RDK6 Release Notes

RDK6 is the newest open source software release, supporting both IP and Hybrid video platforms. It integrates over-the-top (OTT) video apps through the Firebolt™ framework, standardizing interfaces for video playback, digital rights management (DRM), graphics, and security. RDK6 builds upon previous RDK releases to further simplify app development, enhance security, and standardize functionality across diverse set-top box hardware.

Key capabilities and benefits of RDK6 include:

- Support for various DRM solutions, video security integrations, and the WebKit browser
- Improved efficiency of video app integration and core video functionality management across chipsets and device manufacturers
- An updated certification suite to ensure consistency and performance of your devices
- Device-agnostic downloadable application containers for native video apps and AppArmor-based access control
- Containerized browser instances for Lightning™ or HTML5 streaming apps
- Unified Application Interface with Firebolt
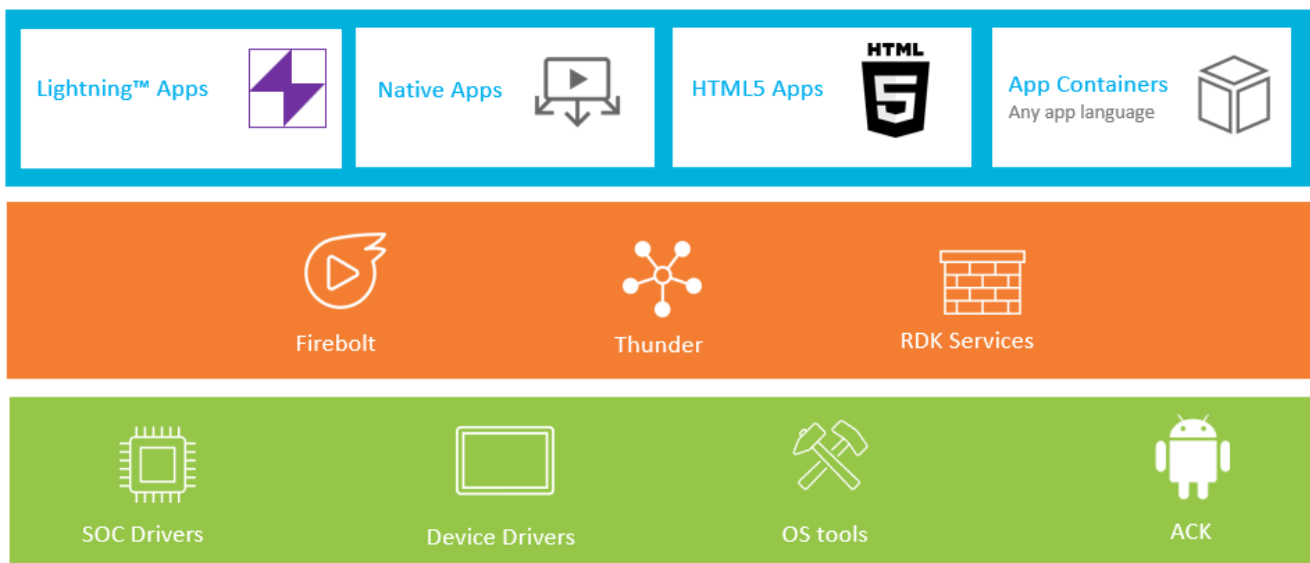
Key features of RDK6:

- Pre-certified apps package - includes pre-installed apps such as YouTube, Amazon Prime, and Alexa
- Voice search and pre-integrated voice remotes
- Updated RDK Reference UI - Lightning-based interface for RDK Reference devices and video accelerators
- Firebolt - Standardized specification for integrating Native and web applications
- Unified player interface for IP, OTT, and hybrid devices
- Security enhancement using app sandboxing (Containerization) and access control (AppArmor)
- Device management using firmware upgrade, Telemetry, WebPA.

In this page:

Architecture Overview:

A quick architecture overview of RDK6 to help associate the capabilities with the software stack is given below

Platforms supported:

ℹ️ For details of how to get the source code, test coverage & test report and known issues in each platform, please click the hyper link. If you do not have an account, please signup at https://wiki.rdkcentral.com/signup.action . If you are logged in but not able to view the page, please contact support@rdkcentral.com

Platform	Type	SOC	OEM
Raspberry Pi 4	Generic Reference device	Broadcom	Raspberry Pi Foundation
IP STB 72180 HBC	SOC Reference device	Broadcom	NA
IP STB M393	Video Accelerator	Broadcom	Sagemcom
IP STB AH 212	SOC Reference device	Amlogic	NA
IP TV AT 301	SOC Reference device	Amlogic	NA
IP STB HX44X	Video Accelerator	Amlogic	Skyworth
IP STB 1319 Hank	SOC Reference device	Realtek	NA
IP STB Blade	Video Accelerator	Realtek	Sercomm

New Features:

Category	Sub -category	Version details
Streaming apps	Amazon Prime	V4
	YouTube	YT 23
Framework	Firebolt	V1.0
	Ripple	Reference implementation for Firebolt 1.0
	Lightning	V2.8
	QT for BLE	V5.1.1 OSS version
	Core Thunder framework	Version R2.1 Version R4.2 (Beta)
	Browser - WPEWebkit	V2.28 V2.38(Beta)
Screen cast	DIAL	V2.2.1
Security	DAC (Containerization)	
	Dobby	

	Rialto	
	Packager (Lisa)	
	AppArmor	
Graphics	Rendering	ESSOS with Westeros
	Graphics	OpenGL ES
Gstreamer	Gstreamer	1.18
CAS, DRM & Content protection	PlayReady	4.4
	Widevine	Widevine 16
	CAS	AnyCAS
Build & Platform	Yocto version	Yocto 3.1 (Dunfell)
	Kernel	Android common kernel Raspberry Pi - 5.10 Broadcom - 5.15-1.0 Realtek - 5.10 Amlogic - 5.4
	Init system	Systemd v244 (Yocto 3.1)
	Application Manager	RDK Shell
	Broadcom	V23.0.1
	AmLogic BSP	5.1
	Realtek BSP	6.3
Video Player	IP	UVE (AAMP)
	QAM	UVE via RMF (QAMSrc)
	DVB (DTVKit)	Sessionmanager via RMF
	TSB	Fog
	DAC Apps	RIALTO
Remote Control and Voice	Voice Stack	
	BLE voice remote	
	External Audio support	
Networking	Wi-Fi	
	LAN	
Device Management	Telemetry	2.0
	Feature Control	
	Firmware Upgrade	
	WebPA	
UI/UX	Reference App	3.15.19
Digital Assistant (Voice)	Alexa (Push to talk)	Alexa SDK 3.0.0