Blue Chip Technology

BETA Lite

Low-cost configuration of the modular BETA platform featuring a 4.3" LCD with resistive touch screen and soft touch bezel.

PROCESSOR

Cortex A9

OPERATING SYSTEM

Windows | Linux | Android

I/O

RS232 | RS485 | USB | Ethernet | Wifi | Bluetooth

› **Low-Cost Configuration**

Featuring only the core BETA features and our smallest LCD option.

› **Small Size, Big Features**

Features an ARM Cortex-A9 CPU, USB 2.0, RS232, Ethernet and more.

› **Pre-Integrated for Simplicity**

Single board computer, LCD and touch screen delivered as one pre-integrated unit.

› **Easily Connect Your Own Product**

Add your own electronics via the 50-pin general purpose connector.

SUMMARY

The BETA Lite is a pre-integrated embedded touch screen module configuration designed for low-cost applications that still require the functionality expected of a feature-packed single board computer. Its compact size make it ideal for modernising the interface of basic systems or where a product is limited by the available space.

- 4.3" LCD screen
- Projected Capacitive or Resistive touch overlay
- Vertical connections for panel mounting
- 1GHz NXP iMX6 ARM Cortex-A9 CPU
- 1GB DDR3L (low power) memory
- MicroSD socket or 8GB eMMC flash storage

- Dual RS232 and single RS232/422/485 serial ports
- Ethernet 10/100 MBit, GPIO, SPI and I²C
- USB 2.0 Host & Device
- USB camera interface
- Optional WiFi 802.11 a/b/g/n (2.4GHz and 5GHz)
- Optional Bluetooth 4.1, BLE 4.0

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TECHNICAL SPECIFICATIONS

Core System

Processor	NXP iMX6 SoloLite ARM Cortex-A9 Single Core, 1GHz
Memory	1GB DDR3L (low power)
Storage	MicroSD socket or 8GB eMMC flash
Graphics	OpenVG 1.1 PXP (PiXel Processing pipeline)
Audio	Stereo Inputs and Outputs Class D mono 0.5 watt amplifier
Watchdog	Yes
Real Time Clock	Yes

Display & Touch

Touch Interface Type	Projected Capacitive or Resistive
LCD Size	4.3"
LCD Resolution	480x272
LCD Brightness	440 cd/m² typical
LCD Contrast	500 typical
LCD Viewing Angles	50, 70, 70, 70 typical

Operating System

OS Support	Android 4.4.3
	Linux Ubuntu 14.04 LTS
	Windows EC 2013

I/O

Ethernet	10/100 MBit
Wireless	Optional WiFi 802.11 a/b/g/n (2.4GHz and 5GHz) with Station and Access Point operation Optional Bluetooth 4.1, BLE 4.0
Serial	x1 I²C x2 RS232 (Rx/Tx) x1 RS232/422/485 x1 SPI USB 2.0 Host (HS, FS, LS) USB 2.0 Device (HS, FS)
GPIO	12 signals (1.8v or 3.3v, software-controlled)
Camera Interface	USB
Expansion/Other	50-way expansion interface Various adapters available (see right of page)

Power

Input Connector	Screw Terminal or Jack
Input Voltage	5 Volts DC
Power Consumption	Input: 5 Volts DC @ 0.51 amps max (2.5 watts) Suspend to RAM: 5 Volts DC @ >0.01 amps (50 milliwatts) At desktop: 5 Volts DC @ 0.19 amps (~1 watt)

Physical

Operating Temperature	Standard (0°c to 50°c) or Extended (-20°c to 50°c)
Storage Temperature	-30°c to 80°c
Humidity	5 to 85% non-condensing
Overall Dimensions	128mm (W) x 87mm (H) x 32mm (D)
Mounting Options	Panel mount stud fix

Physical

Approvals	CE, UKCA
	Thermal

EXPANSION ADAPTERS, EXPLAINED

The BETA platform features a unique 50-way expansion interface that enables you to integrate the system into your existing electronics with minimal additional development. This expansion connector can make use of adapters to provide alternative connectivity options, such as Screw Terminal, Pico Blade and CAN bus.

ALTERNATIVE CONFIGURATIONS

We also offer a variety of other configurations of the BETA platform to suit different requirements and applications:

› BETA Standard

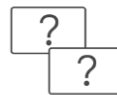General-purpose configuration featuring a 7.1" LCD and Projected Capacitive touch screen.

› BETA Mobile

Packed with communications features including 3G, GPS, WiFi and Bluetooth, plus a rear panel and battery enabling mobile handheld use.

› BETA Panel PC

Configuration designed for industrial automation applications, featuring a 9.7" LCD and Windows 10 operating system.

› Create Your Own BETA Configuration

The BETA platform is modular, giving you the flexibility to create your own configuration of screen size, touch interface, processing power, I/O and much more.

For more information, visit **bluechiptechnology.com**