

# ALPHA 431

4.3" LCD Computer Module  
PRODUCT INFORMATION



## ALPHA 431 - For the Engineers



## ALPHA 431 - The Headlines

- ▶ 4.3" TFT touch screen LCD with 480 x 272 Resolution
- ▶ Extremely low power consumption
- ▶ Attractive but rugged machined aluminium front panel
- ▶ Front panel overlay allows customisation at low cost
- ▶ Fanless cooling so high reliability and quiet operation
- ▶ Wide input power range from 7 to 36 volts DC simplifies installation and reduces cost
- ▶ Available with Microsoft Windows CE 6.0 R3 or Linux Operating Systems
- ▶ Customisable splash screen allows easy branding (CE)
- ▶ Powerful onboard configuration tools (CE)
- ▶ Mounting options include Dry Wall, Panel & VESA
- ▶ 333MHz or 500MHz RISC Processor
- ▶ 64MB SDRAM memory, 32MB Flash, MicroSD Socket
- ▶ 10/100 Mbit LAN
- ▶ Dual external USB 1.1 Host Ports, Dual internal USB 1.1 Host Ports, single external USB Device Port
- ▶ Single external RS232 Serial Port, single internal RS232 Serial Port, optional RS422/485 Serial Port
- ▶ Audio Line In and Out
- ▶ 12 General purpose IO signals
- ▶ Real Time Clock with separate battery
- ▶ Designed, Manufactured and Technically supported in the UK

## ALPHA 431 - In a few words

Designed and manufactured at Blue Chip Technology's facility in the heart of the UK the Alpha 431 is a reliable compact solution to a wide range of touch screen applications. Consuming less than 3 watts the Alpha 431 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 431 can be supplied with either Microsoft Windows CE or Linux 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 431 is the answer.



BS EN ISO 9001  
Certificate No 33069

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### Processors & Memory

#### Processors

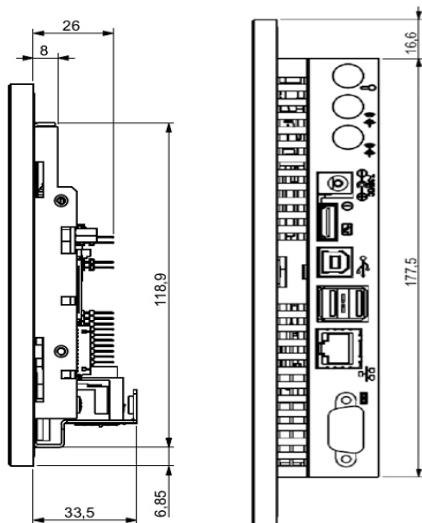
Device	MIPS RISC
CPU Cores	1
Socket	NA
Data Width	32 bit

#### Memory

Technology	SDRAM
Speed	
Channel Width	32bits
Capacities	64MB

### Display

- ▶ Resolutions 480 x 272 pixels
- ▶ Technology a-Si TFT
- ▶ Touch Screen 4 wire Resistive
- ▶ Active Area (W x H) 95 x 54 mm
- ▶ Pixel Size (W x H) 0.198 x 0.198 mm
- ▶ Colour Depth 18 bit
- ▶ Interface 18 bit RGB
- ▶ Viewing Direction 6 o'clock
- ▶ Surface Hardness 3H
- ▶ Input Mode Stylus or Finger
- ▶ Operating Force 80g
- ▶ Contrast Ratio 250 typical
- ▶ Brightness 400 cd/m<sup>2</sup>



### Communications

- ▶ 10/100 Mbit LAN
- ▶ Two USB 1.1 external Host Ports, Two USB 1.1 internal Host Ports
- ▶ Single USB external Device Host Port
- ▶ Two RS232 ports, one RS422/485 port
- ▶ Single IrDA receiver on Internal header

### Storage

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

### Expansion and General Interfacing

- ▶ 12 General Purpose IO signals - internal
- ▶ 8 bit PC104 style expansion bus - internal

### Operating System Support \*

- ▶ Microsoft Windows CE 6.0 R3
- ▶ Linux

### Environmental/Mechanical

- ▶ Operating Temperatures  
Standard 0°C to 50°C
- ▶ Humidity 10% to 85% non-condensing
- ▶ EMC Emissions EN55022 (A)
- ▶ Immunity EN55024
- ▶ Safety EN60950

### Power

- ▶ Input Voltage 7 to 36 Volts DC
- ▶ Power Consumption Less than 3 Watts

