HYPER-RK39

PICO-ITX SBC with Rockchip 3399 Processor, 2GB LPDDR3, 16GB eMMC Flash, HDMI, eDP, GbE LAN, PCIe mini, USB 3.1 Gen 1, USB 2.0, COM, RoHS

Features
- Pico-ITX SBC supports Rockchip RK3399
- HDMI and eDP dual display support
- OS: Android 7.1 & Linux QT 5.9.4

Specifications

<table>
<thead>
<tr>
<th>Model Name</th>
<th>HYPER-RK39</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chassis</td>
<td>Dimensions (WxHxD) (mm) - Single board: 100mm x 72mm</td>
</tr>
<tr>
<td>Motherboard</td>
<td>CPU - Rockchip RK3399 (Dual-core Cortex-A72 up to 1.8GHz + Quad-core Cortex-A53 up to 1.5GHz)</td>
</tr>
<tr>
<td></td>
<td>System Memory - 2GB LPDDR3-1666</td>
</tr>
<tr>
<td>Storage</td>
<td>SD Card - 1 x Micro SD slot</td>
</tr>
<tr>
<td></td>
<td>Flash - 16GB eMMC NAND FLASH</td>
</tr>
<tr>
<td>Communication</td>
<td>WLAN - 802.11 a/b/g/n/ac</td>
</tr>
<tr>
<td></td>
<td>Bluetooth - Bluetooth V4.1</td>
</tr>
<tr>
<td></td>
<td>WWAN - PCIe Mini LTE (optional)</td>
</tr>
<tr>
<td>I/O Interfaces</td>
<td>COM port - 1 x RS-232/422/485</td>
</tr>
<tr>
<td></td>
<td>GPIO - 8 bit (4 in / 4 out)</td>
</tr>
<tr>
<td></td>
<td>Ethernet - 1 x GbE RJ45 by RTL8211E</td>
</tr>
<tr>
<td></td>
<td>USB 3.1 Gen 1 - 1 x USB 3.1 Gen 1 (50Gb/s) Type A</td>
</tr>
<tr>
<td></td>
<td>1 x USB 3.1 Gen 1 (50Gb/s) Type C</td>
</tr>
<tr>
<td></td>
<td>USB 2.0 - 1 x USB 2.0 Type A</td>
</tr>
<tr>
<td></td>
<td>Display - 1 x HDMI out</td>
</tr>
<tr>
<td></td>
<td>1 x eDP port</td>
</tr>
<tr>
<td></td>
<td>Others - 1 x i²C</td>
</tr>
<tr>
<td>Expansions</td>
<td>PCIe Mini - 1 x Full-size PCIe Mini (reserved for WWAN)</td>
</tr>
<tr>
<td>Multimedia</td>
<td>Audio - 1 x 2 pin for speaker (1.5W 8Ω)</td>
</tr>
<tr>
<td></td>
<td>1 x 10 pin (Line in / Line out)</td>
</tr>
<tr>
<td></td>
<td>Camera - 1 x MIPI CSI interfaces for Camera</td>
</tr>
<tr>
<td>Power</td>
<td>Power Input - 1 x 2 pin DC 12V in wafer connector</td>
</tr>
<tr>
<td></td>
<td>Power Consumption - 12V @ 1.2A</td>
</tr>
<tr>
<td>Reliability</td>
<td>Operating Temperature - -10°C – 50°C with air flow</td>
</tr>
<tr>
<td></td>
<td>Storage Temperature - -20°C – 60°C</td>
</tr>
<tr>
<td></td>
<td>Humidity - 10% – 90%, non-condensing</td>
</tr>
<tr>
<td></td>
<td>Weight (Net) - 80 g</td>
</tr>
<tr>
<td></td>
<td>Safety/EMC - CE/FCC Class A compliant</td>
</tr>
<tr>
<td>OS</td>
<td>Supported OS - Android 7.1 or Linux QT 5.9.4</td>
</tr>
<tr>
<td></td>
<td>Watchdog Timer - Yes</td>
</tr>
</tbody>
</table>
Ordering Information

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYPER-RK39-R10</td>
<td>PICO-ITX SBC with Rockchip 3399 Processor, 2GB LPDDR3, 16GB eMMC Flash, Android 7.1, HDMI, eDP, GbE LAN, PCle mini, USB 3.1 Gen 1, USB 2.0, COM, RoHS</td>
</tr>
<tr>
<td>HYPER-RK39-R10-TW</td>
<td>PICO-ITX SBC with Rockchip 3399 Processor, 2GB LPDDR3, 16GB eMMC Flash, Android 7.1, HDMI, eDP, GbE LAN, PCle mini, USB 3.1 Gen 1, USB 2.0, COM, Wi-Fi TW reg, RoHS</td>
</tr>
<tr>
<td>HYPER-RK39-R10-US</td>
<td>PICO-ITX SBC with Rockchip 3399 Processor, 2GB LPDDR3, 16GB eMMC Flash, Android 7.1, HDMI, eDP, GbE LAN, PCle mini, USB 3.1 Gen 1, USB 2.0, COM, Wi-Fi US reg, RoHS</td>
</tr>
<tr>
<td>HYPER-RK39-R10-EU</td>
<td>PICO-ITX SBC with Rockchip 3399 Processor, 2GB LPDDR3, 16GB eMMC Flash, Android 7.1, HDMI, eDP, GbE LAN, PCle mini, USB 3.1 Gen 1, USB 2.0, COM, Wi-Fi EU reg, RoHS</td>
</tr>
<tr>
<td>HYPER-RK39-R10-CN</td>
<td>PICO-ITX SBC with Rockchip 3399 Processor, 2GB LPDDR3, 16GB eMMC Flash, Android 7.1, HDMI, eDP, GbE LAN, PCle mini, USB 3.1 Gen 1, USB 2.0, COM, Wi-Fi CN reg, RoHS</td>
</tr>
<tr>
<td>HYPER-RK39-R10-L-TW</td>
<td>PICO-ITX SBC with Rockchip 3399 Processor, 2GB LPDDR3, 16GB eMMC Flash, Linux QT, HDMI, eDP, GbE LAN, PCle mini, USB 3.1 Gen 1, USB 2.0, COM, Wi-Fi TW reg, RoHS</td>
</tr>
<tr>
<td>HYPER-RK39-R10-L-US</td>
<td>PICO-ITX SBC with Rockchip 3399 Processor, 2GB LPDDR3, 16GB eMMC Flash, Linux QT, HDMI, eDP, GbE LAN, PCle mini, USB 3.1 Gen 1, USB 2.0, COM, Wi-Fi US reg, RoHS</td>
</tr>
<tr>
<td>HYPER-RK39-R10-L-EU</td>
<td>PICO-ITX SBC with Rockchip 3399 Processor, 2GB LPDDR3, 16GB eMMC Flash, Linux QT, HDMI, eDP, GbE LAN, PCle mini, USB 3.1 Gen 1, USB 2.0, COM, Wi-Fi EU reg, RoHS</td>
</tr>
<tr>
<td>HYPER-RK39-R10-L-CN</td>
<td>PICO-ITX SBC with Rockchip 3399 Processor, 2GB LPDDR3, 16GB eMMC Flash, Linux QT, HDMI, eDP, GbE LAN, PCle mini, USB 3.1 Gen 1, USB 2.0, COM, Wi-Fi CN reg, RoHS</td>
</tr>
<tr>
<td>HYPER-RK39-R10-L</td>
<td>PICO-ITX SBC with Rockchip 3399 Processor, 2GB LPDDR3, 16GB eMMC Flash, Linux QT, HDMI, eDP, GbE LAN, PCle mini, USB 3.1 Gen 1, USB 2.0, COM, RoHS</td>
</tr>
</tbody>
</table>

Packing List

- 1 x Hyper-RK single board
- 1 x Two pin to DC in power cable
- 1 x Heatsink set
- 1 x RTC battery

Options

<table>
<thead>
<tr>
<th>Item</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Adapter</td>
<td>63040-010060-120-RS</td>
<td>Vin:90~264VAC; 60W; Φ2.5/Φ5.5/lock</td>
</tr>
<tr>
<td>GPIO Cable</td>
<td>32133-030000-100-RS</td>
<td>FEMALE 2<em>5P Pin:1.0; (B) PIN HEADER 2</em>5P Pin:2.54*2</td>
</tr>
<tr>
<td>Audio Cable</td>
<td>32107-005520-100-RS</td>
<td>Audio Jack:Ø3.5,6P</td>
</tr>
<tr>
<td>Power Switch Cable</td>
<td>19500-016506-100-RS</td>
<td>ROCKER SWITCH:250V/6A, 2P ON/OFF</td>
</tr>
<tr>
<td>ePD Cable</td>
<td>32602-030700-100-RS</td>
<td>CABLE, 2:300MM, 34AWG, (A) I-PEX:20454-240T Pin:0.5+PULL BAR*2</td>
</tr>
<tr>
<td>Speaker</td>
<td>19800-026000-100-RS</td>
<td>SPEAKER+CABLE MODULE, 2:300MM, 38AWG, (A) Speaker:26.6+15.09+0.50+1.5W</td>
</tr>
<tr>
<td>IPEX to SMA cable</td>
<td>32501-000705-100-RS</td>
<td>RF CABLE FOR DVB,T, LINE DIAMETER:1.37mm,213MM, 50Ω, Exceltek, 0-6GHz</td>
</tr>
<tr>
<td>Wi-Fi Antenna</td>
<td>32505-004800-100-RS</td>
<td>WLAN, 2.4G+5G Wi-Fi ANTENNA</td>
</tr>
<tr>
<td>Camera module</td>
<td>70001-COC79A55FE-RS</td>
<td>Image Module, 2592*1944</td>
</tr>
<tr>
<td>LTE Antenna</td>
<td>32505-004200-100-RS</td>
<td>WLAN, LTE FULL BAND ANTENNA</td>
</tr>
<tr>
<td>LTE Module</td>
<td>27552-000004-RS</td>
<td>WCDMA/HSPA+LTE, SIM7500SA</td>
</tr>
<tr>
<td></td>
<td>27552-000005-RS</td>
<td>GSM/LTE/WCDMA, SIM7500E</td>
</tr>
<tr>
<td></td>
<td>27552-000006-RS</td>
<td>LTE/WCDMA, SIM7500A</td>
</tr>
</tbody>
</table>

* Use LTE module need to add a SIM card slot board.

**HYPER-RK39 Dimensions**

(Unit: mm)

![HYPER-RK39 Dimensions Diagram]