## VIM2(V14) Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Basic</th>
<th>Pro</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SoC</strong></td>
<td>Amlogic S912</td>
<td>1.5 GHz 64Bit Octa Core ARM Cortex-A53</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>750MHz ARM Mali–T820MP3 GPU</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>HW UHD H.265/VP9 60fps 10bit video decoder</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>HDR10 and HLG HDR video processing</td>
<td></td>
</tr>
<tr>
<td><strong>MCU</strong> [1]</td>
<td>STM8S003 with Programmable EEPROM</td>
<td></td>
<td></td>
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<tr>
<td><strong>SPI Flash</strong></td>
<td>16MB</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DDR4</strong></td>
<td>2GB</td>
<td>3GB</td>
<td>3GB</td>
</tr>
<tr>
<td><strong>EMMC</strong></td>
<td>16GB</td>
<td>32GB</td>
<td>64GB</td>
</tr>
<tr>
<td><strong>Wi–Fi</strong> [2]</td>
<td>AP6356S, 2X2 MIMO</td>
<td></td>
<td>AP6398S, 2X2 MIMO with RSDB [3]</td>
</tr>
<tr>
<td><strong>Bluetooth</strong></td>
<td>V4.1</td>
<td>V5.0</td>
<td></td>
</tr>
<tr>
<td><strong>LAN</strong></td>
<td>10/100 / 1000M</td>
<td></td>
<td></td>
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<tr>
<td><strong>WOL</strong> [4]</td>
<td>Wake on Lan</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IR Receiver</strong></td>
<td>2 Channels</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HDMI 2.0a</strong></td>
<td>Type-A Female, up to 4K@60Hz</td>
<td></td>
<td></td>
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<tr>
<td><strong>HDMI CEC</strong></td>
<td>Yes</td>
<td></td>
<td></td>
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<tr>
<td><strong>TF Card</strong></td>
<td>Molex Slot</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>USB2.0 HOST</strong></td>
<td>x2 (900mA &amp; 500mA Load)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>USB Type-C</strong></td>
<td>USB2.0 OTG &amp; DC IN</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Wide Input Voltage</strong></td>
<td>Range from 5V to 9V, Recommend 5.0V</td>
<td></td>
<td></td>
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<tr>
<td><strong>Current Limit Switch</strong></td>
<td>Programmable, 3.0A as default (up to 4.0A)</td>
<td></td>
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<tr>
<td><strong>RTC &amp; Battery Header</strong></td>
<td>0.8mm Pitch Header</td>
<td></td>
<td></td>
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<tr>
<td><strong>Cooling Fan Header</strong></td>
<td>4–Pins 0.8mm Pitch Header, with PWM Speed Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>40–Pins I/O Header</strong></td>
<td>2.54mm, USB, I2C, I2S, SPDIF, UART, PWM, ADC, ISO7816</td>
<td></td>
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<tr>
<td><strong>FPC Connector</strong></td>
<td>10–Pins, 0.5mm Pitch, with I2C, IOs</td>
<td></td>
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<tr>
<td><strong>Pogo Pads Array</strong></td>
<td>USB, I2C, DVB–Bus, IOs</td>
<td></td>
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<tr>
<td><strong>Pogo Pads MCU</strong></td>
<td>SWIM, UART, ADC, NRST</td>
<td></td>
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<tr>
<td><strong>Pogo Pads for VIN</strong></td>
<td>System Power Input</td>
<td></td>
<td></td>
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<tr>
<td><strong>XPWR Pads</strong></td>
<td>For External Power Button</td>
<td></td>
<td></td>
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<tr>
<td><strong>Buttons</strong></td>
<td>x3 (Power / Func / Reset)</td>
<td></td>
<td></td>
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<tr>
<td><strong>LEDs</strong></td>
<td>Blue LED x1, White LED x1</td>
<td></td>
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<tr>
<td><strong>Mounting Holes</strong></td>
<td>Size M2 x 4</td>
<td></td>
<td></td>
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<tr>
<td><strong>Board Dimensions</strong></td>
<td>82.0 x 58.0 x 11.5 mm</td>
<td></td>
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<tr>
<td><strong>Board Weight</strong></td>
<td>28.5g</td>
<td></td>
<td></td>
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<tr>
<td><strong>Linux</strong></td>
<td>Mainline Linux (Linux 5.0+)</td>
<td></td>
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<tr>
<td><strong>Bootloader</strong></td>
<td>Mainline U-Boot</td>
<td></td>
<td></td>
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<tr>
<td><strong>Linux Distro</strong></td>
<td>Ubuntu 18.04+ / Armbian</td>
<td></td>
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<tr>
<td><strong>O/S for HTPC</strong></td>
<td>Android TV / LibreELEC</td>
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<tr>
<td><strong>Android</strong></td>
<td>Nougat (7.1)</td>
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<tr>
<td><strong>Google Fuchsia OS</strong></td>
<td>Google Official ARM64 Platform</td>
<td></td>
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<tr>
<td><strong>Khadas Only</strong></td>
<td>Khadas TST [5]</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Certifications</strong></td>
<td>Fenix Script [6]</td>
<td></td>
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</tbody>
</table>

[1] MCU: Power management, EEPROM for customization, and boot media(SPI Flash or eMMC) setup.

[2] Wi–Fi: All models feature with 802.11a/b/g/n/ac.

[3] RSDB: Real Simultaneous Dual Band, which lets VIM2 and other devices transmit and receive data over two bands at the same time.

[4] WOL: Power on or wake up VIM2 remotely over Lan through APP or webpage.

[5] The Khadas TST feature enables developers to enter upgrade mode easily: simply press the function key 3 times within 2 seconds, and it works even if the bootloader is damaged.