

### FEATURES

- OS: Debian 12
- LCD Size 7" ~ 15.6"
- Resolution 1024 x 768 ~ 1920 x 1200
- eMMC Memory: 16GB
- DDR4: 4GB
- Input Voltage: DC 12V ± 10%
- Power Consumption: 20W Max

### APPLICATIONS

- Medical Equipment
- Industrial Equipment

### DESCRIPTIONS

The XR5 series is an embedded TFT LCD touch screen module which consists of a TFT LCD panel, a single board computer, a touch panel and a user friendly bracket. It has a variety of I/O ports: micro SD slot, USB 3.0, USB 2.0, UART, RS-232C, GPIO, Ethernet, Wi-Fi, Bluetooth and speaker. It provides a time-tested, user-friendly design to help maximize efficiency and minimize errors in

the field.

The single board computer is designed and developed for designed for medical and industrial applications. It uses the Broadcom BCM2712 Cortex-A76 quad-core CPU with 4GB LVDDR4 and 16GB eMMC. The XR5 series supports Debian 12(bookworm) plus Qt 5.15.



### SPECIFICATIONS

	<b>XR5L070HR1</b>	<b>XR5M101HR</b>	<b>XR5L116HR4</b>	<b>XR5L121HR2</b>	<b>XR5E133HR5</b>	<b>XR5E156HR5</b>	<b>XR5E215HR5</b>	<b>CUSTOM</b>
Size	7.0"	10.1"	11.6"	12.1"	13.3"	15.6"	21.5"	
CPU	Broadcom BCM2712 / 2.4GHz							
Core	Cortex-A76 Quad-Core @ 2.4GHz w/ 512KB L2 caches and a 2MB shared L3 cache							
Resolution	1024 x 600	1280 x 800	1366 x 768	1024 x 768	1920 x 1080	1920 x 1080	1920 x 1080	
Brightness	300~500cd/m <sup>2</sup> , optional							
Type of touch	Resistive or capacitive							
Viewing angle	$\theta_L : 85^\circ$ , $\theta_R : 85^\circ$ / $\theta_T : 85^\circ$ , $\theta_B : 85^\circ$ , dependent on LCD							
Contrast ratio	800:1, optional							
eMMC memory	16GB							
RAM memory	4GB LPDDR4							
Video interface	LVDS	MIPI	LVDS	LVDS	eDP	eDP	eDP	
	High Performance 3D Graphic Accelerator							
	VideoCore VII GPU with OpenGL ES and Vulkan support							
Audio interface	I <sup>2</sup> S							
Interfaces	USB 3.0 (HOST), USB 2.0 (HOST), USB 2.0 (OTG), RS-232C, GPIO, HDMI, Ethernet, WiFi (2.4GHz, 5.0GHz), BLE 5.0							
Micro SD	1							
Speaker	2W / Mono with output level selection							
RTC	Rechargeable back up battery							
GUI	Qt 5.15							
OS	Debian 12							

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### SINGLE BOARD COMPUTER

XR5 series has been designed using Raspberry Pi CM5 which is containing Broadcom BCM2712 Cortex-A76 quad-core CPU, memory, eMMC Flash, IO interfaces, communication interfaces and supporting power circuitry.

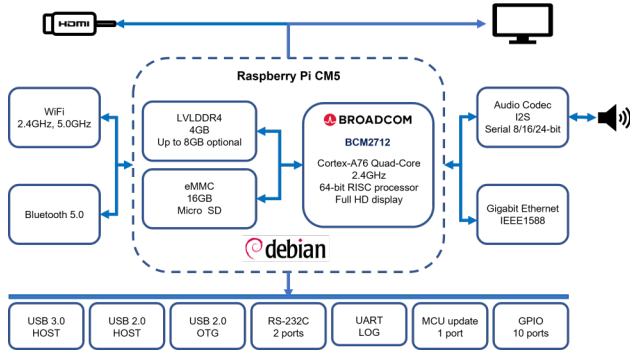


Fig. 1 Block diagram of single board computer

The XR5 features an embedded wireless module based on the Cypress CYW43455, supporting all of the following:

- 2.4GHz, 5.0GHz IEEE 802.11 b/g/n/ac wireless
- Bluetooth 5.0 BLE

These wireless interfaces can be individually enabled or disabled as needed. For example, in a kiosk application, a service engineer can enable wireless operation and disable it upon task completion. The XR5 includes an onboard antenna. When using this antenna, it must be placed inside the product so it is not surrounded by metal (including a ground plane). Alternatively, the module has a standard U.FL connector for using an external antenna.

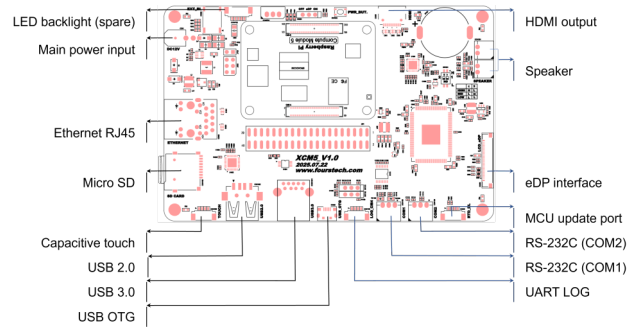


Fig. 2 Single board computer configuration

### GENERAL SPECIFICATIONS

	SPEC	UNIT
Operating voltage	10.8~13.2	VDC
Operating Temp.	-20~+70	°C
Storage Temp.	-30~+80	°C
Relative Humidity	90	%RH max. 24hrs
Power consumption	TBD	W

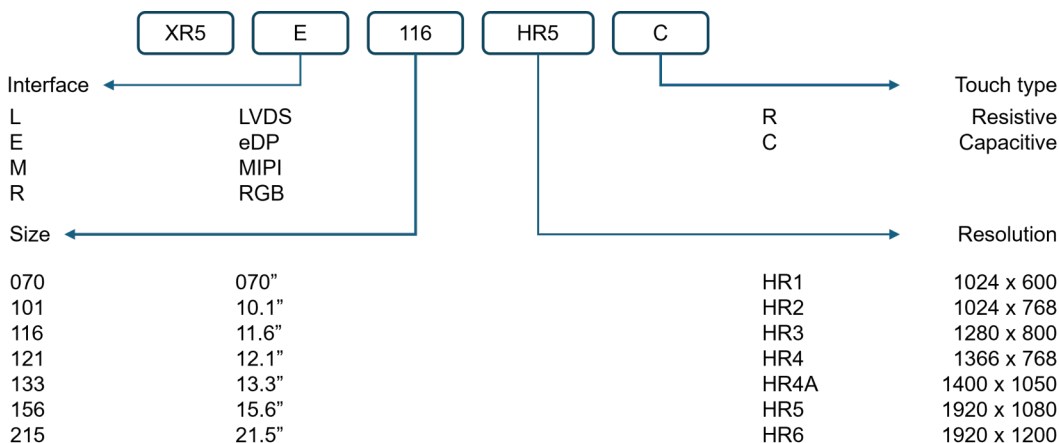
### ABSOLUTE MAXIMUM RATING

	SYMBOL	MIN	MAX	UNIT
Supply voltage	VCC	0	+13.2	VDC
Battery voltage	VBAT	0	+3.6	VDC
ESD rating	ESD	0	+2	KV

Note: Absolute maximum ratings are stress only, and functional operation at the maximum is not guaranteed. Stress beyond the limits specified in this table may affect device reliability or cause permanent damage to the device.

### ORDERING INFORMATION

Explained what the model number means on. Example model XR5E116HR5C



### WARRANTY PERIOD & ORIGIN

XR series has been designed by Fourstech Co., Ltd. and manufactured in Korea. The period of warranty shall start from the date of purchase of the product and shall cover a period one (1) year. If the date of purchase of the product is unknown, the period of warranty shall start from the month of manufacturing of the product.

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