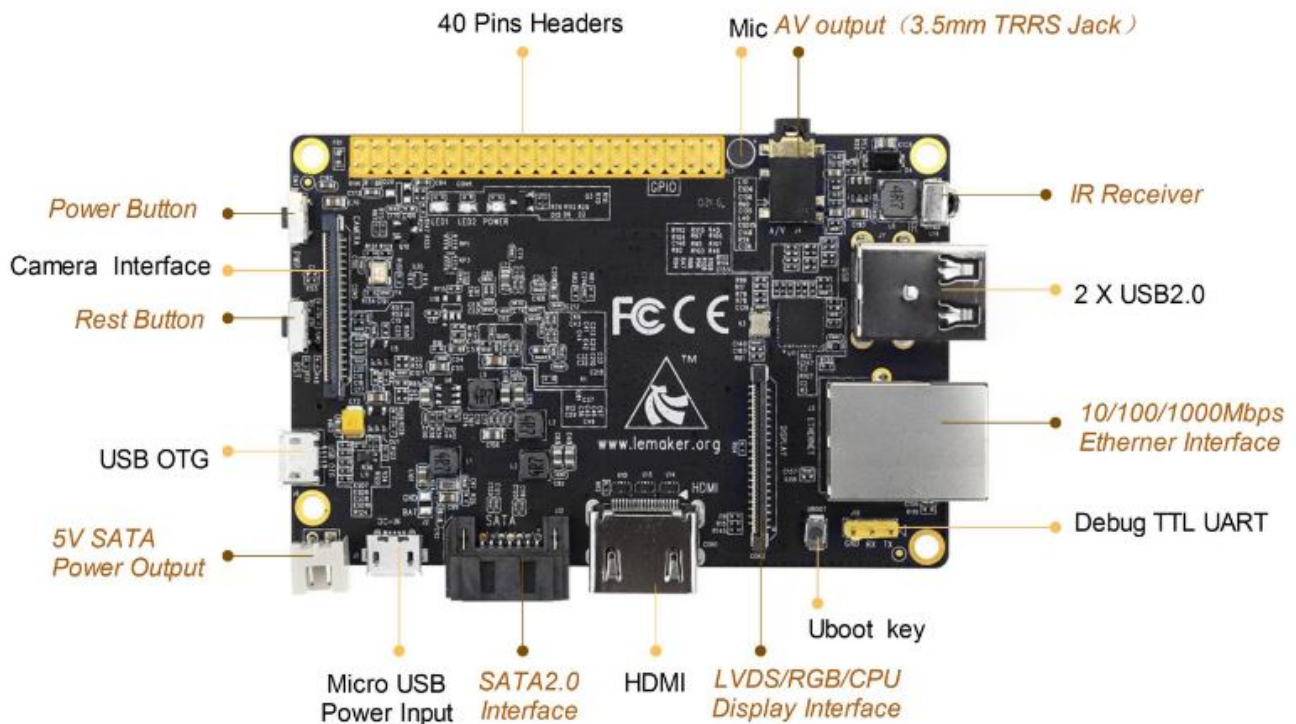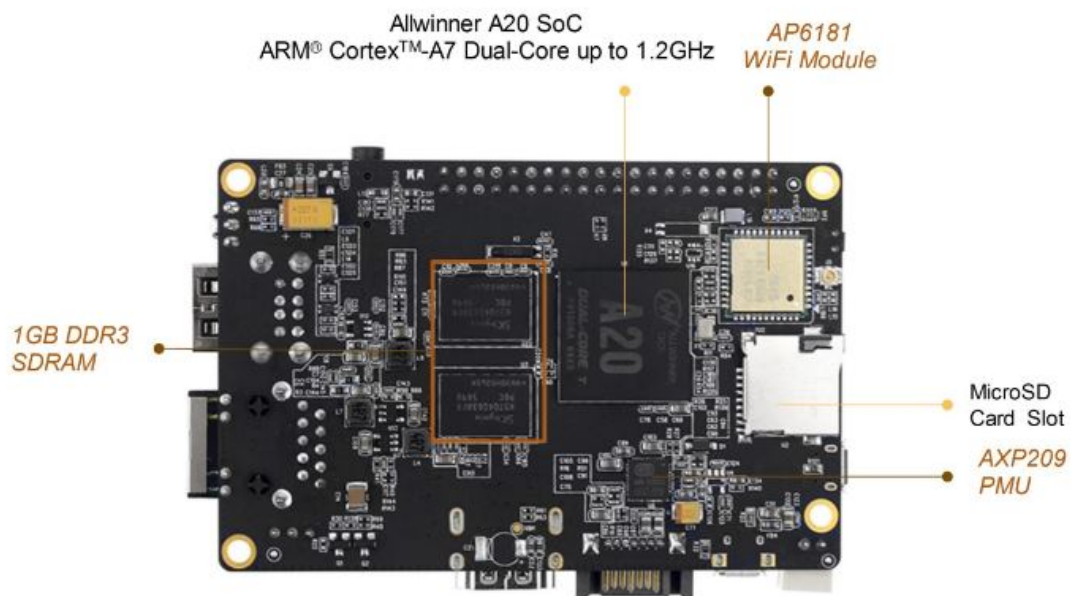# Banana Pro

What is a Banana Pro ?

Banana Pro™ is an updated version of Banana Pi™ designed by the LeMaker Team. Try Banana Pro™ today and take advantage of the many enhanced features.

Banana Pro™ is compatible with many Linux-based operating system and has many distributions specially developed for Banana Pi™ Hardware. Some of these distributions include Lubuntu, Android, Debian, Bananian, Berryboot, OpenSuse, Scratch, Fedora, Gentoo, Open MediaVault, OpenWRT. Banana Pro™ also supports the BSD system.

Banana Pro™ has a wide selection of home applications including: Building a low-cost computer, Servers (for Multimedia, Minecraft or other home servers), Video Game Emulators, Home Security Cameras and more.

Banana Pro™ is an excellent educational learning tool that can be used for many projects including: building Multimedia projects,Robots, Arduino applications or Computer Programming with many popular programming languages available including Scratch (a drag and drop programming language for people beginning to learn how to code).

Allwinner A20 SoC
ARM® Cortex™-A7 Dual-Core up to 1.2GHz

AP6181
WiFi Module

1GB DDR3
SDRAM

MicroSD
Card Slot

AXP209
PMU

Back side

LEMAKER

Hardware Specification of Banana Pro™

SoC	Allwinner® A20(sun 7i)
CPU	ARM® Cortex™-A7 Dual-Core (ARM v7 instruction set)
GPU	Mali400MP2 , supproting OpenGL ES 2.0/1.1(hardware acceleration support)
RAM	1GB DDR3 SDRAM (shared with GPU)
PMU	AXP209
Features	
Storage	MicroSD (TF) card slot SATA 2.0 (suggest 2.5 inch SSD or HDD)
Ethernet Port	10/100/1000Mbps ethernet (Realtek RTL8211E/D)
Wireless	WiFi 802.11 b/g/n 2.4GHz 1 x IR receiver
USB	2 x USB2.0 Host 1 x USB 2.0 OTG (all direct from A20 chip)
Display	Supports multi-channel HD display: 1 x HDMI 1.4 (Type A - full) 1 x LVDS/RGB/CPU display interface (DSI) for raw LCD panels Composite video (PAL and NTSC) (via 3.5 mm TRRS jack shared with audio out) HDMI resolutions from 640×480 to 1920×1080 plus various PAL and NTSC standards
Audio	HDMI output Analog audio (via 3.5 mm TRRS jack shared with composite video out) I2S audio (also potentially for audio input) 1 x On-board micphone for audio input
Camera	1 x Parallel 8-bit camera interface

EXPANSION INTERFACE	**40 Pins Header:** 28×GPIO, some of which can be used for specific functions including UART, I2C, SPI, PWM, CAN, I2S, SPDIF.
LED	1 x Power status led (red) 1 x User defined led1 (green) 1 x User defined led2 (blue)
Button	1 x Reset button 1 x Power button 1 x U-boot button
Power Source	5V @ 2A via MicroUSB
OS Support	Android 4.2（4.4）/ Linux
Appearance characteristic	
Sizes	92mm × 60mm
Weight	45g
Banana Pro ™ **and Banana Pi**™ **are trademarks of LeMaker**	