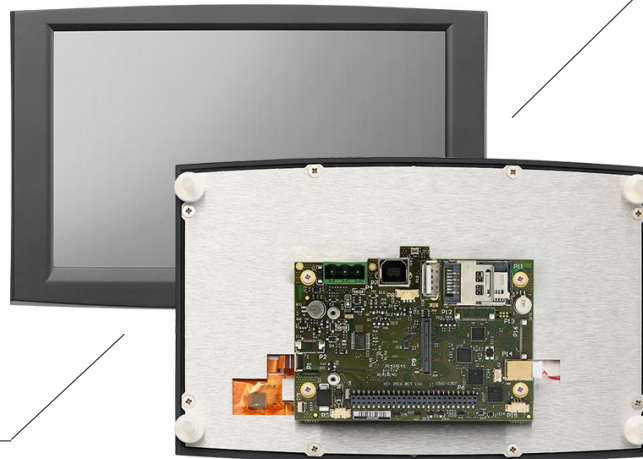**Blue Chip Technology**

Beta C Series

Integrated touchscreen system packed with mobile communications features including 3G, GPS, WiFi, and Bluetooth.

Smart Antenna

Minimises interference between 3G, GPS, WiFi and Bluetooth signals to ensure optimal signal integrity.

Power Options

Features automotive-approved 6 to 30 Volt DC power operation or battery option for mobile use.

Customisable

Choice of screen size, bezel, operating system, touch overlay and board features.

Approved, Certified

CE and Radio Equipment Directive-approved, thermally certified.

BETA
YOUR MODULAR TOUCHSCREEN PLATFORM

Cortex A9 · Linux · Android · Windows · Bluetooth · WiFi · GPS · 3G / GSM · Touch

SUMMARY

The Beta C Series of integrated toucshcreen systems is the ideal platform for quickly creating your new touchscreen-based connected device.

With its outstanding range of communications, the Beta C Series systems are already certified to the latest Radio, EMC and Environmental regulations.

Reduce your costs and get to production faster. Just add your application to your choice of operating system and go.

- Choice of 4.3", 7.1" and 9.7" touchscreen LCD
- Projected Capacitive or Resistive Touch
- 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 CAN, Dual RS232 and an RS232/422/485 port
- Charge and monitor battery for mobile operation
- Automotive 6-30 Volt DC Power operation
- Android, Linux, Windows EC 2013 Supported

Beta C Series

TECHNICAL SPECIFICATIONS

Core System

Processor	NXP iMX6 SoloLite Single Core, 1GHz
Memory	256MB, 512MB and 1GB options
Storage	8GB eMMC Flash or MicroSD Socket
Touch	Resistive and Projected Capacitive options
4.3" LCD Screen	Resolution: 480x272 Brightness: 350 cd/m² Contrast: 500 typical Viewing Angle: 70, 50, 70, 70 typical
7.1" LCD Screen	Resolution: 800x400 Brightness: 380 cd/m² Contrast: 400 typical Viewing Angle: 60, 70, 70, 70 typical
9.7" LCD Screen	Resolution: 1024x768 Brightness: 800 typical Contrast: 360 cd/m² Viewing Angle: 80, 80, 80, 80 typical
Audio	Mic and Line inputs Stereo Line 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

Mobile Communications	UMTS/HSPA - 5.76Mb/s uplink, 7.2Mb/s downlink GSM - 850/1900MHz, 900/1800MHz GPRS - Class 12, CS1-CS4, up to 85.6kb/s EDGE - Class 12, MCS1-9, up to 236kb/s CSD - GSM max 9.6kb/s, UMTS max 64kb/s SMS - MT/MO PDU / Text mode Standard Size SIM (optional Dual SIM)
Voice	EU - u-blox SARA-U270 (900/2100MHz, D1) NA - u-blox SARA-U260 (850/1900MHz, D2)
GPS	u-blox MAX7W GPS/QZSS, GLONASS, Assisted Fix
Wireless	Wi-Fi 802.11 a/b/g/n 2.4GHz and 5GHz Station and Access Point operation Bluetooth 4.1, BLE 4.0
Accelerometer	3 axis, 14/8-bit (MMA8451QR1)
Light Sensor	16-bit (APDS-9301-020)
Serial	2x CAN 1x I²C 2x RS232 (Rx/Tx) 1x RS232/422/485 (factory option) 1x SPI
GPIO	5 channels

Power

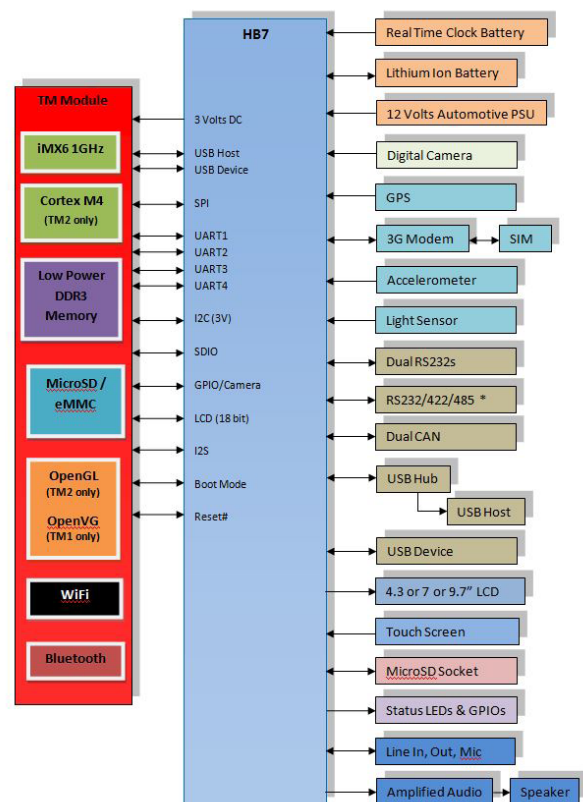|	
Input Voltage	Automotive 6 to 30 Volts DC with protection
4.3" Battery (optional)	Lithium-Ion 3.7 Volts DC 800maH (GPS9007)
7.1" Battery (optional)	Lithium-Ion 3.7 Volts DC 3400mAH (18650)
9.7" Battery (optional)	TBA

Power

Battery Features	Charges while powered Monitor battery levels with fuel gauge
Ignition	Dedicated control signal

Physical

Status LEDs	2x bi-colour LEDs
Operating Temperatures	Standard 0°C to 50°C Extended -20°C to 60°C
Battery Limitations	Charging 0°C to 45°C Discharging -20°C to 60°C
4.3" Dimensions	128mm (W) x 87mm (H) x 31mm (D) (no back panel)
7.1" Dimensions	192.5mm (W) x 125mm (H) x 33mm (D) (no back panel)
9.7" Dimensions	241mm (W) x 185mm (H) x 35mm (D) (no back panel)
Approvals & Certifications	CE EMC Radio Equipment Directive Thermal

BLOCK DIAGRAM

For more information, visit our website:

www.bluechiptechnology.com