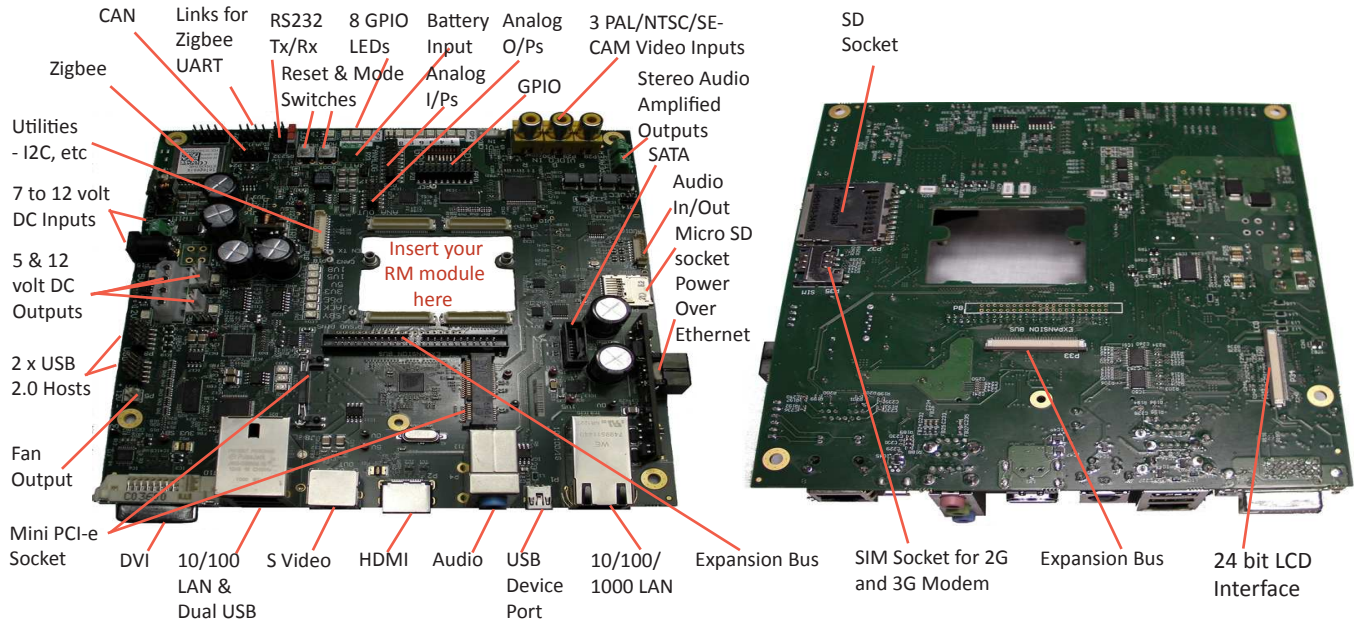


HB3

RMx Host Board 3 PRODUCT INFORMATION



HB3 - For the Engineers



HB3 - The Headlines

- ▶ Host board for the Blue Chip Technology's RM series of ARM System on Modules (SoM) providing a wide range of peripherals and interfaces.
- ▶ Interfaces include:
 - ▶ Video
DVI, HDMI, LCD, 3 x Video Capture
 - ▶ Communications
Dual LANs, USBs, RS232, CAN, I2C, SIM socket, Zigbee
 - ▶ Storage
SATA, uSD, SD
- ▶ Power
7 to 12 volt DC input, Power Over Ethernet, Li-Ion battery, Battery charging/control
- ▶ Miscellaneous
Mini PCI-e socket, Expansion Bus, GPIO, Analogue inputs, Analogue outputs
- ▶ Full design package including schematics, gerbers, bill of materials and software.
- ▶ Linux, Android and Windows Embedded Operating supported (please check with Blue Chip Sales for details).
- ▶ Size - 170 x 170mm, Mini ITX compatible

HB3 - In a few words

Our HB3 is the latest development host board specifically designed to support the RM series of System on Module products from Blue Chip Technology. The HB3 provides the ideal platform, together with your chosen RM module, to start your application software development and also to provide a working example of the design package to base your new product on. With its wide array of interfaces, functions and different power sources the HB3 can reduce your new product development time and get you to market faster.

Please note that the HB3 includes support for all the RM modules currently available and for the forthcoming modules.



BS EN ISO 9001
Certificate No 33069

HB3

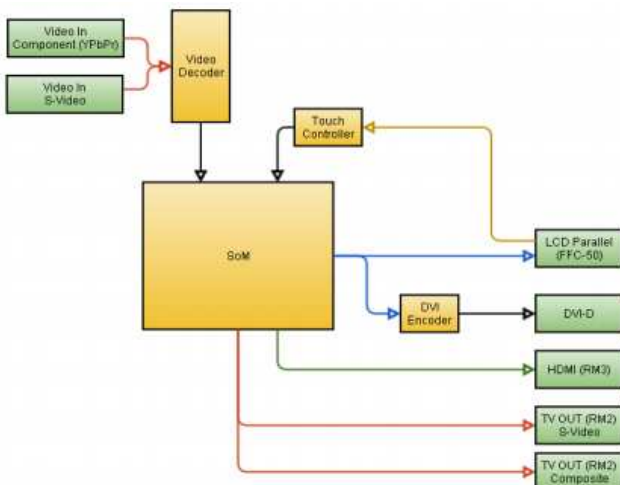
RMx Host Board 3 PRODUCT INFORMATION



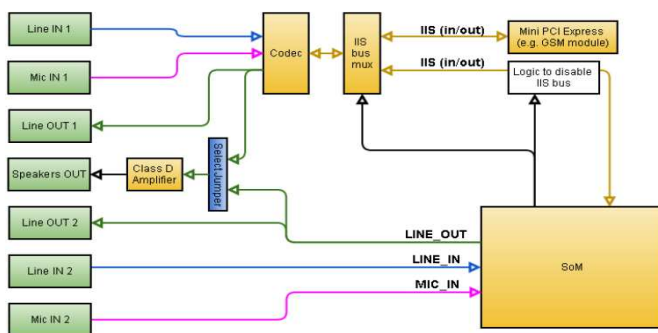
RMx Support

- ▶ Blue Chip Technology RM2
 - ▶ Cortex A8 Single Core 800MHz - standard and extended temperature range
 - ▶ Cortex A8 Single Core 1GHz - standard and extended temperature range
- ▶ Blue Chip Technology RM3
 - ▶ Cortex A9 Single Core 800MHz - standard and extended temperature range
 - ▶ Cortex A9 Dual Core 1GHz - standard and extended temperature range
 - ▶ Cortex A9 Quad Core 1GHz - standard and extended temperature range

Video Inputs & Outputs



Audio



Communications

- ▶ One 10/100/1000 Mbit LAN
- ▶ One CAN 2.0 interface
- ▶ Five USB 2.0 Hosts (four type A and one header)
- ▶ One USB 2.0 Device Port
- ▶ Two RS232 ports, one with handshaking and one RS422/485 port
- ▶ Optionals :
 - 2G/3G Modem, GPS, Wi-Fi, Bluetooth via Mini PCIe

Storage

- ▶ 1GB SLC NAND Flash
- ▶ MicroSD Socket
- ▶ SATA 3Gbit Socket

Video In Interfaces

- ▶ Two Camera inputs on UFL Connectors
 - Supports NTSC M, NTSC J, NTSC 4.43, PAL B/G/H/I/D, PAL M, PAL N, PAL 60
 - 10-Bit 4x Oversampling (54MSPS) ADC with True 10-Bit Digital Processing

Expansion and General Interfacing

- ▶ Mini PCIe x1 Socket - with local SIM socket for modem
- ▶ 12 GPIO Signals, I2C, system fan output, Real Time Clock (external 3.7 volt battery required)

Operating System Support *

- ▶ Ubuntu Linux 11.10
- ▶ Android 4.04 (Ice Cream Sandwich)
- ▶ Microsoft CE 6.0, Embedded Compact 7, Windows Embedded Compact 2013

Environmentals/Mechanicals

- ▶ Operating Temperatures
 - Standard 0°C to 70°C
 - Extended -40°C to 85°C
- ▶ Humidity 20% to 80% non-condensing
- ▶ EMC
 - Emissions EN55022 (A)
 - Immunity EN55024
 - Safety EN60950
- ▶ Dimensions 170 x 170mm

Power

- ▶ Input Voltage 7 to 12 Volts DC or PoE 48 volts
- ▶ Power Consumption Depends on the RM module fitted
- ▶ Connector Jack plug, Screw Terminal or PoE RJ45

* Always check that the RM module you intend to use has all the features/functions/interfaces that you require for your product.