



AGTtechnologies

# **SPECIFICATION**

# **AGM-070R0-A2-C**

Atualizado pelo MKT em 06/04/2016

## Revision History

<b>Date</b>	<b>Rev.</b>	<b>Page</b>	<b>Description</b>
<b>2015-05-23</b>	<b>1.0</b>	<b>All</b>	<b>First issue</b>

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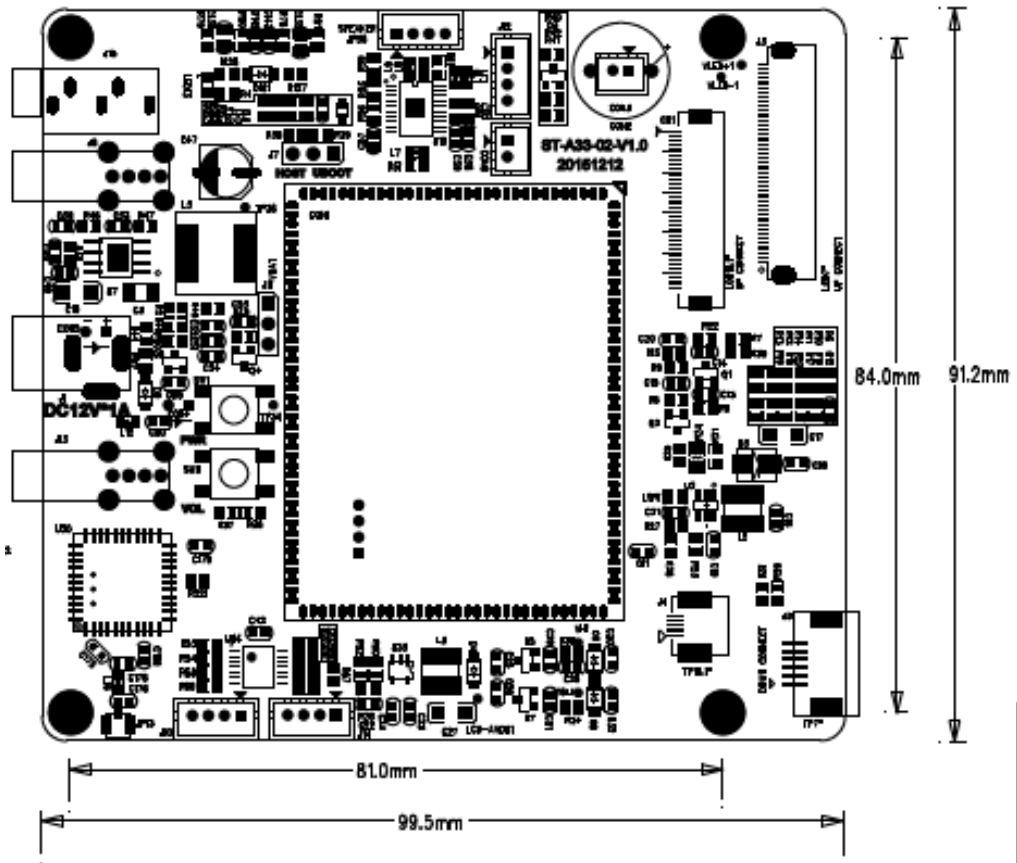
## 1. General Features

AGM-070R0-A2-C is a HMI board working on Android operating system, designed for customer's convenience running their products under "Android" control unit. It supports RS232/RS485 interface with customer's MCU, by sending commands via RS232/RS485 interface from customized APP, customer would easily finish development for their application with control unit based on Android system.

AGM-070R0-A2-C series works based on Android 4.4 operating system, uses Allwinner A33 SOC with 1.4GHZ frequency, integrated 4GB memory, supporting video playing, image viewing, VGA/Audio/LVDS/RGB signal output, RS232/RS485/ Ethernet /Wifi/3G/Bluetooth/USB interface etc.

General Features	
CPU	Allwinner A33, 1.4G frequency
Operation System	Android 4.4
Memory	DDR 512M
Internal Memory	FLASH 4GB
RS232/RS485 interface	RS232/RS485 interface
TFT LCD supported	3.5"~55" TFT LCD with RGB/LVDS interface
CTP supported	CTP with I2C interface
Internet connection supports	Ethernet/WCDMA 3G/Wifi/Bluetooth
Camera supported	Maximum 500M Pixels
Speaker Supported	Left/Right Channel
Microphone	Microphone supported
USB 2.0 interface	One OTG, two USB host, one USB inserter
VGA output	VGA signal Output
Audio Output	CVBS format output with left/right tracks
Display Resolution Supports	Max 2160P
Video Format supports	wmv、avi、flv、rm、rmvb、mpeg、ts、mp4 etc
Audio Format Supports	Mp3 etc
Image format Supports	BMP、JPEG、PNG、GIF etc
TF card	TF card integrated
Beeper	Beeper integrated
Real Time Clock supports	Supports Real Time Clock
System Updates	Support System updates via USB interface





AGM-070R0-A2-C outline

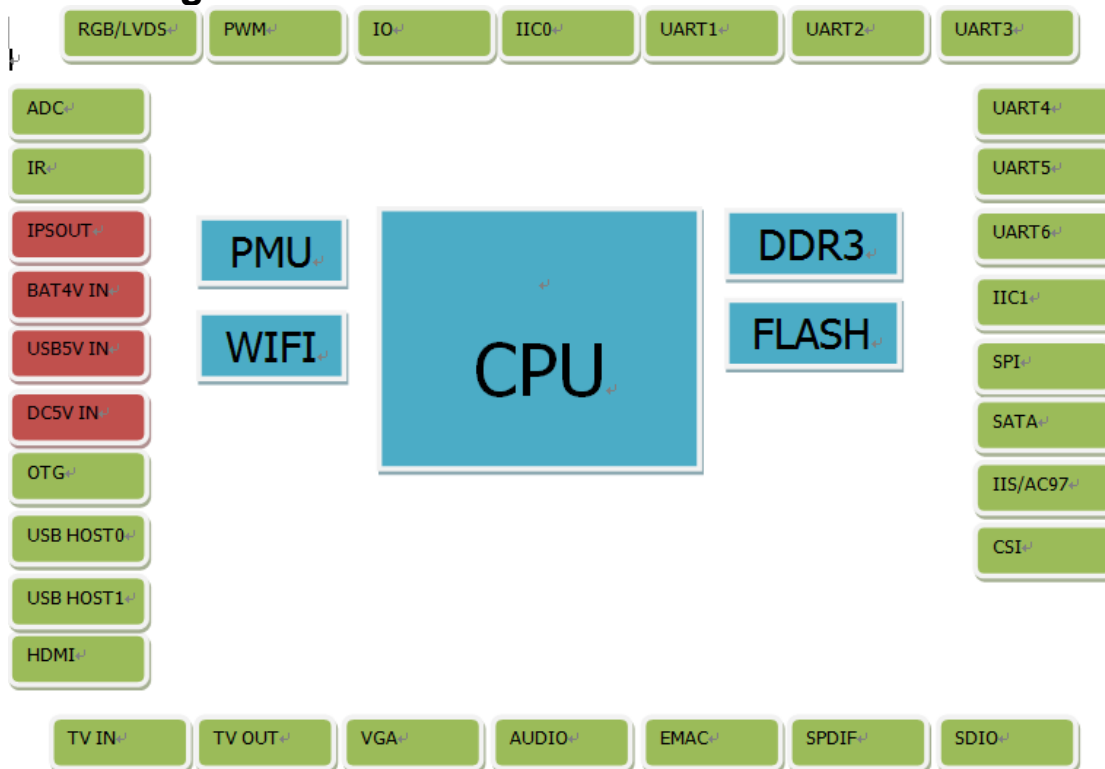


AGM-070R0-A2-C core board Front Side

### 3. Electrical specifications

Items		Min	Typical	Max
Power Supply	DC12V input	--	12V	
Power Consumption	Operating current	--	500mA	800mA
Environment	Operating Temp	-10°C	--	60°C
	Storage Temp	-20°C	--	70°C

### 4. Block Diagram



## 5. Pin interface description in different function block

### RS232/TTL UART

Pin 1	VCC 3V
Pin 2	TX
Pin 3	RX
Pin 4	GND

### RS485/TTL UART

Alternative, need customization



## Other peripheral blocks customized:

Operation System:	Android 4.4			
SOC:	All Winner A33,1.4G frequency			
Memory	DDR 512MB			
Internal Memory	FLASH 4GB			
Integrated Blocks	USB 2.0x2,TF card slotx1,beeper			
interface:	<input type="checkbox"/> RS232	<input type="checkbox"/> RS485		
PCBA General Outline:				
TFT LCD Size:	<input type="checkbox"/> no need	<input type="checkbox"/> need	Size:	Pixels:
CTP:	<input type="checkbox"/> no need	<input type="checkbox"/> need, Size:		
Ethernet:	<input type="checkbox"/> no need	<input type="checkbox"/> need		
Wifi:	<input type="checkbox"/> no need	<input type="checkbox"/> need		
Bluetooth:	<input type="checkbox"/> no need	<input type="checkbox"/> need		
WCDMA 3G Module:	<input type="checkbox"/> no need	<input type="checkbox"/> need		
Camera:	<input type="checkbox"/> no need	<input type="checkbox"/> need, resolution:		
Speaker:	<input type="checkbox"/> no need	<input type="checkbox"/> need		
Microphone:	<input type="checkbox"/> no need	<input type="checkbox"/> need		
VGA Output:	<input type="checkbox"/> no need	<input type="checkbox"/> need		
Key Pad:	<input type="checkbox"/> no need	<input type="checkbox"/> need		
Other Blocks requires:				
Remark:				

## 6. Reliability Standard

No.	Test Item		Test Conditions	Remark
1	High Temperature	Storage	70°C, 48Hr	
		Operation	60°C, 48Hr	
2	Low Temperature	Storage	-20°C, 48Hr	
		Operation	-10°C, 48Hr	
3	High Temperature and High Humidity		40°C, 90%RH, 48Hr	
4	ESD Test		Air +/-8KV 5 times; Contact:+/-4 KV 5 times;	
5	Vibration Test(Storage)		50HZ, 30min, Amplitude: 2 cm, X/Y/Z directions	

## 7. Technical Service Supports

All peripheral blocks adjusted well by AGT

Customer needs to download Android system SDK from Google website, then develop software commands based on RS232/RS485 protocol

Suggest customer develop APP themselves

Experienced technical teams to share "Android" products development experience, details pls contact: [projetos@agte.com.br](mailto:projetos@agte.com.br)