

BETA (B04CV-0A1A-JE000)

Low-cost configuration of the modular BETA platform featuring a 4.3" LCD with projected capacitive touch screen

PROCESSOR



OPERATING SYSTEM



FEATURES



› 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 interface.

SUMMARY

BETA is a configurable platform for creating embedded touch screen modules. This configuration is designed for low-cost applications that still require the functionality expected of a feature-packed single board computer. Its compact size makes 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 touch interface
- Vertical ports, ideal for panel mounting
- 1GHz NXP iMX6 ARM Cortex-A9 CPU
- 1GB DDR3L (low power) memory
- 8GB MicroSD 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

BETA (B04CV-0A1A-JE000)

TECHNICAL SPECIFICATIONS

Core System

Processor	NXP iMX6 SoloLite ARM Cortex-A9 Single Core, 1GHz
Memory	1GB DDR3L (low power)
Storage	MicroSD socket with 8GB MicroSD card
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
LCD Size	4.3"
LCD Resolution	480x272
LCD Brightness	440 cd/m ² 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
Serial	x1 I ² C 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	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	-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
Approvals	CE EMC 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 interface 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 x86 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.

