ALPHA 1212
12.1" Cortex A8 LCD Computer Module
PRODUCT INFORMATION

ALPHA 1212 - For the Engineers

12.1" TFT Touch LCD
1280 x 800 resolution

Thin Aluminium
Front Panel

Overlay allows easy
customisation

Audio in & Out   7 to 36 Volts DC   Dual USB 2.0 Host Ports   RS232 Port

HDMI   USB Device Port   10/100 LAN
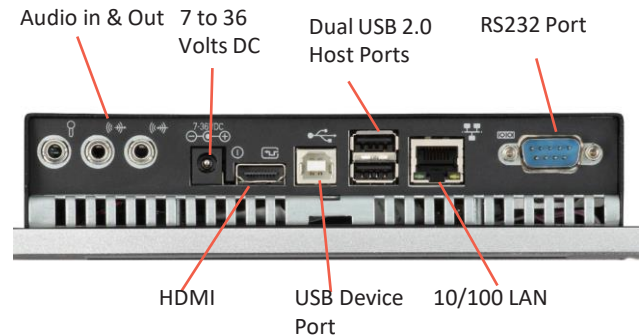
ALPHA 1212 - The Headlines

▶ 12.1" TFT touch screen LCD with 1280 x 800 Resolution

▶ Projected Capacive or Resisitive Touch Screens

▶ Attractive but rugged machined aluminium front panel

▶ Front panel overlay allows low cost branding options

▶ Fanless cooling so high reliability and silent operation

▶ Wide input power range from 7 to 36 volts DC simplifies installation and reduces cost

▶ Available with Linux, Android and Microsoft Windows Operating Systems

▶ Mounting options include Panel & VESA

▶ Designed, Manufactured and Technically supported in the UK

▶ 1GHz Cortex A8 ARM RISC Processor

▶ 256MB memory, 512MB onboard Flash, MicroSD

▶ Supports LCD or DVI/HDMI high definition displays

▶ 10/100 Mbit LAN

▶ Dual external USB 2.0 & 1.1 Host Ports, dual internal USB 2.0 & 1.1 Host Ports, single external USB Device Port

▶ Dual RS232 Serial Ports one of which can be a RS422/RS485 Serial Port if required

▶ Wifi & Bluetooth

▶ Optional three composite video capture inputs

▶ 12 General purpose IO signals, Audio Line In and Out

▶ Real Time Clock with separate battery

ALPHA 1212 - In a few words

Designed and manufactured at Blue Chip Technology's facility in the heart of the UK the Alpha 1212 is a reliable compact solution to a wide range of touch screen applications. The high performance but low power Alpha 1212 delivers an impressive array of technology in a very compact unit. The machined aluminium front panel not only conveys quality but also is extremely rugged which allows a wide range of mounting options.

The Alpha 1212 can be supplied with either Linux, Android or Microsoft Windows operating systems and is the ideal platform to swiftly develop your new touch screen application.

If your installation requires a low cost, compact, touch screen platform with great support and reliability - the Alpha 1212 is the answer.

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12.1" Cortex A8 LCD Computer Module
PRODUCT INFORMATION

Processors & Memory

- **Processors**

Device	Cortex A8 ARM RISC
CPU Cores	1
Speed	1GHz
Data Width	32 bit

- **Memory**

Technology	LPDDR
Channel Width	32bits
Capacities	256MB

Display

▶ Resolution	1280 x 800 pixels
▶ Technology	a-Si TFT
▶ Touch Screen	Resistive or Capacive
▶ Active Area (W x H)	261.12 x 163.2mm
▶ Pixel Size (W x H)	0.204 x 0.204mm
▶ Colour Depth	24 bit
▶ Interface	24 bit LVDS
▶ Viewing Angle	88, 88, 88, 88 degrees
▶ Surface Hardness	Resisitive 3H
	Capacive 7H
▶ Contrast Ratio	1000 typical
▶ Brightness	340 cd/m^2 typical
▶ LED Backlight Life	50,000 hours minimum

Communications

- ▶ 10/100 Mbit LAN
- ▶ Two USB 2.0/1.1 external Host Ports, Two USB 2.0/1.1 internal Host Ports. Single USB external Device Host Port
- ▶ Two RS232 ports, one RS422/485 port
- ▶ Wi-Fi 802.11 b/g and Bluetooth
- ▶ Optional CM-1 provides GPS, GSM, 2G Modem and accelerometer. 3G modem version in development.

Storage

- ▶ Onboard 512MB NAND Flash
- ▶ MicroSD Socket - HC compatible (up to 32GB)

Expansion and General Interfacing

- ▶ 12 General Purpose IO signals - internal
- ▶ Optional video capture (Windows CE only)
  Three composite video inputs or single component video
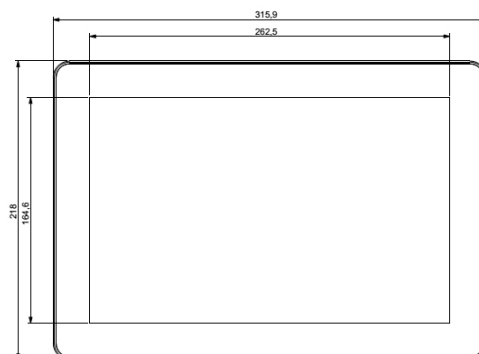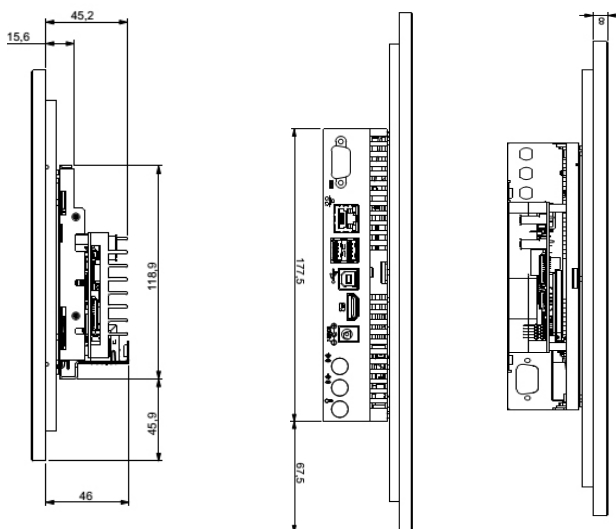
Operating System Support

- ▶ Microsoft Windows CE 6.0 R3 & EC7
- ▶ Linux Ubuntu 12.04 LTS
- ▶ Android

Environmental/Mechanical

▶ Operating Temp	0ºC to 50ºC		
Humidity	10% to 85% non-condensing		
▶ EMC	Emissions	EN55022 (A)	
	Immunity	EN55024	
	Safety	EN60950	
▶ Protection	IP54 Front Panel		

Power

- ▶ Input Voltage   7 to 36 Volts DC
- ▶ Power Consumption Up to 7 Watts

* Please contact your supplier for the latest details

Version 0.2