

# AXIS C8110 Network Audio Bridge

## Versatile audio hub

AXIS C8110 Network Audio Bridge is a smart solution based on open standards for connecting and combining analog and digital audio systems. Thanks to the built-in AXIS Audio Manager Edge application you can get functionalities like zone management and content scheduling in existing analog systems. With SIP support it is possible to connect an IP telephony system for callouts in analog speakers. With analog audio input you can easily integrate your intercom system or music streaming box with network speakers from Axis.

- > **Combines analog and network audio**
- > **I/Os for buttons and relays**
- > **PoE for easy installation**
- > **Based on open standards**
- > **Easy integration with other systems**



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## Audio hardware

Frequency response	20 Hz - 20 kHz
Audio input/output	Mic-in, line-in, line-out
Digital signal processing	Built-in and pre-configured

## Audio software

Audio encoding	AAC LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Axis $\mu$ -law 16 kHz, WAV, MP3 in mono/stereo from 64 kbps to 320 kbps. Constant and variable bit rate. Sampling rate from 8 kHz up to 48 kHz.
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## Audio management

AXIS Audio Manager Edge	Built in: <ul style="list-style-type: none"> <li>Content management for music and live/pre-recorded announcements.</li> <li>Scheduling to decide when and where to play specific content.</li> <li>Content prioritization to ensure urgent messages interrupt the schedule.</li> <li>Zone management allowing you to divide up to 200 speakers into 20 zones.</li> <li>Health monitoring for remote discovery of system errors.</li> <li>User management to control who has access to what features. See separate datasheet for more details.</li> </ul>
AXIS Audio Manager Pro	For larger and more advanced systems. Sold separately. See separate datasheet for specifications.
AXIS Audio Manager Center	AXIS Audio Manager Center is a cloud service for remote access and management of multi-site systems.

## System on chip (SoC)

Model	i.MX 6SoloX
Memory	512 MB RAM, 512 MB Flash

## Network

Security	Password protection, IP address filtering, HTTPS <sup>3</sup> encryption, IEEE 802.1X <sup>0</sup> network access control, Digest authentication, User access log, Centralized Certificate Management
Network protocols	IPv4/v6 <sup>c</sup> , HTTP, HTTPS <sup>d</sup> , SSL/TLS <sup>e</sup> , QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP <sup>TM</sup> , SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCP, ARP, SOCKS, SSH, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), NTCIP, SIP (Cisco, Avaya, Asterisk)

## System integration

Application Programming Interface	Open API for software integration, including VAPIX <sup>®</sup> . One-click cloud connection, AXIS Camera Application Platform (ACAP) Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX Tested with various SIP client such as Cisco, Bria and Grandstream. Tested with various PBX suppliers such as Cisco and Asterisk.
Video management systems	Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, AXIS Camera Station 5, and video management software from Axis' partners available at <a href="http://axis.com/vms">axis.com/vms</a> .
VoIP	Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems. Peer to peer or integrated with SIP/PBX. Tested with: SIP client such as Cisco, Bria and Grandstream and PBX suppliers such as Cisco and Asterisk. Supported SIP features: secondary SIP server, IPv6, SRTP, SIPS, SIP TLS, DTMF (RFC2976 and RFC2833), NAT (ICE, STUN, TURN) Supported codecs: PCMU, PCMA, opus, L16/16000, L16/8000, speex/8000, speex/16000, G.726-32
Event triggers	Call, Virtual inputs, External input, AXIS Camera Application Platform (ACAP)
Event actions	Play audio clip, send SNMP trap, status LED File upload via HTTP, network share and email Notification via email, HTTP, HTTPS and TCP External output activation

## Approvals

EMC	CISPR 35, CISPR 32 Class B, EAC, EN 55035, EN 55032 Class B, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class B, ICES-3(B)/NMB-3(B), KC KN35, KN32 Class B, RCM AS/NZS CISPR 32 Class B, VCCI Class B,
Safety	UL 62368-1
Environment	IEC/EN 60529 IP20
Cybersecurity	ETSI EN 303 645, BSI IT Security Label
Cybersecurity	<b>Edge security</b> Software: Signed OS, brute force delay protection, digest authentication and OAuth 2.0 RFC6749 OpenID Authorization Code Flow for centralized ADFS account management, password protection, AES-XTS-Plain64 256bit SD card encryption Hardware: Axis Edge Vault cybersecurity platform Secure element (CC EAL 6+), Axis device ID, secure keystore, secure boot
Network security	IEEE 802.1X [EAP-TLS, PEAP-MSCHAPv2] <sup>f</sup> , IEEE 802.1AR, HTTPS/HSTS <sup>9</sup> , TLS v1.2/v1.3 <sup>h</sup> , Network Time Security (NTS), X.509 Certificate PKI, host-based firewall
Documentation	<i>AXIS OS Hardening Guide</i> <i>Axis Vulnerability Management Policy</i> <i>Axis Security Development Model</i> AXIS OS Software Bill of Material (SBOM) To download documents, go to <a href="http://axis.com/support/cybersecurity/resources">axis.com/support/cybersecurity/resources</a> To read more about Axis cybersecurity support, go to <a href="http://axis.com/cybersecurity">axis.com/cybersecurity</a>

## General

Casing	IP20-rated Plastic and metal casing Color: Black NCS S 9000-N
Power	8-28 V DC, max 4 W typical 1.85 W Power over Ethernet (PoE) IEEE 802.3af Type 1 Class 2 (max 4 W)
Connectors	RJ45 10BASE-T/100BASE-TX PoE I/O: 4-pin 2.5 mm terminal block for two configurable inputs/outputs Power: 2-pin 5.0 mm terminal block DC input Audio: 3 pole 3.5 mm, RCA line out
Storage	Support for microSD/microSDHC/microSDXC card Max. size 1 TB For SD card recommendations see <a href="http://www.axis.com">www.axis.com</a>
Reliability	Designed for 24/7 operation.
LED indicators	Status LED
Operating conditions	-20 °C to 50 °C (4 °F to 122 °F) Humidity 10-85% RH (condensing)
Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5-95% RH (non-condensing)
Dimensions	H x D x W: 24 x 56 x 128 mm (0.94 x 2.2 x 5.0 in)
Weight	107 g (0.24 lb)
Included accessories	Installation Guide, AVHS authentication key, power connector, I/O connector, hook-and-loop fastener
Optional accessories	Power supply For more accessories, see <a href="http://www.axis.com">www.axis.com</a>
Languages	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese
Warranty	5-year warranty, see <a href="http://axis.com/warranty">axis.com/warranty</a>

- This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. ([www.openssl.org](http://www.openssl.org)), and cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)).
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