

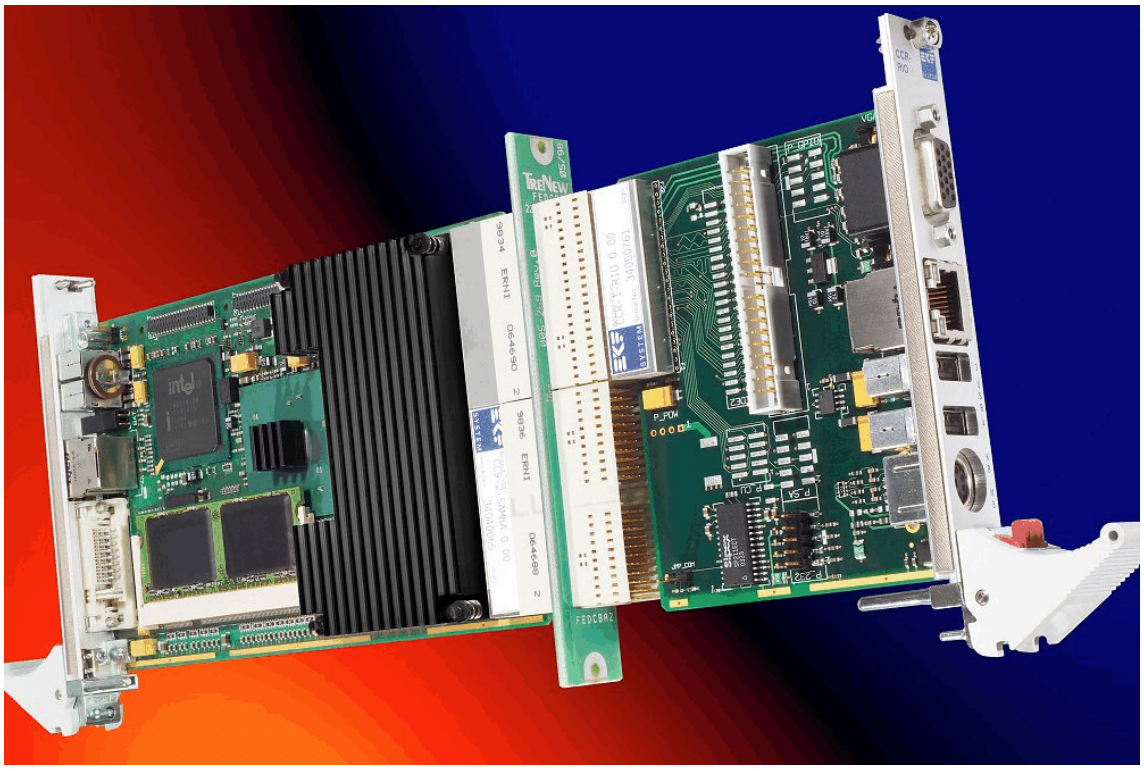


1.8-Inch on-Board Hard Disk Module for CC9-SAMBA

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



CC9-SAMBA & CCR-RIO



CC9-SAMBA & CCR-RIO

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



CCR-RIO



CC9-SAMBA / CCB-BOSSANOVA with front panel CF Card slot & on-board hard disk

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



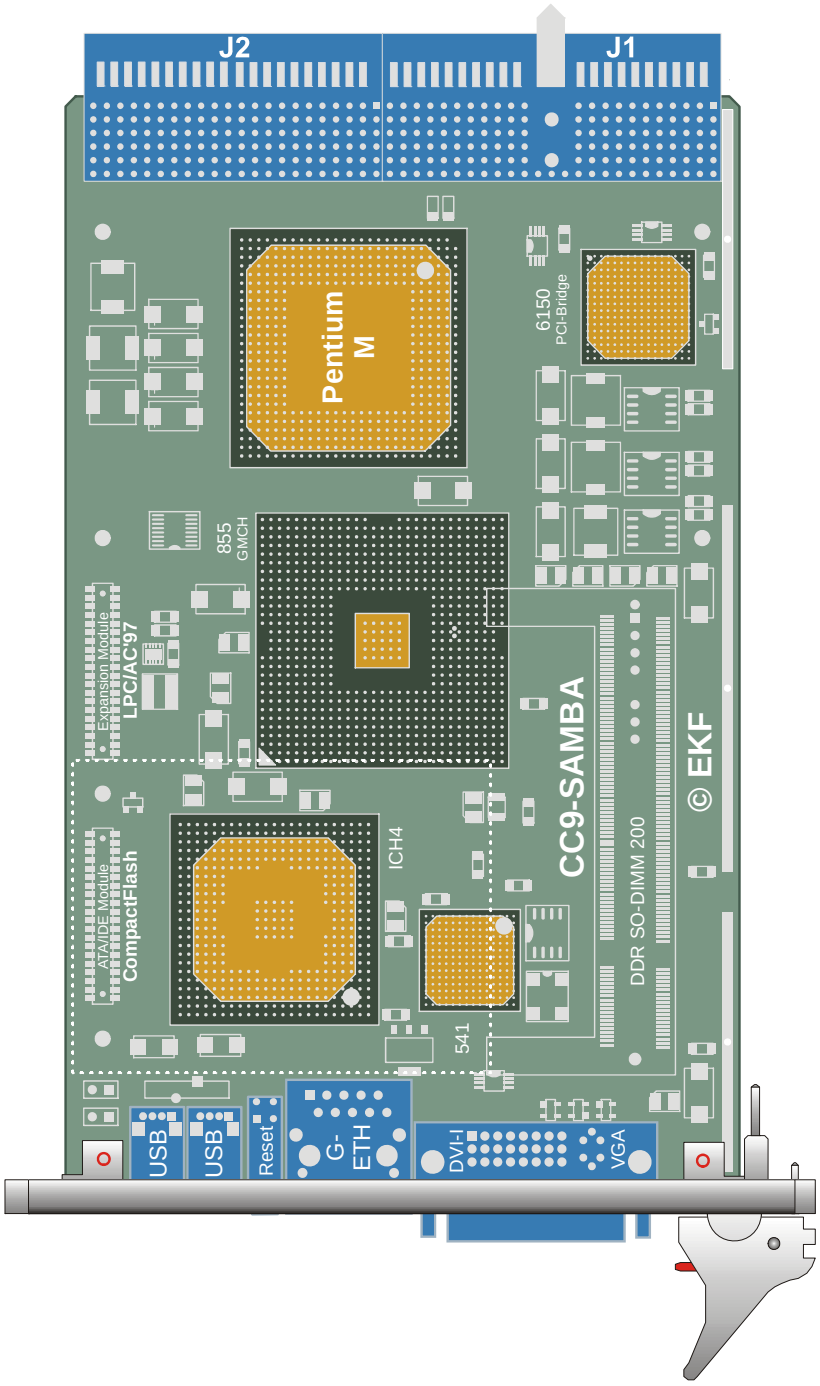
CCA-LAMBADA mounted on top of the CC9-SAMBA, with hard disk option



CCA-LAMBADA mounted on bottom of the CC9-SAMBA

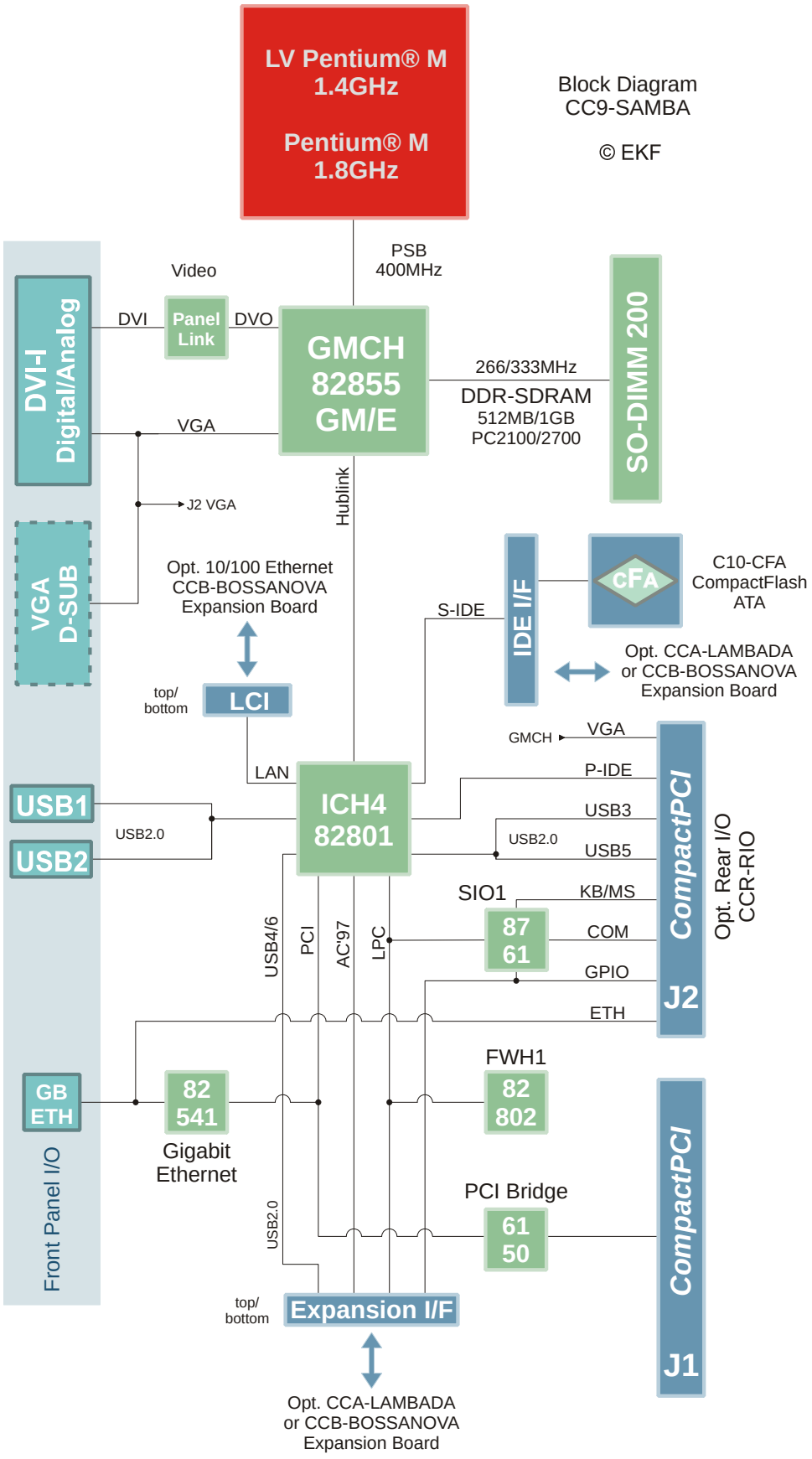
Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Top View Assembly Drawing CC9-SAMBA

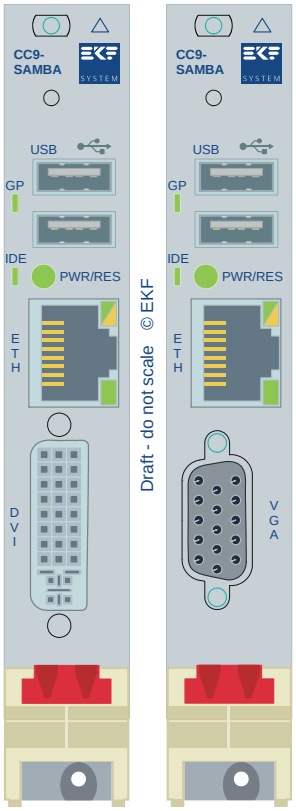


Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

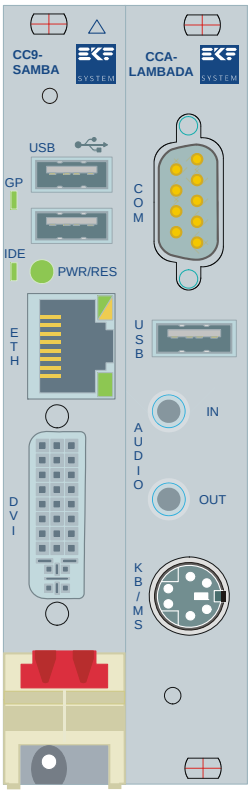
Block Diagram CC9-SAMBA



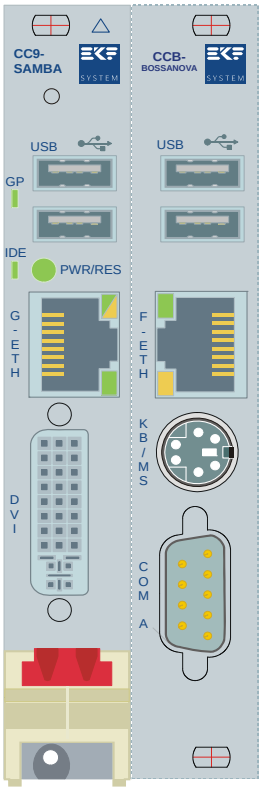
Front Panel Options DVI/VGA CC9-SAMBA



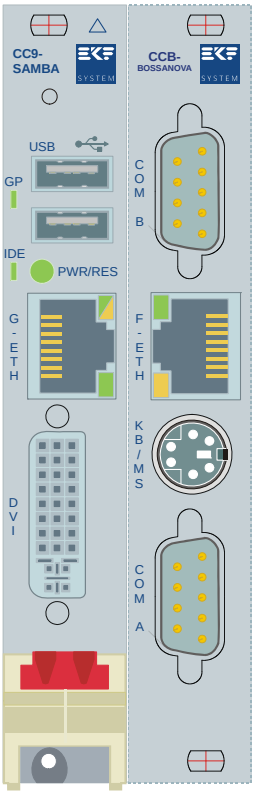
Front Panel CCA-LAMBADA, CCB-BOSSANOVA



CCA-LAMBADA
(Mounting on top of CC9)



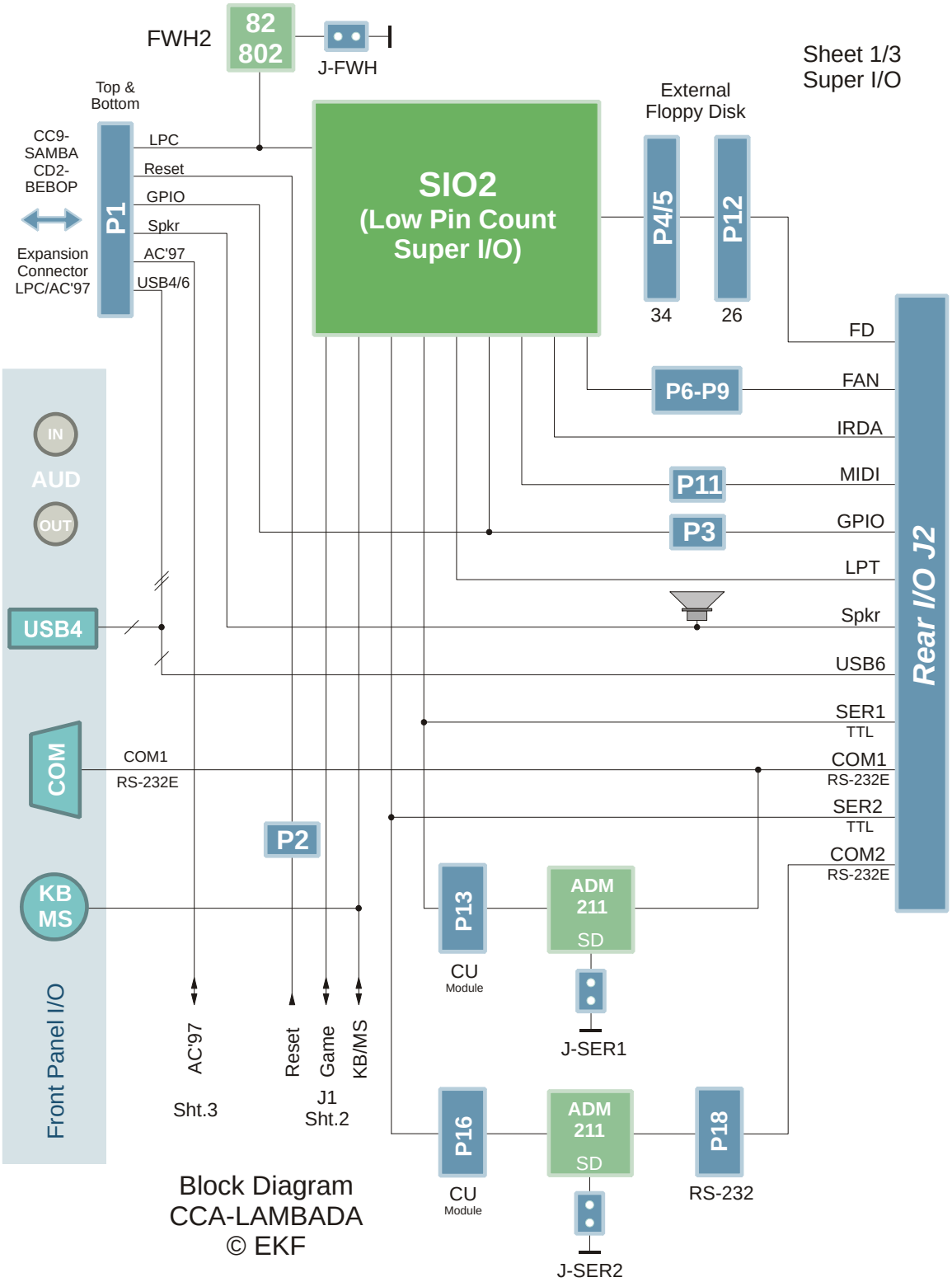
CCB-1-BOSSANOVA
(Top Mounting on CC9)



CCB-2-BOSSANOVA
(Top Mounting on CC9)

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

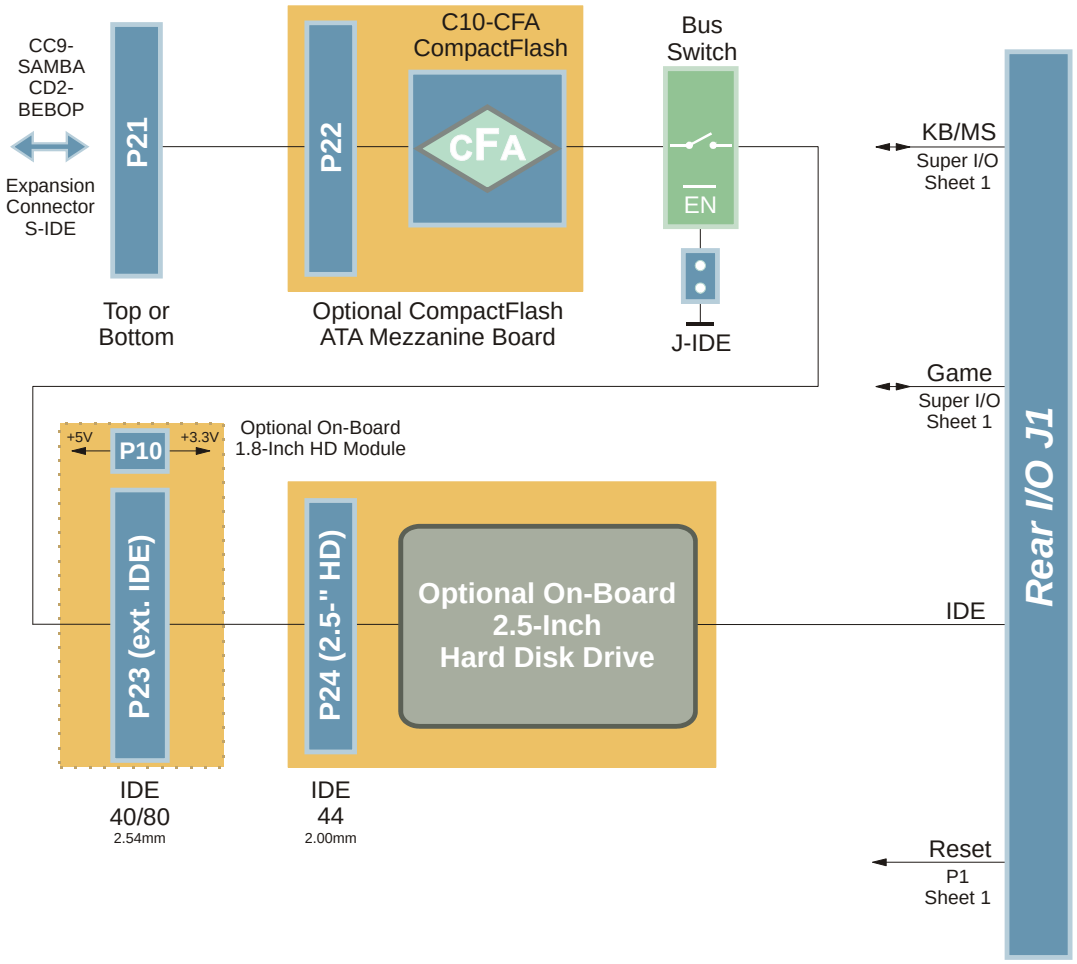
Block Diagram CCA-LAMBADA

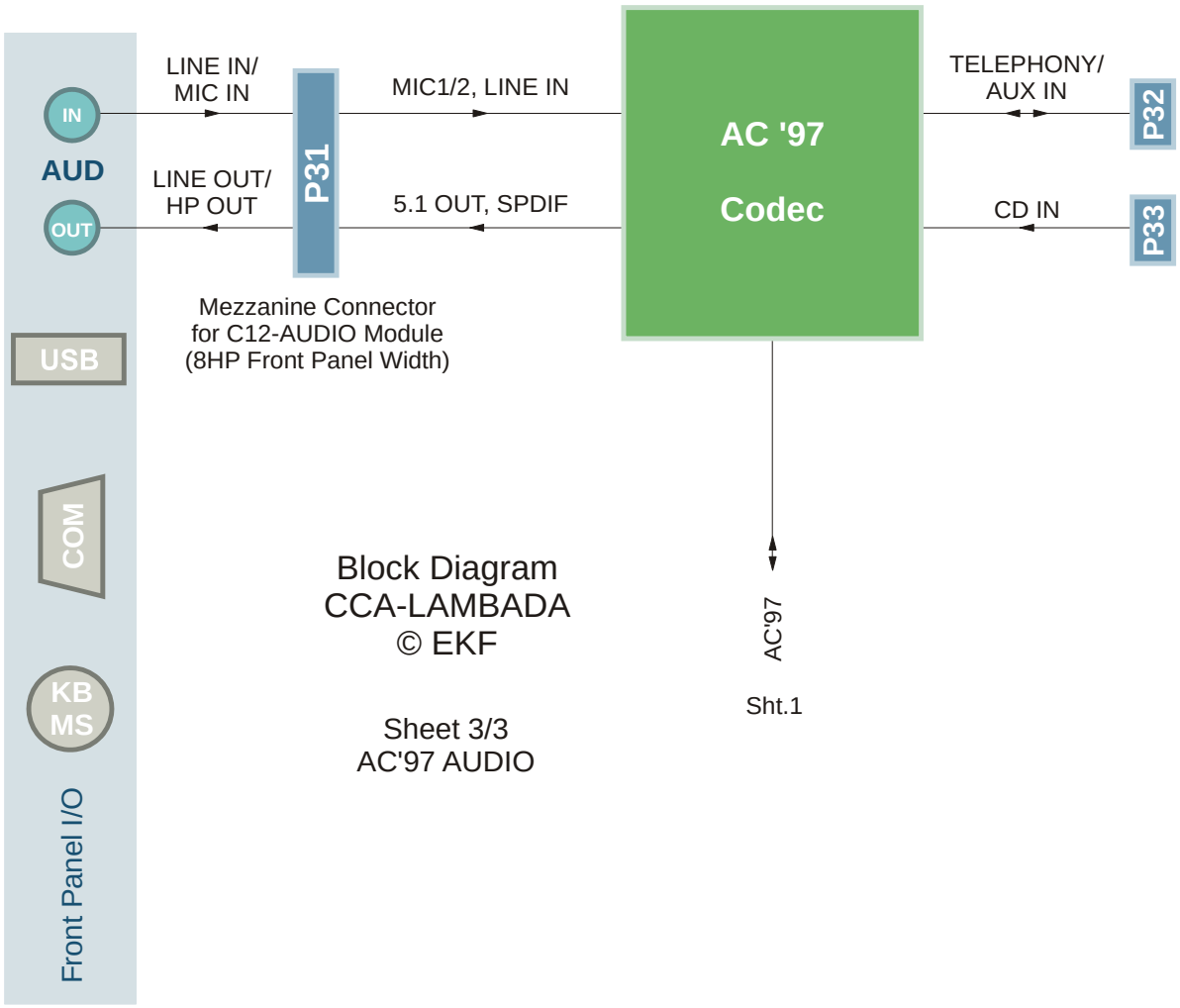


Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Block Diagram
CCA-LAMBADA
© EKF

Sheet 2/3
IDE Storage Options



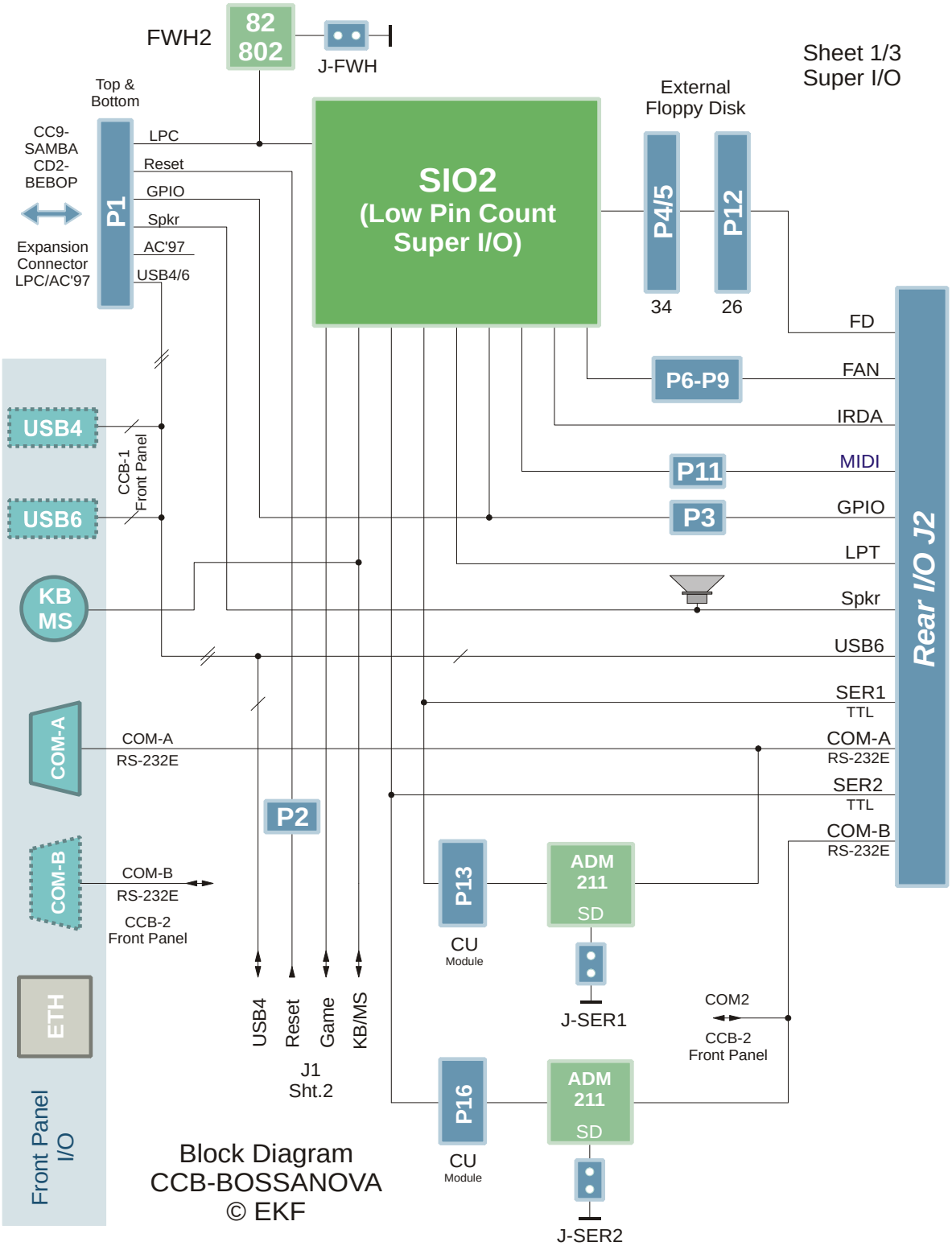


Block Diagram
CCA-LAMBADA
© EKF

Sheet 3/3
AC'97 AUDIO

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

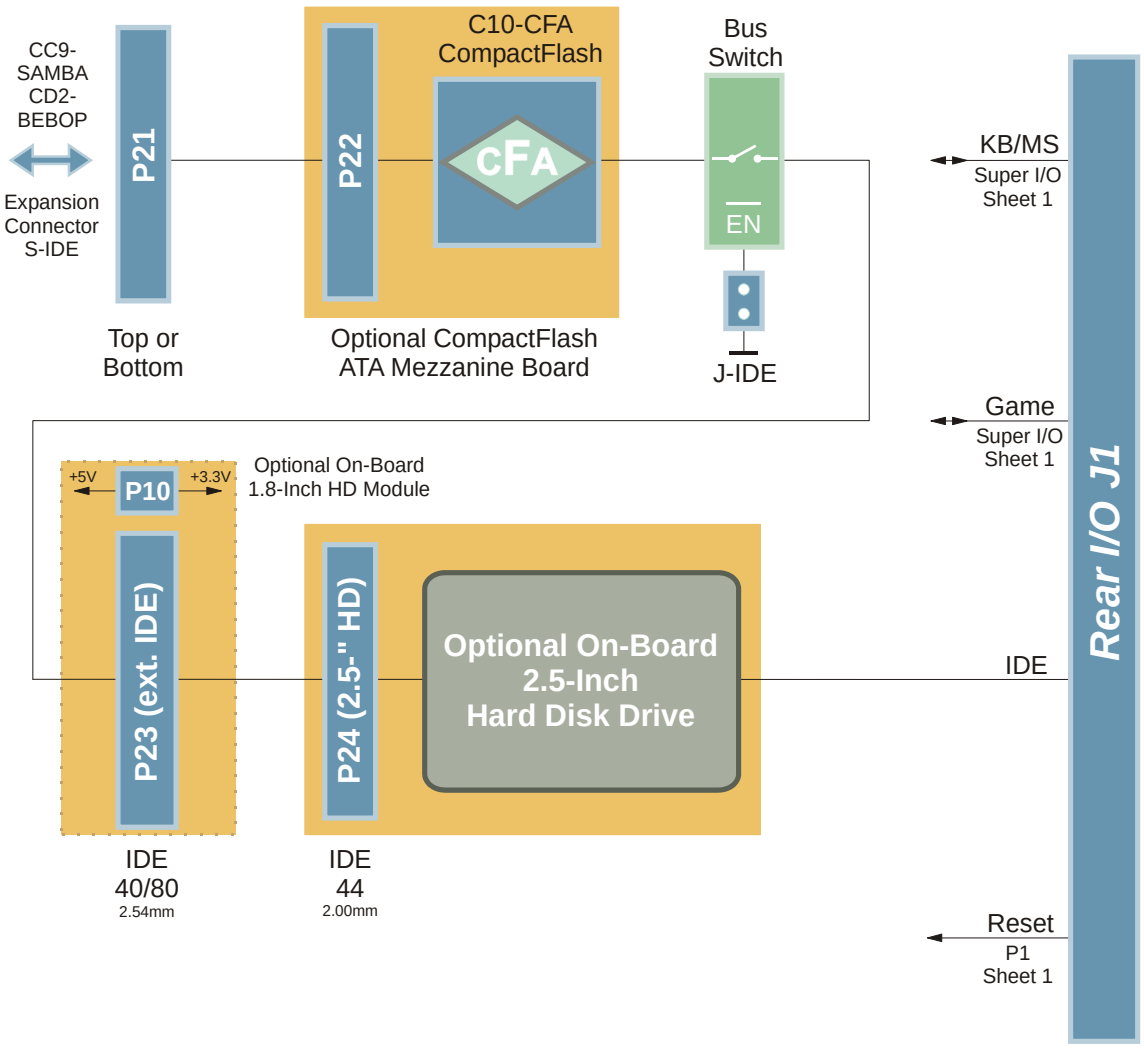
Block Diagram CCB-BOSSANOVA

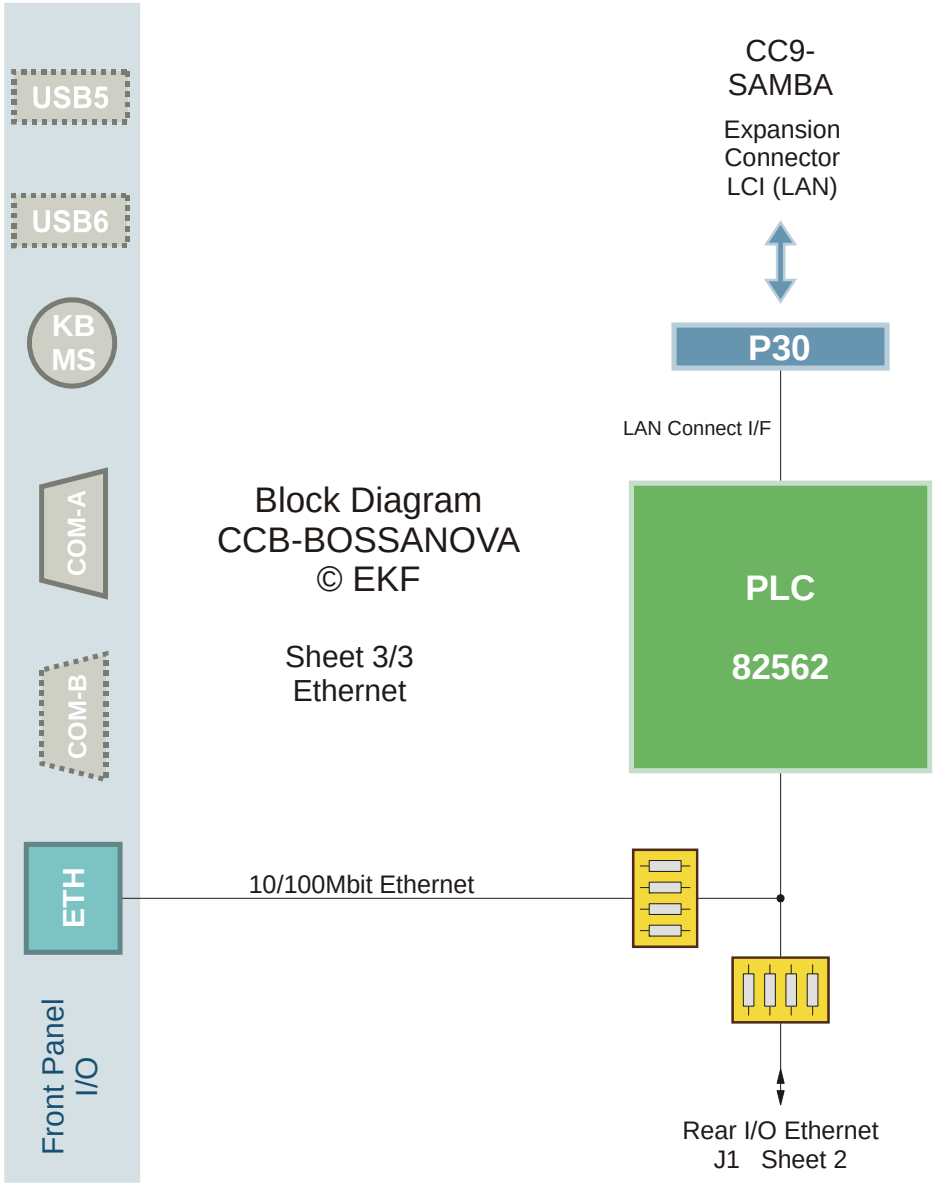


Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Block Diagram
CCB-BOSSANOVA
© EKF

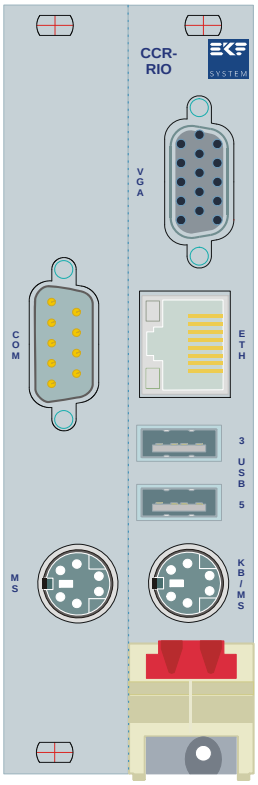
Sheet 2/3
IDE Storage Options



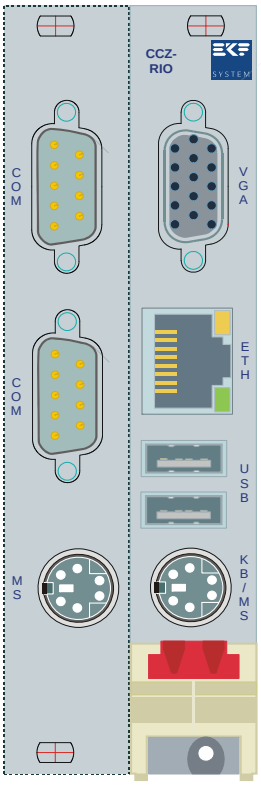


Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

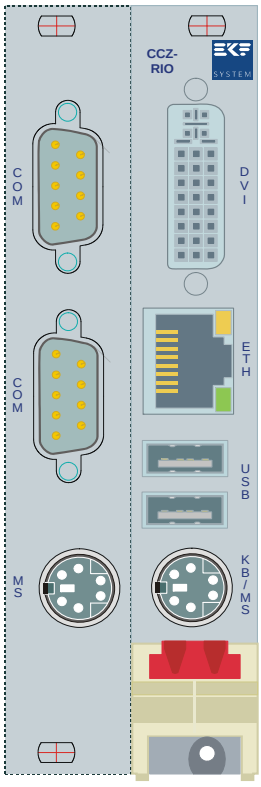
Rear Panel CCR-RIO, CCZ-RIO



CCR-RIO 4/8HP



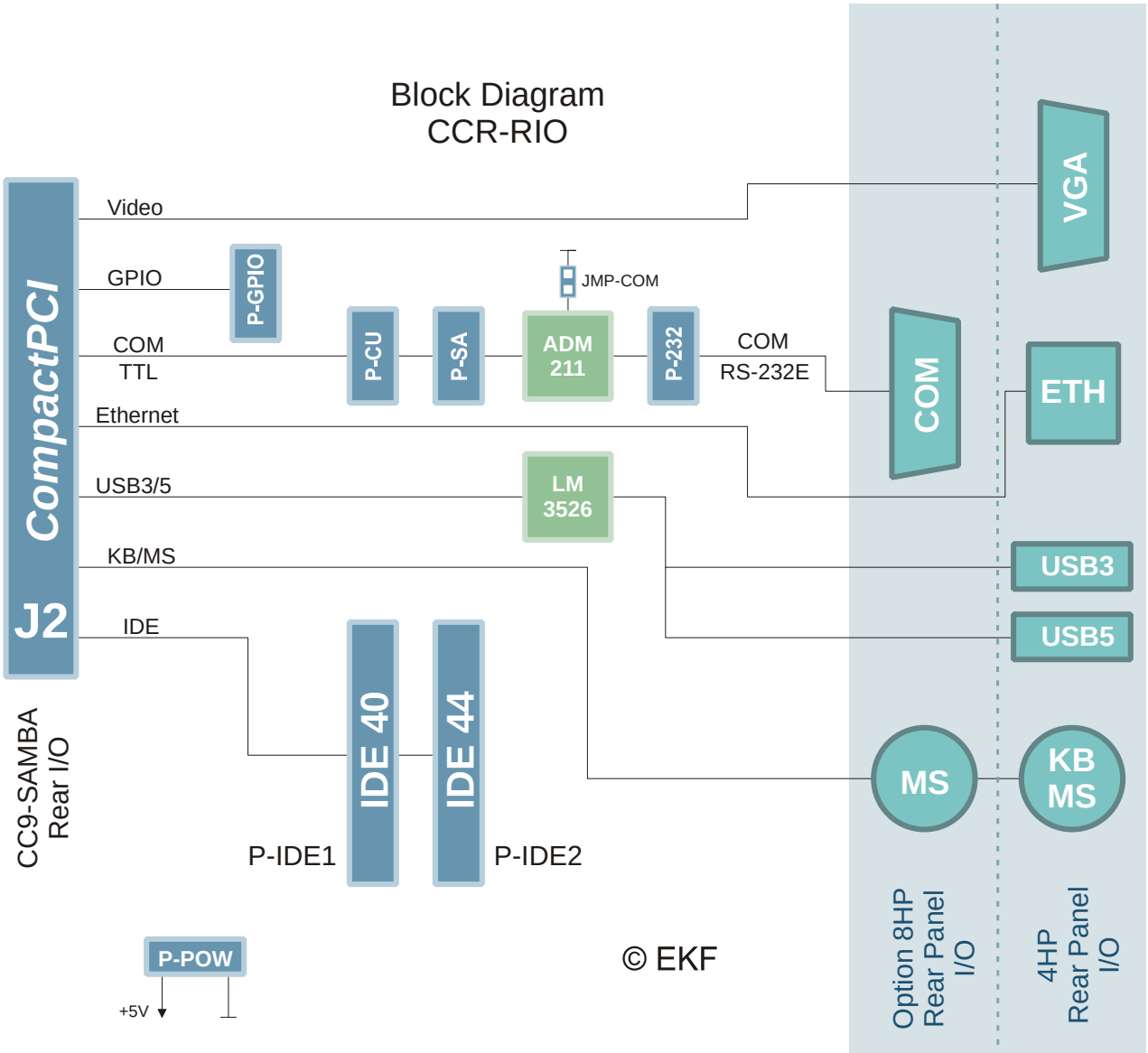
CCZ-RIO 4/8HP
(VGA Video Output)



CCZ-RIO 4/8HP
(DVI-I Video Output)

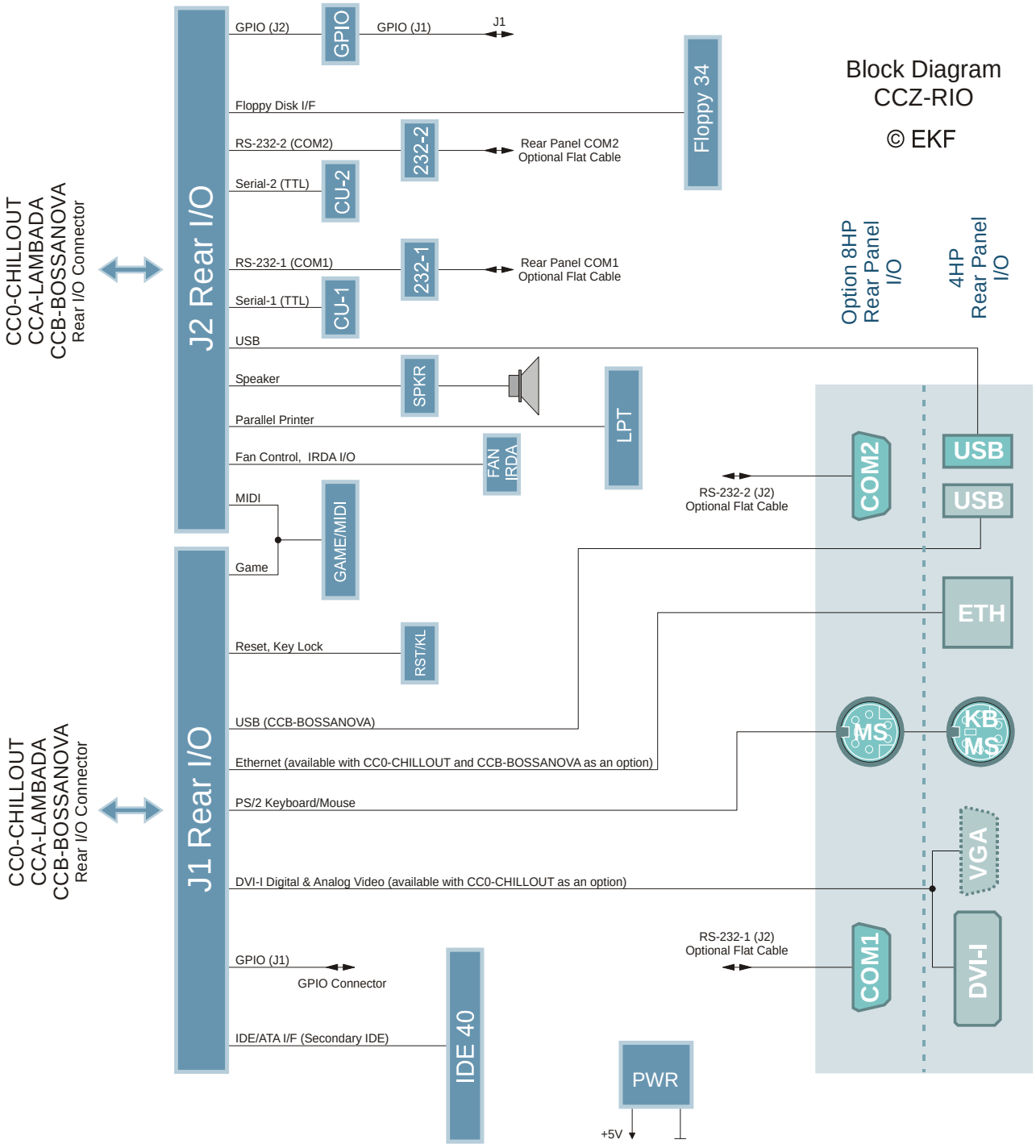
Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Block Diagram CCR-RIO



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Block Diagram CCZ-RIO

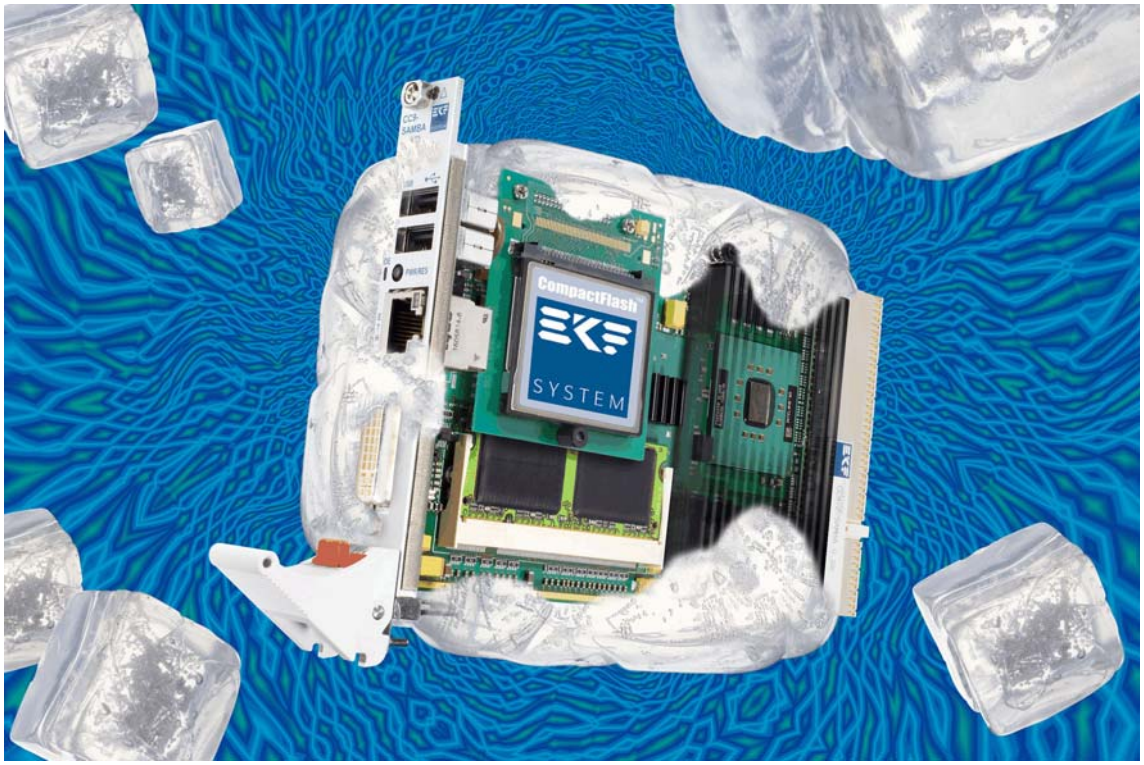


Ordering Information	
Ordering No.	Short Description
CC9-1(R)-SAMBA	3U/4HP CPCI CPU Board, 600MHz ULV Celeron® M, 512MB DDR SDRAM, GB Ethernet, DVI-I video, CompactFlash slot
CC9-2(R)-SAMBA	Similar to CC9-1-SAMBA, 1.0GHz ULV Celeron® M Dothan 373
CC9-3(R)-SAMBA	Similar to CC9-1-SAMBA, 1.4GHz LV Pentium® M Dothan 738
CC9-5(R)-SAMBA	Similar to CC9-1-SAMBA, 1.8GHz Pentium® M Dothan 745
CC9-6(R)-SAMBA	Similar to CC9-1-SAMBA, 2.0GHz Pentium® M Dothan 755
CC9-A(R)-SAMBA	Similar to CC9-1-SAMBA, VGA video connector
CC9-B(R)-SAMBA	Similar to CC9-2-SAMBA, VGA video connector
CC9-C(R)-SAMBA	Similar to CC9-3-SAMBA, VGA video connector
CC9-E(R)-SAMBA	Similar to CC9-5-SAMBA, VGA video connector
CC9-F(R)-SAMBA	Similar to CC9-6-SAMBA, VGA video connector
CCA-1-LAMBADA	3U Super-I/O module, local expansion board complementing the CC9-SAMBA, front panel width 4HP, with PS/2 keyboard/mouse, RS-232, optional audio connectors & AC'97 Codec, mounting on top or bottom of the CC9-SAMBA
CCB-1-BOSSANOVA	3U Super-I/O module, local expansion board complementing the CC9-SAMBA, front panel width 4HP, 10/100 Ethernet, 2 x USB, 1 x RS-232, PS/2 keyboard/mouse mounting on top or bottom of the CC9-SAMBA
CCB-2-BOSSANOVA	3U Super-I/O module, local expansion board complementing the CC9-SAMBA, front panel width 4HP, 10/100 Ethernet, 2 x RS-232, PS/2 keyboard/mouse mounting on top or bottom of the CC9-SAMBA
CCR-1-RIO	Rear I/O transition module for CC9-SAMBA
CR9-5-ADAPT	Mechanical kit, expands the CC9 front panel to 6U full height
280.7.400	External keyboard/mouse Y-splitter-cable Mini-DIN male to 2 x Mini-DIN female
908.51.02.01	DVI-D to DVI-D cable assembly, 2m, connects the CC9-SAMBA with DVI-I video connector to DVI monitors (digital way)
908.57.02.01	DVI-I to HD DSUB15 cable assembly, 2m, connects the CC9-SAMBA with DVI-I video connector to VGA monitors (analog way)
908.57.12.01	DVI-I to VGA adapter (plug to receptacle), to be plugged onto the CC9-SAMBA DVI output, with HD DSUB15 socket, suitable especially for analog monitors with firmly attached VGA cable

CC9-*-SAMBA: suitable for 64-bit CPCI J2/P2 backplane

CC9-*R-SAMBA: suitable for rear I/O across J2

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



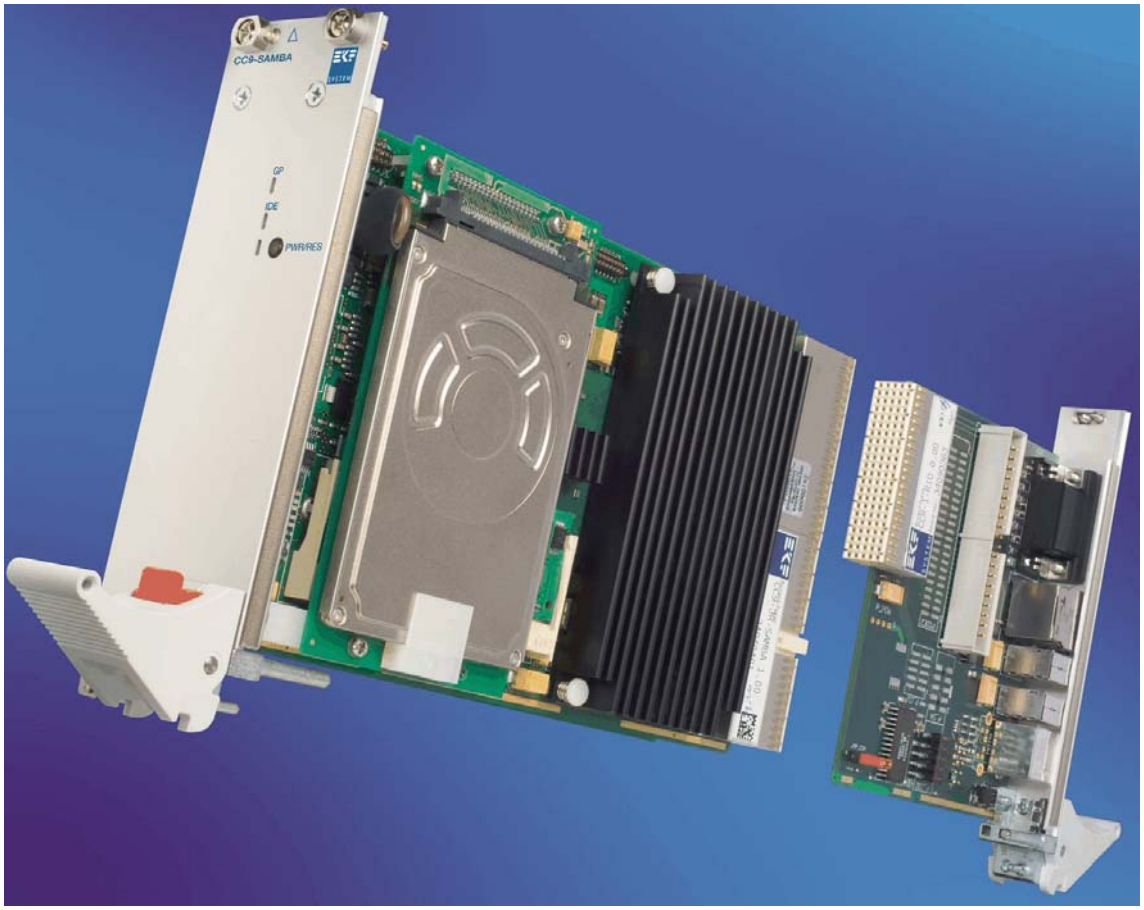
Cool Runnings ... with CC9-SAMBA



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



CC9-SAMBA w. Custom Specific Front Panel



CC9-SAMBA w. Custom Specific Front Panel & on-Board Hard Disk

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



C29-RIO (Similar to CCR, Internal I/O Usage)



C29-RIO

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



CC9-SAMBA with CCB-BOSSANOVA Mounted on Top



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

boards. systems. solutions.

EKF Elektronik GmbH
Philipp-Reis-Str. 4
59065 Hamm
Germany



Fax. +49 (0)2381/6890-90
Tel. +49 (0)2381/6890-0
Internet www.ekf.com
E-Mail info@ekf.de

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

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