

C100 Smart Processor Server

Reduced complexity and cost for applications that require management and control with large counts of AVoIP audio channels.

OVERVIEW

C100 offers high performance, enterprise level, large scale centralized processing to manage and control high counts of networked devices.

The centralized processing of large quantities of IP endpoints including microphones, amplifiers, computers, remote controls, and control screens all within a single component greatly simplifies designing and deploying solutions that communicate and interact across multiple rooms, floors, buildings, or campuses. Managers of such systems benefit from a unified approach to monitoring and maintaining the equipment used to create their media environments.

C100 is a scalable server with three field upgrades to increase the Dante channel count, the internal media playback channel count, and the AEC (Acoustic Echo Cancellation) channel count.

C100 is built around a true enterprise level COTS server platform that incorporates the latest high performance multi-core processors to handle the audio requirements of today and tomorrow. C100 is a rack mountable unit with dedicated internal SSD media storage, multiple network ports, and dual redundant, hot swappable power supplies.

USE CASES

Conferencing

Conference rooms are one of the biggest users of AEC (acoustic echo cancellation) because of their need to communicate with people outside of their environment. As conference rooms need to scale up or more conference rooms are added, processors must be increased as well. Rather than having to program and maintain multiple systems all doing the same thing, C100 can expand to retain a centralized system implementation that can be easily administered.

Higher Education

Campuses need to process, mix, and redistribute many audio channels to a variety of locations for usage such as announcements, alerts, and playback. C100 satisfies the requirements of administration/IT/security centers that need to monitor audio feeds, and at the same time communicate back to each individual connected location.

Enterprise Business

Within a large-scale corporate facility, it's common for a single company to span multiple floors and/or buildings. Wherever they are located, each conference room has a requirement for both local I/O and room control that C100 makes easy to administer. To enhance operations, the use of low-latency audio routing between adjacent rooms is also desirable. Additionally, the high channel counts of C100 prove invaluable in the case of emergency alerts and notifications throughout offices, warehouses, and manufacturing facilities.

Transportation/Event Venues

Airport, train, and bus terminals along with ships, stadiums, exhibition halls, and amusement parks all have specialized audio and control distribution needs. Audio routing across the facility is not only needed for public announcements, playback, and safety needs but also for interactive control requirements for triggering actions and devices across facilities. The C100 large channel count DSP server with distributed control endpoints solves the challenge of managing large matrices of control signaling and audio distribution.

KEY BENEFITS

- Cost-effective, high-performance solution that streamlines installations, reduces hardware complexity, and maximizes project efficiency while delivering superior audio quality.
- Seamless integration of every audio source and destination into designs enables unique possibilities for any sort of media space.
- Effective and efficient installation and programming for larger audio/video/ control system requirements.
- Expansive Dante channel count offers unparalleled flexibility and scalability for audio control and network integration even in the most demanding and complex environments.
- High AEC channel count for integration into larger conference rooms or deployment across multiple conference rooms.
- Integrated record and playback of prerecorded messages on multiple channels for announcements and alerts crucial to public facilities.
- Extensive digital signal processing capabilities include compression, EQ, and matrix mixing for large quantities of different devices.
- Cognio OS software upgrades in the field to increase various channel counts contribute to making the system scalable and cost effective.
- Fast and easy configuration and control with Symetrix Cognio DesignOps software.

PRIMARY CAPABILITIES

- 256 × 256 Dante I/O channels, option to add 128 × 128 Dante I/O channels for a total of 384 x 384
- 64 channels of acoustic echo cancellation (AEC), option to add 32 AEC channels for a total of 96
- 32 media playback channels, option to add 32 or 96 media playback channels for a total of 128
- 8 media record channels
- 96 kHz / 24-bit Signal Processing
- 4x 1Gb Ethernet ports
- ILO port
- Run multiple independent signal flow spaces on a single system
- Extensive control options via Symetrix DesignOps interfaces, TC-Series touchscreens, WC-Series remotes, and TCP/UDP standard
- Web server functionality for third party control / personal device integration
- Lua scripting support standard
- Third-party control
- Secure Boot, Hardware Locking, Secure TPM Module for security
- Dual redundant AC power