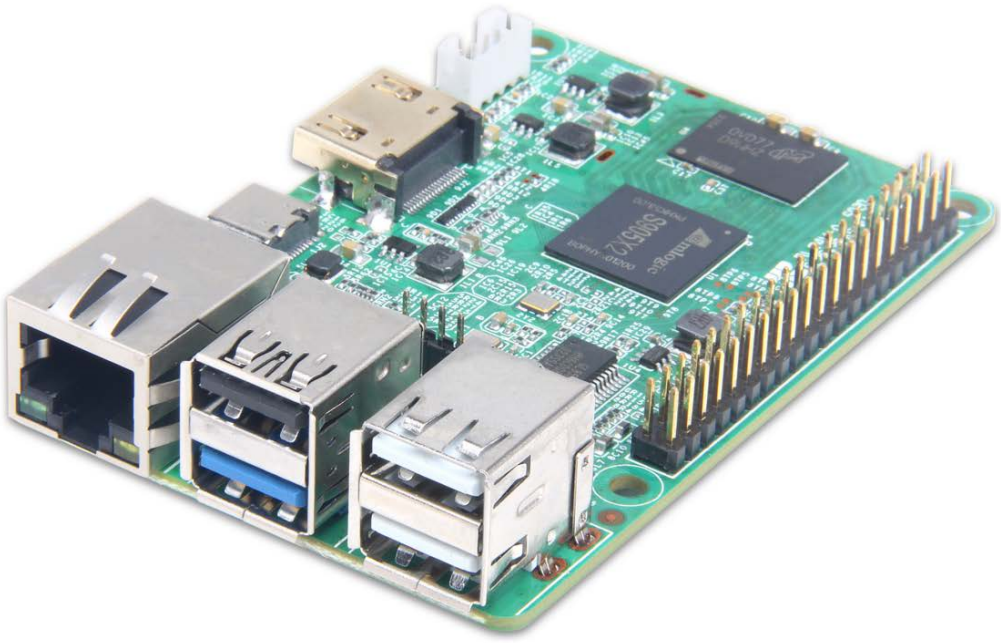
深 圳 金 亚 太 科 技 有 限 公 司

Shenzhen Geniatech Co.,Ltd.

SPECIFICATION

MODEL:XPI-S905X3



Confirmation

REVISION HISTORY					
VERSION	**DATE**	**BOARD ID**	**PAGE**	**DESCRIPTION**	**AUTHOR**
V1.0	2021/03/01	XPI_S905X2_V1.0	7	specification	

APPROVED BY GENIATECH		
PREPARED BY 编写	**CHECKED BY 审核**	**APPROVED BY 批准**

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COMMENTS 确认意见	**APPROVED BY 批准签字**	**COMPANY STAMP 盖章**

Website: www.geniatech.com

Address: 18th Floor, GDC Building, No 9th, Gaoxin Middle 3rd Road, Nanshan, Shenzhen, China

CONTENT

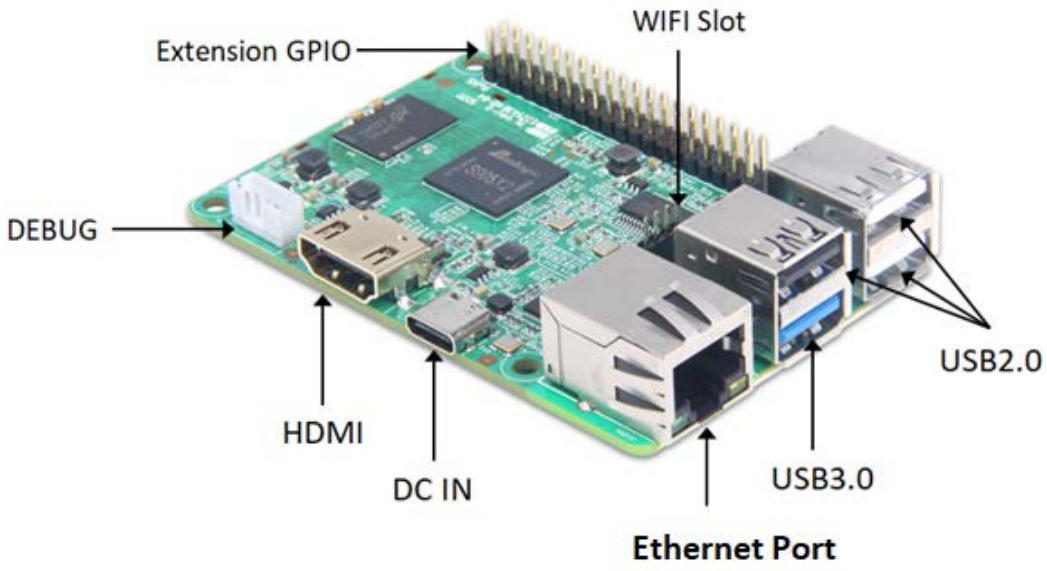
1. GENERAL DESCRIPTION

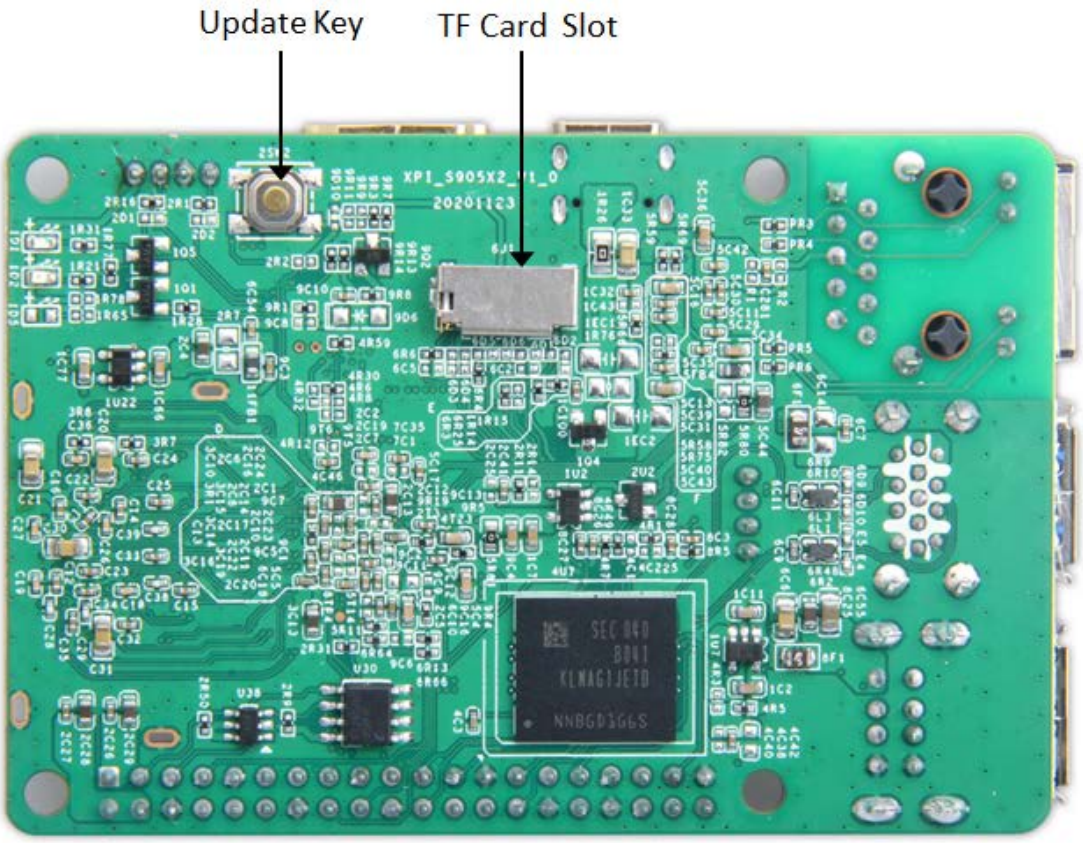
XPI-S905X3 is a DIY product made by Geniatech that uses the form factor of Raspberry Pi. According to the definition of Raspberry Pi, which is suitable for the field of programming education for teenagers. Below is the detailed specification：

(I) 85mm*56mm, Only the size of a bank card
(II) Amlogic S905X3 with Quad-core Cortex-A55 , Android 9.0 or above
(III) 2G RAM, 8GB eMMc flash
(IV) 3*USB2.0, 1*USB3.0，1*HDMI Out, 1*Micro USB, 1*UART, 1* Extension GPIO interface
(VI) WiFi (optional) and 1000M LAN interface
(VII) Micro SD card(TF card : Max64G)
(VIII)Designed for education, industrial control, etc.

2. PRODUCT LAYOUT

Below pictures are for reference only:





3.FEATURES

Chipset	Amlogic S905X3	
Market area	Global	
OSD Language	English/Chinese(multi language OSD)	
Processor	CPU	Quad-core Cortex-A55
	GPU	ARM G31 MP2 GPU
	RAM	2GB(1GB Optional)
	EMMC FLASH	8GB （16G/32G Optional）
Network	Ethernet	RJ45, 1000M
	WiFi	Optional

	Bluetooth	Optional
Interface	TF Card Slot	TF card *1(max. 64GB)
	HDMI	HDMI out*1
	USB	USB 2.0*3 and USB3.0*1
	MicroUSB	Power IN*1
	Extension GPIO	GPIO*28
Dimensions	85 mm * 56 mm	
Adapter	DC5V / 2A Cooling fin WIFI Module（**Optional** (2.4G&5.8G / BT4.0))	
Accessory	Adapter and USB power line	

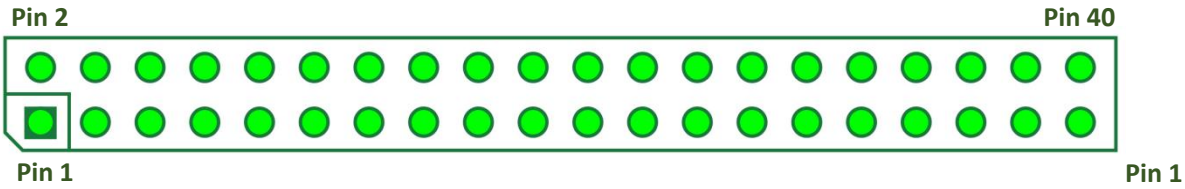
4.Support Formats

Video/Picture Decoding:

VP9 Profile-2 up to 4Kx2K@60fps
H.265 HEVC MP-10@L5.1 up to 4Kx2K@60fps
AVS2-P2 Profile up to 4Kx2K@60fps
H.264 AVC HP@L5.1 up to 4Kx2K@30fps
H.264 MVC up to 1080P@60fps
MPEG-4 ASP@L5 up to 1080P@60fps (ISO-14496)
WMV/VC-1 SP/MP/AP up to 1080P@60fps
AVS-P16(AVS+) /AVS-P2 JiZhun Profile up to 1080P@60fps
MPEG-2 MP/HL up to 1080P@60fps (ISO-13818)
MPEG-1 MP/HL up to 1080P@60fps (ISO-11172)
RealVideo 8/9/10 up to 1080P@60fps
Multiple language and multiple format sub-title video support
MJPEG and JPEG unlimited pixel resolution decoding (ISO/IEC-10918)
Supports JPEG thumbnail, scaling, rotation and transition effects
Supports *.mkv,*.wmv,*.mpg, *.mpeg, *.dat, *.avi, *.mov, *.iso, *.mp4, *.rm and *.jpg file format

4.1 Extension GPIO definition

*Please note that the missing corner in the lower left corner identifies Pin No. 1



Extension GPIO			
PIN	**Default function**	**PIN**	**Default function**
1	VCC_IO_3V3	2	VCC_5V
3	GPIOA_14	4	VCC_5V
5	GPIOA_15	6	GND
7	GPIOH_7	8	GPIOX_6
9	GND	10	GPIOX_7
11	GPIOX_11_SPI_A_SCLK	12	GPIOAO_2
13	GPIOX_8_SPI_A_MOSI	14	GND
15	GPIOX_9_SPI_A_MISO	16	GPIOH_5_UART_CTS
17	VCC_IO_3V3	18	GPIOH_4_UART_RTS
19	GPIOX_12_TX	20	GND
21	GPIOX_13_RX	22	GPIOX_5
23	GPIOX_14_CTS	24	GPIOX_10_SPI_A_SS0
25	GND	26	GPIOH_6_SPI_B_SS0
27	GPIOX_17	28	GPIOX_18
29	GPIOX_15_RTS	30	GND
31	GPIOX_19	32	GPIOAO_5_IR
33	GPIOAO_6_CLK	34	GND
35	GPIOAO_7_FS	36	GPIOAO_4
37	GPIOX_4	38	GPIOAO_8_TDI
39	GND	40	GPIOAO_9_TDO

5.Precautions for use

1. Relative humidity: 10% ~ 90% .
2. Storage temperature: -10 ~ 125℃
3. Operation temperature: 0 ~ 70℃
4. Do not squeeze、distort or disassemble the board.
5. Keep the board away from static electricity .
6. Keep the board away from water and other liquid.
7. Clean the board with soft and clean dry cloth when it’s dirty.
8. Don’t use long connect wires which may affect performance and image quality.