

# AXIS D3110 Connectivity Hub

## Secure sensor and audio integration

AXIS D3110 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 increases scene awareness through high-quality audio. AXIS Camera Application Platform (version 4) supported by the device makes it possible to run customized applications, including in containerized environments. Integration is secure and seamless through VAPIX<sup>®</sup>, MQTT, or SIP. Built-in cybersecurity functionality prevents unauthorized access and safeguards the system.

- > **Eight supervised configurable I/Os**
- > **Two audio-in ports, one audio-out port**
- > **VAPIX<sup>®</sup>, MQTT, SIP integration**
- > **ACAP and container support**
- > **Built-in cybersecurity features**



# AXIS D3110 Connectivity Hub

## System on chip (SoC)

<b>Model</b>	i.MX GULL
<b>Memory</b>	512 MB RAM, 512 MB Flash

## Audio

<b>Audio streaming</b>	Two-way, full duplex
<b>Audio encoding</b>	24bit LPCM, AAC-LC 8/16/32/48 kHz, G.711 PCM 8 kHz, G.726 ADPCM 8 kHz, Opus 8/16/48 kHz
<b>Audio input/output</b>	Input: 2 x 5V Unbalanced microphone / 12V Balanced Phantom power Microphone Input / 12V digital audio input/ Line in Output: Line out

## Network

<b>Security</b>	IP address filtering, HTTPS <sup>a</sup> encryption, IEEE 802.1x (EAP-TLS) <sup>b</sup> network access control, user access log, centralized certificate management, Axis Edge Vault with Axis device ID
<b>Network protocols</b>	IPv4, IPv6 USGv6, HTTP, HTTPS <sup>c</sup> , HTTP/2, SSL/TLS <sup>d</sup> , QoS Layer 3 DiffServ, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP <sup>e</sup> , SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, NTS, RTSP, RTP, SRTP/RTSPS, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCPv4/v6, ARP, SSH, SIP, LLDP, MQTT v3.1.1, Secure syslog (RFC 3164/5424, UDP/TCP/TLS)

## System integration

<b>Application Programming Interface</b>	Open API for software integration, including VAPIX <sup>®</sup> and AXIS Camera Application Platform; specifications at <a href="http://axis.com">axis.com</a> One-click cloud connection Support for Session Initiation Protocol (SIP) for integration with Voice over IP (VoIP) systems, peer to peer or integrated with SIP/PBX.
<b>Event triggers</b>	External input, supervised external input, edge storage events, virtual inputs through API Detectors: audio detection Hardware: network, ring power overcurrent Input Signal: virtual input, digital input, supervised input tampering, manual input Storage: disruption, health issues detected, recording System: system ready, new IP address, IP address removed, live stream active Time: recurrence, use schedule MQTT: stateful, stateless Audio: audio clipp playing Digital audio signal: invalid sample rate, contains axis metadata, missing, okay SIP: call state
<b>Event actions</b>	Record audio: SD card and network share Notification: email, HTTP, HTTPS, TCP and SNMP trap External output activation, play audio clip, MQTT, make call, status LED
<b>Filters</b>	Voice enhancer, Automatic Gain Control (AGC), graphic equalizer

## Approvals

<b>EMC</b>	CISPR 35, 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 Japan: VCCI Class A Korea: KC KN32 Class A, KC KN35 USA: FCC Part 15 Subpart B Class A
<b>Safety</b>	CAN/CSA C22.2 No. 62368-1, IEC/EN/UL 62368-1, UL 2043, UN ECE R118
<b>Environment</b>	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 60721-3-5 Class 5M3, IEC/EN 61373 Category 1 Class B, NEMA TS 2 (2.2.7-2.2.9)
<b>Network</b>	NIST SP500-267
<b>Cybersecurity</b>	ETSI EN 303 645, BSI IT Security Label

## Cybersecurity

<b>Edge security</b>	<b>Software:</b> 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 <b>Hardware:</b> Secure boot
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<b>Network security</b>	IEEE 802.1X (EAP-TLS, PEAP-MSCHAPv2) <sup>e</sup> , HTTPS/HSTS <sup>f</sup> , TLS v1.2/v1.3 <sup>g</sup> , Network Time Security (NTS), X.509 Certificate PKI, host-based firewall
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<b>Documentation</b>	<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>
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## General

<b>Casing</b>	Aluminum casing Color: black NCS S 9000-N
<b>Mounting</b>	T91A03 DIN Clip A Mounting bracket
<b>Power</b>	Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 3 Typical 4 W, max 12.95 W or 10–28 VDC, typical 5 W, max 13.5 W
<b>Connectors</b>	1 x Shielded RJ45 10BASE-T/100BASE-TX PoE 2 x 6-pin 2.5 mm terminal block for 8 x supervised configurable I/Os (12 VDC output, max load 50 mA) 2 x USB Type A 1 x RS485/RS422, 2 pcs, 2 pos, full duplex, terminal block 1 x form C relay, NO/NC, max 1 A, max 30 VDC 1 x DC input, terminal block 2 x 3.5 mm input 1 x 3.5 mm output
<b>Storage</b>	Support for microSD/microSDHC/microSDXC card
<b>Operating conditions</b>	- 40 °C to 65 °C (-40 °F to 149 °F) Maximum temperature according to NEMA TS 2 (2.2.7): 74 °C (165 °F) Humidity 10–85% RH (non-condensing)
<b>Storage conditions</b>	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5–95% RH (non-condensing)
<b>Dimensions</b>	Height: 42.2 mm (1.7 in) Depth: 117.8 mm (4.6 in) Width: 99 mm (3.9 in)
<b>Weight</b>	392 g (0.9 lb)
<b>Included accessories</b>	Installation guide, connector kit, terminal block connector
<b>Optional accessories</b>	DIN T91A03 Clip A AXIS TD3901 Strain Relief AXIS T8415 Wireless Installation Tool AXIS Surveillance Cards For more accessories, see <a href="http://axis.com">axis.com</a>
<b>Languages</b>	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese
<b>Warranty</b>	5-year warranty, see <a href="http://axis.com/warranty">axis.com/warranty</a>

## Sustainability

<b>Substance control</b>	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 <a href="http://echa.europa.eu">echa.europa.eu</a>
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<b>Environmental responsibility</b>	<a href="http://axis.com/environmental-responsibility">axis.com/environmental-responsibility</a> Axis Communications is a signatory of the UN Global Compact, read more at <a href="http://unglobalcompact.org">unglobalcompact.org</a>
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- This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. ([openssl.org](http://openssl.org)), and cryptographic software written by Eric Young ([eyay@cryptsoft.com](mailto:eyay@cryptsoft.com)).
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