

# Beta H Series

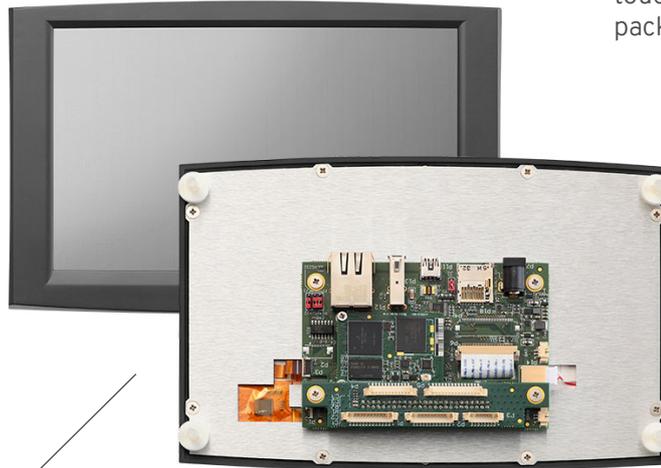
Off-the-shelf integrated touchscreen system with horizontal connections for a low profile, ideal for panel mounting.

## Flexible Configuration

Choose from a variety of screen sizes, bezel options, operating systems and more.

## Pre-Integrated System

Single board computer and touchscreen LCD in one flexible package.



## Mounting Options

Can be VESA mounted or fit to a variety of surfaces using the mounting holes provided.

## Expansion Connector

Add your own electronics via the 50-pin general purpose connector or select one of our connector PCBs.



## SUMMARY

The Beta H Series of integrated touchscreen systems is a modular platform designed to modernise your product and simplify development.

The integrated single board computer with upgradeable processor module provides an easy upgrade path for your next product. Further configurable features include screen size, bezel colour, type of touch overlay, operating system and more.

- Choice of 4.3", 7.1" and 9.7" touchscreen LCD
- Projected Capacitive or Resistive Touch overlay
- Horizontal connections allows for a low profile
- 1GHz NXP iMX6 ARM Cortex A9 CPU
- 256MB, 512MB and 1GB memory options
- 8GB eMMC Flash or MicroSD storage options
- Camera Interface option
- WiFi 802.11a/b/g/n, Station & Access Point supported
- Bluetooth 4.1, BLE 4.0
- Dual RS232 and single RS232/422/485 serial ports
- Android, Linux, Windows EC 2013 supported
- Custom designs available

# Beta H Series

## TECHNICAL SPECIFICATIONS

### Core System

Processor	NXP iMX6 SoloLite ARM Cortex™ A9 Single Core, 1GHz
Memory Storage	256MB, 512MB and 1GB options 8GB eMMC Flash or MicroSD Socket
Touch	Resistive and Projected Capacitive options
4.3" LCD Screen	Resolution: 480x272 Brightness: 350 cd/m <sup>2</sup> Contrast: 500 typical Viewing Angle: 70, 50, 70, 70 typical
7.1" LCD Screen	Resolution: 800x400 Brightness: 380 cd/m <sup>2</sup> Contrast: 400 typical Viewing Angle: 60, 70, 70, 70 typical
9.7" LCD Screen	Resolution: 1024x768 Brightness: 800 typical Contrast: 360 cd/m <sup>2</sup> Viewing Angle: 80, 80, 80, 80 typical
Audio	Stereo Inputs and Outputs Class D mono 0.5 watt amplifier
Camera Interface	BT656 and USB
Operating System Support	Android 4.4 Linux Ubuntu 14.04 LTS Windows EC 2013

### I/O

Ethernet	10/100 MBit
Wireless	Wi-Fi 802.11 a/b/g/n 2.4GHz and 5GHz Station and Access Point operation Bluetooth 4.1, BLE 4.0
Serial	x1 I <sup>2</sup> 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 [TM1 only])

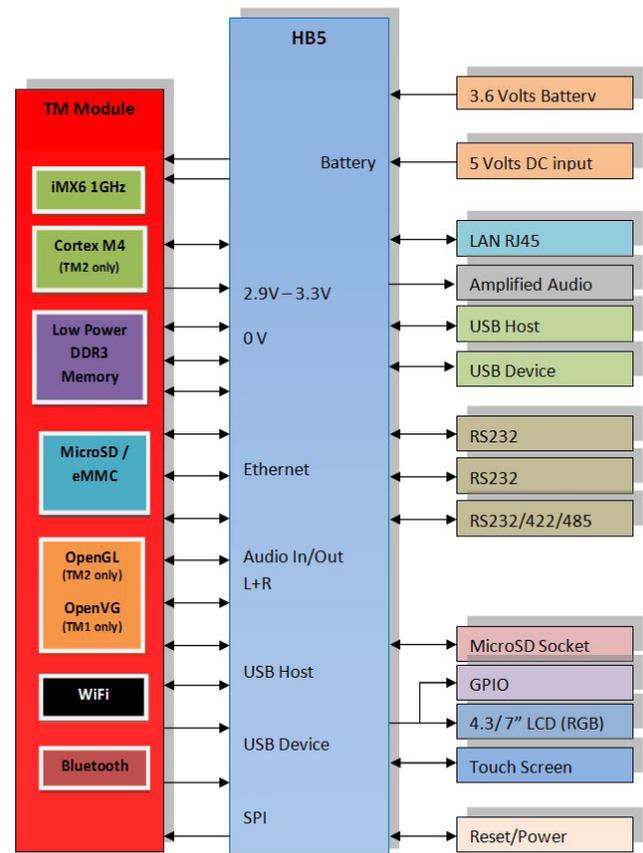
### Power

Input	Jack or Screw Terminal
4.3" 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)
7.1" Power Consumption	Input: 5 Volts DC @ 0.84 amps max (4.2 watts) Suspend to RAM: 5 Volts DC @ 0.01 amps (~50 milliWatts) At Desktop: 5 Volts DC @ 0.39 amps (~2 watts)
9.7" Power Consumption	Input: 5 Volts DC @ 0.84 amps max (4.2 watts) Suspend to RAM: 5 Volts DC @ 0.01 amps (~50 milliWatts) At Desktop: 5 Volts DC @ 0.39 amps (~2 watts)

### Physical

Operating Temperatures	Standard 0°C to 50°C Extended -20°C to 60°C
4.3" Dimensions	128mm (W) x 87mm (H) x 30mm (D)
7.1" Dimensions	192.5mm (W) x 125mm (H) x 32mm (D)
9.7" Dimensions	241mm (W) x 185mm (H) x 33mm (D)
Approvals & Certifications	CE EMC Thermal

## BLOCK DIAGRAM



For more information, visit our website:

[www.bluechiptechnology.com](http://www.bluechiptechnology.com)