

This product has been discontinued.
Please reference: **Q-SYS Core 510i processor.**

Core 500i
Specification Sheet

QSC

Q-SYS™ Integrated System Platform Core 500i

Features

- Intel processing architecture
- Eight on-board slots accommodate all Q-SYS I/O cards
- Abundant DSP capacity
- Uses standard gigabit ethernet hardware and technology for audio transport and control
- Control and interface to external devices using TCP/IP, GPIO and RS-232
- Powerful and intuitive design GUI
- System seamlessly integrates with QSC amplifiers and loudspeakers
- Supports multiple levels of system redundancy
- Q-SYS technical support is available 24/7 – worldwide

24/7



The Core 500i Integrated Core processor brings the power and flexibility of the Q-SYS audio, video and control operating system to projects requiring great diversity in audio I/O options. Q-SYS Integrated Cores have the capability of directly accommodating eight Q-SYS input and/or output cards for a total onboard channel capacity of 32 channels (more if AES or CobraNet™ high density networked audio I/O cards are used – see chart below for more details). Channel count may be further expanded by the addition of Q-SYS I/O-Frames and other peripheral devices.

Applications – The Q-SYS Interated Cores are an ideal choice for auditoriums, large conference rooms, convention centers, entertainment venues, hospitality, houses of worship, legislative installations, performing arts, sports bars, stadiums and arenas, theme parks and transportation facilities.

Platform – Using a customized Linux OS and running on Intel® microprocessors, the 500i is amazingly powerful. Because Q-SYS doesn't depend on proprietary DSP hardware, it directly benefits from advancements driven by the entire global computing / IT industry, and software improvements don't require new hardware. New capabilities are added on a regular basis. Visit www.qsc.com or contact your QSC representative for the latest updates.

Network – Q-SYS utilizes our IT-friendly Layer-3 Gigabit Ethernet technology. The

audio transport is low-latency (fixed at 2.5 ms from any input to any output) and based on accepted IP networking standards. Q-SYS operates on standard IT network switches (see the QSC website for a list of qualified switches). Because it is standards based it can easily run on a shared network without segregating audio traffic via tedious VLAN configuration.

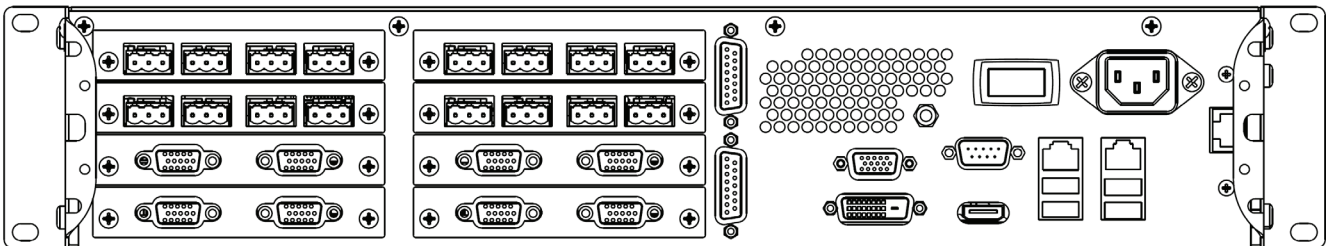
Design GUI – Q-SYS Cores are configured using an intuitive object-based drag and drop user interface that provides for the creation of nearly any imaginable signal flow. Control logic components are provided and custom scripting may also be used to accomplish a wide range of interface or control tasks. The design GUI is capable of quickly and easily generating graphical control screens that may be run on network-connected computers, tablet devices or QSC touch-screen controllers.

Scalable Redundancy – While QSC is known for and dedicated to building the most reliable products, some applications call for additional assurance. Any element of a Q-SYS system – Cores, networks, I/O Frames and even amplifiers may be deployed in a redundant configuration. The system designer has the choice of making one or all system elements redundant.

Peripherals – Q-SYS capabilities are further enhanced by a growing suite of peripheral devices including page stations, touch screen controllers and specialized I/O cards.

Core 500i | Specifications

Maximum Realtime Channel Processing (24-bit / 48 kHz)	384 Ch
Simultaneous local channels (using any combination of analog input / output cards)	Up to 32 Ch
Simultaneous local channels (using high density Networked Audio I/O cards)	Up to 128 x 128 Ch
Simultaneous Q-LAN Networked Audio channels (using any combination of input & output)	Up to 128 Ch
Simultaneous AEC channels (routeable)	Up to 24 Ch
Additional Input channels available from WAN Rx, VoIP Softphone Rx, or Media Stream Rx components	Channel count limited only by network bandwidth
Additional Output channels available to WAN Tx, or VoIP Softphone Tx components	Channel count limited only by network bandwidth
System Hardware	Core 500i
Description	Audio DSP and Control processor
Front Panel Controls	LCD page forward momentary switch Unit ID button momentary switch Clear settings momentary switch
Front Panel Indicators	Power On: Blue LED; Device Status: Tri-color LED Audio Signal: 32 Tri-color LEDs Card Status: 8 Tri-color LEDs 240 x 64 monochrome LCD graphics display
Rear Panel Controls	Power Switch
Rear Panel Connectors	RS-232: DE-9 (male 9-pin D shell connector) Video Out: HD-15 (female 15-pin D shell connector); DVI-D, HDMI (500i only) Aux USB ports: USB host (type A) x4 Aux Network Port: RJ45 10/100/1000 Mbps GPIO ports: DA-15 (female 15-pin D shell connector) x2 Q-SYS Network LAN A: RJ45 1000 Mbps only Q-SYS Network LAN B: RJ45 1000 Mbps only IEC inlet: AC mains power connector
Available peripherals	Page Station (H)&(G), I/O Frame, I/O-22, TSC-7w, TSC-7t, I/O-USB Bridge, Q-SYS PTZ IP Cameras, CXD-Q networked amplifiers
Q-LAN Network Channel Capacity	128 Flex Channels
Audio I/O Capacity	8 card slots, up to 32 analog channels; Requires purchase of Q-SYS Type-2 audio I/O cards: CIML4, CIML4-HP, COL4, CODP4, CAES4, CCN32, CDN64, CAN32
Line Voltage Requirements	100 VAC - 240 VAC, 50 - 60 Hz
Current Draw	1.7A (120V mains)
Thermal	650 BTU/h (typical)
Dimensions (HWD)	3.5" x 19" x 15" (89 mm x 482.6 mm x 381 mm)
Included Accessories	6 ft UL/CSA/IEC line cord, user manual, software CD



1675 MacArthur Boulevard • Costa Mesa, CA 92626 • Ph: +1.800.854.4079 or +1.714.957.7100 • Fax: +1.714.754.6174

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