

# GEA-8316 ARM Embedded Computer

## Features

- Support Android. Linux operating system
- Support 3G/4G, WIFI,blue-tooth wireless transmission
- Support VGA,HDMI,LVDS display output
- 3\*RS232, 1\*RS485/RS232 optional,4\*USB,2\*LAN
- Built-in RTC and Watchdog
- Support 12VDC power input



## Specification

Function		Specification
Processor	CPU	be compatible with IMX6 whole series of CPU:Signal-core,Dual-Core,Quad-Core
RAM	Technical Architecture	2GB DD3,1066MHz
Network	Wired Network	CPU internal integration one gigabit network PCIE external expansion RTL8111E gigabit network
	WIFI+blue tooth module	USB RTL7632 2.4G WIFI module,support blue tooth 4.0
	3G/4G	Support UNICOM/CMCC/Telecom module
Hardware	Watch dog timer	0-255 seconds,offer Watch dog routine
Storage	EMMC	EMMC 4/8/16G optional
	EPROM	Read hardware information, especially device ID
	SD	1 standard SD base
	SATA	7 pin SATA+POWER(only quad-core CPU support )
Port	COM0	DEBUG
	COM1	3 wire system RS232/RS422/RS485 optional, CPU internal lead out
	COM2-4(TTY02-04)	3 wire system RS232 optional, CPU internal lead out
USB	USB2.0	4 Channel
	OTG	1 Channel, support Android standard, share function through microUSB network
Display	VGA	TTL LCD transfer VGA output
	LVDS LCD	24 Bite Dual Channel
	HDMI	HDMI 1.4A standard,can transmit audio,support 1080P display
	Touch Screen	USB port,support various touch screen,offer drive
Expansion interface	CON1	1 channel I2C port/1 channel SPI port
		1 channel PWM output
		1 channel CAN port, only pull-out signal
		12 channel GPIO and power, GND
Audio	Connector	MIC/earphone
	Power amplifier	2w8Ω power amplifier output
Function button	GPIO	HOTKEY: volume+ HOTKEY: volume- HOTKEY: power on HOTKEY: maintenance switch(GPIO base)
RTC clock	power supply by CR2302 rechargeable battery, a) Configurable system RTC, accuracy requirement: error value less than ±3s/month	
Temperature Sensor	unlimited specifications, offer API/EnumValue: SENSOR-TYPE-TEMPERATURE	
LED	LED definition and quantity: three (power, wifi, 3G)	
Power	Power type	DC 12V input,support Power reverse and over voltage protection
		power dial code hard switch, press to start at once,long press more than 5s to shutdown
		use 4 PIN aviation plug and keep LAYOUT 4PIN WAFER
Operating Environment	Operating Temperature	-20℃-70℃
	Storage Temperature	-40℃-80℃
	Operating Humidity	0%-90% relative humidity, no condensation
	Storage Humidity	0%-90% relative humidity, no condensation
Appearance	Dimension	146mmX112mm, 6 layer