EXHIBIT 28

Skill Builders   Device Makers   Products   Programs   Docs   Blog

Learn

Alexa Voice Service

Alexa Voice Service   Learn   Design   Build   Launch   AVS CONSOLE

Learn How to Build Devices with AVS

Alexa offers a glimpse into the future – a world where artificial intelligence has the capacity to entertain, inform, and control the devices and services we use every day. Today, customers want the ability to reach out to Alexa anywhere, presenting an interesting challenge to you. As you prepare to create devices with Alexa built-in, you'll first need to learn what's required, what's accessible in the cloud, and how you can customize your device. Here's where to begin your journey:

Create a Developer Account »
Get Started »

Interaction Model
Envision how you want customers to interact with Alexa on your product – from across the room, hands-free, or with the press or tap of a button.

Hardware Requirements
You'll need a microphone array for audio pickup, a processor to run the AVS client, internet connectivity to send audio to the cloud, and a speaker to play back audio for the customer.

Alexa Features
Consider how to design a product that takes advantage of the many cloud-based features and add-on capabilities that make Alexa products desirable for customers

Start Prototyping with Our Online Tutorials

BUILD NOW

Cloud-Based Features

Alexa is always getting smarter with new features and capabilities added to the cloud. When you connect your device-side client to the Alexa Voice Service, you give customers access to a wealth of information. All they have to do is ask.

Information

Alexa helps you stay connected to the news and offers answers to your questions fast. Just ask for your Flash Briefing, weather or sports updates, information on nearby businesses, or how many cups are in a liter.

Streaming Media

Enhance the Alexa experience on your product by offering customers access to streaming media from providers like Amazon Music, iHeartRadio, TuneIn, SiriusXM, Pandora, Spotify, and Audible.

Productivity

Alexa makes life easier by helping you multitask. Set kitchen timers, wake-up alarms, manage reminders, add items to your shopping or to-do lists, and ask what's on your calendar.

Smart Home

Alexa enables you to control compatible smart home devices, such as lights, thermostats, and locks. Now with ESP, Alexa identifies the best voice-forward device to respond to your request.

Cloud-Based Intelligence

AVS handles complex automatic speech recognition (ASR), natural language understanding (NLU), and text-to-speech (TTS) processes in the cloud, making it easier for you to build AI-powered products.

Alexa Skills/Fun & Games

Give customers access to thousands of custom skills, including Domino's, Uber, Jeopardy, and Starbucks on any device with Alexa built-in.

Build Richer Experiences

Different device types may require richer features to enable Alexa to express itself in the best possible way for the customer. We provide add-on capabilities, such as streaming media, graphical user interfaces, and proactive notifications to commercial device makers. These features require additional development work and testing to ensure the best user experience for end-customers.

Display Cards

Render visual content on your screen-based device, such as a "Now Playing" information for music and books, as well as visual displays for weather, To-Do and Shopping Lists, calendar updates, and skills.

Learn about Display Cards »

Localization

Enable regional language models and content on your Alexa-enabled product to reach customers around the world. AVS enables customers to speak to Alexa in a variety of supported languages and regions.

Learn about Localization »

Notifications

Proactively deliver content from Alexa skills and domains to your Alexa-enabled product, alerting customers about content they may have missed.

Learn about Notifications »

Create a Developer Account

SIGN UP NOW

Your Alexa Consoles   Sign In   ?

Skill Builders   Device Makers   Products   Programs   Docs   Blog

Tutorials

Start prototyping your own device with Alexa built-in using our self-service AVS tutorials.

See Tutorials »

Tech Docs

Get started with AVS by reading our technical documentation and registering as an Alexa developer.

See Tech Docs »

AVS Forum

Post questions, share comments, and read about new ideas from other developers and engineers.

See AVS Forum »

Developer Tools

Build with our range of development tools, including SDK, dev kits, system integrators, and ODM solutions.

See Dev Tools »

Alexa Blog

Read the latest news, announcements, and updates from AVS.

See Alexa Blog »

FAQs

Have a question about AVS or a new feature? Read our FAQs for answers and resources.

See FAQs »

Sign Up for Voice Mail

The Alexa Newsletter for Device Makers

First Name	Last Name
Email Address	Zip Code
Select Country... ▼	

Submit

Manage Email Preferences

Next Steps

GET STARTED

DESIGN

Learn

Learn - Overview

Quick Start Guide

AVS International

Tutorials

AVS Blog

AVS What's New

Design

Design - Overview

Audio Hardware Configurations

Functional Design Guide

UX Design Guidelines

Build

Build - Overview

AVS Device SDK

Development Kits for AVS

API and Reference

Solution Providers

Launch

Launch - Overview

Product Testing Overview

Marketing & Brand Guidelines

Marketing Opportunities

Success Stories

Back to top

Design
Build
Launch

Resources

Quick Start Guide
Documentation
Developer Forums
Agencies and Tools

Design
Build
Launch

Resources

Quick Start Guide
AVS Device SDK
AVS API
Dev Kits for AVS

Agreements

Amazon Developer Services Agreement
Program Materials License Agreement
Mobile Ad Network Publisher Agreement
Mobile Ad Network Program Participation
Requirements
Advertise Your App with Amazon Agreement
Trademark Guidelines
Terms of Use
AVS Program Requirements

Support

Amazon Developer Support
Contact Us
Forums
Manage Email Preferences

Devices

Echo Show & Echo Spot
Amazon Echo, Echo Dot & Echo Plus
Amazon Tap
Amazon Fire TV

Language   English

Follow Us: