



Features

- Broadcom BCM2837 processor Quad core A53 (ARM v8) 64-bit SoC
- 1GB LPDDR2 SDRAM
- Cypress BLE chip 2.4GHz/5.0GHz IEEE 802.11b/g/n/ac wireless LAN, Bluetooth 4.2
- Gigabit Ethernet over USB 2.0 (300Mbps max.)
- USB 2.0 port x 4
- Full size HDMI x 1
- H.264, MPEG-4 decode (1080p30); H.264 encode (1080p30); OpenGL ES 1.1, 2.0 graphics
- 1080p FHD USB camera
- Suitable for people monitoring and retail applications
- CE, FCC, RoHS certified

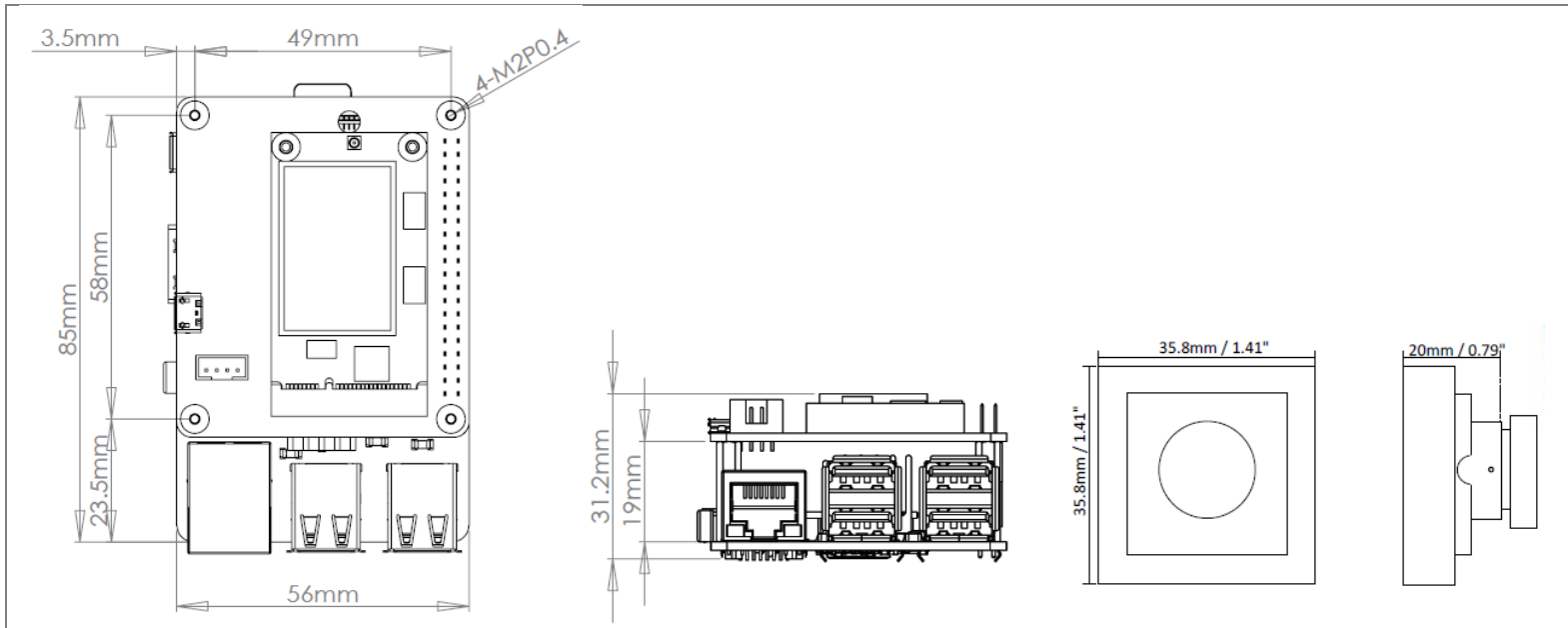
Specifications

Raspberry Pi 3 Model B+ Board	
Processor	Broadcom BCM2837B0, Cortex-A53 64-bit SoC @ 1.4GHz
Memory	1GB LPDDR2 SDRAM
Connectivity	2.4GHz and 5GHz IEEE 802.11.b/g/n/ac wireless LAN, Bluetooth 4.2, BLE Gigabit Ethernet over USB 2.0 (maximum throughput 300Mbps) 4 × USB 2.0 ports
Access	Extended 40-pin GPIO header
Video & sound	Full size HDMI x 1 MIPI DSI display port MIPI CSI camera port 4 pole stereo output and composite video port
Multimedia	H.264, MPEG-4 decode (1080p30); H.264 encode (1080p30); OpenGL ES 1.1, 2.0 graphics
SD card support	Micro SD format for loading operating system and data storage
Input power	5V/2.5A DC via micro USB connector 5V DC via GPIO header Power over Ethernet (PoE)–enabled (requires separate PoE HAT)
Operating Temp.	0°C ~ 50°C / 32°F ~ 122°F

AI NPU KL520	
IC	Kneron KL520
Type	Integrated SoC
Support Framework	ONNX, TensorFlow, Keras, Caffe
Support Model	Support Model Vgg16, Resnet, GoogleNet, YOLO, Tiny YOLO, Lenet, MobileNet, DenseNet
Memory	LPDDR2
NPU Power	NPU Power Efficiency 0.56TOPS/W
Overall	Overall Power Consumption 0.5 W
Camera EUA1200	
Pickup Device	1080p CMOS sensor
Video Format	MJPEG / YUV2
Frame Rate	MJPEG: 1920x1080/30FPS; 1280x720/30FPS; 640x480/30FPS YUV2: 1920x1080/5FPS; 1280x720/8FPS; 640x480/30FPS
Power Source	5VDC
Operating Temp.	0°C ~ 50°C / 32°F ~ 122°F
Dimensions (W x H x D)	35.8 x 35.8 x 20mm / 1.41" x 1.41" x 0.79" (without bracket and lens)

Dimension

Unit: mm / inch



Ordering Information

Part Number	Packing List
21AIM520AA0001R EF AI Development Kit,EK520-AI,w camera	<ul style="list-style-type: none"> • Raspberry Pi 3 Model B+ x 1 • Docking Board x 1 • Kneron KL520 x 1 • Full HD Camera EUA1200 x 1 • Micro USB to USB Cable x 1