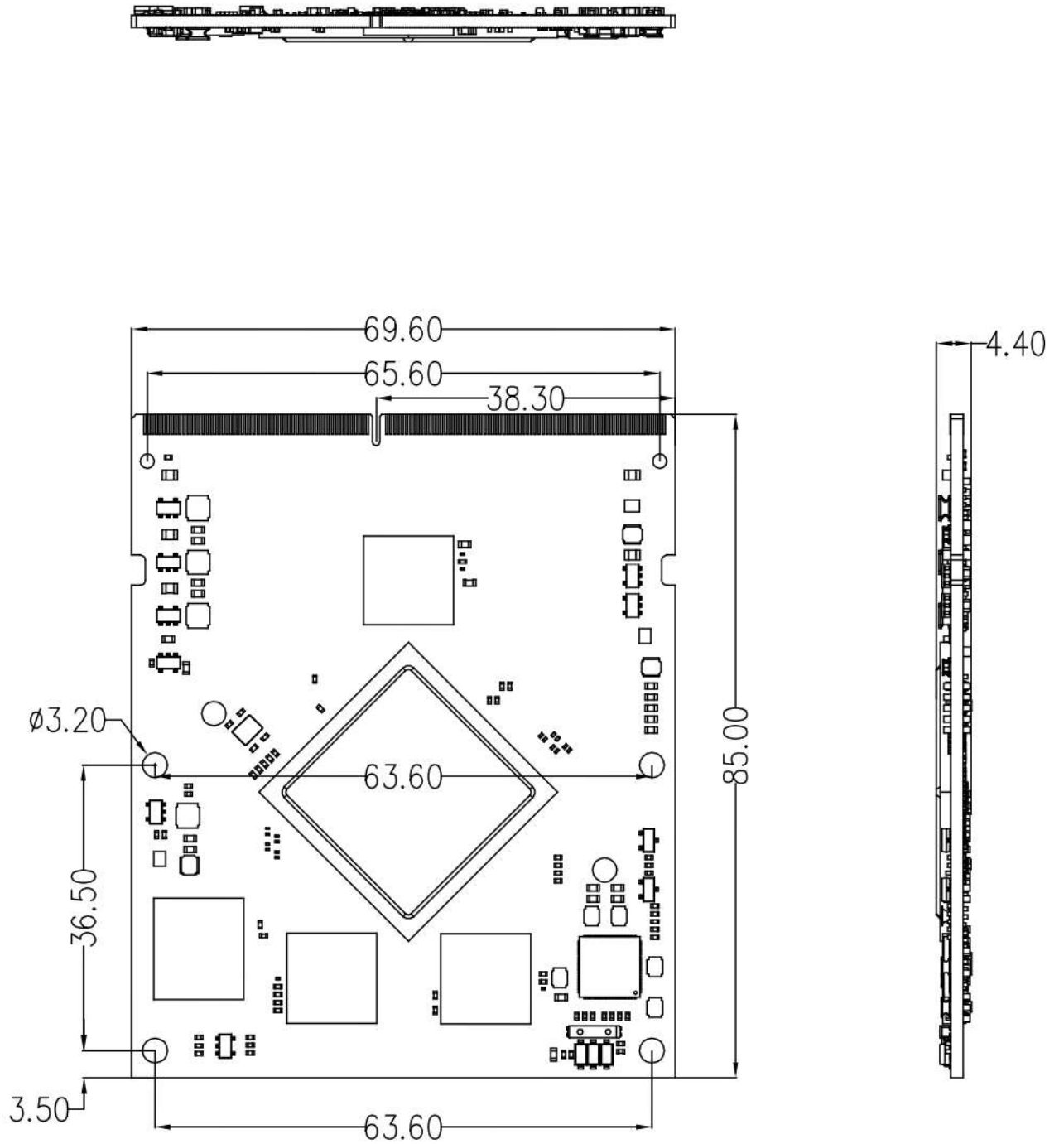


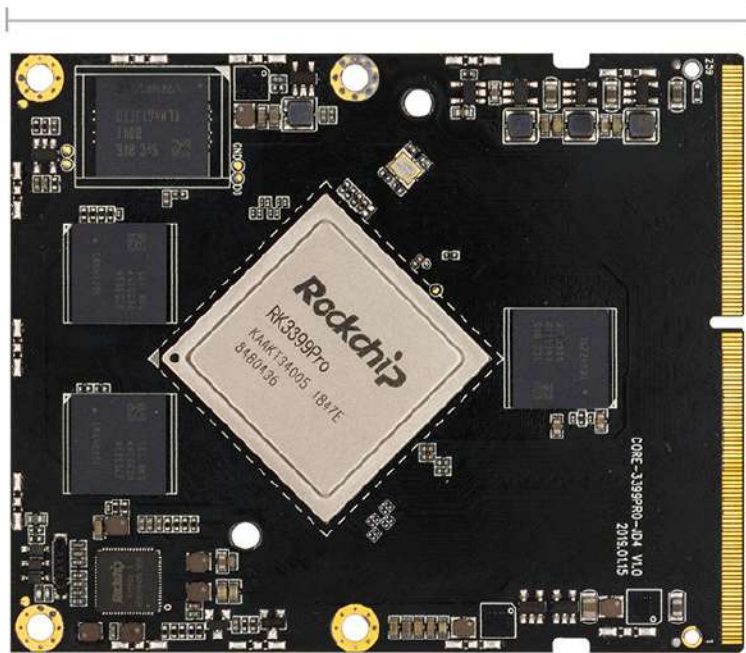
2. Product Specification

| Specification | |
|-------------------|---|
| SOC | Rockchip RK3399Pro |
| CPU | Dual-core Cortex-A72 + Quad-core Cortex-A53 big.LITTLE core CPU architecture, frequency up to 1.8GHz |
| GPU | ARM® Mali-T860 MP4 Quad-core GPU Support OpenGL ES1.1/2.0/3.0/3.1, OpenVG1.1, OpenCL, DX11 Support AFBC(frame buffer compression) |
| NPU | Built-in neural network processor NPU which with powerful computing performance: - Support 8bit/16bit operation with up to 3.0 TOPS performance. - Compared to tradition solution, the power consumption of the NPU is less than 1% of the GPU when performing AI operations. - Load Caffe / Mxnet / TensorFlow model directly. |
| VPU | Support 4K VP9 and 4K 10 bits H265/H264 video decoding, up to 60fps 1080P multi-format video decoding (WMV, MPEG-1/2/4, VP8) 1080P video coding, support H.264 , VP8 format Video post processor, de-interlacing, de-noising, edge/detail/color optimization |
| RAM | 3GB LPDDR3 (NPU 1GB + CPU 2GB) 6GB LPDDR3 (NPU 2GB + CPU 4GB) |
| Storage | 16GB high-speed eMMC 5.1 (16GB/32GB/128GB) Support TF Card Extended Storage Support M.2 PCIe M-KEY extend NVMe SSD |
| Hardware Features | |
| Ethernet | 10 / 100 / 1000 Mbps Ethernet interface (RJ45) |
| WiFi | Extend WiFi & Bluetooth via SDIO3.0 |
| Display | 1 x HDMI 2.0, support 4K@60HZ output and HDCP 1.4/2.2 1 x MIPI-DSI , support single channel 1080P@60fps output 1 x eDP 1.3 (4 lanes with 10.8Gbps) 1 x DP 1.2 (DisplayPort), support 4K@60Hz output Support dual-screen identical display/dual-screen differential display |
| Audio | 1 x HDMI 2.0 audio output 1 x I2S (Support 8-way digital microphone array input) 1 x Speaker (8Ω, 1.3W, Single track) 1 x Phone, for audio output 1 x Mic, for audio input |
| Camera | 2x MIPI-CSI camera interface (Built-in dual-ISP, Maximum support single 13Mpixel or dual 8Mpixel) |
| USB | 2 x USB2.0 Host, 1 x USB3.0 Type-C |
| Interface | UART×5, ADC×4, I2C×9, PWM×3, GPIO, PCIe×1, SPI×5 |
| Power | DC input voltage 5V |
| OS / Software | |
| OS | Android, Linux+QT, Ubuntu |
| Software | - Provide AI development tools: support model fast conversion, Support API conversion, Support models such as TensorFlow / TF Lite / Caffe / ONNX / Darknet, and so on. - Provide AI application development interface: support Android NN API, provide RKNN cross-platform API, support for TensorFlow development under Linux. |
| Appearance | |
| Size | 69.6mm × 85 mm |
| Type | Gold finger (SODIMM 260P, 0.5mm pitch) |
| PCB | 10-layer board design |

3. PCB Size

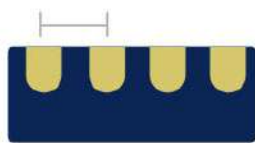


85 mm



69.6 mm

0.5mm



Pin Pitch

0.15mm 0.35mm



Blank Pitch