

## 3.5" SBC Series

# VIA VAB-630

Cost effective single board computer with flexible I/O and rich connectivity

## Features

- Compact 3.5" SBC Form Factor
- Hardware acceleration for smooth 1080p video playback
- Android solution pack available
- Optional 12V(default) or 5V power input
- Support for 3G, Wi-Fi, & BT wireless connectivity



## Board Placement

Ethernet

COM

USB Connector

SIM Card Slot

miniPCIe Slot

Line-out

Mic-in

Micro SD Card Slot

Micro USB 2.0

USB 2.0

HDMI

DC-in

Battery Charger

VIA Dual-core SoC

DDR3

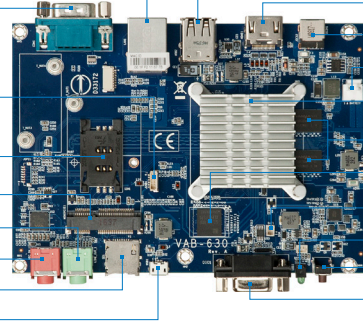
eMMC

RTC Battery Connector

Power LED

Power Button

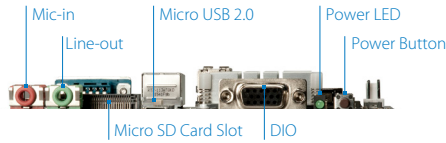
DIO



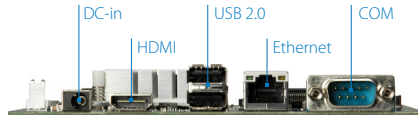
## Specifications

<b>Model Name</b>	<b>VAB-630</b>
<b>Processor</b>	1.0GHz VIA Cortex-A9 dual-core SoC
<b>System Memory</b>	1GB DDR3 SDRAM onboard
<b>Storage</b>	4GB eMMC flash memory
<b>Boot Loader</b>	512KB SPI Flash ROM
<b>Graphics</b>	Mali-400 SP GPU 2 integrated, independent 3D/2D graphics processing units Graphics engine supporting OpenGL® ES 2.0 hardware acceleration Supports MPEG-2 and H.264 video decoding up to 1080p
<b>LAN</b>	ASIC AX88772CLF
<b>Audio</b>	VIA VT1603A I2S Audio Codec
<b>HDMI</b>	Integrated HDMI 1.4 Transmitter
<b>USB</b>	ASIC USB2514B-AEZC USB 2.0 hi speed 4-port hub controller
<b>Expansion I/O</b>	1 miniPCIe slot
<b>Onboard I/O</b>	1 Single-channel LVDS connector 1 miscellaneous pin header for I <sup>2</sup> C touch screen interface 1 USB connector 1 UART (console port connector) 1 RTC battery connector 1 Battery charger connector 1 Reset connector 1 SIM card slot (supports 3G module without built-in SIM card slot) 1 miniPCIe slot
<b>Front Panel I/O</b>	1 Micro USB 2.0 OTG port 1 DIO port supporting 10 GPIO with 3.3V power 1 Micro SD card slot 2 Audio jacks : Line-out and Mic-in 1 Power LED 1 Power Button
<b>Back Panel I/O</b>	1 HDMI port 2 USB 2.0 ports 1 COM port for RS-232 (TX/RX) 1 10/100Mbps Ethernet port 1 DC-in jack
<b>Power Supply</b>	12V DC-in (5V DC-in optional)
<b>Operating System</b>	Android 5.0, Linux Kernel 3.4.5
<b>VIA Smart ETK</b>	Watchdog timer, GPIO, UART
<b>Operating Temperature</b>	0°C ~ 60°C
<b>Operating Humidity</b>	0 ~ 90% @ 40°C (non-condensing)
<b>Form Factor</b>	14.6cm x 10.2cm (5.75" x 4.02")
<b>Compliance</b>	CE, FCC

## Front Panel I/O



## Back Panel I/O



## Accessories



**EMIO-5531 USB Wi-Fi + BT Module**  
802.11b/g/n standards  
Bluetooth 2.1 + EDR specification



**EMIO-2550 3G HSPA/UMTS Mobile Broadband Module**



**EMIO-2531 miniPCIe Wi-Fi + BT Module**  
802.11b/g/n standards  
Bluetooth 2.1 + EDR specification

## Ordering Information

Part Number	SoC Frequency	Description
10GHL126000A0	VIA Cortex-A9 dual-core SoC @ 1.0GHz	3.5" SBC with 1.0GHz VIA Cortex-A9 dual-core SoC, 4GB eMMC, 1GB DDR3 SDRAM, HDMI, 2 USB 2.0, 1 Micro USB 2.0 OTG, COM, DIO, 10/100Mbps Ethernet, miniPCIe slot, Micro SD card slot, 12V DC-in

## Optional Accessories

### Power Accessories

Part Number	Description
99G63-02033A	12V 36W power adapter (power plug not included)

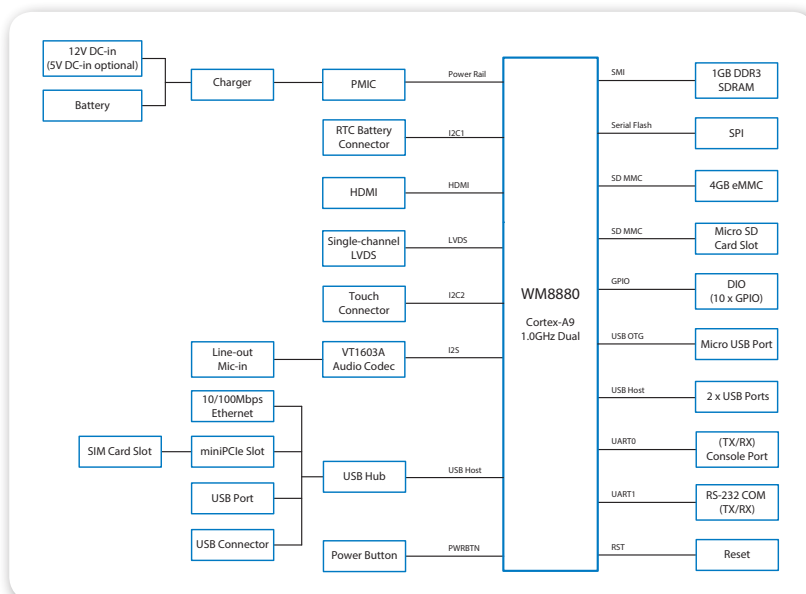
### Touch Panel

Part Number	Description
STK-10630-00A0	10.1" LVDS LCD Touch panel with LVDS and touch cables

### Wireless Accessories

Part Number	Description
EMIO-5531-00A1	VAB-820-W IEEE 802.11 b/g/n USB Wi-Fi + Bluetooth module with assembly kit and antenna
EMIO-2531-00A1	VAB-820-W-M IEEE 802.11 b/g/n miniPCIe Wi-Fi & Bluetooth module with assembly kit and antenna
EMIO-2550-01A1	3.75G HSPA/UMTS mobile broadband full size miniPCIe module with assembly kit and antenna

## Dimensions



## Packing List

### Items

VAB-630 Board  
RTC battery

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Single Board Computers](#) category:*

*Click to view products by [VIA manufacturer](#):*

Other Similar products are found below :

[MANO882VPGGA-H81](#) [SSD3200W-S-SLC-INN 20-101-0738](#) [MVME61006E-2173R](#) [SHB230DGGA-RC](#) [IMB210VGGA](#) [IB915F-3955](#)  
[MI958F-16C](#) [S2600WFT](#) [S2600STB](#) [BBS2600BPS](#) [BLKNUC7I3DNHNC1978015](#) [DEV-17745](#) [BEAGLEBOARD POCKET](#) [BPI-M5](#)  
[GENE-APL5-A12-F002](#) [MICROSOM I2 + WIFI/BT](#) [HUMMINGBOARD-I2EX BASE + WIFI/BT](#) [HUMMINGBOARD-I4 PRO + WIFI/BT](#)  
[VAB-600-B](#) [RT5350F-OLINUXINO-EVB](#) [MITX-440-DVI-2E](#) [ATCA-7365-D-24GB](#) [NITX-315-DEVKIT](#) [A13-SOM-512](#) [NITX-315](#)  
[BANANA PI BPI-M1+](#) [A13-SOM-WIFI-4GB](#) [AM3359-SOM-EVB-IND](#) [UPS-APLC2-A10-0432](#) [DFR0419](#) [UPS-APLP4-A10-0864](#) [UPS-](#)  
[APLP4-A10-0432](#) [UPS-APLP4-A10-08128](#) [MI977F-Q27](#) [BBBLUE](#) [IB811F-I30](#) [DFR0470-ENT](#) [Nit6Q\\_i](#) [M2M \(TELIT\)](#) [RELAY](#)  
[PROFESSIONAL](#) [GCS22.2.080.2.2.I](#) [GCS22.8.100.4.2.I](#) [GLS11.2.053.2.2.E](#) [A20-OLINUXINO-LIME-E16GS16M](#) [A20-OLINUXINO-](#)  
[LIME-S16M](#) [A20-OLINUXINO-LIME2-E16GS16M](#) [A20-OLINUXINO-MICRO-E16GS16M](#) [A20-OLINUXINO-MICRO-S16M](#)