RFP - Release Notes - 2021 - M7



Version: 1.17 04 Aug 2021

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Revision History

Release No.	Date	Revision Description
1.17	04 Aug 2021	Porting of WanManger with New Ethernet Manager Arch - REFPLTB-1217 Fixing the issues on Hackathon Base branch - REFPLTB-1227 Created dunfell tagged build for RPI3 -REFPLTB-1252 Build fixing for RDK-B Emulator Dunfell Migration - Phase-1-REFPLTB-1199 Git tagged releases for Turris Omnia on dunfell branch - REFPLTB-1260 Camera Analyzed the communication between Pipewire and Pipewire media media session - REFPLTCAM-143 Supported validation of multiple sample application with pipewire callback REFPLTCAM-144 Resolved build issue and camera detection issue - REFPLTCAM-146, REFPLTCAM-147 Created July2021 tagged dunfell build for Camera - REFPLTCAM-148 Video Bring up of Rpi4 32bit Dunfell - REFPLTV-893 Revamp of Resident APP UI - REFPLTV-968 Bug fixes in UI.
1.16	30 Jun 2021	Broadband WAN Manager Integration in RDKB RPI target platform -REFPLTB-905 Build Fixes for RDKB Emulator Bringup RPI4 Extender with OpenSync - REFPLTB-1000 Common Wi-Fi HAL for reference platform - REFPLTB-1146 Camera Sample pipewire use case validation without gstreamer - REFPLTCAM-139 WIFI Ip is missing after reboot - REFPLTCAM-141 Capture the h264 encoded data from camera without gstreamer - REFPLTCAM-142 Video Revamp of Resident APP UI - REFPTLV-968 IPSTB Bringup on R-Pi3 (Phase-1)- REFPLTV-892 Bug fixes in UI

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1.15	05 Jun 2021	Broadband
		Telemetry 2.0 support in RPI - REFPLTB-1041
		 Added Zilker-sdk recipe in R-Pi - Phase 1 -REFPLTB-1025 Rpi4 Extender bringup with opensync-2.0 - REFPLTB-1070
		Common Wi-Fi HAL for reference platform - REFPLTB-1146
		Camera
		 Validate CVR use case with pipewiresrc plugin - REFPLTCAM-134 HTTP Firmware Upgrade is not working in RPi - REFPLTCAM-127
		, ,
		Video
		Stabilization fixes in RPi Yocto 3.1 (Dunfell) image.
		 Stabilization of RDK Services. Bug fixes in UI.
		- Bug likes III OI.
1.14	02 May	Broadband
	2021	
		Release builds for Turris-Omnia - REFPLTB-1048 TinyRDK for Turris Omnia target - REFPLTB-1021
		Design preparation for WiFi6 radio bring up in Turris Omnia - REFPLTB-1058
		Community Support for Turris Omnia target - REFPLTB-1063, REFPLTB-1068 Integrate and compile Operation 3.0 region for RPI4 target. PEEDLTB-1070.
		Integrate and compile Opensync_2.0 recipe for RPI4 target - REFPLTB-1070
		Camera
		 Validate live stream using pipewire framework with gst-launch - REFPLTCAM-118 Bringing RDKC Streamerhal component into the yocto framework - REFPLTCAM-104
		Bringing RDKC sateamental component into the yocto framework - REFPLTCAM-104 Bringing RDKC camera-apps component into the yocto framework - REFPLTCAM-103
		Resolve build failure in RDK-C - REFPLTCAM-125
		Video
		Stabilization fixes in RPi Yocto 3.1 (Dunfell) image.
		 Stabilization of RDK Services. Bug fixes in UI.
		Edg II/60 III 61.
1.13	31 Mar	Broadband
	2021	• Analyze and analyze the time DDV Changes hypurcht up in December DI DEEDI TO 040
		 Analyze and ensure the tiny RDK Changes brought up in Raspberry PI - REFPLTB-916 Analyzed the tiny RDK changes in Raspberry PI and making changes for turris-omnia REFPLTB-1021
		Added wifihal Test binary to validate the wifi hal api's in emu console - REFPLTB-1018
		 Wifi Hal refactoring for gathering the information of Associated wireless clients - REFPLTB-1038 Fixed Build errors for Unification of rtmessage on both RDKB and RDKC
		Fixed Turris Extender opensync_2.0.5 build errors in dunfell - REFPLTB-964
		Camera
		 Audio playback with pipewire utility - REFPLTCAM-124 Resolved firmware upgrade issue
		Video
		 Stabilization fixes in RPi Yocto 3.1 (Dunfell) images Enhancements in Resident App UI
		Bug fixes on RDK Services

1.12	28 Feb	Broadband
	2021	 Analyze and ensure the tiny RDK Changes brought up in Raspberry PI - REFPLTB-916 RDK-B Upgradation to R-Pi4 - REFPLTB-931 Yocto 3.1 Migration with WebUI JST support in rpi3 Fixes - REFPLTB-923 TR-069 Data Parameters Support- GPV, SPV for RPI - REFPLTB-928 Extensible SDK (eSDK) support for Turris Omnia Phase2 - REFPLTB-584 Git tagged releases for Turris Omnia on rdk-next branch - REFPLTB-976
		 Resolve buffer glitches and hang issue in RMS feature with libcamera REFPLTCAM-115 validate cvr feature using libcamera - REFPLTCAM-108 Bringup pipewire component in RDK-C REFPLTCAM-116
		Video
		 RDKCentral's generic TR-069 Data Model used in RPi platform Fixed RDK Services stabilization tickets Pinned Revision for RDK components in eSDK support Resolved few Community tickets
1.11	31 Jan 2021	Broadband • Vocto 2.4 with Web III IST migration Support in PDI/Model 2B (/2B) to get plotform PEEDLTD 963
		 Yocto 3.1 with WebUI JST migration Support in RPI(Model 3B+/3B) target platform - REFPLTB-862 Remote Management Support With HTTPS in RDKB RPI target platform - REFPLTB-893 TR-069 Support for RPI - REFPLTB-899 Telemetry- Cron Expression Support for Turris Omnia - REFPLTB-866 Extensible SDK (eSDK) support on Dunfell Turris -REFPLTB-584 Wireless Protection Setup(WPS) support for Turris Omnia - REFPLTB-673 Git tagged releases for Turris Omnia on rdk-next branch - REFPLTB-924
		Camera
		 extensible SDK (eSDK) support for raspberrypi - REFPLTCAM-105 fixing zoom issue observed on libcamerasrc video capture - REFPLTCAM-106 crash observed during capturing video using libcamerasrc after 40+ seconds of capture - REFPLTCAM-107 Support RMS with RTSP feature using libcamera src - REFPLTCAM-110
		Video
		 New RDK Resident App available in RPi images Telemetry 1.0 feature on Video profiles RDKShell runtime crash is fixed MPEG-2 playback using hardware decoding on RPi available in Yocto 3.1 Build issues fixed in RPi RefApp image on Yocto 3.1 Migration of BRCM Reference Device 72180 to 20.2 sdk
1.10	08 Jan 2021	Broadband
	2021	 Yocto 3.1 Migration and validation of RDKB features with opensync - REFPLTB-836 Git tagged releases for Turris Omnia on rdk-next branch - Dec_30_12_2020 Yocto 3.1 migration Support in RPI(Model 3B+/3B) target platform - REFPLTB-862
		Camera
		 Yocto 3.1 Migration on rdk-next branch for RPI - REFPLTCAM-91 Firmware Upgarde with HTTP support for RPI - REFPLTCAM-92 libcamera validation with gst-launch-1.0 -REFPLTCAM-68
		Video
		 Extensible SDK for Raspberrypi Platform - REFPLTV-730 NEW Yocto 3.1 (Dunfell) Migration of RDK-Video profile's yocto builds on rdk-next branch - Phase 2 - REFPLTV-412 NEW Firmware Upgrade on RPi platform from XCONF Server - REFPLTV-759 NEW Stabilization of RDK Services on RDK-V images - fixed most of the issues - REFPLTV-514

1.9	30 Nov 2020	Broadband RDK Telemetry for Turris omnia reference platform - REFPLTB-664 Yocto 3.1 Migration on rdk-next branch for RPI - REFPLTB-862 Validation on Migration from dunfell to rdk-next on Turris Omnia - REFPLTB-836 Mesh config on R-Pi 4 (Proof of Concept) Git tagged releases for Turris Omnia on rdk-next branch - Nov_30_11_2020 Camera Support RTSP streaming with RMS in Dunfell branch - REFPLTCAM-86 Validate CVR use case in RPI3 with dunfell branch - REFPLTCAM-82 Support Normal Thumbnail in RPI3 with Dunfell branch - REFPLTCAM-82 Support Firmware upgrade in RPI3 with dunfell branch - REFPLTCAM-87 Smart Home with Security Surveillance Video Streaming (Proof of Concept) Face detection Thumbnail support RTSP Streaming Video Yocto 3.1 (dunfell) build framework support on rdk-next RPi RDK image builds RTSP Streaming Video Yocto 3.1 (dunfell) build framework support on rdk-next RPi RDK image builds Supports generation of both media client and hybrid gateway generic images Smart Home with Security Surveillance Video Streaming (Proof of Concept) Thumbnail Notification handling Picture-in-Picture video playback IOT device control application RDK Services on x86 PC Emulator Supports Controller UI Services: DeviceInfo,
1.8	31 Oct 2020	Broadband Yocto 3.1 Turris Omnia - Synchronizing from topic branches to mainstream branches Synchronizing yocto 3.1 changes in meta-turris layer - REFPLTB-807 Git tagged releases for Turris Omnia on rdk-next branch - Oct_30_10_2020 Camera Validation of RDK-C use cases of CVR, Normal thumbnail and firmware upgrade in RPI-3B+ target REFPLTCAM-74 CVR crash issue was fixed - REFPLTCAM-69 Supported firmware upgrade with both ethernet and wifi Mac - REFPLTCAM-77 CVR build issue was fixed - REFPLTCAM-76 Video Firmware Control service on HYB and MC images Wifi service enabled for HYB images Yocto 3.1 Migration on rdk-next build - Phase 1 Parsing errors were resolved and RPi specific changes are merged Supporting Jenkins team to merge Comcast migration changes into rdk-next meta-wpe layer removal - Supported all images including RefApp image where video and graphics issue fixed RMF Streamer crash was fixed
1.7	30 Sept 2020	 Support rdk-generic-camera-image for RPI-3 target - REFPLTCAM-67 Validate RMS Feature in RPI3 B+ - REFPLTCAM-75 Upstream patches in `meta-rdk-camera` - REFPLTCAM-2 After initial bootup RPI-0 target not up on reboot REFPLTCAM-71 Graphics and Video rendering issue resolved on RPi for RDK Service integration - REFPLTV-597, REFPLTV-594 Bluetooth RDK service enabled for both MediaClient and Hybrid Gateway - REFPLTV-610 RDK Services on RPi Generic MediaClient RDK Services on RPi Generic Hybrid Gateway Yocto 3.1 Turris Omnia - Synchronizing from topic branches to mainstream branches - REFPLTB-808 Git tagged releases for Turris Omnia on rdk-next branch - Sep_30_09_2020_RDKB_Gateway

1.6	31 Aug 2020	Updated Release Information, Release Identification for 2020 M8 Release Updated Features supported for this sprint and Community tickets addressed • Yocto 3.1 integration and validation for rdk-generic-camera-image - REFPLTCAM-31(REFPLTCAM-55, REFPLTCAM-56, REFPLTCAM-57, REFPLTCAM-60) • Telemetry with cron job support - REFPLTB-607 • RDKServices on Raspberrypi 's Firebolt ® Media Client Image - REFPLTV-514 • Yocto-3.1 Turris-Omnia Opensync Integration with Plume NOC and MeshAgent Support - REFPLTB-750 • Git tagged releases for Turris Omnia on rdk-next branch - Aug_31_08_2020
1.5	31 Jul 2020	Updated Release Information, Release Identification for 2020 M7 Release Updated Features supported for this sprint and Community tickets addressed Integarted SNMP module in RDKB stack in RPI - REFPLTB-714 RDKB Emulator hal refactoring - REFPLTB-758 Online / Offline status of connected devices on RDKB in R-Pi - REFPLTB-622 Fixed high priority run-time/build time issues: Yooto 3.1 RDK MediaClient Generic Image - REFPLTV-474 Validation and fixes for runtime issues for Yooto 3.1 RDK Hybrid Generic image - REFPLTV-473 Integrate yooto3.1 for rdk-generic-camera-image - REFPLTCAM-31 Yooto 3.1 dunfell RDKB build for Turris Omnia: Brought all RDKB feature that are available in rdk-next build - REFPLTB-566 Git tagged release build(rdk-next) for Turris omnia - REFPLTB-680
1.4	30 Jun 2020	Updated Release Information, Release Identification for 2020 M6 Release Updated Features supported for this sprint and Community tickets addressed • Firmware upgrade through XCONF server in Turris Omnia Platform - REFPLTB-665 • Added RDKM logo support in UI page and corresponding syndication DM parameters also updated with respect to emulator - REFPLTB-623 • Added Firmware Upgrade with http protocol support in rpi platform - REFPLTB-659 • Supported Normal Thumbnail feature for RPI-0 Device - REFPLTCAM-15 • Validation and fixes for various runtime/build time failures for rdk-generic-mediaclient-image - REFPLTV-474
1.3	29 May 2020	Updated Release Information, Release Identification for 2020 M5 Release Updated Features supported for this sprint and Community tickets addressed • vc4graphics and v4l2 enabled for RDK Hybrid Thunder image on RPI platform to resolve MPEG TS streams playback issue - REFPLTV-433 • RDK Generic Hybrid image support on RPI platform from yocto 3.1 manifest - REFPLTV-473 • RDK Generic Mediaclient image support on RPI platform from yocto 3.1 fixing Issues - REFPLTV-474 • Yocto - 3.1 support in Turris Omnia Target - RDK Broadband generic gateway image - REFPLTB-566 • Implementated the hal-dhcpv4c api's for successfully fetching of Device.DHCPv4.Client.{i} data model tree - REFPLTB-635 • Supported Firmware Upgrade with XConf server for RDK-C - REFPLTCAM-21
1.2	30 Apr 2020	Updated Release Information, Release Identification for 2020 M4 Release Updated Features supported for this sprint and Community tickets addressed • Yocto-3.1 core minimal image support in Turris Omnia target (REFPLTB-564) • Yocto-3.1 RDK generic media client image support in R-Pi(REFPLTV-412) • EMS Refactored to RMS (REFPLTCAM-11 REFPLTCAM-18 REFPLTCAM-19 REFPLTCAM-20 and REFPLTCAM-2) • CVR Support in AWS cloud through gstreamer kvs sink (REFPLTCAM-10) • RDK Telemetry support in Emulator(REFPLTB-563)
1.1	31 Mar 2020	Updated Release Information, Release Identification for 2020 M3 Release Updated Features supported for this sprint and Community tickets addressed Updated Known Issues and Limitations for Band Steering Support in RPI - RDKB (REFPLTB-432) Bring WebPA support for Turris Omnia - RDKB (REFPLTB-550) Continuous Video Recording (CVR) - RDKC (REFPLTCAM-10)

1.0	02 Mar 2020	Updated Release Information, Release Identification for 2020 M2 Release
		Updated Features supported for this sprint and Community tickets addressed
		 Super POD connectivity to <i>Plume</i> cloud server through Turris Omnia RDKB Gateway (REFPLTB-434) Wi-Fi Hostapd dynamic Configuration - Turris Omnia (<u>REFPLTB-539</u>) Emulator for Developer in rdk-next branch (<u>REFPLTB-540</u> & REFPLTB-541) IO connector plugin in R-PI Thunder image (<u>REFPLTV-393</u>) Community Tickets (<u>REFPLTB-528</u> & <u>REFPLTB-487</u>)

Contents

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Introduction

This Release Notes document details for the delivery of version 2021 M7 for the RDK Reference Platform to the RDK Community

- 1. Release Feature Information
- Software and Hardware requirements to build
- 3. Known limitations
- 4. Updated Platform Tickets

Release Information

Below is the list of release features supporting Turris Omnia, R-Pi, and Emulator platforms.

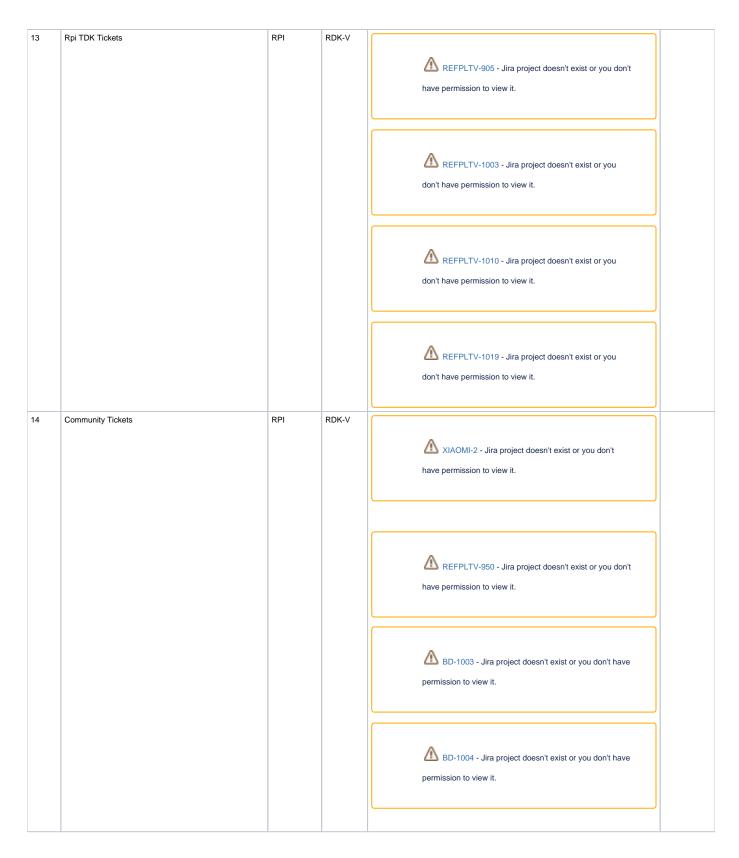
S. No.	Feature	Device	Profile	Tickets	Remarks
1	Porting of WanManager with New Ethernet Manager Arch	RPI	RDK-B	Key Summary Status No issues found	
2	Fixing issues on Hackathon Base Build	RPI	RDK-B	Key Summary Status No issues found	
3	Create July2021 tagged rdk-next build for RPI3	RPI	RDK-B	Key Summary Status No issues found	

		I	T	
4	Dunfell build for RDKB Emulator	Emulator	RDK-B	Key Summary Status No issues found
5	Improvements	RPI (Extender)	RDK-B	REFPLTB-1212 - Jira project doesn't exist or you don't have permission to view it.
6	Community Tickets, Bug Fixes , TDK	RPI,Turris- Omnia	RDK-B	REFPLTB-1215 - Jira project doesn't exist or you don't have permission to view it. REFPLTB-1222 - Jira project doesn't exist or you don't have permission to view it. REFPLTB-1176 - Jira project doesn't exist or you don't have permission to view it.
				REFPLTB-1202 - Jira project doesn't exist or you don't have permission to view it. REFPLTB-1200 - Jira project doesn't exist or you don't have permission to view it.

7	Create July2021 tagged dunfell Gateway & Extender builds for Turris omnia	Turris- Omnia	RDK-B	REFPLTB-1260 - Jira project doesn't exist or you don't have permission to view it.
				Sub-tasks:
				REFPLTB-1261 - Jira project doesn't exist or you don't have permission to view it.
				REFPLTB-1262 - Jira project doesn't exist or you don't have permission to view it.
8	Pipewire	RPI	RDK-C	REFPLTCAM-143 - Jira project doesn't exist or you don't have permission to view it.
				REFPLTCAM-144 - Jira project doesn't exist or you don't have permission to view it.
9	TDK Tickets	RPI	RDK-C	REFPLTCAM-146 - Jira project doesn't exist or you don't have permission to view it.
				REFPLTCAM-147 - Jira project doesn't exist or you don't have permission to view it.
10	Tag release for camera	RPI	RDK-C	REFPLTCAM-148 - Jira project doesn't exist or you don't have permission to view it.
11	Revamp of RDK UI	RPI	RDK-V	REFPLTV-880 - Jira project doesn't exist or you don't have permission to view it.

A REFPLTV-1014 - Jira project doesn't exist or you don't have permission to view it. REFPLTV-1021 - Jira project doesn't exist or you don't have permission to view it. REFPLTV-1020 - Jira project doesn't exist or you don't have permission to view it. AREFPLTV-938 - Jira project doesn't exist or you don't have permission to view it. AREFPLTV-874 - Jira project doesn't exist or you don't have permission to view it. REFPLTV-1000 - Jira project doesn't exist or you don't have permission to view it. A REFPLTV-999 - Jira project doesn't exist or you don't have permission to view it. A REFPLTV-985 - Jira project doesn't exist or you don't have permission to view it. A REFPLTV-1016 - Jira project doesn't exist or you don't have permission to view it.

				REFPLTV-1008 - Jira project doesn't exist or you don't have permission to view it.
				REFPLTV-926 - Jira project doesn't exist or you don't have permission to view it.
				REFPLTV-874 - Jira project doesn't exist or you don't have permission to view it.
				REFPLTV-961 - Jira project doesn't exist or you don't have permission to view it.
				REFPLTV-982 - Jira project doesn't exist or you don't have permission to view it.
				REFPLTV-962 - Jira project doesn't exist or you don't have permission to view it.
				REFPLTV-879 - Jira project doesn't exist or you don't have permission to view it.
2	R-Pi 4 Target 32 Bit Dunfell Support	RPI	RDK-V	
				REFPLTV-893 - Jira project doesn't exist or you don't have permission to view it.



Hardware and Software Requirements

Hardware Requirements

Broadband

Supported software and hardware

- Preferred 2.4GHZ WIFI adapter for Emulator: Tenda 150Mbps Wireless PICO USB Adapter with RT5370 chipset (W311MI) (or) Preferred 2.4GHZ WIFI adapter for Emulator: TP-Link AC1200 Wireless Dual Band USB Adapter (Archer T4U)
- Preferred 5GHZ WIFI adapter for Emulator/RPI: TP-Link AC1200 Wireless Dual Band USB Adapter (Archer T4U)
- Preferred xfinity-wifi 2.4GHZ WIFI adapter for RPI: TP-LINK TL-WN823N 300Mbps Mini Wireless N USB Adapter
- New dongle Ultra-fast 1300 (867+400) mbps wireless speed with 802.11ac
- Turris Omnia Target for Wi-Fi Extender functionality
- USB to Ethernet
- Desktop PCs
- 8 GB SD-Card

Video

- Raspberrypi 3 Model B+ 1 No.
- Power Supply (Output: 5V 2A) 1 No.
- HDMI Supported TV 1 No.
- HDMI cable 1 No.
- Micro SD Card 1 No.
- · Card Reader 1 No.
- Keyboard 1 No.

Camera

- Raspberrypi 3 Model B+ 1 No.
- USB webcamera 1No.
- Power Supply (Output: 5V 2A) 1 No.
- HDMI Supported TV 1 No.
- HDMI cable 1 No.
- Micro SD Card 1 No.
- · Card Reader 1 No.
- Keyboard 1 No.

System Requirements

How to Build#SettinguptheHostEnvironment - This Link provides the Software and System requirements for both Yocto 2.2 (Morty) and Yocto 3.1
(Dunfell) builds

Known Issues and Limitations

Project Documentation

Below is the list of supporting documents that are part of the release

1	Build Instructio ns	Camera • RDK-C rdk-next Yocto 3.1 dunfell build for Raspberrypi	The wiki links provided here give the Linux commands to setup Yocto Project build framework's workspace and to generate RDK images.
		Video	
		RDK-V rdk-next Yocto 3.1 dunfell build for Raspberrypi	
		Broadband	
	Release (Dunfell) - RPI 3B/3B+ Model Reference Platform General (Morty) - RDK-B Raspberrypi - Host SetUp and Build Instructions#BRaspberrypi-HostSetUpandBuildInstructions-BRaspberrypi-HostSetUpandBuildInstructions-YoctoBuildSteps RPI 4B (dunfell) - RPI 4B Model Reference Platform RPI 4B Extender (dunfell) - RPI 4B Model Reference Platform: Extender build instructions Turris Omnia Gateway - Turris Omnia RDK-B Gateway - Yocto 3.1(Dunfell) Turris Omnia Extender - RDKB Extender Yocto 3.1 - Dunfell Emulator (dunfell) - RDK-B Emulator Dunfell Build Instructions		

2	User Manual	Broadband - RPI, Turris Omnia Porting of WanManager in RDKB RPI Tagged dunfell build for RPI3 Tagged dunfell build for Turris-Omnia Camera Release feature user manual - Camera - 2021 - M7 Pipewire: Validation of multiple sample application without Gstreamer RDKC: Tagged dunfell build for RPI3 Video Release Feature User Manual - RDK-V -M7 RPI 4B model reference platform for RDKV RDK Accelerator Home UI - Version 2.0	The user manual consists of a procedure to test the particular feature also covers Environment setup, Executing the System, and Troubleshooting steps
3	System Test Plan Results	Camera System Test Plan and Report - Camera - 2021 - M7 E-09874-01-01STP97.xls Video System Test Plan and Report - Video - 2021 - M7 E-09874-01-01STP98.xls	This document contains multiple test cases and test results which are captured after test execution
4	Release Notes	RFP - Release Notes - 2021 - M7	Release Notes -This document

Technical Support contact

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