

AXIS D3110 Mk II Connectivity Hub

Secure sensor and audio integration

AXIS D3110 Mk II gives sensor and audio capabilities to network video systems that don't have them or need additional ones – a perfect fit in an Axis end-to-end solution. It connects to a broad range of non-visual sensors to trigger alarms and events in the system. Connected to a microphone, a speaker, or both, AXIS D3110 Mk II increases scene awareness through high-quality audio. It supports ACAP (AXIS Camera Application Platform) and seamless integration through VAPIX®, MQTT, or SIP. Furthermore, Axis Edge Vault, a hardware-based cybersecurity platform, safeguards the device and protects sensitive information from unauthorized access.

- > **Eight supervised configurable I/Os**
- > **Two audio-in ports, one audio-out port**
- > **VAPIX®, MQTT, SIP integration**
- > **AXIS Audio Analytics preinstalled**
- > **Built-in cybersecurity with Axis Edge Vault**



AXIS D3110 Mk II Connectivity Hub

System on chip (SoC)

Model

NXP i.MX 8M Nano

Memory

1024 MB RAM, 1024 MB Flash

Audio

Features

Automatic gain control
10-band graphic equalizer for audio input
Voice enhancer

Streaming

Two-way, full duplex
Simplex – speaker only
Simplex – microphone only

Input

Input 1: External microphone input or line input (balanced or unbalanced), digital audio input with optional 12 V ring power
Input 2: External microphone input or line input (balanced or unbalanced)
Microphone power 5 V on tip, phantom power 12 V on tip/ring, ring power 12 V for digital input on ring

Output

Line output

Encoding

AAC-LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726
ADPCM 8 kHz, Axis μ -law 16 kHz, Opus 8/16/48 kHz

Audio management

AXIS Audio Manager Edge

Built in:

- Zone management allowing you to divide up to 200 speakers into 20 zones.
- Content management for music and live/pre-recorded announcements.
- Scheduling to decide when and where to play content.
- Content prioritization to ensure urgent messages interrupt the schedule.
- Health monitoring for remote discovery of system errors.
- User management to control who has access to what features.

For more details, see the datasheet on axis.com/products/axis-audio-manager-edge/support

AXIS Audio Manager Center

AXIS Audio Manager Center is a cloud service for remote access and management of multi-site systems. For specifications, see the datasheet on axis.com/products/axis-audio-manager-center/support

I/O interface

Configurable I/Os

2 x 6 pin connectors, each with ground, 12 V at max 50 mA and 4 supervised configurable I/Os

Relays

1 x SPDT relay, terminal block, max 1 A, max 30 V DC

RS485

RS485 or RS422 half/full duplex, max 460.8 kbps

Network

Network protocols

IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS⁽¹⁾, HTTP/2, TLS⁽¹⁾, QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, mDNS (Bonjour), UPnP®, SNMP v1/v2c/v3 (MIB-II), DNS/DNSv6, DDNS, NTP, PTP, NTS, RTSP, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SSH, LLDP, CDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS), Link-Local address (ZeroConf)

1. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (eyay@cryptsoft.com).

System integration

Application Programming Interface

Open API for software integration, including VAPIX® and AXIS Camera Application Platform (ACAP); specifications at axis.com/developer-community.
One-click cloud connection
Compatible with AXIS Camera Station Edge, AXIS Camera Station Pro, and video management software from Axis' partners available at axis.com/vms.
Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX.

Event conditions

Audio: audio clip playing
Audio analytics: audio level above threshold, glass break detected, scream detected, shout detected
Call: state, state change
Device status: above/below/within operating temperature, IP address blocked/removed, live stream active, network lost, new IP address, ring power overcurrent protection, system ready
Digital audio: digital signal contains Axis metadata, digital signal has invalid sample rate, digital signal missing, digital signal okay
Edge storage: recording ongoing, storage disruption, storage health issues detected
I/O: digital input is active, digital output is active, manual trigger, virtual input is active
MQTT: MQTT client connected, stateless
Scheduled and recurring: schedule

Event actions

Audio clips: play audio clip, play audio clip while the rule is active, stop playing audio clip
Calls: answer call, end SIP call, make SIP call
I/O: toggle I/O once, toggle I/O while the rule is active
LEDs: flash status LED, flash status LED while the rule is active
MQTT: send MQTT publish message
Notification: HTTP, HTTPS, TCP and email
Recordings: record audio, record audio while the rule is active
Security: erase configuration
SNMP trap messages: send, send while the rule is active

Analytics

AXIS Audio Analytics

Features: adaptive audio detection, audio classification
Audio classes: coughing fit, glass break, human presence, scream, shout, speech

Approvals

Product markings

CSA, UL/cUL, CE, KC, VCCI, RCM

Supply chain

TAA compliant

EMC

EN 55035, EN 55032 Class A, EN 50121-4, EN 50130-4, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2, IEC 62236-4
Australia/New Zealand: RCM AS/NZS CISPR 32 Class A
Canada: ICES(A)/NMB(A)
Japan: VCCI Class A
Korea: KS C 9835, KS C 9832 Class A
USA: FCC Part 15 Subpart B Class A

Safety

CAN/CSA C22.2 No. 62368-1, IEC/EN/UL 62368-1

Environment

UL 2043 (plenum rating), IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-64, IEC/EN 60529 IP30

Network

NIST SP500-267

Cybersecurity

ETSI EN 303 645, BSI IT Security Label, FIPS 140

Cybersecurity

Edge security

Software: Signed OS, brute force delay protection, digest authentication and OAuth 2.0 RFC6749 Client Credential Flow/OpenID Authorization Code Flow for centralized ADFS account management, password protection, Axis Cryptographic Module (FIPS 140-2 level 1)
Hardware: Axis Edge Vault cybersecurity platform Secure element (CC EAL 6+, FIPS 140-3 Level 3), system-on-chip security (TEE), Axis device ID, secure keystore, secure boot, encrypted filesystem (AES-XTS-Plain64 256bit)

Network security

IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2)⁽²⁾, IEEE 802.1AR, HTTPS/HSTS⁽²⁾, TLS v1.2/v1.3⁽²⁾, Network Time Security (NTS), X.509 Certificate PKI, host-based firewall

Documentation

AXIS OS Hardening Guide

Axis Vulnerability Management Policy

Axis Security Development Model

AXIS OS Software Bill of Material (SBOM)

To download documents, go to axis.com/support/cybersecurity/resources

To read more about Axis cybersecurity support, go to axis.com/cybersecurity

General

Casing

IP30-rated aluminum casing

Color: black NCS S 9000-N

Mounting

AXIS T91A03 DIN Clip A

Mounting bracket

Power

Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3, typical 3 W, max 9.53 W

or

10–28 V DC, typical 3 W, max 9.0 W

Connectors

Audio: 2 x 3.5 mm input, 1 x 3.5 mm output

Data transfer: 1x USB 2.0 Type A, max load 500 mA, supported USB class: HID, Audio, Audio/Video Devices

I/O: 2 x 6 pin terminal block for 4 supervised configurable I/Os

I/O: 1 x relay, terminal block

Network: 1 x Shielded RJ45 10BASE-T/100BASE-TX PoE

Power: DC input, terminal block

Serial communication: RS485/RS422, 2 pcs, 2 pos, full duplex, terminal block

Storage

Support for microSD/microSDHC/microSDXC card

Support for SD card encryption (AES-XTS-Plain64 256bit)

Recording to network-attached storage (NAS)

For SD card and NAS recommendations see axis.com

Operating conditions

Temperature: -40 °C to 70 °C (-40 °F to 158 °F)

Start-up temperature: -20 °C (-4 °F)

Humidity: 10–85% RH (non-condensing)

Storage conditions

Temperature: -40 °C to 70 °C (-40 °F to 158 °F)

Humidity: 5–95% RH (non-condensing)

Dimensions

For the overall product dimensions, see the dimension drawing in this datasheet.

Weight

445 g (0.98 lb)

Box content

Installation guide, connectivity hub, connector kit

Optional accessories

AXIS T91A03 DIN Clip A, AXIS TD3901 Strain Relief

AXIS T8351 Mk II Microphone 3.5 mm, AXIS C8310 Volume Controller

AXIS Surveillance Cards

For more accessories, go to axis.com/products/axis-d3110-mkii#compatible-products

Languages

English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese

Warranty

5-year warranty, see axis.com/warranty

Part numbers

Available at axis.com/products/axis-d3110-mkii#part-numbers

Sustainability

Substance control

PVC free, BFR/CFR free in accordance with JEDEC/ECA Standard JS709

RoHS in accordance with EU RoHS Directive 2011/65/EU and 2015/863, and standard EN IEC 63000:2018

REACH in accordance with (EC) No 1907/2006. For SCIP UUID, see echa.europa.eu

2. This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (ey@cryptsoft.com).

Materials

Screened for conflict minerals in accordance with OECD guidelines

To read more about sustainability at Axis, go to axis.com/about-axis/sustainability

Environmental responsibility

axis.com/environmental-responsibility

Axis Communications is a signatory of the UN Global Compact, read more at unglobalcompact.org

