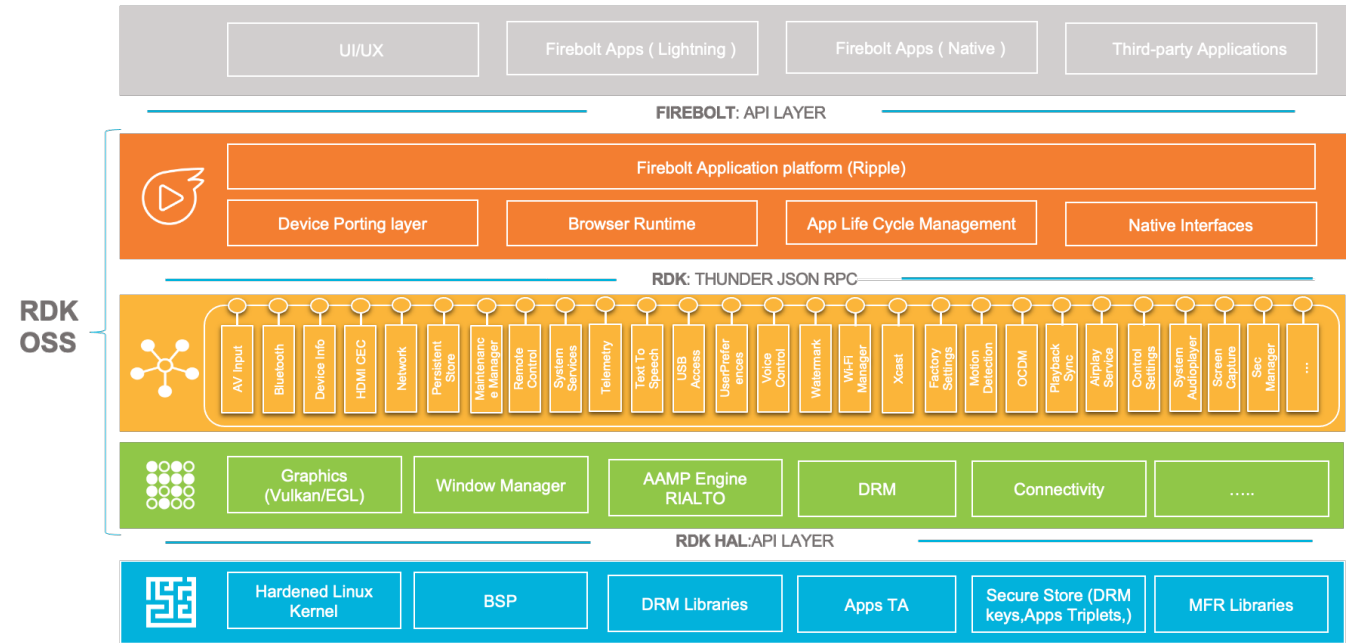


RDK7 Feature Integration (WIP)

RDK7 Features

App Standardization	New Application Onboarding	Feature/Version Upgrades & Upstreaming Patches	Optimization
Firebolt 2.0 Ripple Reference Implementation Life Cycle Management APIS Firebolt Native SDK DAC Applications DAB 2.0	FB Apps MAX	Reference UI (Ripple Based) Amazon Prime AVPK6. (Low latency Player) YouTube Cobalt 24/25* (Evergreen) Yocto OE 4.0-(Kirkstone) Kernel - ACK 5.15 Graphics - EGL Thunder 4.4.1 Browser WPEWebkit 2.38	Remove Qt from RDK Core Systemd thunder alignment. AAMP with RIALTO plugin App Manager Optimization

RDK Architecture



RDK 2024 Committed features

Feature	Business Requirements/why this feature is needed?	RDK Ticket	Priority	Comcast ETA	SoC /OEM /App Partner ETA	Targeted platforms	Targeted code changes in RDK-Next	Remarks

Build Standardization	RDK can control the number of components/packages installed in the image package. This also helps to validate the system performance and benchmark the new changes and SOC's	RDKVRE L-76	P2	NA	NA	• Amlogic VA • Amlogic TV • Realtek • Broadcom • RPI4	2024 Q3	
Yocto 4.0	Upgrading the Yocto build to the latest open-source components improves quality, security, performance, and maintainability.	RDKVRE L-52	P0	Q1	Q2	• Amlogic VA • Amlogic TV • Realtek • Broadcom • RPI4	2024 Q2	
Android Common Kernel 5.15	1) The Android kernel is more popular and has more footprints compared to the Linux kernel, which leads to more support worldwide 2)SOC vendor supporting Android kernel doesn't need to work to provide Linux kernel support to bring in RDK-V stack.	RDKVRE L-53	P0	NA	Q2	• Amlogic VA • Amlogic TV • Realtek • Broadcom • RPI4	2024 Q2	
Lightning 3.0	Lightning 3.0 release comes with a new set of feature upgrades including - New and improved font rendering, Batched rendering, dynamic shaders and Multi threading			NA	NA		2024 Q2	Standalone Release: The release is backward compatible with previous releases.
Patch Upstream	Upstream RDK Common patches	RDKVRE L-155	P2	NA	NA	• Amlogic VA • Amlogic TV • Realtek • Broadcom • RPI4	2024 Q2	
DAB 2.0	YouTube requires DAB support for YT certification	RDKVRE L-96	P1		Amazon Alexa Q1	• Amlogic • Realtek • Broadcom • RPI4	2024 Q2	DAB Compliance Test Suite is required here.
Firebolt Native SDK	Firebolt Native SDK API integrations with Netflix Native application	RDKVRE L-147	P0	Q1	NA	Premium Apps	2024 Q3	
Firebolt Apps (Lightning)	Standardizing ecosystems and pre-validation of Apps		P0				2024 Q2	Firebolt Lightning apps will be ready by Q2 24, which is tracked as a separate program
Memcr	App checkpoint/restore functionality - Memcr	RDKVRE L-145	P1	Q1	NA	• Amlogic VA • Amlogic TV • Realtek • Broadcom • RPI4	2024 Q3	
Remove QT from RDK Middleware	Create a clean build, Reduce maintenance costs, and improve the build time. Remove QT dependencies from BLE RCU Daemon so that RDK middleware can be built without QT.	RDKVRE L-61	P0	Q1	NA	• Amlogic VA • Amlogic TV • Realtek • Broadcom • RPI4	2024 Q2	
Thunder 4.4.1	Thunder WPE Framework process to self-heal after any crash in the WPE Framework process which is triggered by an incoming JSON-RPC request to a plugin so that the system is able to continue working without any interruption	RDKVRE L-54	P0	Q1(BCM)	NA		2024 Q3	

Firebolt 2.0 Reference Implementation (Ripple) Lifecycle management	Standardized Firebolt™ interfaces published, implemented, and certified for easy on-boarding of lightning applications	LCM - RDKVREL-188	P0		NA		2024 Q3	
Hardware porting kit	To standardize the HAL Layer Across RDK devices and provide a more advanced documentation	RDKVRE L-192	P1				2024 Q3	
Update RDK Documentation	Update RDK Documentation including HAL for RDK7	RDKVRE L-160	P1				2024 Q3	
Reference app (Firebolt Based)	Reference implementation for Firebolt Spec based RDK UI, Performance improvement and improved customer experience for better scale.	RDKVRE L-73	P0			• Amlogic VA • Amlogic TV • Realtek Broadcom • RPI4	2024 Q3	
Amazon Prime AVPK6	Amazon prime deployment	RDKVRE L-65	P0	NA	NA	• Amlogic (AH212)	2024 Q4	
Netflix 7*	Netflix Firebolt port	RDKVRE L-111	P0			• Realtek (Reference board)	2024 Q4	
YouTube 25	Pre-certified Native apps for RDK global deployment. YouTube's requirement is to update their native player on the device every year.	RDKVRE L-69	P0	NA	Pre release from Google (July)	• Amlogic (AH212) • Realtek (Reference board) Broadcom (Reference 972126) • RPI4	2024 Q4	
TDK	RDK device and app certification		P0				2024 Q4	Certified Annual RDK release

RDK7 Nice to Have Features - Source code will be available, Platform integration and certification not committed

Feature	Business Requirements/why this feature is needed?	RDK Ticket	Priority	Dependency	Targeted code changes in RDK-Next	Remarks		
Containerization	Improvements in RDK build time container	RDKVRE L-112	P0		2024 Q2			
AppArmor	Refactor AppArmor process with generic and platform specific code	RDKVRE L-97	P1		2024 Q2			
Security	Kernel hardening		P1		2024 Q2			
Rbus Enhancements	the unified message bus will simplify the communications and support in Ops tools to all, RDK-based devices.	RDKVRE L-186	P2		2024 Q2			
EGL	Migrate to the new wayland-egl	RDKVRE L-187	P2		2024 Q3	Broadcom SOC only		
Package-manager support	Upgrade Thunder to support the new version of package manager	RDKVRE L-189	P2		2024 Q3			
Secure Storage Thunder Plugin implementation on RDK	Enhancements to PersistentStore plugin to support Scope	RDKVRE L-207	P1		2024 Q3			
AAMP	IP Video Low Latency DASH with TSB Support	RDKVRE L-148	P2		2024 Q3			

AAMP with RIALTO	Direct application access to hardware resources is prevented	RDKVRE L-59	P2	Q1	NA		2 0 2 4 Q2
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RDk7 plan for certified devices

Feature Implementation

Platform	SoC / Model	Type	Remarks
Amlogic	AH212	Reference	
Amlogic	HX44X	VA(Skyworth)	
Amlogic TV	T5W	Reference	Sanity test only
Broadcom	BCM 72126	Reference	
Realtek	RTD 1319	Reference	
Raspberry pi	RPI4	Reference	