



SET-TOP-BOX DEVICE SPECIFICATIONS

Category	Features
System	Total RAM size 1 GB/2 GB.
	Total Flash (eMMC) size 8 GB
	Supports Android 9.X & above
Graphics	Supports OpenGL Standard APIs ES 2.0/3.0 & above
Networking (Wireless)	2x2 2.4 GHz Wi-Fi 802.11b/g/n (2-antenna design)
	2x2 5GHz WIFI 802.11ac (2-antenna design)
	Standard Bluetooth Interface Version 4.0
Networking (Wired)	Ethernet 10bT/100 Base-T (Full duplex, Auto sensing)
Networking	Supports IPv4 Stack
	Supports IPv6 Stack
	Supports DHCP V4 to acquire IP address when connected over Ethernet or WiFi
	Supports DHCP V6 procedure when connected over Ethernet or Wifi
	Supports SLAAC procedure to acquire IPV6 address when connected over Ethernet or WiFi
Security	Supports Secure Boot
	Supports Digital Content protection for HDMI output (HDCP 2.2 and 1.4)
	Supports different content protection DRM schemes like Widevine L1, Verimatrix Advanced.
	Secures Storage for DRM/Application keys.
	Secures Video Path for content protection
	Supports Decryption algorithms DES, 3DES, SHA1, SHA256, RSA, ECC
	Supports ARM TrustZone , TEE.
	Supports for Conditional Access System
	DVB common Scrambling algorithm (ETR 289)
Supports fixed key scrambling and BIS descrambling	
Audio	Supports HDMI audio output format of PCM, Dolby Digital, Dolby Digital Plus for upto 6 channels (5.1) - DD, DD+ in pass-through mode.
	Supports SPDIF audio output format of PCM, Dolby Digital for upto 6 channels (5.1)
	Supports Audio codecs MP3, MPEG Audio, AAC, HE AAC V2, AC3, E-AC3 in HW
	Audio Format: MP3 (MPEG-1 or MPEG-2 Audio Layer III) Sample Rate: Upto 48kHz Bit-rate: Upto 320 kbps/VBR channels: 2.0
	Audio Format: AAC (HE-AAC or LC-AAC) Sample Rate: Upto 48kHz Bit-rate: Upto 320 kbps/VBR channels: 2.0/5.1
	Supports Dolby Pulse/Dolby MS1X decoder for HW based video decode
Video	Supports video output of 3840x2160 @ 60fps according to the HDMI2.0 specification (6Gbps Link per TMDS)
	Supports Video decode of upto HEVC up to 4K p60 4:2:2 10bit

	Supports audio transcoding of AAC, E-AC3 multi-channel audio formats into AC3 5.1 channel @ 640kbps on the SPDIF output.
	Supports video decoding: H.265/HEVC 8-bit and 10-bit (ITU-R BT.2020)
	Supports video decoding: H.264 High Profile @ Level 4.1, 4.2 and 5, CBP @ Level 3.1
	Supports video decoding: VP8/VP9 (60 fps), VC-1 Advanced profile @ level 3
	Supports video decoding: MPEG-2 MP@HL, MP@ML
	Supports video decoding: MPEG4 SP@L3, ASP@L5
	Supports video encoding: H.264 CBP @ Level 3.1 VP8 MJPEG
	Supports High Dynamic Range output using HDR10 (3840x2160p 10-bit Rec. 2020)
	Supports output of 3840x2160p 50 fps and 3840x2160p 60 fps each in YCbCr 4:2:0, 4:2:2, 4:4:4 and RGB color formats with 8, 10 & 12 bits per pixel according to the CEA 861-F spec
	The STB supports CEC v1.4 specification
Still Images	Supports decoding of JPEG, TIFF, GIF, PNG, BMP and Animated GIF
Broadcast	The STB supports reception and processing of EN 300 429 (DVB-C) compliant digitally modulated signals. It can receive and process Service Information (SI) as laid down in EN 300468 and ETR 211. For data services (if implemented), it receives data bit streams compliant to EN 301192 and ETSI TR 101202.
Bluetooth	Bluetooth dual-stack (BT4.0 and BLE) on-board module
	The BLE RCU is recognized as a HID device. HOGP (HID over GATT Profile) for BLE is used for communication with the STB.
	Support for BT voice search through BLE RCU.
	Support for Wake-On-BT when in standby mode
	Connect to all BT devices with HID, A2DP, HS, HFP profiles.
Wi-Fi	The STB supports 2x2 2.4 GHz Wi-Fi 802.11b/g/n & 2x2 5GHz WIFI 802.11n/ac - on-board module with 2 antenna design.
	The STB supports WPA, WPAv2
	The STB Automatic Wi-Fi Setup is a WPS connection over 5GHz band.
Ethernet	IEEE 802.3 Ethernet 10bT/100 Base-T - Full duplex, Auto sensing design
Video	Supports scaling of SD, HD resolutions to 4K resolutions
	Supports H.264 encoding/decoding in the HW for video calling application. Max. FPS - 25 Bitrate - 400000 bps Color Formats - I420(preferred), NV21, NV12
	Support output of all 3D video formats in Top-Bottom, Side-By-Side and Frame Pack 3D modes according to the HDMI2.0a specification
Boot	Support HW secure boot with device specific unique keys for boot



	<p>The STB supports cold boot, warm boot and recovery mode boot modes.</p> <p>The STB has a boot-time (cold boot) of less than 60 seconds.</p> <p>The STB has a wakeup time of less than 5 seconds from active standby mode.</p> <p>The STB displays a Jio logo upon boot before the launching the Home Screen.</p>
LED	<p>The STB must display the following LED states at different system states:</p> <p>On/Running state: GREEN</p> <p>Active standby: RED</p> <p>Wake up: GREEN fade-in/fadeout every 1000ms</p> <p>Software upgrade: GREEN fade-in/fadeout every 1000ms</p> <p>Acknowledge RCU code reception: BLINKING RED ONCE</p>
Security	<p>VOD security based on Verimatrix Ultra</p> <p>VOD security based on Widevine L1</p> <p>VOD security based on Microsoft Playready 3.0</p> <p>Secure Passwords, keys and certificates must never be available in the unencrypted form in the DDR, flash either temporarily or permanently.</p> <p>All debug interfaces to the STB must be blocked to make it secure against any potential hacker attack.</p>
USB	<p>The STB supports USB mass-storage devices compliant with USB 3.0 specification (including USB HDD devices)</p> <p>The STB supports USB HID devices (mouse, keypad, gamepad)</p> <p>The USB port supports external hubs within the limit of the electrical consumption constraints for USB3.0</p> <p>The STB supports USB video device class v1.5 for SD/HD cameras.</p>
Power States	<p>The STB enters into active standby state with the press of the RCU POWER button.</p> <p>The STB wakeup from the standby state with the RCU POWER button.</p> <p>The STB boots into recovery mode with the long press of the STB RESET button during power ON.</p>
Certifications	<p>USB2.0/3.0</p> <p>HDMI 2.0/1.4</p> <p>HDCP 2.2/1.4</p> <p>Wifi alliance 11ax/ac/b/g/n</p> <p>BIS product certification for India region.</p> <p>EMC/Safety/Radio and Consumption for EU (The CE certification must be performed with all the accessories provided within the STB's package - power adapter, HDMI, ethernet cable)</p>
Hardware Interfaces	<p>1 HDMI Output Port (Version 2.0) - 3840x2160p @ 60 fps</p> <p>1 RJ-45 Ethernet port 10/100 base-T</p> <p>1 SPDIF digital audio output (optical/coaxial connector)</p> <p>1 single 3.5 mm jack for AV output (Composite Video + Digital Audio)</p>



	1 DC Pack 2 pins female standard Jack plug
	1 (or 2) USB 2.0 Data port (type A)
	1 USB 3.0 Data port (type A)
	Bi-color LED (red/green)
	1 RF input female connector (based on IEC 60169-24)
Platform	STB goes to standby state if user does not press any key within preset amount of time
	STB supports a custom JIO Launcher
	STB supports network lock feature to bind the device to JIO network.
	STB launches the Jio Launcher by default on bootup upon pressing the Jio button on the RCU
	STB displays still images loaded on a pre-defined flash partition when the day-dream mode kicks in.
	STB switches between normal (BLE) and universal (BLE+IR) mode of operations for device control with Jio Remote
	Supports FAT32, NTFS filesystems for USB mass-storage device access in read-write mode.
Tuner & Demodulator	DVB-C Tuner (47 MHz to 862 MHz)
	3 Tuners & Demod support